

New Source Review

**Prevention of Significant Deterioration
and
Nonattainment Area**

Guidance Notebook

Update

Prepared by:

**New Source Review Section
Noncriteria Pollutant Programs Branch
Air Quality Management Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency**

HOW TO USE THE PSD/NONATTAINMENT POLICY REFERENCE GUIDE NOTEBOOK

Purpose

This notebook is a compilation of policy memorandums, letters, and information that have been developed to aid implementation of the prevention of significant deterioration (PSD) and nonattainment area air pollution control programs. The material included in this notebook primarily includes policy statements, policy interpretations, and applicability determinations.

This notebook is an "active" file - it has been designed to accommodate new or revised policy. Additions, deletions, replacements, and cross-referencing information will be provided by Mr. Dennis Crumpler of OAQPS:AQMD as it becomes available.

How to Use the Notebook

PSD-related policies are found in Chapters 1-15 of the notebook; nonattainment-related policies are found in Chapters 21-28. The subject headings and types of policy included under each subject heading are listed in Tables I and II. To use the notebook properly, please follow these steps:

- Step 1. See Table I or Table II to locate your subject area of interest under the subject headings listed.
- Step 2. Next, look at the index under the same subject heading to locate a specific entry (memorandum, letter, etc.) addressing your subject. Each index entry presents pertinent summary identification information and it is organized as follows:
 - a. Each entry is numbered and the entries in each chapter are arranged generally in chronological order. For each numbered entry, digits to the left of the decimal indicate the chapter in which the entry is located; digits to the right of the decimal are assigned individually for each entry.
 - b. Entry index summary information:
 - (1) DATE: the date the memorandum or policy statement was issued.
 - (2) SUBJECT: the "Subject" line on the memorandum. For letters or other types of policy statements, a brief statement of the policy is presented here.
 - (3) FROM: the originator(s) or originating office(s) for the policy statement.
 - (4) TO: the recipient(s) of the policy statement, usually the originator(s) of the request for guidance.
 - (5) DISCUSSION: a brief summary of issues or policies discussed in the entry. The discussion is included to provide the user with more information than the "Subject" line.

- (6) CR: cross referencing. Where an entry cannot easily be placed under a single subject heading, the index shows the other possible subject headings where the entry could be placed. The term [Hard Copy] following a cross reference index number indicates the location of the actual memorandum, letter, etc. Entries are cross referenced only when the subject matter of the entry pertains to two or more policies (i.e., the policies discussed in the entry fall under more than one subject heading).
[NOTE: Where an entry is cross referenced, the body of the notebook contains index information to help locate the hard copy. For example, entry 8.4 in the body of the notebook shows index information indicating that the hard copy can be found under entry 10.6.]

Step 3. The final step - locate the notebook entry or entries that relate to your need.

Updating the Notebook

Periodically, Dennis Crumpler will forward additional entries for the notebook. For each addition, the following information will be included along with a hard copy of the entry:

- a. index number;
- b. complete entry index summary information;
- c. additional CR information, as necessary; and
- d. index numbers of any existing entries partially or entirely superceded by the addition. Memos wholly outdated or superceded should be removed from the notebook.

TABLE I
PSD SUBJECT HEADINGS

1.	PSD:	Transition/Grandfathering
		Exemptions from PSD requirements entirely or from "new" requirements based upon date construction commenced
2.	PSD:	Potential to Emit/Limitations on Capacity to Emit
		Calculating "Potential to Emit" Federal enforceability Limits on operating conditions
3.	PSD:	Definition/Classification of Source
		Definitions Source applicability for PSD Source reactivation
4.	PSD:	Modification
		Allowable/actual emissions increase Fuel conversions - "capable of accommodating," etc.; DOE exemptions Accumulations of emissions <u>de minimum</u> levels for modification Netting of emissions
5.	PSD:	Geographic/Pollutant Applicability
		Ship unloading Exempt solvents Fugitive (secondary) emissions <u>de minimus</u> levels for new sources; quantification of emission rates
6.	PSD:	Baseline/Increment Consumption/Impact Analysis
		Baseline data, area, emissions Increment consumption Air quality offsets under PSD Air quality degradation determination Modeling Creditable emissions decreases
7.	PSD:	Ambient Monitoring
		Preconstruction monitoring Quality Assurance Minimum data requirements for permit application Significance levels for monitoring

TABLE I
PSD SUBJECT HEADINGS
(concluded)

8.	PSD:	BACT	BACT decisions Source's ability to meet BACT BACT baseline BACT exemptions Unregulated pollutants
9.	PSD:	Class I Areas	Notification of Federal Land Manager Inter-agency coordination National Park Service PSD permit application review guidance Redesignation of Class I Areas
10.	PSD:	Permits/Permit Processing/Public Notice	Permit administrative procedures Permit conditions/approval Phased permits Contingency plans Performance testing Publication policy
11.	PSD:	Permit Changes/Extension/Expiration	Deficient permits Extensions Permit appeals Permit modifications Permit reviews Rescissions
12.	PSD:	Relation to Nonattainment Program	Offsets and PSD Nonattainment sanctions Dirty and clean areas affected
13.	PSD:	Temporary Source/Portable Source/Other Exemptions	Temporary emissions Portable sources - PSD applicability Specific sources - requirements, exemptions
14.	PSD:	Allowable Construction Activities Prior to Permit Issuance	Definition of "constructed" Definition of "commence construction" Allowable activities
15.	PSD:	SIP Processing	

TABLE II
NONATTAINMENT SUBJECT HEADINGS

21.	NAA:	Transition/Grandfathering
		Exemptions from nonattainment review based on date construction commenced
22.	NAA:	Potential to Emit/Limitations on Capacity to Emit
		Calculating "Potential to Emit"
		Federal enforceability
		Limits on operating conditions
23.	NAA:	Definition/Classification of Source
		Definitions
		Source applicability for EOP
		Source reactivation
24.	NAA:	Geographic/Pollutant Applicability
		Ship unloading
		Exempt solvents
		Fugitive (secondary) emissions
25.	NAA:	Offsets
		Emissions Offset Policy
		Emissions credits
26.	NAA:	LAER
		LAER decisions
		Source's ability to meet LAER
		LAER baseline
		LAER exemptions
27.	NAA:	Statewide Compliance
		Enforceability
		EOP Condition 2
		Sanctions
28.	NAA:	SIP Processing

2. PSD: Potential to Emit/Limitations on Capacity to Emit

2.27 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 3.29; 10.51; 14.9

2.28 DATE: March 29, 1988
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corp, Civil Action No. 86-A-
1880 (D. Colorado, March 22, 1988)
FROM: Michael S. Alushin, Associate Enforcement Counsel Air Enforcement
Division
TO: Thomas L. Adams, Jr., Assistant Administrator for Enforcement and
Compliance Monitoring
J. Craig Porter, Asst. Admin. for Air and Radiation
DISCUSSION: In this, the first enforcement case to go to trial for PSD
violations exclusively, the court found that EPA had not met its
burden of proving that the Olathe plant of Louisiana-Pacific Co.
(LPC) was subject to PSD requirements, but held that LPC had
violated PSD requirements at the Kremmling plant. Even though LPC
had not received economic benefit from its violation, the court
assessed a civil penalty of \$65,000 to avoid giving "sanction to a
willful disregard of the PSD regulatory framework..." The court
decision discusses proper implementing of the 30-day notice
provisions of 42 USC §7413 and contains a thorough analysis of the
term "potential-to-emit."
CR: 3.32

2. PSD: Potential to Emit/Limitations on Capacity to Emit (continued)

2.29 DATE: October 14, 1988
SUBJECT: Applicability of PSD and NSPS to Proposed Life Extension Project at the Port Washington Steam Electric Generating Station
FROM: Lee M. Thomas, Administrator, EPA
TO: John W. Boston, Vice President, Wisconsin Electric Power Company, Milwaukee, WI
DISCUSSION: This is the final applicability determination regarding the proposed Port Washington steam electric generating station. The renovations constitute physical changes for PSD purposes, and do not come within the exclusions for routine maintenance, repair, replacement; or for production rate or hours of operation. The renovations will result in a significant net increase in emissions of several pollutants for PSD and NSPS purposes, and are, therefore, subject to both PSD and NSPS requirements, unless the project is reconfigured.
CR: 4.38 [Hard Copy]

2.30 [RESERVED]

2.31 DATE: June 13, 1989
SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting
FROM: Terrell E. Hunt, Associate Enforcement Counsel, Air Enforcement Division, Office of Enforcement and Compliance Monitoring
John S. Sietz, Director, Stationary Source Compliance Division, Office of Air Quality Planning and Standards
TO: Addressee's (Regions I-X, Regional Counsels, Air Branch Chiefs, Air Division Directors)
DISCUSSION: This 22-page memo contains final guidance on conditions in construction permits that can legally limit a source's potential to emit to minor or de minimus levels. The memo includes sections of the Louisiana Pacific rulings. Types of limitations that are Federally enforceable, and, therefore, legitimate restrictions on potential to emit, are discussed, including restrictions on production rates, operating hours, control device limitations, and averaging periods for determining emission rates and control efficiencies. Characteristics of "sham" permits are identified and enforcement is discussed. The memo includes sections of the Louisiana-Pacific rulings as a basis for policy and includes several examples to illustrate the principles.
CR: 4.41; 22.7

2. PSD: Potential to Emit/Limitations on Capacity to Emit (continued)

- 2.32 DATE: November 24, 1989
SUBJECT: Court of Appeals Decision Upholding PSD "Actual-to-Potential" Applicability Rules, Puerto Rican Cement Co., Inc. v. EPA, No. 89-1070 (1st Cir.)
FROM: Gregory B. Foote, Attorney, Air and Radiation Division
TO: Alan W. Eckert, Associate General Counsel, Air and Radiation Division
William G. Rosenberg, Assistant Administrator for Air and Radiation
DISCUSSION: This memo discusses the court's decision affirming EPA's position that, when a company makes a "physical or operational change" at an existing facility, there is a "major modification" subject to PSD review if a comparison of actual emissions before the change with potential emissions thereafter shows a significant net increase. A copy of the court's ruling is attached.
CR: 4.43
- 2.33 DATE: January 8, 1990
SUBJECT: Clarification of "Secondary Emissions" as defined in 40 CFR 52.21(b)(18).
FROM: John Calcagni, Director, Air Quality Management Division
TO: Ken Waid, President, Waid and Associates, TX
DISCUSSION: (1) The definition of secondary emissions in the 1988 CFR at 40 CFR 52.21(b)(18) is incomplete; the second sentence was inadvertently omitted by the Federal Register during revision.
(2) Portions of the 1982 revisions to the PSD regulations have been vacated and remanded to EPA, including the way the Agency treats vessel emissions. Consequently, the August 7, 1980, PSD regulations, with the exception of to and from emissions counting, shall apply to determinations on how to treat vessel emissions. Under the 1980 regulations, emissions from certain activities of a ship docked at a terminal may be considered terminal emissions.
CR: 5.26 [Hard Copy]; 3.36
- 2.34 DATE: January 30, 1990
SUBJECT: Comment on Permit Proposed by Indiana DEM for NIPSCO Bailly Generating System
FROM: David Kee, Director, Air and Radiation Division, EPA Region 5
TO: Timothy J. Method, Asst. Commissioner, Indiana DEM
DISCUSSION: The new control device and related improvements under the Clean Coal Technology (CCT) program at the NIPSCO Bailly generating station are not "major modifications" under NSR or "modifications" under NSPS. The backup diesel generator is also not a major modification if operating limits are federally enforceable. If a source solely adds or enhances systems or devices whose primary functions are the reduction of air pollution, and are determined to be not less environmentally beneficial than any emission control system or device they replace, if any, such activities would not trigger new source requirements.
CR: 4.47 [Hard Copy]

2. PSD: Potential to Emit/Limitations on Capacity to Emit (concluded)

2.35 DATE: June 8, 1990
SUBJECT: EPA's Revised PSD Applicability Determination in Response to Court's Remand Concerning the "Potential to Emit" Concept
FROM: William G. Rosenberg, Asst. Administrator for Air and Radiation, US EPA
TO: John Boston, President, WEPCO
DISCUSSION: This letter is EPA's revised PSD applicability determination in response to the remand by the US Court of Appeals of one issue advanced by EPA in the NSPS and PSD determinations for WEPCO. Traditionally, EPA has used an "actual-to-potential" method to calculate emissions increased for PSD purposes. The court instructed EPA to consider past operating conditions at a plant when addressing modifications that involve "like-kind replacement". This instruction, in essence, causes EPA to recognize a new subcategory of "like-kind replacements" under the "major modification" definition of EPA's NSR provisions. In these cases, EPA will use an "actual to actual" method, which involves projections based on historical capacity utilization, to calculate emission increases.
CR: 4.48 [Hard Copy]

3. PSD: Definition/Classification of Source

- 3.29 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 10.51; 14.9
- 3.30 DATE: June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point
Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, Region VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 5.23; 23.27; 24.13
- 3.31 DATE: August 31, 1988
SUBJECT: Whether Facilities That Use Glass Fibers Are Considered "Glass
Fiber Processing Plants"
FROM: Dennis Crumpler, New Source Review Section
Noncriteria Pollutant Programs Branch
TO: Michael A. Stawarz, NY DEC Region 5
DISCUSSION: Facilities that use glass fibers to manufacture other products,
such as fiberglass-reinforced composites, were not intended to be
included in the "glass fiber processing" category. "Glass fiber
processing" was intended to include only those facilities engaged
in making glass fiber.
CR: 13.9

3. PSD: Definition/Classification of Source (continued)

3.32 DATE: March 29, 1988
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corp, Civil Action No. 86-A-1880 (D. Colorado, March 22, 1988)
FROM: Michael S. Alushin, Associate Enforcement Counsel Air Enforcement Division
TO: Thomas L. Adams, Jr., Assistant Administrator for Enforcement and Compliance Monitoring
J. Craig Porter, Asst. Admin. for Air and Radiation
DISCUSSION: In this, the first enforcement case to go to trial for PSD violations exclusively, the court found that EPA had not met its burden of proving that the Olathe plant of Louisiana-Pacific Co. (LPC) was subject to PSD requirements, but held that LPC had violated PSD requirements at the Kremmling plant. Even though LPC had not received economic benefit from its violation, the court assessed a civil penalty of \$65,000 to avoid giving "sanction to a willful disregard of the PSD regulatory framework..." The court decision discusses proper implementing of the 30-day notice provisions of 42 USC §7413 and contains a thorough analysis of the term "potential-to-emit."
CR: 2.28 [Hard Copy]

3.33 DATE: January 12, 1989
SUBJECT: Guidance on Several Issues Related to Determining Applicability of New Major Source Regulations in Granting Construction Permits
FROM: Edward J. Lillis, Chief
Noncriteria Pollution Programs Branch
Air Quality Management Division
TO: Michael J. Hayes, Manager
Division of Air Pollution Control, Illinois EPA
DISCUSSION: Memo provides guidance on several issues related to determining applicability of major source regulations in granting construction permits to modified sources.
(1) A reviewing agency must base determination of whether a source is "major" on "major" source definitions in the Federal Register.
(2) Whether the emissions increase related to a modification is significant is determined before any netting calculation is done. If it is, netting calculations are then performed to determine whether the "net emissions increase" associated with that modification is significant.
(3) Contemporaneous emissions increases and decreases are discussed, as well as other factors affecting whether they are "creditable".
(4) An example of a netting calculation is shown. Emissions increases or decreases used in issuing a previous major source permit cannot be creditable to a subsequent increase.
CR: 4.40; 23.30

3. PSD: Definition/Classification of Source (continued)

- 3.34 DATE: July 28, 1989
SUBJECT: Request for PSD Applicability Determination, Golden Aluminum Co.
FROM: William B. Hathaway, Director, Air, Toxics, and Pesticides
Division, EPA, Region 6
TO: Steve Spaw, Deputy Executive Director, TACB
DISCUSSION: Golden Aluminum facility is properly considered a "secondary metal production plant". Although little guidance towards defining "secondary metal production plant" exists, either in the Clean Air Act, the federal PSD regulations, or even in the legislative history, Golden Aluminum's plant is the type of source Congress that intended to be covered by the PSD provisions of the Act, because the proposed plant would emit several thousand tons of particulates without control equipment. Also, EPA interprets the congressional intent as based upon the source's pollutant emitting activity (e.g., smelting) rather than the source's finished product.
CR: None
- 3.35 DATE: August 11, 1989
SUBJECT: Prevention of Significant Deterioration (PSD) Applicability Determination for Multiple Owner/Operator Point Sources Within a Single Facility
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: Irwin L. Dickstein, Director
Air and Toxics Division (BAT-AP)
DISCUSSION: An airport is a single stationary source if the pollutant-emitting activities are under the control of the same person (or persons under common control) at the time construction would commence on the proposed source. This finding remains the same even if discrete portions of the airport's pollutant-emitting facilities are leased to other control after construction.
CR: None

3. PSD: Definition/Classification of Source (concluded)

3.36 DATE: January 8, 1990
SUBJECT: Clarification of "Secondary Emissions" as defined in 40 CFR 52.21(b)(18).
FROM: John Calcagni, Director, Air Quality Management Division
TO: Ken Waid, President, Waid and Associates, TX
DISCUSSION: (1) The definition of secondary emissions in the 1988 CFR at 40 CFR 52.21(b)(18) is incomplete; the second sentence was inadvertently omitted by the Federal Register during revision.
(2) Portions of the 1982 revisions to the PSD regulations have been vacated and remanded to EPA, including the way the Agency treats vessel emissions. Consequently, the August 7, 1980, PSD regulations, with the exception of to and from emissions counting, shall apply to determinations on how to treat vessel emissions. Under the 1980 regulations, emissions from certain activities of a ship docked at a terminal may be considered terminal emissions.
CR: 5.26 [Hard Copy]; 2.33

3.37 DATE: June 4, 1990
SUBJECT: Definition of Postapproval Monitoring
FROM: Ed Lillis, Chief, Noncriteria Pollutant Program Branch
TO: Marcia Spink, Chief, EPA Region III, Air Programs Branch
DISCUSSION: The term "postapproval monitoring" is used to identify the time when ambient ozone monitoring is to be undertaken when the normal PSD requirement for preconstruction ozone monitoring is waived. The postapproval period may begin anytime after the source receives its PSD permit, but should not begin later than 2 years later after the start-up of the new source or modification.
CR: None

4. PSD: Modification

4.36 [RESERVED]

4.37 DATE: September 9, 1988
SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPC) Port Washington Life Extension Project
FROM: Don R. Clay, Acting Assistant Administrator for Air and Radiation (ANR-443)
TO: David A. Kee, Director
Air and Radiation Division, Region V
DISCUSSION: Although not an official applicability determination, this memo provided the preliminary opinion, based on the information collected up to the date of issue, that PSD and NSPS would apply to a "life extension" project at Port Washington Power Plant. Each element of PSD applicability via major modification and NSPS applicability were discussed in the context of information provided. This project involves restoring the physical and operational capabilities of each unit to its original capacity and extending the useful life of the units well beyond the planned retirement dates that would otherwise apply. This work appears to be non-routine, and, thus, to constitute a "physical change"; a significant net emissions increase would occur as a result of the work.
CR: 23.29

4. PSD: Modification (continued)

- 4.38 DATE: October 14, 1988
SUBJECT: Applicability of PSD and NSPS to Proposed Life Extension Project at the Port Washington Steam Electric Generating Station
FROM: Lee M. Thomas, Administrator, EPA
TO: John W. Boston, Vice President, Wisconsin Electric Power Company, Milwaukee, WI
DISCUSSION: This is the final applicability determination regarding the proposed Port Washington steam electric generating station. The renovations constitute physical changes for PSD purposes, and do not come within the exclusions for routine maintenance, repair, replacement; or for production rate or hours of operation. The renovations will result in a significant net increase in emissions of several pollutants for PSD and NSPS purposes, and are, therefore, subject to both PSD and NSPS requirements, unless the project is reconfigured.
CR: 2.29
- 4.39 DATE: October 28, 1988
SUBJECT: Review of De Minimis Emissions - Sanctions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division
TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26) Region V
DISCUSSION: De minimis net emission increases that accumulate within a contemporaneous (5 year) time frame should not be combined and would not trigger PSD review when significance levels are reached. However, de minimis increases do consume PSD increment, and, in nonattainment areas, aggregated de minimis emissions will trigger sanctions when significance levels are reached.
CR: 5.24; 27.5

4. PSD: Modification (continued)

4.40 DATE: January 12, 1989
SUBJECT: Guidance on Several Issues Related to Determining Applicability of New Major Source Regulations in Granting Construction Permits
FROM: Edward J. Lillis, Chief
Noncriteria Pollution Programs Branch
Air Quality Management Division
TO: Michael J. Hayes, Manager
Division of Air Pollution Control, Illinois EPA
DISCUSSION: Memo provides guidance on several issues related to determining applicability of major source regulations in granting construction permits to modified sources.
(1) A reviewing agency must base determination of whether a source is "major" on "major" source definitions in the Federal Register.
(2) Whether the emissions increase related to a modification is significant is determined before any netting calculation is done. If it is, netting calculations are then performed to determine whether the "net emissions increase" associated with that modification is significant.
(3) Contemporaneous emissions increases and decreases are discussed, as well as other factors affecting whether they are "creditable".
(4) An example of netting calculation is shown.
CR: 3.33 [Hard Copy]; 23.30

4.41 DATE: June 13, 1989
SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting
FROM: Terrell E. Hunt, Associate Enforcement Counsel, Air Enforcement Division, Office of Enforcement and Compliance Monitoring
John S. Sietz, Director, Stationary Source Compliance Division, Office of Air Quality Planning and Standards
TO: Addressee's (Regions I-X, Regional Counsels, Air Branch Chiefs, Air Division Directors)
DISCUSSION: This 22-page memo contains final guidance on conditions in construction permits that can legally limit a source's potential to emit to minor or de minimus levels. The memo includes sections of the Louisiana Pacific rulings. Types of limitations that are Federally enforceable, and, therefore, legitimate restrictions on potential to emit, are discussed, including restrictions on production rates, operating hours, control device limitations, and averaging periods for determining emission rates and control efficiencies. Characteristics of "sham" permits are identified and enforcement is discussed. The memo includes sections of the Louisiana-Pacific rulings as a basis for policy and includes several examples to illustrate the principles.
CR: 2.31 [Hard Copy]; 22.7

4. PSD: Modification (continued)

4.42 DATE: September 18, 1989
SUBJECT: Request for Clarification of Policy Regarding the "Net Emission Increase"
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: William B. Hathaway, Director
Air, Pesticides and Toxics Division (6T)
DISCUSSION: Memo provides general guidance on four questions of net emissions increases:
(a) If an emissions increase from a proposed modification is less than significant, the Agency need not consider whether a contemporaneous net emissions increase has occurred. The 1983 memo that discussed this, entitled "Net Emission Increases under PSD," is still an appropriate resource (No. 4.24).
(b) The criteria used to determine if a significant net emissions increase has occurred from a proposed modification at an existing major source are applied on a pollutant-by-pollutant basis.
(c) When determining PSD applicability, the comparison of prior "actual" versus new "potential" emissions (or "allowable" where appropriate) is the correct methodology to use.
(d) Except for emissions changes considered in issuing a PSD permit, all emissions points at the source are reviewed in terms of actual emissions changes to determine the contemporaneous emissions changes at a source, including those emissions points that have not had emissions changes incorporated into State permits.
CR: None

4.43 DATE: November 24, 1989
SUBJECT: Court of Appeals Decision Upholding PSD "Actual-to-Potential" Applicability Rules Puerto Rican Cement Co., Inc. v. EPA, No. 89-1070 (1st Cir.)
FROM: Gregory B. Foote, Attorney, Air and Radiation Division
TO: Alan W. Eckert, Associate General Counsel, Air and Radiation Division
William G. Rosenberg, Assistant Administrator for Air and Radiation
DISCUSSION: This memo discusses the court's decision affirming EPA's position that, when a company makes a "physical or operational change" at an existing facility, there is a "major modification" subject to PSD review if a comparison of actual emissions before the change with potential emissions thereafter shows a significant net increase. A copy of the court's ruling is attached.
CR: 2.32 [Hard Copy]

4. PSD: Modification (continued)

- 4.44 DATE: December 29, 1989
SUBJECT: Use of Netting Credits
FROM: John Calcagni, Director, Air Quality Management Division
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: Emissions decreases that are not fully utilized in allowing a source to net out of review do not result in "leftover" emissions credits that could be used in any future netting transactions. All contemporaneous and creditable emissions changes used to net out of review remain fully available and must be included in subsequent netting transactions at the source unless they occur before the contemporaneous time period of the subsequent modification under consideration or they are "relied upon" in issuing a major source permit. The memo provides an example of a netting calculus.
CR: None
- 4.45 DATE: January 2, 1990
SUBJECT: Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring
FROM: John Calcagni, Director, Air Quality Management Division
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: An increase in stack height can be considered as part of a proposed modification whether or not it is physically tied to the emissions unit(s) being constructed or modified. The stack height increase must be proposed in conjunction with the overall modification. Thus, any creditable air quality improvements resulting from the higher stack should be considered in the preliminary modeling analysis. Note that for a height greater than 65 meters to be fully creditable as the GEP stack height, it must be established in a manner consistent with the stack height rules.
CR: 6.30; 7.9
- 4.46 DATE: January 18, 1990
SUBJECT: Review of Determination that Proposed Fuel Conversion at Greenwood Unit I Power Plant is a "Major Modification"
FROM: Gerald A. Emison, Director, OAQPS
TO: Morton Sterling, Director, Environmental Protection, Detroit Edison Co.
DISCUSSION: EPA Region V and Headquarters agree that a proposed conversion of an oil-fired unit to dual capacity for oil and gas firing would subject the Detroit Edison Greenwood Unit 1 Power Plant to a PSD review for NO_x. Because the source did not own, or initiate plans to construct equipment necessary to deliver natural gas, EPA believes the source was not capable of accommodating natural gas prior to January 6, 1975. Second, actual emissions after the change to natural gas are deemed to be the sources' "potential to emit", and under this criteria the source will experience a "significant net emissions increase". A comparison of current allowable to future allowable emissions is irrelevant for PSD applicability purposes. Simple addition of gas to the boiler would not be subject to BACT. More information is necessary to assess the effect of other proposed changes at the plant.
CR: None

4. PSD: Modification (concluded)

4.47 DATE: January 30, 1990
SUBJECT: Comment on Permit Proposed by Indiana DEM for NIPSCO Bailly Generating System
FROM: David Kee, Director, Air and Radiation Division, EPA Region 5
TO: Timothy J. Method, Asst. Commissioner, Indiana DEM
DISCUSSION: The new control device and related improvements under the Clean Coal Technology (CCT) program at the NIPSCO Bailly generating station are not "major modifications" under NSR or "modifications" under NSPS. The backup diesel generator is also not a major modification if operating limits are federally enforceable. If a source solely adds or enhances systems or devices whose primary functions are the reduction of air pollution, and are determined to be not less environmentally beneficial than any emission control system or device they replace, if any, such activities would not trigger new source requirements.
CR: 2.34

4.48 DATE: June 8, 1990
SUBJECT: EPA's Revised PSD Applicability Determination in Response to Court's Remand Concerning the "Potential to Emit" Concept
FROM: William G. Rosenberg, Asst. Administrator for Air and Radiation, US EPA
TO: John Boston, President, WEPCO
DISCUSSION: This letter is EPA's revised PSD applicability determination in response to the remand by the US Court of Appeals of one issue advanced by EPA in the NSPS and PSD determinations for WEPCO. Traditionally, EPA has used an "actual-to-potential" method to calculate emissions increased for PSD purposes. The court instructed EPA to consider past operating conditions at a plant when addressing modifications that involve "like-kind replacement". This instruction, in essence, causes EPA to recognize a new subcategory of "like-kind replacements" under the "major modification" definition of EPA's NSR provisions. In these cases, EPA will use an "actual to actual" method, which involves projections based on historical capacity utilization, to calculate emission increases.
CR: 2.35

5. PSD: Geographic/Pollutant Applicability

- 5.23 DATE: June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 3.30 [Hard Copy]; 23.27; 24.13
- 5.24 DATE: October 28, 1988
SUBJECT: Review of De Minimis Emissions - Sanctions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division
TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26)
Region V
DISCUSSION: De minimis net emission increases that accumulate within a contemporaneous (5 year) time frame should not be combined and would not trigger PSD review when significance levels are reached. However, de minimis increases do consume PSD increment, and, in nonattainment areas, aggregated de minimis emissions will trigger sanctions when significance levels are reached.
CR: 4.39 [Hard Copy]; 27.5
- 5.25 [RESERVED]

5. PSD: Geographic/Pollutant Applicability (concluded)

5.26 DATE: January 8, 1990
SUBJECT: Clarification of "Secondary Emissions" as defined in 40 CFR 52.21(b)(18).
FROM: John Calcagni, Director, Air Quality Management Division
TO: Ken Waid, President, Waid and Associates, TX
DISCUSSION: (1) The definition of secondary emissions in the 1988 CFR at 40 CFR 52.21(b)(18) is incomplete; the second sentence was inadvertently omitted by the Federal Register during revision.
(2) Portions of the 1982 revisions to the PSD regulations have been vacated and remanded to EPA, including the way the Agency treats vessel emissions. Consequently, the August 7, 1980, PSD regulations, with the exception of to and from emissions counting, shall apply to determinations on how to treat vessel emissions. Under the 1980 regulations, emissions from certain activities of a ship docked at a terminal may be considered terminal emissions.
CR: 2.33; 3.36

6. PSD: Baseline/Increment Consumption/Impact Analysis

6.22 DATE: July 5, 1988
SUBJECT: Air Quality Analysis for Prevention of Significant Deterioration (PSD)
FROM: Gerald E. Emison, Director
Office of Air Quality Planning Standards (MD-10)
TO: Thomas J. Maslany, Director
Air Management Division (3AM00)
DISCUSSION: The memo relays a policy decision on the approach to use to interpret dispersion modeling results to determine whether a source will cause or contribute to a violation of NAAQS or PSD increment. Under this approach, air quality concentrations are projected throughout the proposed source's impact area, but do not automatically cause a source to cause or contribute to a violation. Instead, where a modeled violation is predicted, further analysis is done to determine whether the impact is significant at the point and time of the modeled violation.
CR: 12.13

6.23 [RESERVED]

6.24 [RESERVED]

6. PSD: Baseline/Increment Consumption/Impact Analysis (continued)

- 6.25 DATE: March 16, 1989
SUBJECT: Use of Allowable Emissions for National Ambient Air Quality Standards (NAAQS) Impact Analysis Under the Requirements for Prevention of Significant Deterioration (PSD)
FROM: John Calcagni, Director, Air Quality Management Division (MD-15)
TO: William B. Hathaway, Director
Air, Pesticides and Toxics Division, Region VI
DISCUSSION: The required PSD air quality impact analysis for new major sources and major modifications is to be based on allowable emissions, rather than actual emissions, from existing background sources. However, actual annual operations at an existing source may be considered, primarily with respect to evaluating long term NAAQS impacts.
CR: None
- 6.26 DATE: June 15, 1989
SUBJECT: Timing of BACT Determination for a New Emission Source
FROM: Gary McCutchen, Chief, New Source Review Section
TO: John Daniel, Asst. Executive Director, Dept. of Air Pollution Control, Commonwealth of Virginia
DISCUSSION: A BACT decision is not final or "locked-in" until the final permit is issued; until that time, a permit issuing agency is free to share a tentative preliminary BACT determination as soon as appropriate. An applicant does not need a final BACT decision to conduct modeling; modeling is based on the level of control recommended by the applicant. Decisions on technology transfer should be carefully scrutinized to ensure that "reasonable technology transfer" is defined broadly enough to prevent circumvention of use of certain controls by selection of some slightly different unit.
CR: 8.38 [Hard Copy]
- 6.27 DATE: August 24, 1989
SUBJECT: Guidance on Implementing the Nitrogen Dioxide Prevention of Significant Deterioration (PSD)
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: William B. Hathaway, Director
Air, Pesticides and Toxics Division, Region VI
DISCUSSION: The memo discusses general and specific aspects of the NO₂ PSD increment regulation. States should require NO₂ increment consumption analysis as soon as possible to help to avoid a situation where a proposed new source would violate NO₂ increment before the State's NO₂ increments regulations are in effect.
CR: 15.10

6. PSD: Baseline/Increment Consumption/Impact Analysis (continued)

- 6.28 DATE: August 25, 1989
SUBJECT: Texas Air Control Board (TACB) Inquiry Regarding Allowable Emissions in PSD NAAQS Analysis
FROM: William B. Hathaway, Director
Air, Pesticides and Toxics Division (6T)
TO: John Calcagni, Director
Air Quality Management Division (MD-15)
DISCUSSION: The change from actual to allowable emissions in modeling background sources for Texas PSD permit applicants does not represent "a significant change in the PSD rules" that would warrant federal rulemaking procedures. This policy requires emissions inputs that are as near as practicable to legally allowable emissions.
CR: None
- 6.29 DATE: October 17, 1989
SUBJECT: Ambient Air
FROM: Robert D. Bauman, Chief
SO₂/Particulate Matter Programs Branch (MD-15)
TO: Gerald Fontenot, Chief
Air Programs Branch, Region VI (6T-A)
DISCUSSION: This memo responds to the August 24, 1989, memo from Hathaway to Calcagni [6.27].
(a) PSD modeling by a permit applicant can discount the contribution of a background source to the predicted concentration as described.
(b) Where a proposed source has a significant impact on any increment violation, the permit should not be approved unless the increment violation is corrected prior to operation of the proposed source. (See also July 15, 1988, memo from OAQPS to Region 6 [6.23]).
CR: 10.45
- 6.30 DATE: January 2, 1990
SUBJECT: Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring
FROM: John Calcagni, Director, Air Quality Management Division
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: An increase in stack height can be considered as part of a proposed modification whether or not it is physically tied to the emissions unit(s) being constructed or modified. The stack height increase must be proposed in conjunction with the overall modification. Thus, any creditable air quality improvements resulting from the higher stack should be considered in the preliminary modeling analysis. Note that for a height greater than 65 meters to be fully creditable as the GEP stack height, it must be established in a manner consistent with the stack height rules.
CR: 4.45 [Hard Copy]; 7.9

6. PSD: Baseline/Increment Consumption/Impact Analysis (concluded)

6.31 DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have
Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department
of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD
permits in areas with modeled violation(s) both to sources with no
significant impacts and to sources with significant impacts. In
the latter case, procedures for processing the associated SIP
revisions are also discussed.
CR: 10.49 [Hard Copy]; 12.17; 15.11

7. PSD: Ambient Monitoring

7.8 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others
DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.
1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
2. Unregulated pollutants (Denied)
3. Prescribed emission limits for entire life of the permit (Remanded)
4. BACT for PM (Remanded)
5. Ambient Air and Public access (Remanded)
6. BACT for CO (Denied)
7. Preconstruction monitoring (Denied)
CR: 8.39 [Hard Copy]; 10.43; 11.13

7.9 DATE: January 2, 1990
SUBJECT: Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring
FROM: John Calcagni, Director, Air Quality Management Division
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: An increase in stack height can be considered as part of a proposed modification whether or not it is physically tied to the emissions unit(s) being constructed or modified. The stack height increase must be proposed in conjunction with the overall modification. Thus, any creditable air quality improvements resulting from the higher stack should be considered in the preliminary modeling analysis. Note that for a height greater than 65 meters to be fully creditable as the GEP stack height, it must be established in a manner consistent with the stack height rules.
CR: 4.45 [Hard Copy]; 6.30

8. PSD: BACT

8.25 DATE: March 31, 1988
SUBJECT: Transmittal of OAQPS Interim Control Policy Statement
FROM: John S. Sietz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
TO: Regions I-X Division Directors
DISCUSSION: The memo provides final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. During the interim period, interim controls that may be more effective in reducing emissions may be installed, if no delay results in installation of the final control equipment.
CR: 10.32; 11.10

8.26 DATE: April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 11.11; 15.5; 28.5

8.27 DATE: July 28, 1988
SUBJECT: Supplemental Guidance on Implementing the North County Prevention of Significant Deterioration (PSD) Remand
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: Addressees (Regional Air Division Directors)
DISCUSSION: The memo discusses 2 issues that have arisen from the Administrators remand decision in the North County PSD permit appeal, and that are beyond the scope of the September 22, 1987, document providing initial guidance on the subject.
(1) Although BACT is determined case-by-case, the permitting authority must consider the full range of pollution control options available and choose the most effective means of limiting emissions, unless shown compelling reasons of economic or energy impracticality.
(2) Emission of noncriteria pollutants should be evaluated carefully, including consultation with the sources listed. Where a municipal waste combustor is involved, OAQPS has provided rather detailed guidance on methods to factor air toxics considerations into the BACT decision.
(3) In the public notice, the level of detail and identification of specific toxic substances should be consistent with the concern posed by the air toxics.
CR: 10.34

8. PSD: BACT (continued)

- 8.28 DATE: November 10, 1988
SUBJECT: Administrative Order Remanding to NJ DEP the PSD Permit That Was Issued to Pennsauken Solid Waste Management Authority for Construction of a Municipal Waste Combustor
FROM: Lee M. Thomas, Administrator, U.S. EPA
TO: NJ DEP
DISCUSSION: Permit is remanded to New Jersey DEP for further consideration of the BACT analysis solely as it relates to NO_x emissions. Applicants BACT analysis for NO_x was inadequate and should have considered thermal de-NO_x technology as available. Permit proceedings should be reopened for source to supply appropriate data to document consideration of thermal de-NO_x and to allow for public notice and comment on findings.
CR: None
- 8.29 DATE: November 14, 1988
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for Columbia Gulf Transmission Company, Clementsville Compressor Station, Kentucky
FROM: Greer C. Tidwell, Regional Administrator
TO: Lee M. Thomas, Administrator
DISCUSSION: Review is requested of the permit issued by KY DER for a natural-gas-fired turbine, because dry controls do not constitute BACT for NO_x for the source.
CR: 10.35
- 8.30 DATE: December 14, 1988
SUBJECT: Review of Valero Hydrocarbons BACT Analysis
FROM: Allen C. Basala, Chief, EAB, ASB
TO: Anthony Wayne, Chief, Texas, New Mexico Enforcement Section, Region VI
DISCUSSION: The Valero hydrocarbons BACT economic analysis is unacceptable, because the employed methodology is not supported as valid for purposes of project budgeting and cost-effectiveness assessments. Also, the BACT analysis fails to include other less-costly alternate control options that are still potentially as effective as those presented. A detailed review from EAB is attached.
CR: None
- 8.31 DATE: January 4, 1989
SUBJECT: Valero Hydrocarbons BACT Analyses
FROM: Anthony P. Wayne, Chief, TX/NM Enforcement Section
TO: Lawrence E. Pewitt, PE, Director, Permits Division, Texas Air Control Board
DISCUSSION: (1) Valero Hydrocarbons should reevaluate its study of feasible BACT alternatives for its proposed natural gas processing plant, particularly with respect to the technical, cost, and economic issues mentioned.
(2) The memo discusses the steps Valero must take to keep their PSD permit active, because they are coming up on the one-year date by which EPA must make a decision.
CR: 10.37

8. PSD: BACT (continued)

- 8.32 DATE: January 27, 1989
SUBJECT: Discounted Cash Flow (DCF) Analysis for Craven County Project New Source Review
FROM: Frank L. Bunyard, Economic Analysis Section, ASB, AQMD
TO: Allen C. Basala, Chief, Economic Analysis Section, ASB, AQMD
DISCUSSION: The EPA Economic Analysis Section reviewed a discounted cash flow analysis describing feasibility of thermal de-NO_x as BACT. This memo states reasons EPA is not convinced on infeasibility and recommends the PSD applicant be asked to provide more substantive justification for key assumptions. Memos 8.33 and 8.35 are closely related to this one.
CR: 10.36
- 8.33 DATE: January 27, 1989
SUBJECT: Review of Craven County Wood Energy Project
FROM: Allen C. Basala, Chief, Economic Analysis Section, ASB
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: This memo provides notification to Region IV that a discounted cash flow analysis provided by a PSD applicant was not found to be convincing of the infeasibility of thermal de-NO_x controls. Memos 8.32 and 8.35 are closely related.
CR: 10.37
- 8.34 DATE: February 3, 1989
SUBJECT: BACT Determination for Davidson Exterior Trim/Textron
FROM: John S. Sietz, Director, Stationary Source Compliance Division, Office of Air Quality Planning Standards
TO: Winston A. Smith, Director, Air, Pesticides and Toxics Management Division, Region IV
DISCUSSION: Davidson Exterior, an automotive fascia painting operation, failed to make a case for rejecting add-on spray booth and/or oven controls as BACT. Transfer of control technology from other automotive spray painting operations might be appropriate. The memo discusses what criteria EPA would consider valid for rejection of controls.
CR: None
- 8.35 DATE: February 13, 1989
SUBJECT: BACT Determination for Craven County Wood Energy Project
FROM: Bruce P. Miller, Chief
Air Programs Branch; Air, Pesticides and Toxics Management Division
TO: N. Ogden Gerald, Chief Air Quality Section
NC Department of Natural Resources and Community Development
DISCUSSION: PSD permit applicant must provide additional verification as described of economic data presented regarding thermal de-NO_x as BACT for NO_x emissions. The memo references economic evaluations in Economic Analysis Section Documents 8.32 and 8.33.
CR: 10.38

8. PSD: BACT (continued)

- 8.36 DATE: May 19, 1989
SUBJECT: Technical Document on Control of Nitrogen Oxides From Municipal Waste Combusters
FROM: Jack R. Farmer, Director
Emissions Standards Division, OAQPS (MD-13)
TO: Air Division Directors, Regions I-X
DISCUSSION: Memo transmits OAQPS' technical report evaluating the technical aspects of the control of NO_x emissions from municipal waste combustors. Selective non-catalytic reduction is discussed in detail in the report. Copies of the report are available from EPA, Emission Standards Division, MD-13, Research Triangle Park, NC 27711.
CR: None
- 8.37 DATE: June 9, 1989
SUBJECT: Order Denying Review of PSD Permit for Spokane Regional Waste-to-Energy Project
FROM: William K. Reilly, Administrator, EPA
TO: Citizens for Clean Air and Council for Land Care and Planning
DISCUSSION: Petitioners requested review of PSD permit because BACT for NO_x, which should be thermal de-NO_x, was not required, and because fuel cleaning and separation, and recycling, were not adequately considered as emission reduction techniques. Spokane agreed to install thermal de-NO_x before this opinion was written, so the court dismissed that petition. The Administrator stated that petitioners did not make an adequate case for reviewing the permit on the other issues.
CR: 10.42
- 8.38 DATE: June 15, 1989
SUBJECT: Timing of BACT Determination for a New Emission Source
FROM: Gary McCutchen, Chief, New Source Review Section
TO: John Daniel, Asst. Executive Director, Dept. of Air Pollution Control, Commonwealth of Virginia
DISCUSSION: A BACT decision is not final or "locked-in" until the final permit is issued; until that time, a permit issuing agency is free to share a tentative preliminary BACT determination as soon as appropriate. An applicant does not need a final BACT decision to conduct modeling; modeling is based on the level of control recommended by the applicant. Decisions on technology transfer should be carefully scrutinized to ensure that "reasonable technology transfer" is defined broadly enough to prevent circumvention of use of certain controls by selection of some slightly different unit.
CR: 6.26

8. PSD: BACT (continued)

- 8.39 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others
DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.
1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
2. Unregulated pollutants (Denied)
3. Prescribed emission limits for entire life of the permit (Remanded)
4. BACT for PM (Remanded)
5. Ambient Air and Public access (Remanded)
6. BACT for CO (Denied)
7. Preconstruction monitoring (Denied)
CR: 7.8; 10.43; 11.3
- 8.40 DATE: August 2, 1989
SUBJECT: Administrative Order Denying Review of an Amended PSD Permit for a Mass-Burn Municipal Waste Incinerator for Huntington, NY
FROM: William K. Reilly, Administrator, U.S. EPA
TO: Citizens for a Livable Environment and Recycling
DISCUSSION: The order states that the amended permit does require the facility to use BACT, and the BACT analysis is not deficient. Petitioner confused "de minimis" emissions limits with limitations for NO_x
CR: 10.44
- 8.41 DATE: September 11, 1989
SUBJECT: Use of Urea Injection in Place of Ammonia Inspection for the Control of NO_x from Municipal Waste Combustors
FROM: Gerald A. Emison, Director, OAQPS
TO: Christopher J. Daggett, Commissioner, NJ DEP
DISCUSSION: Urea injection could be considered as innovative control technology or BACT for NO_x control from municipal waste combustors if the source presented EPA with material to review including source-specific information and written justification as to how the method fulfills the innovative technology criteria and how it would be applied to the source.
CR: None

8. PSD: BACT (continued)

8.42 DATE: January 2, 1990
SUBJECT: Order Denying Review of Revised Permit Determination for Spokane Regional Waste to Energy Project
FROM: F. Henry Hubicht, Acting Administrator, EPA
TO: Lisa J. Kilian, Joan Honican, Citizens for Clean Air, and the Council for Land Care and Planning
DISCUSSION: This order denies the appeals filed against the revised permit for the Spokane Regional Waste to Energy Project. The Washington State Department of Ecology did not act inappropriately in not holding a public hearing. Questions relating to State requirements are beyond the purview of this proceeding. The recycling issue is again rejected as a subject for review for the same reasons as stated in the June 9, 1989, remand (8.38).
CR: 10.46; 11.14

8.43 DATE: January 11, 1990
SUBJECT: BACT/LAER Determination Cut-Off Date
FROM: John Seitz, Director, Stationary Source Compliance Division, OAQPS
TO: Regional Air Directors, Regions I-X
DISCUSSION: The BACT/LAER determination for a major new source is not set until the final permit is issued. The source has the responsibility to investigate all available and pending control technologies for consideration as BACT or LAER. Establishment of a cutoff date prior to the public comment period would limit public participation. A cutoff date established prior to permit issuance could allow a source to avoid more stringent controls.
CR: 26.11

8.44 DATE: February 16, 1990
SUBJECT: Typical PSD Submittal Outline
FROM: Wallace N. Davis, Executive Director, Virginia Dept. of Air Pollution Control
TO: William C. Campbell, III, Cogentrix, Inc.
DISCUSSION: The letter provides target emission guidelines for coal-fired facilities, and includes a typical outline for a PSD submittal.
CR: 10.48 [Hard Copy]

8.45 [RESERVED]

8. PSD: BACT (continued)

- 8.46 DATE: June 7, 1990
SUBJECT: Designation of Issues for Review of Illinois EPA's Permit Determinations Regarding World Color Press
FROM: William K. Reilly, Administrator, EPA
TO: Richard J. Carlson, Director, Illinois EPA
DISCUSSION: This paper designates the issues to be briefed in the review of World Color Press PSD permit determinations made by the Illinois EPA. World Color Press and IEPA must reexamine their reasoning in stating, incorrectly, that an alleged absence of significant photochemical reactivity of the facilities' VOC emissions was an "environmental impact" that would justify less stringent limitations.
CR: 11.16
- 8.47 DATE: July 9, 1990
SUBJECT: Order on Motion for Stay on Appeal of Permits for Columbia Gulf Transmission Company
FROM: William K. Reilly, Administrator, EPA
TO: William C. Eddins, Director, Division for Air Quality, Commonwealth of Kentucky
Susan Midgett, Director, Air Programs Branch, USEPA, Region IV, and others
DISCUSSION: The Administrator hereby grants a stay to the appeal by EPA Region IV of the PSD permit granted by the State of Kentucky to Columbia Gulf Transmission Company. The stay enables the applicant to supplement the state administrative record with new factual information, which the applicant believes will confirm the wisdom of the State's original permit determination. Further, the Region may submit additional information to ensure that the BACT determination is fully contemporaneous. If the permit is subsequently revised, the public will be given the right to comment.
CR: 11.17

8. PSD: BACT (concluded)

- 8.48 DATE: June 3, 1987
SUBJECT: Administrative Order Regarding Construction of the Lake County Waste-to-Energy Facility
FROM: Jack E. Ravan, Regional Admin., Region IV
TO: NRG/Recovery Group, Inc.
DISCUSSION: A PSD permit given to a municipal solid waste incinerator is invalidated due to deficiencies in requiring acid gas controls, and in requiring more stringent emission limitations for particulate matter and SO₂.
CR: None
- 8.49 DATE: July 24, 1987
SUBJECT: Calculating Amortized Capital Costs
FROM: Robert D. Bauman, Chief
Standards Implementation Branch, CPDD (MD-15)
TO: Stephen H. Rothblatt, Chief
Air and Radiation Branch, Region V (5AR-26)
DISCUSSION: The memo discusses (1) the appropriate criteria to be used in calculating the amortized capital costs of control options in the selection of BACT, both for process-related controls and for add-on controls, and (2) the appropriate annual interest ("discount") rate to use in these analyses.
CR: None
- 8.50 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee W. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction of a resource recovery facility because no emission limit was included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and no public comment on PM₁₀ occurred. The NJ DEP issued the permit December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1, 1987.
CR: 10.52; 11.18

10. PSD: Permits/Permit Processing/Public Notice

- 10.32 DATE: March 31, 1988
SUBJECT: Transmittal of OAQPS Interim Control Policy Statement
FROM: John S. Sietz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
TO: Regions I-X Division Directors
DISCUSSION: The memo provides final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. During the interim period, interim controls that may be more effective in reducing emissions may be installed, if no delay results in installation of the final control equipment.
CR: 8.25 [Hard Copy]; 11.10
- 10.33 DATE: July 15, 1988 [2 memoranda]
SUBJECT: Procedures for EPA to Use to Address Deficient New Source Permits Under the Clean Air Act
FROM: Michael S. Alushin, Assoc. Enforcement Counsel for Air, OAQPS
John S. Sietz, Director, Stationary Source Compliance Division, OAQPS
TO: Regions I-X: Regional Counsels, Regional Council Air Branch Chiefs, Air Division Directors, PSD Contacts, et. al.
DISCUSSION: The cover memo transmits final guidance, in the form of the attached memo, for addressing deficient new source permits. The cover memo discusses some of the comments made on the draft guidance memo. The attached final guidance memo contains procedures for 3 types of permit processes: those issued pursuant to EPA-approved State programs, those issued by States pursuant to EPA authority delegation, and those issued by EPA directly. Model forms are appended. In addition, the memo contains information on factors normally sufficient for EPA to find a permit deficient and to consider enforcement action, timing of EPA response, and enforcement against the source v. enforcement against the State.
CR: None

10. PSD: Permits/Permit Processing/Public Notice (continued)

- 10.34 DATE: July 28, 1988
SUBJECT: Supplemental Guidance on Implementing the North County Prevention of Significant Deterioration (PSD) Remand
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: Addressees (Regional Air Division Directors)
DISCUSSION: The memo discusses 2 issues that have arisen from the Administrators remand decision in the North County PSD permit appeal, and that are beyond the scope of the September 22, 1987, document providing initial guidance on the subject.
(1) Although BACT is determined case-by-case, the permitting authority must consider the full range of pollution control options available and choose the most effective means of limiting emissions, unless shown compelling reasons of economic or energy impracticality.
(2) Emission of noncriteria pollutants should be evaluated carefully, including consultation with the sources listed. Where a municipal waste combustor is involved, OAQPS has provided rather detailed guidance on methods to factor air toxics considerations into the BACT decision.
(3) In the public notice, the level of detail and identification of specific toxic substances should be consistent with the concern posed by the air toxics.
CR: 8.27 [Hard Copy]
- 10.35 DATE: November 14, 1988
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for Columbia Gulf Transmission Company, Clementsville Compressor Station, Kentucky
FROM: Greer C. Tidwell, Regional Administrator
TO: Lee M. Thomas, Administrator
DISCUSSION: Review is requested of the permit issued by KY DER for a natural-gas-fired turbine, because dry controls do not constitute BACT for NO_x for the source.
CR: 8.29 [Hard Copy]
- 10.36 DATE: December 12, 1988
SUBJECT: Order Denying Review, Colmac Energy, Inc.
FROM: Lee M. Thomas, Admin., EPA
TO: County of Riverside, Coachella Valley Assoc, of Governments
DISCUSSION: Petitioners concerns can be grouped into 3 categories: (1) that the State and local agencies should have jurisdiction over the facility, (2) that unregulated pollutants, and odor and vector control were not adequately considered, and (3) that certain conditions are vague or inadequate and should be clarified. All petitions are denied.
CR: None

10. PSD: Permits/Permit Processing/Public Notice (continued)

- 10.37 DATE: January 4, 1989
SUBJECT: Valero Hydrocarbons BACT Analyses
FROM: Anthony P. Wayne, Chief, TX/NM Enforcement Section
TO: Lawrence E. Pewitt, PE, Director, Permits Division,
Texas Air Control Board
DISCUSSION: (1) Valero Hydrocarbons should reevaluate its study of feasible BACT alternatives for its proposed natural gas processing plant, particularly with respect to the technical, cost, and economic issues mentioned.
(2) The memo discusses the steps Valero must take to keep their PSD permit active, because they are coming up on the one-year date by which EPA must make a decision.
CR: 8.31 [Hard Copy]
- 10.38 DATE: January 27, 1989
SUBJECT: Discounted Cash Flow (DCF) Analysis for Craven County Project New Source Review
FROM: Frank L. Bunyard, Economic Analysis Section, ASB, AQMD
TO: Allen C. Basala, Chief, Economic Analysis Section, ASB, AQMD
DISCUSSION: The EPA Economic Analysis Section reviewed a discounted cash flow analysis describing feasibility of thermal de-NO_x as BACT. This memo states reasons EPA is not convinced on infeasibility and recommends the PSD applicant be asked to provide more substantive justification for key assumptions. Memos 10.39 and 10.40 are closely related to this one.
CR: 8.32 [Hard Copy]
- 10.39 DATE: January 27, 1989
SUBJECT: Review of Craven County Wood Energy Project
FROM: Allen C. Basala, Chief, Economic Analysis Section, ASB
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: This memo provides notification to Region IV that a discounted cash flow analysis provided by a PSD applicant was not found to be convincing of the infeasibility of thermal de-NO_x controls. Memos 10.38 and 10.40 are closely related.
CR: 8.33 [Hard Copy]
- 10.40 DATE: February 13, 1989
SUBJECT: BACT Determination for Craven County Wood Energy Project
FROM: Bruce P. Miller, Chief
Air Programs Branch; Air, Pesticides and Toxics
Management Division
TO: N. Ogden Gerald, Chief Air Quality Section
NC Department of Natural Resources and Community Development
DISCUSSION: PSD permit applicant must provide additional verification as described of economic data presented regarding thermal de-NO_x as BACT for NO_x emissions. The memo references economic evaluations in Economic Analysis Section Documents 10.38 and 10.39.
CR: 8.35 [Hard Copy]

10. PSD: Permits/Permit Processing/Public Notice (continued)

10.41 DATE: February 24, 1989
SUBJECT: Opinion in Frank J. Kelley, Michigan Natural Resources Commission, Michigan Air Pollution Control Commission, and David F. Hales v. Albar Industries, C.A. No. 88-cv-40302-FL, E.D. Michigan, February 7, 1989
FROM: Terrell E. Hunt, Associate Enforcement Counsel, Air Enforcement Division
TO: Edward E. Reich, Acting Asst. Admin. for Enforcement and Compliance Monitoring
Don R. Clay, Acting Asst. Admin. for Air and Radiation
DISCUSSION: This US District Court decision upheld the right of a State to bring suit in Federal court as a citizen under the Clean Air Act (CAA). Also, although the CAA does not authorize penalties under Section 304, Michigan could collect them under the authority of the State statute. [Copy of the Decision is included]
CR: None

10.42 DATE: June 9, 1989
SUBJECT: Order Denying Review of PSD Permit for Spokane Regional Waste-to-Energy Project
FROM: William K. Reilly, Administrator, EPA
TO: Citizens for Clean Air and Council for Land Care and Planning
DISCUSSION: Petitioners requested review of PSD permit because BACT for NO_x, which should be thermal de-NO_x, was not required, and because fuel cleaning and separation, and recycling, were not adequately considered as emission reduction techniques. Spokane agreed to install thermal de-NO_x before this opinion was written, so the court dismissed that petition. The Administrator stated that petitioners did not make an adequate case for reviewing the permit on the other issues.
CR: 8.37 [Hard Copy]

10. PSD: Permits/Permit Processing/Public Notice (continued)

- 10.43 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others
DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.
1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
 2. Unregulated pollutants (Denied)
 3. Prescribed emission limits for entire life of the permit (Remanded)
 4. BACT for PM (Remanded)
 5. Ambient Air and Public access (Remanded)
 6. BACT for CO (Denied)
 7. Preconstruction monitoring (Denied)
- CR: 8.39 [Hard Copy]; 7.8; 11.13
- 10.44 DATE: August 2, 1989
SUBJECT: Administrative Order Denying Review of an Amended PSD Permit for a Mass-Burn Municipal Waste Incinerator for Huntington, NY
FROM: William K. Reilly, Administrator, U.S. EPA
TO: Citizens for a Livable Environment and Recycling
DISCUSSION: The order states that the amended permit does require the facility to use BACT, and the BACT analysis is not deficient. Petitioner confused "de minimis" emissions limits with limitations for NO_x
CR: 8.40 [Hard Copy]

10. PSD: Permits/Permit Processing/Public Notice (continued)

- 10.45 DATE: October 17, 1989
SUBJECT: Ambient Air
FROM: Robert D. Bauman, Chief
SO₂/Particulate Matter Programs Branch (MD-15)
TO: Gerald Fontenot, Chief
Air Programs Branch, Region VI (6T-A)
DISCUSSION: This memo responds to the August 24, 1989, memo from Hathaway to Calcagni [6.27].
(a) PSD modeling by a permit applicant can discount the contribution of a background source to the predicted concentration as described.
(b) Where a proposed source has a significant impact on any increment violation, the permit should not be approved unless the increment violation is corrected prior to operation of the proposed source. (See also July 15, 1988, memo from OAQPS to Region 6 [6.23]).
CR: 6.29 [Hard Copy]
- 10.46 DATE: January 2, 1990
SUBJECT: Order Denying Review of Revised Permit Determination for Spokane Regional Waste to Energy Project
FROM: F. Henry Hubicht, Acting Administrator, EPA
TO: Lisa J. Kilian, Joan Honican, Citizens for Clean Air, and the Council for Land Care and Planning
DISCUSSION: This order denies the appeals filed against the revised permit for the Spokane Regional Waste to Energy Project. The Washington State Department of Ecology did not act inappropriately in not holding a public hearing. Questions relating to State requirements are beyond the purview of this proceeding. The recycling issue is again rejected as a subject for review for the same reasons as stated in the June 9, 1989, remand [8.37].
CR: 8.42 [Hard Copy]; 11.14
- 10.47 DATE: January 4, 1990
SUBJECT: Remand order concerning the denial of the PSD application of Bio Energy Corporation, West Hopkinton, NH
FROM: William K. Reilly, Administrator, EPA
TO: Timothy Williamson, Office of Regional Counsel, US EPA, Region I, William Dell Orfano, President, Bio Energy Corporation, and others
DISCUSSION: All matters regarding the PSD Permit Denial Decision dated November 15, 1989, concerning Bio Energy's PSD application for its wood-fired power plant are remanded to Region I so that further comments and technical information may be received to supplement the administrative record.
CR: 11.15 [Hard Copy]

10. PSD: Permits/Permit Processing/Public Notice (continued)

- 10.48** DATE: February 16, 1990
SUBJECT: Typical PSD Submittal Outline
FROM: Wallace N. Davis, Executive Director, Virginia Dept. of Air Pollution Control
TO: William C. Campbell, III, Cogentrix, Inc.
DISCUSSION: The letter provides target emission guidelines for coal-fired facilities, and includes a typical outline for a PSD submittal.
CR: 8.44
- 10.49** DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD permits in areas with modeled violation(s) both to sources with no significant impacts and to sources with significant impacts. In the latter case, procedures for processing the associated SIP revisions are also discussed.
CR: 6.31; 12.17; 15.11
- 10.50** DATE: July 30, 1990
SUBJECT: Order denying review of PSD permit authorizing construction of a steam electricity cogenerating facility at Altavista, VA.
FROM: William K. Reilly, Administrator
TO: Petitioners for review of permit as listed
DISCUSSION: Petitions are denied and the response of the Virginia Department of Air Pollution Control is upheld for two reasons: (1) in each instance, the grounds for review alleged in the petitions did not meet the threshold for review established by the rules, and (2) in numerous instances, the issues raised by two of the petitioners had not been raised at the public hearing or during the public comment period, and, therefore, were not eligible for consideration on appeal.
CR: None

10. PSD: Permits/Permit Processing/Public Notice (concluded)

10.51 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 3.29; 14.9

10.52 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee M. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction
of a resource recovery facility because no emission limit was
included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and
no public comment on PM₁₀ occurred. The NJ DEP issued the permit
December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1,
1987.
CR: 8.50 [Hard Copy]; 11.18

11. PSD Permit Changes/Extensions/Expiration

- 11.10 DATE: March 31, 1988
SUBJECT: Transmittal of OAQPS Interim Control Policy Statement
FROM: John S. Sietz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
TO: Regions I-X Division Directors
DISCUSSION: The memo provides final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. During the interim period, interim controls that may be more effective in reducing emissions may be installed, if no delay results in installation of the final control equipment.
CR: 8.24 [Hard Copy]; 10.32
- 11.11 DATE: April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 8.26 [Hard Copy]; 15.5; 28.5
- 11.12 DATE: September 8, 1988
SUBJECT: EPA Region IX Policy on PSD Permit Extensions
FROM: Wayne A. Blackard, Chief
New Source Section
TO: Region IX States and Districts NSR/PSD Permitting Contacts
DISCUSSION: EPA's policy intends to grant a permit extension of the 18-month deadline to any good faith application providing the requirements described in this memo are met.
CR: None

11. PSD Permit Changes/Extensions/Expiration (continued)

11.13 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others
DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.
1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
2. Unregulated pollutants (Denied)
3. Prescribed emission limits for entire life of the permit (Remanded)
4. BACT for PM (Remanded)
5. Ambient Air and Public access (Remanded)
6. BACT for CO (Denied)
7. Preconstruction monitoring (Denied)
CR: 8.39 [Hard Copy]; 7.8; 10.43

11.14 DATE: January 2, 1990
SUBJECT: Order Denying Review of Revised Permit Determination for Spokane Regional Waste to Energy Project
FROM: F. Henry Hubicht, Acting Administrator, EPA
TO: Lisa J. Kilian, Joan Honican, Citizens for Clean Air, and the Council for Land Care and Planning
DISCUSSION: This order denies the appeals filed against the revised permit for the Spokane Regional Waste to Energy Project. The Washington State Department of Ecology did not act inappropriately in not holding a public hearing. Questions relating to State requirements are beyond the purview of this proceeding. The recycling issue is again rejected as a subject for review for the same reasons as stated in the June 9, 1989, remand (8.38).
CR: 8.42 [Hard Copy]; 10.46

11. PSD Permit Changes/Extensions/Expiration (continued)

11.15 DATE: January 4, 1990
SUBJECT: Remand order concerning the denial of the PSD application of Bio Energy Corporation, West Hopkinton, NH
FROM: William K. Reilly, Administrator, EPA
TO: Timothy Williamson, Office of Regional Counsel, US EPA, Region I, William Dell Orfano, President, Bio Energy Corporation, and others
DISCUSSION: All matters regarding the PSD Permit Denial Decision dated November 15, 1989, concerning Bio Energy's PSD application for its wood-fired power plant are remanded to Region I so that further comments and technical information may be received to supplement the administrative record.
CR: 10.47

11.16 DATE: June 7, 1990
SUBJECT: Designation of Issues for Review of Illinois EPA's Permit Determinations Regarding World Color Press
FROM: William K. Reilly, Administrator, EPA
TO: Richard J. Carlson, Director, Illinois EPA
DISCUSSION: This paper designates the issues to be briefed in the review of World Color Press PSD permit determinations made by the Illinois EPA. World Color Press and IEPA must reexamine their reasoning in stating, incorrectly, that an alleged absence of significant photochemical reactivity of the facilities' VOC emissions was an "environmental impact" that would justify less stringent limitations.
CR: 8.46 [Hard Copy]

11.17 DATE: July 9, 1990
SUBJECT: Order on Motion for Stay on Appeal of Permits for Columbia Gulf Transmission Company
FROM: William K. Reilly, Administrator, EPA
TO: William C. Eddins, Director, Division for Air Quality, Commonwealth of Kentucky
Susan Midgett, Director, Air Programs Branch, USEPA, Region IV, and others
DISCUSSION: The Administrator hereby grants a stay to the appeal by EPA Region IV of the PSD permit granted by the State of Kentucky to Columbia Gulf Transmission Company. The stay enables the applicant to supplement the state administrative record with new factual information, which the applicant believes will confirm the wisdom of the State's original permit determination. Further, the Region may submit additional information to ensure that the BACT determination is fully contemporaneous. If the permit is subsequently revised, the public will be given the right to comment.
CR: 8.47 [Hard Copy]

11. PSD Permit Changes/Extensions/Expiration (concluded)

11.18 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee W. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction of a resource recovery facility because no emission limit was included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and no public comment on PM₁₀ occurred. The NJ DEP issued the permit December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1, 1987.
CR: 8.50 [Hard Copy]; 10.52

12. PSD Relation to Nonattainment Program

- 12.13 DATE: July 5, 1988
SUBJECT: Air Quality Analysis for Prevention of Significant Deterioration (PSD)
FROM: Gerald E. Emison, Director
Office of Air Quality Planning Standards (MD-10)
TO: Thomas J. Maslany, Director
Air Management Division (3AM00)
DISCUSSION: The memo relays a policy decision on the approach to use to interpret dispersion modeling results to determine whether a source will cause or contribute to a violation of NAAQS or PSD increment. Under this approach, air quality concentrations are projected throughout the proposed source's impact area, but do not automatically cause a source to cause or contribute to a violation. Instead, where a modeled violation is predicted, further analysis is done to determine whether the impact is significant at the point and time of the modeled violation.
CR: 6.22 [Hard Copy]
- 12.14 DATE: December 28, 1988
SUBJECT: Emission Offset Exemptions for Resource Recovery Facilities
FROM: Gerald A. Emison, Director, OAQPS
TO: Conrad Simon, Director, Air and Waste Management Division, Region II
DISCUSSION: States that have offset exemptions for RRF's in their SIP's should initiate SIP revisions that would remove the exemptions. EPA will no longer approve SIP's containing offset exemptions for RRF's unless they contain an approved growth allowance. Appendix S is no obstacle to deletion of the exemptions, because it has been largely superseded.
CR: 25.13 [Hard Copy]; 28.6
- 12.15 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix S has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 13.10; 15.8; 25.15; 28.9

12. PSD Relation to Nonattainment Program (concluded)

12.16 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards
CR: 25.15 [Hard Copy]; 13.11; 15.9; 28.10

12.17 DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD permits in areas with modeled violation(s) both to sources with no significant impacts and to sources with significant impacts. In the latter case, procedures for processing the associated SIP revisions are also discussed.
CR: 10.49 [Hard Copy]; 6.31; 15.11

13. PSD Temporary Source/Portable Source/Other Exemptions

- 13.9 DATE: August 31, 1988
SUBJECT: Whether Facilities That Use Glass Fibers Are Considered "Glass Fiber Processing Plants"
FROM: Dennis Crumpler, New Source Review Section
Noncriteria Pollutant Programs Branch
TO: Michael A. Stawarz, NY DEC Region 5
DISCUSSION: Facilities that use glass fibers to manufacture other products, such as fiberglass-reinforced composites, were not intended to be included in the "glass fiber processing" category. "Glass fiber processing" was intended to include only those facilities engaged in making glass fiber.
CR: 3.31 [Hard Copy]
- 13.10 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix S has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 12.15; 15.8; 25.15; 28.9
- 13.11 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards
CR: 25.15 [Hard Copy]; 12.16; 15.9; 28.10

14. PSD Allowable Constructive Activities Prior to Permit Issuance

14.9 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 3.29; 10.51

15. PSD SIP Processing

- 15.5 DATE: April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 8.26 [Hard Copy]; 11.11; 28.5
- 15.6 DATE: May 17, 1988
SUBJECT: Application of the Interim Policy for Stack Height Regulatory Actions
FROM: John Calcagni, Director, Air Quality Management Division
TO: Chief, Air Branch, Regions I-X
DISCUSSION: This memo provides guidance on carrying out the interim policy described in the April 22, 1988, memo from Potter to all Regional Air Directors (8.26). Attached to that memo example language to be used for permits and regulatory packages to caveat permits discussed prior to EPA's response to the court remand.
CR: None
- 15.7 DATE: February 15, 1989
SUBJECT: Guidance on Early Delegation of Authority for the Nitrogen Dioxide (NO₂) Increments Program
FROM: Gerald A. Emison, Director, Office of Air Quality Planning and Standards
TO: Louis F. Gitto, Director, Air Management Division, Region I
DISCUSSION: The memo discusses: (1) how States with delegated authority initiate the process of advancing the general effective date of 40 CFR 52.21; and (2) the appropriate EPA rulemaking procedures for carrying out a State's request.
CR: None
- 15.8 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix 5 has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 12.15; 13.10; 28.9

15. PSD SIP Processing (concluded)

- 15.9 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards
CR: 25.15 [Hard Copy]; 12.16; 13.11; 28.10
- 15.10 DATE: August 24, 1989
SUBJECT: Guidance on Implementing the Nitrogen Dioxide (NO₂) Prevention of Significant Deterioration (PSD) Increments
FROM: John Calcagni, Director, Air Quality Management Division (MD-15)
TO: William B. Hathaway, Director, Air, Pesticides and Toxics Division, Region VI
DISCUSSION: The memo discusses general and specific aspects of the NO₂ PSD increment regulation. States should require NO₂ increment consumption analysis as soon as possible to help to avoid a situation where a proposed new source would violate NO₂ increment before the State's NO₂ increments regulations are in effect.
CR: 6.27 [Hard Copy]
- 15.11 DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD permits in areas with modeled violation(s) both to sources with no significant impacts and to sources with significant impacts. In the latter case, procedures for processing the associated SIP revisions are also discussed.
CR: 10.49 [Hard Copy]; 6.31; 12.17

22. PSD Potential to Emit/Limitations on Capacity to Emit

22.7 DATE: June 13, 1989
SUBJECT: Guidance on Limiting Potential to Emit New Source Permitting
FROM: Terrell E. Hunt
Associate Enforcement Counsel
Air Enforcement Division
Office of Enforcement and Compliance Monitoring
TO: Addressees
DISCUSSION: This 22-page memo contains final guidance on conditions in construction permits that can legally limit a source's potential to emit to minor or de minimus levels. The memo includes sections of the Louisiana Pacific rulings. Types of limitations that are Federally enforceable, and, therefore, legitimate restrictions on potential to emit, are discussed, including restrictions on production rates, operating hours, control device limitations, and averaging periods for determining emission rates and control efficiencies. Characteristics of "sham" permits are identified and enforcement is discussed. The memo includes sections of the Louisiana-Pacific rulings as a basis for policy and includes several examples to illustrate the principles.
CR: 2.31 [Hard Copy]; 4.41

23. PSD Definitions/Classification of Source

23.22 DATE: June 19, 1986
SUBJECT: Finding of Violation in Issuance of Permit to Operate to AM General Corporation, Indiana
FROM: David Kee, Director, Air Management Division, Region V
TO: State of Indiana, St. Joseph County Health Department, AM General Corporation
DISCUSSION: A permit to operate given to a metal part coating facility is in violation of applicable Federal and State regulations. In particular, applicant did not apply LAER, and increased VOC emissions were not offset by a reduction in VOC emission by existing facilities.
CR: 25.16; 26.13

23.23 DATE: October 24, 1980
SUBJECT: Definition of "Installation" in Nonattainment Regulations
FROM: Walter C. Barber, Director, Office of Air Quality Planning and Standards
TO: Director, Air and Hazardous Materials Division, Regions I-X
DISCUSSION: The term installation refers to "an identifiable piece of process equipment." If an NSPS identifies an "affected facility", the reviewing agency should consider such an affected facility as an installation for the purpose of new source review applicability determinations. Where NSPS is silent or there is no NSPS to define an affected facility, the NSPS approach should still provide guidance to the reviewer.
CR: None

23.24 [RESERVED]

23. PSD Definitions/Classification of Source (continued)

- 23.25 DATE: October 6, 1987
SUBJECT: Emissions from Landfills
FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)
TO: David P. Howekamp, Director
Air Management Division, Region IX
DISCUSSION: A landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tpy applicable major source cutoff for the pollutant for which the area is nonattainment. Landfill emissions that could reasonably be collected and vented are not considered fugitive emissions and must be included in calculating a sources potential to emit. Where landfill gas is combusted or processed before release, the pollutant released counts toward NSR applicability.
CR: 24.11
- 23.26 DATE: November 10, 1987
SUBJECT: Air Emissions from a Landfill
FROM: Wayne A. Blackard, Chief, New Source Section
TO: Russ Baggerly, Meiners Oaks, CA
DISCUSSION: Emissions from existing or proposed landfills without gas collection systems are considered fugitive emissions and are not subject to NSR. Landfill emissions that are collected would not qualify as fugitive and could cause the landfill to be subject to NSR.
CR: 24.12
- 23.27 DATE: June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, Region VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 3.30 [Hard Copy]; 5.23; 24.13

23. PSD Definitions/Classification of Source (continued)

- 23.28 DATE: June 10, 1988
SUBJECT: May 25, 1988 conference call
FROM: Monica Smyth
Assistant Regional Counsel
TO: File, CPC Argo
DISCUSSION: An increase or decrease in actual emissions is creditable in the netting equation only if EPA has not relied on it in issuing a major source permit under the PSD or Non-Attainment regulations. Minor source permits and specific emission increases that might be permitted through such minor source permits must be included in the netting equation, as long as those increases occur during the contemporaneous time period.
CR: 4.36 [Hard Copy]; 25.11
- 23.29 DATE: September 9, 1988
SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPC) Port Washington Life Extension Project
FROM: Don R. Clay, Acting Assistant Administrator for Air and Radiation (ANR-443)
TO: David A. Kee, Director
Air and Radiation Division, Region V
DISCUSSION: Although not an official applicability determination, this memo provided the preliminary opinion, based on the information collected up to the date of issue, that PSD and NSPS would apply to a "life extension" project at Port Washington Power Plant. Each element of PSD applicability via major modification and NSPS applicability were discussed in the context of information provided. This project involves restoring the physical and operational capabilities of each unit to its original capacity and extending the useful life of the units well beyond the planned retirement dates that would otherwise apply. This work appears to be non-routine, and, thus, to constitute a "physical change"; a significant net emissions increase would occur as a result of the work.
CR: 4.37 [Hard Copy]

23. PSD Definitions/Classification of Source (concluded)

23.30 DATE: January 12, 1989
SUBJECT: Guidance on Several Issues Related to Determining Applicability of New Major Source Regulations in Granting Construction Permits
FROM: Edward J. Lillis, Chief
Noncriteria Pollution Programs Branch
Air Quality Management Division
TO: Michael J. Hayes, Manager
Division of Air Pollution Control, Illinois EPA
DISCUSSION: Memo provides guidance on several issues related to determining applicability of major source regulations in granting construction permits to modified sources.
(1) A reviewing agency must base determination of whether a source is "major" on "major" source definitions in the Federal Register.
(2) Whether the emissions increase related to a modification is significant is determined before any netting calculation is done. If it is, netting calculations are then performed to determine whether the "net emissions increase" associated with that modification is significant.
(3) Contemporaneous emissions increases and decreases are discussed, as well as other factors affecting whether they are "creditable".
(4) An example of a netting calculation is shown. Emissions increases or decreases used in issuing a previous major source permit cannot be creditable to a subsequent increase.
CR: 3.33 [Hard Copy]; 4.40

23.31 DATE: February 6, 1990
SUBJECT: Determination of Lowest Achievable Emission Rate for Coors Container Corporation, Canline CX3
FROM: Douglas M. Skie, Chief, Air Programs Branch, Region VIII
TO: Brad Beckham, Director, Air Pollution Control Division, CO Dept. of Health
DISCUSSION: Because LAER is determined for each modified emissions unit, each emissions unit at Coors Canline CXB that has an increase in emissions due to the major modification must have an independent LAER determination. These LAER determinations must be based on a comparison of emissions from other similar operations on a normalized basis.
CR: 26.12 [Hard Copy]

24. PSD Geographic/Pollutant Applicability

24.9 [RESERVED]

24.10 [RESERVED]

24.11 DATE: October 6, 1987
SUBJECT: Emissions from Landfills
FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)
TO: David P. Howekamp, Director, Air Management Division, Region IX
DISCUSSION: A landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tpy applicable major source cutoff for the pollutant for which the area is nonattainment. Landfill emissions that could reasonably be collected and vented are not considered fugitive emissions and must be included in calculating a sources potential to emit. Where landfill gas is combusted or processed before release, the pollutant released counts toward NSR applicability.
CR: 23.25 [Hard Copy]

24.12 DATE: November 10, 1987
SUBJECT: Air Emissions from a Landfill
FROM: Wayne A. Blackard, Chief, New Source Section
TO: Russ Baggerly, Meiners Oaks, CA
DISCUSSION: Emissions from existing or proposed landfills without gas collection systems are considered fugitive emissions and are not subject to NSR. Landfill emissions that are collected would not qualify as fugitive and could cause the landfill to be subject to NSR.
CR: 23.26 [Hard Copy]

24.13 DATE: June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, Region VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 3.30 [Hard Copy]; 5.23; 23.27

25. PSD Offsets

- 25.12 DATE: June 10, 1988
SUBJECT: May 25, 1988 conference call
FROM: Monica Smyth
Assistant Regional Counsel
TO: File, CPC Argo
DISCUSSION: An increase or decrease in actual emissions is creditable in the netting equation only if EPA has not relied on it in issuing a major source permit under the PSD or Non-Attainment regulations. Minor source permits and specific emission increases that might be permitted through such minor source permits must be included in the netting equation, as long as those increases occur during the contemporaneous time period.
CR: 4.36 [Hard Copy]; 23.28
- 25.13 DATE: December 28, 1988
SUBJECT: Emission Offset Exemptions for Resource Recovery Facilities
FROM: Gerald A. Emison, Director, OAQPS
TO: Conrad Simon, Director, Air and Waste Management Division, Region II
DISCUSSION: States that have offset exemptions for RRF's in their SIP's should initiate SIP revisions that would remove the exemptions. EPA will no longer approve SIP's containing offset exemptions for RRF's unless they contain an approved growth allowance. Appendix S is no obstacle to deletion of the exemptions, because it has been largely superseded.
CR: 12.14; 28.6
- 25.14 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix S has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 12.15; 13.10; 15.8; 28.9

25. PSD Offsets (concluded)

25.15 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards
CR: 12.16; 13.11; 15.9; 28.9

25.16 DATE: June 19, 1986
SUBJECT: Finding of Violation in Issuance of Permit to Operate to AM General Corporation, Indiana
FROM: David Kee, Director, Air Management Division, Region V
TO: State of Indiana, St. Joseph County Health Department, AM General Corporation
DISCUSSION: A permit to operate given to a metal part coating facility is in violation of applicable Federal and State regulations. In particular, applicant did not apply LAER, and increased VOC emissions were not offset by a reduction in VOC emission by existing facilities.
CR: 23.22 [Hard Copy]; 26.13

26. PSD LAER

26.4 DATE: April 25, 1988
SUBJECT: LAER Emission Limits for Automobile and Light Duty Truck Topcoat Operations
FROM: Jack R. Farmer, Director
Emission Standards Division (MD-13)
TO: Regional Air Division Directors
DISCUSSION: The LAER emission unit for automobile and light-duty truck topcoat operations should be at least as stringent as 12.26 lbs VOC per gallon solids deposited, with compliance on a daily basis using actual measured transfer efficiency values. Compliance with this LAER limit should be determined using the protocol developed by EPA in conjunction with the motor vehicle manufacturers association. NSR permit for Subaru/Isuzu, Lafayette, IN, was attached to original memo.
CR: None

26.5 DATE: August 29, 1988
SUBJECT: Transfer of Technology in Determining Lowest Achievable Emission Rate (LAER)
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: David Kee, Director
Air and Radiation Division, Region V
DISCUSSION: (a) EPA supports transfer of control technology between source categories for the purpose of determining LAER for a source both for gas stream controls, and for process controls and modification.
(b) LAER is primarily an emissions unit determination; each emissions unit must achieve the lowest possible emission rate. "Facility-wide" LAER can be considered if some more effective LAER exists thereby. Three hurdles to determining "facility-wide" LAER are discussed.
(c) LAER can be considered individually for each aspect of control of a source, although reviewers must be aware that one decision affects the others.
CR: None

26.6 DATE: December 1, 1988
SUBJECT: RACT Requirements in Ozone Nonattainment Areas
FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)
TO: William A. Spratlin, Director
Air and Toxics Division, Region VII
DISCUSSION: Circumstances unique to the auto industry have created a situation [at the time of this memo] where RACT requirements for a facility may be more stringent than NSPS or LAER. In this case, the State or local implementation plan should contain RACT requirements for these facilities.
CR: None

26. PSD LAER (continued)

26.7 DATE: February 24, 1989
SUBJECT: Cut-Off Date for Determining LAER in Major New Source Permitting
FROM: John Seitz, Director, SSCD, OAQPS
TO: David Kee, Director, Air and Radiation Division, Region V
DISCUSSION: A LAER determination for an NSR permit must reflect the most stringent LAER construction permit that has been issued anywhere in the country in the time period up to and including the public comment period on the permit under consideration. See also Documents 26.10 and 26.11.
CR: None

26.8 DATE: February 28, 1989
SUBJECT: Guidance on Determining Lowest Achievable Emission Rate (LAER)
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: David Kee, Director
Air and Radiation Division, Region V
DISCUSSION: (a) Little weight is given to economics in LAER determinations. Cost of a control could be considered not achievable only if no new plants could be built in that industry if emission limits were based on levels achievable only with the contemplated control technology.
(b) LAER for coating operations may mean low (or no) VOC solvent coatings, high transfer efficiencies, add-on control device on the gas stream, or some combination of these.
(c) The most stringent emissions limit contained in a SIP for a class or category of source must be considered LAER unless a more stringent emissions limitation has been achieved in practice, or unless the SIP limitation is demonstrated to be unachievable by the source.
(d) Careful case-by-case investigations must be made to determine how company-mandated product specifications (for coatings) would be used in determining LAER, and what limit must be met where a presumptive SIP-based LAER is not achievable.
CR: None

26.9 DATE: March 2, 1989
SUBJECT: Reasonably Available Control Technology (RACT) for New Automobile Assembly Plants
FROM: G. T. Helms, Chief
Ozone/Carbon Monoxide Programs Branch (MD-15)
TO: Steve Rothblatt, Chief
Air and Radiation Branch (5AR-26)
DISCUSSION: Automobile assembly plants in ozone non-attainment areas should have VOC emission requirements that are at least as stringent as RACT. Where NSPS and LAER requirements are not as stringent as RACT, RACT requirements should be instituted.
CR: 28.8

26. PSD LAER (continued)

- 26.10 DATE: August 9, 1989
SUBJECT: LAER Determination for a Previously Constructed Source
FROM: John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
TO: Thomas J. Maslany, Director
Air Management Division
Region III
DISCUSSION: Final LAER determination is not made until issuance of a final permit for a source constructed previous to permit review. The initial LAER assessment is made at the time of the completed application, and takes into consideration any technologies, practices, or SIP limits in effect as of the date of the complete permit.
CR: None
- 26.11 DATE: January 11, 1990
SUBJECT: BACT/LAER Determination Cut-Off Date
FROM: John Seitz, Director, Stationary Source Compliance Division, OAQPS
TO: Regional Air Directors, Regions I-X
DISCUSSION: The BACT/LAER determination for a major new source is not set until the final permit is issued. The source has the responsibility to investigate all available and pending control technologies for consideration as BACT or LAER. Establishment of a cutoff date prior to the public comment period would limit public participation. A cutoff date established prior to permit issuance could allow a source to avoid more stringent controls.
CR: 8.43 [Hard Copy]
- 26.12 DATE: February 6, 1990
SUBJECT: Determination of Lowest Achievable Emission Rate for Coors Container Corporation, Canline CX3
FROM: Douglas M. Skie, Chief, Air Programs Branch, Region VIII
TO: Brad Beckham, Director, Air Pollution Control Division, CO Dept. of Health
DISCUSSION: Because LAER is determined for each modified emissions unit, each emissions unit at Coors Canline CXB that has an increase in emissions due to the major modification must have an independent LAER determination. These LAER determinations must be based on a comparison of emissions from other similar operations on a normalized basis.
CR: 23.31

26. PSD LAER (concluded)

26.13 DATE: June 19, 1986
SUBJECT: Finding of Violation in Issuance of Permit to Operate to AM
General Corporation, Indiana
FROM: David Kee, Director, Air Management Division, Region V
TO: State of Indiana, St. Joseph County Health Department, AM General
Corporation
DISCUSSION: A permit to operate given to a metal part coating facility is in
violation of applicable Federal and State regulations. In
particular, applicant did not apply LAER, and increased VOC
emissions were not offset by a reduction in VOC emission by
existing facilities
CR: 23.22 [Hard Copy]; 25.16

27. NAA. Statewide Compliance

27.5 DATE: October 28, 1988
SUBJECT: Review of De Minimis Emissions - Sanctions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division
TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26) Region V
DISCUSSION: De minimis net emission increases that accumulate within a contemporaneous (5 year) time frame should not be combined and would not trigger PSD review when significance levels are reached. However, de minimis increases do consume PSD increment, and, in nonattainment areas, aggregated de minimis emissions will trigger sanctions when significance levels are reached.
CR: 4.39 [Hard Copy]; 5.24

28. NAA. SIP Processing

- 28.5** **DATE:** April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 8.26 [Hard Copy]; 11.11; 15.5
- 28.6** **DATE:** December 28, 1988
SUBJECT: Emission Offset Exemptions for Resource Recovery Facilities
FROM: Gerald A. Emison, Director, OAQPS
TO: Conrad Simon, Director, Air and Waste Management Division, Region II
DISCUSSION: States that have offset exemptions for RRF's in their SIP's should initiate SIP revisions that would remove the exemptions. EPA will no longer approve SIP's containing offset exemptions for RRF's unless they contain an approved growth allowance. Appendix S is no obstacle to deletion of the exemptions, because it has been largely superceded.
CR: 25.13 [Hard Copy], 12.14
- 28.7** **DATE:** January 31, 1989
SUBJECT: Use of the Growth Allowable Contained in Part D SIPs
FROM: Bruce P. Miller, Chief, Air Programs Branch, Air Pesticides and Toxics Management Division, EPA Region IV
TO: Paul J. Bontrager, Director, Bureau of Pollution Control, Nashville - Davidson County
DISCUSSION: Areas for which a growth allowance was approved, but who failed to attain the ozone standard by the end of 1987, no longer have growth allowance available for use in lieu of offsets for new sources locating in nonattainment areas. Banked credits from source shutdown can be used for offsets in NAA Areas (except for on-site replacement facilities), only if they occur on the day the application is "complete" or any subsequent day up until actual operations begin.
CR: None
- 28.8** **DATE:** March 2, 1989
SUBJECT: Reasonably Available Control Technology (RACT) for New Automobile Assembly Plants
FROM: G. T. Helms, Chief
Ozone/Carbon Monoxide Programs Branch (MD-15)
TO: Steve Rothblatt, Chief
Air and Radiation Branch (5AR-26)
DISCUSSION: Automobile assembly plants in ozone non-attainment areas should have VOC emission requirements that are at least as stringent as RACT. Where NSPS and LAER requirements are not as stringent as RACT, RACT requirements should be instituted.
CR: 26.9 [Hard Copy]

28. NAA. SIP Processing (concluded)

28.9 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix 5 has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 12.15; 13.10; 15.8

28.10 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards.
CR: 25.15 [Hard Copy]; 12.16; 13.11; 15.9

1. PSD

Transition/Grandfathering

2. PSD

Potential to Emit/Limitations on Capacity to Emit



NR FID

JAN - 4 1988

g/ Part 2.27
cc. [signature]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

WML
Did you see this?
you copy

DEC 23 1987

[Signature: David S.]
OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING
[Signature: EDL...]
read 1/15

MEMORANDUM

SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo., Interpreting Certain PSD Regulations

FROM: Thomas L. Adams, Jr. [Signature]
Assistant Administrator for Enforcement and Compliance Monitoring

TO: J. Craig Potter
Assistant Administrator
for Air and Radiation (ANR-443)

On October 30, 1987, Judge Arraj of the U.S. District Court for the District of Colorado issued an opinion on cross motions for summary judgment in this case. The United States has sued Louisiana-Pacific (LPC) for construction of two major stationary sources without first obtaining prevention of significant deterioration (PSD) permits as required by the Clean Air Act and applicable regulations. LPC has alleged that the sources in question, waferboard production facilities located at Kremmling and Olathe, Colorado, were not major sources and so the requirement to obtain PSD permits did not apply to the facilities. Judge Arraj denied both motions for summary judgment, finding that questions of fact existed which need to be resolved in a trial. Trial is now set to commence January 19, 1988. However, Judge Arraj's opinion covers several legal matters which are important issues of first impression and may significantly affect enforcement under the Clean Air Act in the future.

I. The Jurisdictional Requirement for a 30 Day Continuing Violation After the Issuance of a NOV

In its complaint, the government had pleaded its first claim in the alternative, alleging that the LPC Kremmling waferboard facility was either a "major modification" or a "major stationary source", as defined by the PSD regulations. The Court granted LPC's motion for summary judgment on the government claim that the Kremmling facility was a major modification. The Court's reasoning was based on the jurisdictional requirements of the

Clean Air Act. LPC operated a saw mill which contained a teepee burner on the Kremmling site prior to commencing construction of the waferboard plant in 1983. The teepee burner was undisputedly a major stationary source (it had emitted over 250 tons per year of a regulated pollutant). A major modification is defined in the PSD regulations as a physical or operational change which produces significant net emissions increases. "Significant" is further defined as 40 tons per year of volatile organic compound, or 25 tons per year of particulates. There is no question that the waferboard plant increased emissions at Kremmling by those amounts.

EPA issued an NOV to LPC for construction of a major modification without a PSD permit on June 5, 1987. However, by the end of June, LPC had dismantled and permanently removed the teepee burner (the major stationary source). Judge Arraj held that EPA could not maintain its action on the major modification theory because the major source, upon which the major modification must be based, did not exist for more than 30 days after the NOV was issued. Section 113(b)(2) of the Clean Air Act allows the Administrator to bring suit in federal district court when a source violates the Act "more than 30 days after having been notified by the Administrator under section (a)(1) of this section of a finding that such person is violating such requirement."

EPA had also issued a second NOV to LPC for the construction of the waferboard plant at Kremmling, however. This NOV, issued February 3, 1987, alleged construction of a major stationary source without a PSD permit. To prove this allegation, EPA must show that the Kremmling waferboard plant itself has the potential to emit 250 tons per day. The Judge allowed this claim (the plaintiff's first claim in the alternative) to stand and be heard at trial.

II. The Meaning of "Federally Enforceable Restrictions" as Limiting "Potential to Emit" Under PSD Regulations

LPC argued that the Kremmling and Olathe plants could not be considered major stationary sources because conditions in their state permits limited their emissions to less than 250 tons per year of each regulated pollutant. Since these state permits were issued under an EPA-approved program, the permits are considered "federally enforceable". Therefore, LPC argued, conditions in these permits which limit emissions should be considered federally enforceable limits for purposes of determining potential to emit.

-3-

The Court disagreed. Judge Arraj first pointed out that the violation begins when construction commenced and that the state permits for Kremmling and Olathe were not issued until several months after construction commenced. Thus, the state permit limitations could not be a defense in the case because they did not exist when the alleged violation commenced.

After making this determination, Judge Arraj held that "even if the state permits had been in existence when the alleged violation occurred . . . defendant's motion would still have to fail because I cannot accept defendant's overly broad construction of the term 'potential to emit.'" pp. 17-18. The Judge rejected the notion that restrictions on actual emissions are properly considered in determining a source's potential to emit. He analyzed the opinion in Alabama Power v. Costle, 636 F.2d 322 (D.C. Cir. 1979), the seminal opinion regarding the meaning and requirements of the PSD program. He looked, as well, to the preamble of the 1980 PSD regulations, those regulations promulgated by EPA in response to the Alabama Power decision. From these sources and the language of the regulations themselves, the Judge concluded "that a variety of factors (in addition to maximum design capacity) are properly included in the calculation of a source's potential to emit. These factors clearly include the effect of pollution control equipment. Additionally, they include federally enforceable permit conditions which restrict hours of operation or amounts of material combusted or produced . . . (T)hese factors do not include permit restrictions which limit specific types and amounts of actual emissions." In reaching his conclusion, the Judge found that the definition of "potential to emit" should be given a narrow construction. The opinion held that "not all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of material combusted or produced are properly included, blanket restrictions on actual emissions are not." p. 23.

A copy of the opinion is attached. If you have any questions, please call Judy Katz at 382-2843.

Attachment

cc: Regional Counsels
Regions I-X

Air and Waste Management Division Director
Region II

Air Management Division Directors
Regions I, III, and IX

Air and Radiation Division Director
Region V

Air, Pesticides, and Toxics Management Division Directors
Regions IV and VI

Air and Toxics Division Directors
Regions VII, VIII, and X

Jonathan Z. Cannon
Deputy Assistant Administrator for Civil Enforcement

John S. Seitz, Director
Stationary Source Compliance Division

Alan Eckert
Associate General Counsel
Air and Radiation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

2.28

MAR 29 1988

OFFICE OF
ENFORCEMENT AND
COMPLIANCE MONITORING

(6-17-88)
E-11
126

MEMORANDUM

SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, Civil
Action No. 86-A-1880 (D. Colorado, March 22, 1988)

FROM: Michael S. Alushin *Elliott J. Hillberg for*
Associate Enforcement Counsel
Air Enforcement Division

TO: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement
and Compliance Monitoring

J. Craig Potter
Assistant Administrator
for Air and Radiation (ANR-443)

On March 22, Judge Alfred A. Arraj of the District of Colorado issued his opinion in this case which was tried in Denver between January 19-26, 1988. EPA had brought an enforcement action against Louisiana-Pacific Corporation (LPC) for violations of the prevention of significant deterioration (PSD) regulations under the Clean Air Act. The violations occurred when LPC constructed two waferboard plants in Kremmling and Olathe, Colorado without first obtaining PSD permits. Judge Arraj found that EPA had not met its burden of proving that the Olathe plant was subject to PSD requirements, but held that LPC had violated PSD regulations at the Kremmling plant. Judge Arraj did not find that LPC had received an economic benefit from its violation, however, and assessed a civil penalty of \$65,000. This is the first enforcement case for PSD violations exclusively to go to trial.

Discussion

Although the amount of the civil penalty awarded by Judge Arraj is modest, his opinion contains good law for EPA. The adverse holdings were based on narrow issues of fact and cannot act as precedent for future litigation. The important legal issues discussed include the proper implementation of the thirty day notice provision of 42 U.S.C. §7413 and a thorough analysis of the term "potential to emit."

In arriving at an appropriate penalty, Judge Arraj found that there was no economic benefit from delayed compliance. His conclusion was based on the reasoning that, by the first date of LPC's violation, LPC had already installed and was operating the control equipment that probably would have been required as best available control technology (BACT) if LPC had applied for a PSD permit. The first date of violation was found to be November 1986, when LPC first exceeded the production limits in its state permit.

However, the court ruled that:

Were this court to assess a nominal penalty only in this case, it would give sanction to a willful disregard of the PSD regulatory framework, and encourage other sources in the future to disregard other lawful restrictions on operations whenever convenient to do so (T)he burden of guessing correctly (what emissions will be) remains with the source, and a mistake in this process can indeed result in a penalty. Otherwise, future sources that are unsure of whether they will qualify as a major source will have no incentive to apply for PSD permits, which, undisputedly, is a burden. Slip opinion at 49-50.

Judge Arraj did not explain how he arrived at the figure of \$65,000.

Conclusion

The amount of the penalty awarded by the Court is significantly less than the government sought at trial. However, the opinion contains language that will be helpful precedent for cases in the future. The reasons for the court's relatively small penalty turn on narrow issues of fact peculiar to this specific case and cannot be used generally by other sources in future litigation. While the government has not made a definite decision about whether to appeal, it seems likely that we will accept Judge Arraj's decision. A copy of the opinion is attached.

Attachment

cc: Gerald Emison, Director
Office of Air Quality Planning and Standards

Jonathan Z. Cannon
Deputy Assistant Administrator
for Civil Enforcement

Alan W. Eckert
Associate General Counsel
Air and Radiation Division

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF COLORADO

Civil Action No. 86-A-1880

UNITED STATES OF AMERICA,

Plaintiff,

v.

LOUISIANA-PACIFIC CORPORATION,
a Delaware corporation,

Defendant.

FILED
UNITED STATES DISTRICT COURT
DENVER, COLORADO

MAR 22 1988

JAMES R. MANSPEAKE
CLERK

VW

FINDINGS OF FACT AND
CONCLUSIONS OF LAW

ARRAJ, District Judge

This is a civil enforcement action brought by the United States of America, as plaintiff, on behalf of the U.S. Environmental Protection Agency ("EPA") for violations of the Clean Air Act, 42 U.S.C. § 7401, et. seq., and the regulations promulgated thereunder concerning the prevention of significant deterioration ("PSD")¹ of air quality by the defendant, Louisiana-Pacific Corporation ("LPC"). Plaintiff seeks to enjoin defendant from further alleged violations of the PSD regulations, which are set forth at 40 C.F.R. §52.21. Additionally, plaintiff seeks the assessment of civil penalties against LPC for alleged violations of these regulations.

1. The PSD Program, added to the Clean Air Act by Congress in 1977, is designed to protect areas where the air is relatively clean. It requires that a special permit be obtained before a "major stationary source" of air pollution, or a "major modification" of a major stationary source, may be constructed in such an area.

The case was tried to the court on January 19 through 22, and January 25 and 26, 1988. Written closing arguments were submitted by the parties, and oral closing argument was heard on February 17, 1988. Having heard the testimony and arguments, and having reviewed the voluminous transcripts and exhibits, I find that the matter is ripe for disposition. The following shall constitute the court's findings of fact and conclusions of law in conformance with Fed.R. Civ.P. 52(a).

I. BACKGROUND: THE PSD PROGRAM

The Clean Air Act establishes minimum air quality standards to be achieved in all regions of the country. In 1977, Congress amended the Act to establish a program for the "prevention of significant deterioration ("PSD") of air quality. The PSD statutes and regulations are designed to protect areas of the country where the air is relatively clean. The goal of the program is to prevent the air quality in areas where it exceeds the statutory minimum from degenerating to that level.

To achieve this result, areas of the country where the air is cleaner than required by the National Ambient Air Quality Standards are identified by the states and designated as "attainment areas." 42 U.S.C. §§ 7407, 7471 (1983). The attainment areas are further divided into three classes: Class I for areas that have very clean air (such as national parks) where little or no deterioration is permitted; Class II for areas where moderate deterioration of air quality may occur; and Class III for areas where more economic growth and resulting air quality deterioration is allowed. Id. §§ 7472, 7474.

The thrust of the PSD program is that new "major emitting facilities" may not be constructed within these areas before certain permits have been obtained. Id. § 7475. The permits, in turn, allow the new facility to contribute to air pollution only up to specified incremental amounts. Id. § 7473(b). Of central importance to this case is the fact that LPC's Kremmling and Olathe facilities are located within attainment areas.

The Clean Air Act provides that "[n]o major emitting facility... may be constructed in any [attainment area] unless a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility...." 42 U.S.C. § 7475(a)(1) (emphasis added). The Act further provides that the term "major emitting facility" includes any source with the potential to emit 250 tons per year (TPY) or more of any air pollutant. Id. § 7479(1).

The PSD regulations go into more detail and establish the rule that no "major stationary source" or "major modification" of a major stationary source "shall begin actual construction without a permit" which states that the source or modification will meet the emission requirements set forth in the regulations. 40 C.F.R. § 52.21(i) (1983). The term "major stationary source" is defined to include any facility which emits, or has the potential to emit, 250 TPY of any air pollutant. Id. § 52.21(b)(1)(i)(b). A "major modification" is defined as any physical change or change in operation that would result in a significant increase in the emission of any one of several pollutants. Id. §§ 52.21(b)(2)(i), 52.21 (b)(23). With regard to the pollutants that are relevant in the present case, a net emissions increase of 100 TPY of carbon monoxide (CO) or 40 TPY of volatile organic compounds (VOCs) would be significant, and thereby constitute a major modification. Id.

Permits may be issued only to sources that satisfy two principal requirements. First, the source must demonstrate that emissions from the construction or operation of the facility will not violate any applicable emission standard of the act. 42 U.S.C. § 7475(a)(3). Second, the proposed source must be subject to the best available pollution control technology. Id. § 7475(a)(4). To facilitate its review, the EPA requires that new sources submit air monitoring information necessary to determine the impact on air quality of the proposed source. 40 C.F.R. § 52.21(m). Generally, such monitoring must be gathered one year in advance of submission of the PSD application. The EPA then has up to one year to review and grant or deny the application. 42 U.S.C. § 7475(c). As a result, it may take up to two years before the source is allowed to commence actual construction of the new facility.

Where the EPA determines that the provisions of the Clean Air Act and its implementing regulations have not been complied with, it may issue a notice of violation ("NOV") to the alleged offender. 42 U.S.C. § 7413(a)(1). If the alleged violation continues for more than 30 days after the issuance of the NOV, the EPA is then empowered to bring a civil enforcement action. Id. § 7413(b)(2). If a violation is established, the Act authorizes the court to issue a temporary or permanent injunction, or to assess a civil penalty of up to \$25,000 per day of violation, or both. Id.

II. FINDINGS OF FACT

Defendant LPC came to Colorado in 1983, with the encouragement of the state government, to establish the industry of waferwood manufacturing.² Since that time, LPC has built two waferwood plants in Colorado, the first in Kremmling, and the other near the town of Olathe. The air pollution emissions from these two plants, and the failure by LPC to obtain PSD permits from the EPA, form the basis of the present litigation.

A. "Waferwood"

In order to fully appreciate the issues before the court in this case, it is necessary to have some familiarity with the process by which LPC's Kremmling and Olathe facilities turn aspen and pine logs into "waferboard." First, when the logs are ready to be processed, they are cut by a saw into lengths of about eight feet. Once cut, the logs are moved into pools of heated water, called "hot ponds," to condition the bark for removal.³ From the hot ponds, the logs go to the "debarker" which, not surprisingly, is a machine that removes the bark. After the bark is removed, the logs move on to the "slasher," which cuts the logs into three-foot pieces, and then to the "waferizer," which chops these pieces into one-and-a-half to three-inch chips, or "wafers." The wafers then go to storage bins.

2. Waferwood is a plywood substitute product made of resinated wood chips, or "wafers," which are compressed into boards.

3. Additionally, the hot ponds perform the function of thawing out any logs which may, in the wintertime, be frozen.

From the storage bins, the wafers go to the "wafer dryer," which is a machine that combusts wood and sawdust to produce a heated "exhaust gas." The hot exhaust gas is brought into direct contact with the wood chips and thereby dries them. The chips are blown by the exhaust gas into a cyclone which, using principles of centrifugal force, separates the dried wood chips from the exhaust gas. The dried wafers then move on to a "screening" process where they are separated into two different sizes and stored.

Once the chips have been screened, they move from the storage bins to a "blender," where they are mixed with adhesives and waxes for the forming process. The chips are then laid on a mat, with larger chips on the top and bottom and smaller chips in between. The material on the mat is split by a "cross-cut saw" into sections measuring eight feet by sixteen feet. These sections are then loaded into the "press," which heats and compresses the material into "waferboard." From the press, the sections of waferboard are trimmed and cut into sheets measuring four feet by eight feet by the "trim saw." These four-by-eight sheets of waferboard are the final product.

The process just described creates air emissions in a number of ways. First, wet bark and sawdust from the slasher and debarker are combusted in a device known as a "Konus" thermal oil heater to generate much of the heat required by the plant. The main purpose of the Konus is to provide heat to the presses by means of a hot oil system, which is similar to a boiler system. The heat from the Konus is used to heat oil which, in turn, transfers that heat to the presses. A secondary purpose of the Konus is to supply heat to the hot ponds. Finally, heat from the Konus is also used to heat

the building itself in the wintertime. The emissions generated by the Konus include carbon monoxide ("CO") and volatile organic compounds ("VOCs"), as well as particulates, from the complete and incomplete combustion of the wet bark and wood that is used as fuel for the device.

Particulate emissions from the Konus combustion process are removed from the exhaust gas in two ways. First, the gas is blown into a "cyclone," which is a cylindrical device that causes the exhaust to rotate around in it. As a result of the rotation, solid material in the gas stream is thrown to the side of the device and is collected. Second, the gas exiting the cyclone is blown into a "baghouse." A baghouse is a pollution control device that operates in much the same way as a household vacuum cleaner. It consists of several fabric bags through which the exhaust is blown. The fabric catches particulate matter as the gas passes through.

In addition to the Konus, the wafer dryer process creates a second source of air emissions. As with the Konus, the combustion process again creates CO, VOCs, and particulate emissions. Additionally, when the wood chips are heated and dried in this fashion, natural resins are released from the wood.

As noted above, exhaust gas from the combustion of wood and sawdust is blown, along with the wood wafers being dried, to a primary cyclone where the wafers are separated from the gas. The exhaust gas continues on from the primary cyclone to a number of smaller cyclones operating at a higher velocity which remove more particulate matter from the gas stream. Under the original design, the gas exiting the smaller cyclones was vented directly to a stack. Subsequently,

nowever, LPC added an additional pollution control device, known as an "electrified filter bed" ("EFB"), to remove more particulates from the exhaust.

The presses give rise to a third source of emissions. VOCs result at this point as the heat and pressure from this process release more of the natural resins from the wood. These emissions are exhausted through the "press vents." Finally, the various saws make up a fourth source of emissions, since they generate sawdust which must be controlled.

B. The State Permits

LPC applied to the Colorado Air Pollution Control Division (APCD) in June of 1983 to obtain air emission permits for the Kremmling plant. The application requested permits for four emission sources: the Konus hot oil heater, the wafer dryer, the crosscut saw, and the trim saw. In October of 1983, LPC submitted a similar application for the Olathe plant. LPC then commenced on-site construction at Kremmling and Olathe in July and November of 1983, respectively.

In January of 1984, the Colorado APCD issued four air emission permits for the four emission sources at Kremmling referenced in LPC's application. These permits contained restrictions on the amount of fuel that could be combusted and on the amount of waferboard that could be produced by each source. The wafer dryer permit restricted that source to 20,000 tons per year of wood fuel and 93,000 tons per year of production. The permit for the Konus limited the annual fuel input for that device to 19,000 tons of bark and wood. Finally, the two permits for the saws limited production to 49,950 four-by-eight foot sheets of waferboard per year.

In February of 1984, the APCD received comments from the Colorado State Council of Carpenters to the effect that the public notices issued for the Kremmling and Olathe facilities failed to contain

any information concerning formaldehyde emissions. As a result, the APCD requested information from LPC concerning the possibility that formaldehyde was being emitted from the press vents. LPC responded to this request on March 8, 1984, by supplying the APCD with the data from one of four previous press vent tests it had conducted at its waferboard plant in Hayward, Wisconsin. These four tests were conducted in September of 1981, May of 1983, July of 1983, and the early part of 1984. LPC sent the APCD the preliminary results of the 1984 test as soon as they were available. While these test results were the most recent and current, they also showed the lowest emission rates.⁴

In addition to supplying this test data, LPC invited the APCD officer who had made the inquiry, Mr. Abe Vasquez, to observe another test of formaldehyde emissions from the press vents at the Hayward, Wisconsin plant. Vasquez accepted, and the test was conducted in May of 1984. LPC subsequently applied for a permit for the Kremmling press vents in October of 1984, and such a permit was issued by the APCD in April of 1985. This permit limited waferboard production to a maximum of 49,950 tons per year and 160 tons per day.

In September of 1984, the APCD issued five air emission permits for the Olathe plant. Four of these five permits were for the four emission points referenced in LPC's application, and the fifth was issued for the Olathe press vents. These permits contained combustion and production limitations similar to those issued for the Kremmling plant. Specifically, the wafer dryer was restricted to 20,000 tons per year of wood fuel and 80,127 tons per year of production, the

4. The 1984 tests showed formaldehyde emissions from the press vents of 9.14 lbs/hour. In contrast, the tests from May and June of 1983 indicate emissions of 19.05 and 31.92 lbs/hour, respectively.

Konus was restricted to 19,000 tons per year of bark and wood fuel, and the crosscut and trim saws, as well as the press vents, were limited to 49,950 tons of production annually and 160 tons of production daily. Revised permits for the Olathe Konus and the Olathe dryer were issued in May of 1985.

The APCD informed LPC by letter in June of 1985 of its intention to revoke the wafer dryer permits for both Kremmling and Olathe on the ground that LPC had violated certain conditions of the permits relating to opacity. A hearing on this matter was held before the Air Quality Control Commission on September 5, 1985, and by written order (dated September 23, 1985, nunc pro tunc September 5, 1985) the Commission ruled that the Kremmling dryer permit would be revoked effective October 15, 1985, and that the Olathe dryer permit would be revoked effective November 15, 1985. The order further provided, however, that LPC could continue to operate the plants if it obtained new dryer permits by these dates. The purpose of the order was to give LPC some additional time to install electronic filter beds ("EFBs") to further control emissions from the dryers. LPC did install EFBs in the fall of 1985, and opacity tests were subsequently performed which indicated compliance. As a result, replacement permits for the dryers were issued in October and November of 1985. These permits contained various restrictions on emissions and output, the amounts of which were determined "based on" 8000 hours per year of operation.

The APCD again in early 1986 informed LPC of its intention to revoke the same wafer dryer permits, as well as the permit for the Konus heater at Olathe. As with the 1985 revocations, however, LPC appealed this action to the Air Quality Control Commission, and the revocation decisions were stayed pending a hearing before the Commission.

Subsequently, LPC and the Commission entered into a settlement agreement to resolve the problem. The settlement set forth a number of improvements and modifications for the air pollution control system, and provided that the decision to revoke would be withdrawn if LPC made all of the specified improvements and modifications. After a hearing was held on December 18, 1986, the Commission issued its order, dated January 6, 1987, finding that LPC had "complied in all respects with the terms and conditions of the Settlement Agreement," and ordering that the "suspended decisions" revoking the permits in question were vacated in all respects.

The most restrictive limitation⁵ contained in the state emission permits issued for Kremmling and Olathe limited annual production at both facilities to 49,950 tons of waferboard per year.⁶ Taking into account the weight of a sheet of waferboard that measures three-eighths of an inch in thickness, undisputed expert testimony established that the mathematical equivalent of 49,950 tons is roughly 90 million square feet on a three-eighths inch basis. While LPC

5. The concept and term "most restrictive permit limitation" recognizes the fact that a permit limitation, while it may be issued in reference to a particular piece of equipment in the process flow, is effectively a limit on the whole facility. For example, in a waferboard plant possessing a single waferizer and a single press, if the waferizer was limited to 200,000 tons of production per year, and further down the line the press was limited to 100,000 tons per year, the latter limitation would obviously be the more restrictive of the two. Moreover, it would effectively limit production for the entire facility (including the waferizer) to 100,000 tons per year.

6. This permit limitation was contained in the wafer dryer permits for both Kremmling and Olathe, as well as the permits for the Olathe cross-cut and trim saws. I must admit some confusion over the fact that the permits for the Kremmling cross-cut and trim saws limit production to 49,950 four-by-eight foot sheets of waferboard annually. Assuming that one four-by-eight foot sheet of waferboard weighs less than a ton, this later restriction on sheets of production would clearly seem to be more restrictive than the former limit on tons of production. However, since neither plaintiff nor defendant argued that this latter limitation was the most restrictive, I will ignore this discrepancy as well.

kept production within this amount in 1985 and prior years, production exceeded this permit limitation in 1986 and 1987. Specifically, production in square feet at Olathe and Kremmling amounted to 105 million and 106 million in 1986, and 124 million and 94 million (through November) in 1987, respectively.

Desiring to increase production at Kremmling and Olathe beyond the limits on production contained in the original permits, LPC applied to the APCD for new permits allowing increased production. Revised permits limiting production to 78,216 tons per year were issued for all five of the emission sources at Kremmling in July of 1987. Revised permits for the Olathe plant had not been issued as of the time of trial.

C. The PSD Permits

It is undisputed that the LPC had not submitted PSD permit applications for either of its Colorado waferboard plants to the EPA prior to initiating construction and operation of these facilities. At the time of trial, LPC had submitted PSD permit applications, but actual PSD permits for Kremmling and Olathe had not been issued.

In September of 1983, Mr. Steven Frey of the United States EPA was driving to an inspection when he stopped to visit the Kremmling construction site. Frey stopped because he noticed a large amount of smoke being emitted from a "wigwam burner" at the site. Frey visited the Kremmling operation a second time in December of 1984 because he was aware that the APCD had been conducting frequent inspections of the facility. Frey informed LPC at or around the time of this second visit that the wigwam burner probably constituted a "major stationary source" of air emissions as that term is defined in the PSD regulations. As a result, the new waferboard plant could be

considered a "major modification" of the wigwam burner, and could therefore be in violation of the PSD program.

A "wigwam burner" is a tepee-shaped incinerator used to burn wood waste from a sawmill. Such a wigwam burner and a sawmill were already in existence at the Kremmling plant site when the property was purchased by LPC in 1982. A permit which allowed emissions of 500 TPY of CO from the wigwam burner was transferred to LPC in August of 1983. As a result of Frey's warning, LPC quickly closed operation of the wigwam burner and, by June 4, 1985, it had completely dismantled and removed that facility.

In December of 1984, Robert Jorgenson of the Colorado APCD sent a letter to LPC requesting that air emission tests (or "stack tests") be performed at the Kremmling and Olathe plants. The division required test data for a number of pollutants, including CO and VOCs. LPC accepted bids from a number of companies specializing in this kind of testing and recommended by the APCD. After reviewing the bids, LPC selected Interpoll, Inc. to conduct the tests, and scheduled them for March of 1985.

Alex Slivinsky was hired by LPC in January of 1985 and given direct responsibility for the stack testing to be done in March of 1985. Interestingly, he had no previous experience in air emissions testing. Similarly, Jorgenson, who had a background in wildlife biology and public administration when he was hired by the APCD in 1984, had never observed an emissions test for CO prior to the March, 1985 tests at Kremmling and Olathe. Slivinsky and Jorgenson worked together to prepare the protocol⁷ for the March, 1985 emissions test.

7. A "protocol" is a written plan or program which specifies how the emissions testing is to be conducted.

Jorgenson and Slivinsky ran into some confusion in preparing the protocol for the Konus heater test. Although Jorgenson had no previous experience with the design of the Konus and did not review the specifications for the device, he did learn from an informational brochure that the Konus could generate a maximum heat output of 28 million BTU. As a result, in preparing the protocol, and in administering the test at Olathe,⁸ Jorgenson insisted that the Konus be operated to provide this maximum heat output.

An undisputed fact of critical importance, established by the testimony of numerous expert and lay witnesses, is that the Konus is designed to match heat output with heat demand. As noted above, the sources which demand heat from the Konus include the press (hot oil system), the hot ponds, and the building itself. A thermostat within the Konus works to operate an automatic fuel feed system. When heat demand exceeds heat output, fuel will automatically be added. When heat output and demand are approximately equal, or output exceeds demand, the system will automatically stop supplying fuel. Additionally, if the fire gets too hot, a second system will automatically turn off the fans which supply the air for the combustion, and the fire will smolder. The purpose behind these automatic systems is to achieve maximum combustion and heat output with the smallest amount of fuel.

The emissions test for the Konus heater at Olathe was performed on March 12, 1985.⁹ Although he tried, Slivinsky was never able to generate the maximum heat output called for in the protocol for

8. As a representative of the APCD, Jorgenson was present to observe the testing at Kremmling and Olathe.

9. Various emissions tests were performed at Olathe on March 12, 13, and 14, 1985.

a number of reasons. First, the fuel was fed not automatically, but rather at a pre-calculated rate. By estimating the amount of BTUs that a fixed amount of fuel would generate, Jorgenson and Slivinsky had hoped to be able to create 28 million BTUs by pouring in a pre-calculated amount of fuel. Unfortunately, the fuel created a greater amount of heat than had been estimated. Second, even though the hot ponds, the press, and the building had been allowed to cool the night before the test, and even though the building heat was turned up to maximum and hot ponds were heated to a temperature forty percent higher than normal operations, these sources did not generate a large enough heat demand. These two facts, combined with the fact that the Konus will not generate more heat than required, worked together to create a cycle of problems.

As too much fuel was fed in, and because the heat demand was too low, the system would overheat and the fans would shut down. With the air supply cut off, the fire would "smolder" rather than "burn."¹⁰ Once the smoldering caused the unit to cool down, more fuel would be added to what was already too much, smothering what little fire there was.¹¹ When the fire got to burning again, the

10. Roughly translated from layman's terms into more precise terms, "burning" would correspond to "complete combustion," and "smoldering" would correspond to what the experts referred to as "incomplete combustion."

11. This method of operation was so unusual that at one point the Konus fire actually went out completely for 15 to 20 minutes because the large amount of fuel added (consisting of wet bark and sawdust) smothered it. One expert compared operation of the Konus to burning a small pile of wet leaves in the backyard. Operating the Konus as it is designed would be like adding wet leaves to the fire a few at a time. In contrast, the operation at the March, 1985 test at Olathe would be akin to putting out the fire by throwing a full bushel of wet leaves onto the pile all at once.

the cycle would repeat itself. The ultimate result of this operation was that fuel was fed into the Konus in "lumps," rather than continuously, and that the fuel primarily "smoldered," rather than "burned."

The Konus heater at the Kremmling facility was tested the following week on March 19, 1985. As a result of the problems experienced at Olathe, Slivinsky arranged with Jorgenson to operate the Konus differently. Specifically, although Slivinsky still pre-calculated the amount of fuel to be burned, he calculated a lower fuel-feed setting. The result was that the amount of heat created more closely matched the heat demand, and the Konus therefore operated continuously, and at a relatively stable rate, throughout the test. Using significantly less fuel, the device actually generated more heat than at Olathe, and the plant as a whole was able to operate (that is, produce waferboard) for a greater percentage of the testing time. It is important to note that the representatives of the EPA and the APCD who testified at trial did not consider any of the Kremmling test results to be incorrect or misleading.

The test results processed by Interpoll and returned to LPC indicated that CO emissions were three times greater at Olathe than they were at Kremmling. This discrepancy is due to the fact that CO is a product of incomplete combustion. Since there was so much more incomplete combustion associated with the Olathe test, it naturally follows that the CO emissions there would be greater.

Steven Frey of the EPA reviewed the March, 1985 stack test results and used them to calculate the potential to emit various pollutants from the two plants. Using this data, he concluded that the Olathe facility had the potential to emit more than 250 TPY of CO, and therefore

constituted a "major stationary source" of air emissions (as that term is defined in the PSD regulations). Similarly, Frey calculated that the Kremmling facility had the potential to emit more than 100 TPY of VOCs, and therefore qualified as a "major modification" of the wigwam burner. Accordingly, the EPA issued two Notices of Violation ("NOVs") to this effect on June 5, 1985.

Frey's original calculations did not take into account any of the restrictions on operation contained in the state permits. Rather, his original figures are based on the assumption that the Kremmling and Olathe plants could operate at an unrestricted 8760 hours per year. Accordingly, he combined this figure and the March emission data from Olathe to calculate that the Olathe plant had the potential to emit 437.9 TPY of CO. Similarly, he used the March data from Kremmling and EPA Method 25 to conclude that the Kremmling plant had the potential to emit 265.0 TPY of VOCs. These calculations formed the basis for the issuance of the June, 1985 NOVs.

After comparing the results of the March stack tests at Kremmling and Olathe, and considering Slivinsky's report on the different methods of operation at each facility, LPC concluded that the test data for the Olathe Konus was inaccurate because the unit was not operated as designed. LPC contacted the EPA and the APCD to explain this conclusion. It informed both agencies of its decision to retest the Olathe Konus in June, and invited both agencies to attend. Jorgenson accepted the invitation and attended for the APCD. Frey responded that the maximum capacity of the Konus could not be tested in the relatively warm month of June. As a result, he stated that the June test results would have no effect on his conclusion and that he would not be in attendance.

LPC did retest emissions from the Konus at Olathe in June of 1985. The fuel feed was operated in the automatic mode, and, as with the test at Kremmling, heat output was matched with heat demand. Predictably, the emission rate for CO was drastically lower than the March test at Olathe and similar to the emission rate measured at Kremmling.

On July 10, 1985, representatives of LPC and the EPA held a conference to discuss the NOV's that were issued the previous month. At this conference, Frey explained the reasoning behind the EPA's position that the plants were in violation of the PSD regulatory scheme. In response, Slivinsky explained why LPC felt that no violation had occurred. With respect to Olathe, Slivinsky explained that the March stack tests were unreliable because the plant would never actually be operated so badly that the Konus fire would go out. Addressing the EPA's concern that maximum heat demand could not be tested in June, Slivinsky offered to retest the Konus the following winter. With respect to Kremmling, Slivinsky informed the EPA that the wigwam burner, the alleged major stationary source, had been dismantled.

At this conference, Frey was informed by LPC that the restrictions in the state permits effectively limited the plants to 8000 hours of operation per year.¹² Applying this limitation to the data from

12. Interestingly, none of the many permits issued for the Kremmling and Olathe facilities, by their terms, expressly limit operations to 8000 hours per year. This figure does not even appear at all in 15 of the 19 permits that were ultimately issued, including the original ten permits and the five permits issued for Kremmling in 1987. Four of the permits -- the Olathe Konus and dryer permits dated May 28, 1985, the Olathe dryer permit dated October 21, 1985, and the Kremmling dryer permit dated November 20, 1985 -- do contain a reference to 8000 hours of operation. However, these actually state only that various other specific restrictions on emissions that are expressly contained in those permits were determined "based on" 8000 hours of operation per year.

the March stack tests at Olathe, he calculated that the Olathe plant had the potential to emit 399 TPY of CO. Similarly, the Kremmling data, when applied to this limitation, indicated that the Kremmling facility had the potential to emit 242.1 TPY of VOCs measured in accordance with EPA Method 25.

Upon learning that the wigwam burner had been dismantled before the NOV's were ever issued, the position of the EPA gradually became that the Kremmling facility constituted a major source in its own right. At this point, unconvinced that Method 25 was the appropriate method for measuring VOCs in the PSD context,¹³ Frey recalculated the potential to emit VOCs at Kremmling using a new and unpublished methodology that he conceived and that he felt was preferable. The basic difference between the two methods is that under Method 25, VOCs are expressed as carbon, but under Frey's method, VOCs are expressed as formaldehyde. Since the molecular weight of formaldehyde is greater than the atomic weight of carbon, Frey's method results in a greater VOC emission rate than Method 25. Using his new method, Frey calculated the potential to emit VOCs at Kremmling to be 293.5 TPY for 8760 hours of operation and 265.3 TPY for 8000 hours of operation.

13. Method 25 is a method for VOC emission testing and analysis promulgated by the EPA and published at 40 C.F.R. § 60 App. A. It was originally developed in the context of new source performance standards, but the regulations state that all of the methods contained in Appendix A have potential applicability in other contexts. The government's position is that a methodology arising in the context of new source performance standards "is not necessarily applicable to sources subject to the prevention of significant deterioration requirements." In enacting the PSD program in 1976, Congress ordered the EPA to promulgate regulations giving specific guidance for a number of pollutants, including VOCs. 42 U.S.C. § 7476(a) & (c). The government does not dispute the fact that the EPA has never complied with this directive, and that the deadline set by Congress passed several years ago.

Although nothing transpired at the July conference to change LPC's position that its Kremmling and Olathe facilities were not subject to the PSD program, it decided after this meeting to apply for PSD permits anyway. This decision represented both an attempt to satisfy the EPA and a realization that a significant expansion of these operations in the future might really trigger the PSD program. Before any such applications were ever submitted, the EPA issued an administrative order to LPC on September 27, 1985. The order directed LPC to submit a PSD permit application for its Olathe wafer-board facility within 60 days of the effective date of the order. The order stated that it would become effective 15 days after its issuance. However, in a display of the efficiency for which the public sector is so famous, the order was neither signed nor dated when it was issued.

One of the components of a complete PSD application is air "monitoring" data.¹⁴ Since this requirement can be waived by the administrator,¹⁵ LPC requested such a waiver from the EPA on November 7, 1985. Although only the Olathe plant was subject to the administrative order, LPC asked the EPA to consider a waiver for both Kremmling and Olathe because the plants were so similar and because it was preparing to submit applications for both plants. EPA responded to LPC's request in the negative on December 3, 1985, but the response only addressed the Olathe plant. As a result, Slivinsky continued to wait for a response which addressed the Kremmling plant. When it appeared

14. The PSD regulations generally require that the air quality of the area in which the new emission source is to be located is to be monitored over a period of at least one year. See 40 C.F.R. 52.21(m).

15. See 40 C.F.R. 52.21(i)(8).

that such a response would not be forthcoming, he submitted PSD applications for both facilities on January 15, 1986.

At the time these applications were submitted, a state implementation plan ("SIP") for Colorado had not yet been approved by the EPA.¹⁶ Accordingly, the EPA was responsible for the administration of the PSD program in Colorado, and any application for a PSD permit submitted during this period should have been submitted to the EPA. Nonetheless, under the terms of an "interim agreement" between the EPA and the Colorado APCD, the substantive review of the application was performed by the APCD. Thus, when a PSD permit was submitted to the EPA, it was shortly forwarded to the APCD for review.

Aware of this procedure, Slivinsky submitted the PSD permit applications, contrary to the directions in the administrative order, directly to Jim Geier of the APCD. Slivinsky left a message with the APCD that Geier should contact him if the latter had any questions or if there were any problems with what was submitted. Shortly after receiving the application, Geier conferred with Frey over the fact that the PSD applications had been submitted. Neither Frey nor Geier made any attempt, either by cover letter or phone call, to inform LPC that the applications had been submitted to the wrong agency. LPC was informed of the problem by way of a letter from EPA's regional counsel, on March 25, 1986.

LPC hired Mr. Charles Bray in February of 1986 as a consultant to assist LPC in the PSD permitting process for the Kremmling and Olathe facilities. Bray reviewed the data from the stack tests that had been conducted in March and June of 1985 and used these test

16. Colorado's SIP for its PSD program was approved by EPA in September of 1986.

results to calculate the Kremmling and Olathe plants' potential to emit various pollutants. In contrast to Frey's conclusions, however, Bray's calculations indicated that the Olathe facility did not have the potential to emit 250 TPY of CO, and that the Kremmling facility did not have the potential to emit 250 TPY of VOCs. In short, Bray's calculations indicated that neither of LPC's Colorado facilities was a major stationary source of air emissions subject to the PSD program.

The different conclusions reached by Frey and Bray can be explained by the fact that Bray's calculations differ from Frey's in a couple of important respects. First, with regard to Olathe, Bray used the CO emission data from the June, 1985 test rather than the March, 1985 test. Bray believed it would be inappropriate to use the March results because the Konus heater was operated at that test in a manner contrary to its design. Second, with regard to both facilities, Bray concluded that the most restrictive permit limitation was the annual limit on production of 49,950 TPY which is contained in the original saw and drier permits. Frey (it will be recalled) used a limit of 8000 hours per year of operation. Third, Bray used Method 25 (rather than Frey's new method) to calculate VOC emissions.

Applying the permit limitation on annual tons of production, Bray concluded that the potential of the Kremmling plant to emit VOCs was 193.7 TPY under Method 25. Although he believed that Method 25 was the proper methodology to employ in calculating the weight of VOC emissions, he also calculated the potential to emit VOCs at Kremmling to be 216 TPY using Frey's new and unpublished methodology. Using the test results of the June, 1985 stack test, and applying the permit limitation on tons of production, Bray calculated that the potential to emit CO at the Olathe plant was 196 TPY. He noted

that if he had used the results of the March stack test at Kremmling (instead of the data from the June test at Olathe) that the potential of the Olathe plant to emit CO would have been lower still (by about ten percent).

After reviewing LPC's original PSD permit applications, the EPA noted a number of deficiencies. In response to the agency's complaint that the applications did not contain a "complete" monitoring plan, Bray submitted revised monitoring plans for both plants in June of 1986. In an effort to address the other deficiencies, LPC submitted revised PSD applications to the EPA in July and August of 1986 for the Olathe and Kremmling facilities, respectively. In September of 1986, EPA informed LPC that the revised monitoring plan was also deficient, and, in October of 1986, EPA informed LPC of a number of problems with the second set of PSD permit applications. Yet another monitoring plan was submitted by LPC in April of 1987, and a third set of PSD applications (which EPA has since found to be complete) were received by EPA in July of 1987. PSD permits for the two facilities had not been issued as of the time of trial.

D. Procedural Posture of the Case

The United States filed its complaint in this case on September 12, 1986. The complaint contained two claims for relief. The first claim alleged that the Kremmling facility constituted a "major modification" of the pre-existing wigwam burner, and the second alleged that the Olathe plant itself was a "major stationary source." These claims charged that the plants were in violation of the PSD program because they were constructed and were being operated in the absence of PSD permits.

On February 3, 1987, the EPA issued yet another NOV to LPC alleging this time that the Kremmling plant constituted a "major stationary source" in its own right. The United States then moved to amend its complaint to add a first claim for relief in the alternative based on the violation alleged in the 1987 NOV. The government also sought to add a third claim for relief based on LPC's failure to comply with the administrative order issued in September of 1985. This motion to amend was granted. The first claim for relief was dismissed by Memorandum Opinion and Order of this court dated October 30, 1987, and the third claim for relief was dismissed on defendant's motion at trial made at the close of plaintiff's case-in-chief.

As a result of these rulings, only the first claim for relief in the alternative and the second claim for relief remain for resolution. The narrow questions they present are whether the Olathe plant had the potential to emit 250 TPY of CO, and whether the Kremmling plant had the potential to emit 250 TPY of VOCs. While these issues might at first appear to present questions of fact, their resolution actually turns on the legal construction of the term "potential to emit."

III. CONCLUSIONS OF LAW

A. The Thirty Day Notice Provision of 42 U.S.C. § 7413

42 U.S.C. § 7413(a)(1) provides as follows:

Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any requirement of an applicable state implementation plan, the Administrator shall notify the person in violation of the plan... of such finding. If such violation extends beyond the 30th day after the date of the Administrator's notification, the Administrator... may bring a civil action in accordance with subsection (b) of this section.

42 U.S.C. § 7413(a)(1) (1983) (emphasis added). Subsection (b), in turn, empowers the EPA to bring a civil enforcement action for an injunction, or civil penalty, or both, whenever the owner of a major stationary source "violates any requirement of an applicable implementation plan... more than 30 days after having been notified by the Administrator under subsection(a)(1) of this section of a finding that such person is violating such requirement." Id. § 7413(b)(2) (emphasis added).

These provisions make it clear that, in enacting the PSD program, Congress envisioned a system where, before the EPA has jurisdiction to bring a civil enforcement action, (1) the source which is allegedly in violation must be notified by the EPA of the violation, and (2) the source must disregard the warning and persist in the alleged violation for 30 days. The EPA is empowered to bring such a civil suit only on the basis of the specific violation alleged in the NOV and only where that specific violation has continued for 30 days. United States v. Louisiana-Pacific Corp., No. 86-A-1880, slip op. at 11 (D.Colo. Oct. 30, 1987) (hereinafter Memorandum Opinion). As a result, not every violation of the PSD provisions is actionable, but

only those where the alleged offender is notified of the violation and persists in the violation for 30 days thereafter. Id. at 13.

A primary legal question raised in this case and which must necessarily be resolved at the outset is the proper construction of the 30 day period referred to in 42 U.S.C. § 7413. Defendant contends that this provision should be given the narrowest possible construction. It argues that in considering whether the 30 day requirement is met, the court must look only to the 30 day period immediately following the issuance of the NOV. It urges that any other events transpiring after this period are irrelevant. Thus, if the facilities in question became major stationary sources (the specific violation alleged in the NOVs at issue) 31 days after the NOVs issued, and this violation continued thereafter, LPC would contend that such a violation is not actionable because it began more than 30 days after the notice was issued. If the EPA wished to bring an action on this violation, the argument goes, then it would have to issue a second NOV alleging the same violation and wait another 30 days.

Applied to the facts of the present case, LPC urges that because the NOV for the Olathe plant (which alleged that the facility had the potential to emit 250 TPY of CO and was therefore a major stationary source) was issued on June 5, 1985, this court should only consider whether this facility had the potential to emit 250 TPY of CO between June 5, 1985, and July 5, 1985. Similarly, since the NOV for the Kremmling facility (which alleged that the facility was a major stationary source because it had the potential to emit 250 TPY of VOCs) issued on February 3, 1985, LPC would have the court narrow its inquiry to whether the Kremmling plant had the potential to emit 250 TPY of VOCs between February 3, 1985, and March 5, 1985.

Plaintiff argues for a broader construction of the 30 day requirement. It asserts that this jurisdictional prerequisite exists solely for the purpose of giving the source fair warning of the problem and a reasonable period of time to clean up its act. Thus, in contrast to the position taken by LPC, the government urges that this jurisdictional requirement has been met if the source commits the specific violation alleged in the NOV anytime after the 30 day grace period has run.

I conclude, again,¹⁷ that the latter construction now being urged by the government is indeed the correct one. The Clean Air Act taken as a whole, and a plain reading of its provisions, both clearly indicate that, in enacting the notice requirement at issue, Congress' intention was to give an alleged source a brief period of time within which to evaluate its options before the substantial penalties available under the act could become a possibility.¹⁸ It did not intend to create a jurisdictional technicality that could be abused to prevent even the most reckless and chronic polluter from being brought to trial.

Where a source is truly in violation, the PSD program is designed to allow and encourage the source to correct the problem. To further this goal, the provision being considered should be construed in such a way as to create an incentive for the source to permanently correct the problem, not merely to correct it for 30 days. To achieve this permanent correction, the EPA's power to enforce the violation alleged in the NOV must be ongoing rather than extending merely for 30 days.

17. See Memorandum Opinion at 17 (wherein the approach now being urged by the government was applied by this court without comment at a time before the issue had specifically been raised).

18. The specific language chosen by Congress expressly contemplates the effect of an NOV extending beyond the 30 days immediately following its issuance. Eg. 42 U.S.C. § 7413(a)(1) ("If such violation extends beyond the 30th day..."); 42 U.S.C. § 7413(b)(2) (EPA has jurisdiction to sue whenever the owner of a source commits a violation "more than 30 days after having been notified...").

Were this court to accept the construction being urged by LPC, it would create a loophole in the enforcement scheme large enough to swallow the entire PSD program. Under such a construction, an irresponsible source could chronically and even intentionally avoid the PSD program by temporarily correcting the violation alleged near the end of the 30 day period. After that period had passed, the source could return to business as usual and continue to operate in violation until the next NOV was issued. In light of the fact that one NOV is sufficient to put a source on notice, I fail to see what possible purpose could be served by forcing the EPA to continually issue identical NOV's to the same offender.

In sum, the jurisdictional requirement of 42 U.S.C. § 7413 has been met if the source commits the specific violation alleged in the NOV anytime after the 30 day grace period has run. Therefore, in the case at hand, if the EPA can show that the Olathe facility had the potential to emit 250 TPY of CO anytime after July 5, 1985, it has shown a violation of the PSD program actionable under 42 U.S.C. § 7413. Similarly, if it can prove that the Kremmling plant had the potential to emit 250 TPY of VOCs anytime after March 5, 1987, it has made out an actionable violation. This ruling does nothing to increase the exposure to liability of a source that, upon receiving notice of a violation, does what is necessary to meet its responsibilities to society by pursuing a policy of permanently complying with the law. Rather, the practical effect of this holding extends only to sources who would take advantage of a perceived technicality in the law and whose long term strategy and policy is to continue to violate the Clean Air Act even after having been warned.

B. "Potential to Emit"¹⁹

The PSD regulations define the term "potential to emit" as follows:

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable."

40 C.F.R. § 52.21(b)(4). In order to resolve the seemingly narrow issues of the potential to emit VOCs and CO at Kremmling and Olathe, it is necessary to grapple with some perplexing (and as yet unanswered)²⁰ legal questions raised by this definition and the unique facts of this case. First, what is meant by the "maximum capacity" of a source to emit a pollutant under its "physical and operational design"? Second, are the operational limitations contained in the state permits "federally enforceable"? Third, if they are, which of the several permit restrictions should be used in the calculation? Fourth, should such operational limitations be included in the calculation of a source's potential to emit even where such restrictions are routinely and knowingly violated? The court will now address each of these issues in turn.

19. A thorough analysis of the term "potential to emit", including a history of its definition and construction, is set forth in the Memorandum Opinion at 17-24.

20. There is precious little prior authority dealing, even in a general way, with the proper construction of the term "potential to emit." Moreover, with regard to the narrow and unique issues enumerated and discussed in this litigation, the parties have been unable to supply any helpful citation in their briefs, and the court has similarly been unable to locate any caselaw bearing directly on these points. Thus, since the issues raised in this case appear to present novel questions of law, the court must address them without the benefit of any precedent with which to guide the analysis.

1. "Maximum Design Capacity"

LPC argues that the results obtained from the March, 1985 test of the Konus heater should not be used in the calculation of potential to emit. LPC urges the court that it would be inappropriate to use such data because the concept of potential to emit clearly contemplates the unit being operated as designed, and that the Olathe Konus was operated contrary to its design at the test in March of 1985. The government responds that the March, 1985 Olathe data is acceptable because the term "potential to emit" really means the maximum emissions that a source can possibly generate, regardless of whether it is being operated as designed. The government argues that, even though the operation of the Konus at this test may have been incorrect, it was still possible to operate the unit in this way, and that this data is therefore useful for determining the maximum emissions the source can generate. For the several reasons that follow, I find the government's position on this issue untenable, and hold that the concept of potential to emit refers to the maximum emissions a source can generate when being operated within the constraints of its design.

The PSD regulations themselves define the potential to emit as the maximum capacity of a source to emit pollutants under its physical and operational design. 40 C.F.R. § 52.21(b)(4). The plain reading of this language indicates that test data must meet two requirements before it may properly be used in the calculation of a source's potential to emit. First, the unit being tested must be operated during the test in the manner in which it is designed to be operated. Second, within that constraint, the unit must be operated at maximum capacity, or "full throttle," throughout the test.

Any analysis of the definition of "potential to emit" must include a reference to the case of Alabama Power Co. v. Costle, 636 F.2d 323 (D.C.Cir. 1979) because the current definition above was promulgated in response to the D.C. Circuit's holding in that case. The reasoning in the Alabama Power opinion indicates that the government's construction should not be accepted. At the time this case was before the D.C. Circuit, the EPA by regulation defined potential to emit as referring to the projected emissions of a source when operating at full capacity, with the projection increased by hypothesizing the absence of air pollution control equipment designed into the source. Id. at 363. The court rejected such an interpretation, and remanded the regulations to the EPA with instructions to the agency to include the effect of in-place control equipment in defining potential to emit. Id. at 355. Holding that potential to emit refers to a facility's "design capacity," the court reasoned that since air pollution control equipment was part of the overall design of the source, it must be considered in the calculation of potential to emit. Id. at 353.

The broad holding of Alabama Power is that potential to emit does not refer to the maximum emissions that can be generated by a source hypothesizing the worst conceivable operation. Rather, the concept contemplates the maximum emissions that can be generated while operating the source as it is intended to be operated and as it is normally operated. Of course, it is possible that a source could be operated without the control equipment designed into it or that a Konus heater could be operated so badly that the fire would go out. Yet, Alabama Power stands for the proposition that hypothesizing the worst possible emissions from the worst possible operation is the wrong way to calculate potential to emit.

Additionally, it serves no legitimate purpose to test the emissions from a source when that source is being operated in a way it would never be operated in actual practice. Such data is valueless unless EPA's purpose is to require every source in attainment areas to be subject to the PSD program. It is clear, however, that this was not Congress' intention, since it expressly exempted small sources.

The government makes much of the fact that it is theoretically possible to operate the Konus in the manner that was done at the March, 1985 test at Olathe, and that it was even possible to operate the plant (produce waferboard) when the Konus was being misused in this way. While this statement may be correct, this argument fails to meet the court's concern that any emission data gathered during such operation would be valueless. For example, it makes as much sense to add so much fuel to the Konus that the fire goes out as it does to fuel the unit (which is designed to accept wet bark and sawdust) with coal. Certainly it might be possible to do both, and the unit might even generate sufficient heat to produce waferboard. Yet, either course of action would be contrary to the unit's design, and neither would yield any useful emissions data.

In the present case, there can be no doubt that the Konus at Olathe was operated during the March, 1985 emissions test in a manner contrary to its design. First, it is uncontroverted that the Konus is designed to match heat output with heat demand, whether the unit is operated in the automatic or semi-automatic mode, and that this was not done at the test. Second, the Konus is designed to generate heat by way of complete combustion, but the fire primarily smoldered, rather than burned, during the test in question.

Moreover, the manner in which the Konus was operated during the March, 1985 test at Olathe would never occur during normal operations. First, the function of the Konus is to generate heat. The testimony was uncontroverted (and common sense would also indicate) that, in light of this purpose, the Konus would never be operated so badly that the fire would actually be smothered. Second, the Konus is designed to be fuel efficient, generating the greatest amount of heat or power from the least amount of fuel. Since resorting to outside sources for fuel would be an expense to the business, the realities of a competitive marketplace suggest that LPC would act to conserve its internal fuel supply by operating the unit fuel-efficiently as it is designed. Third, and perhaps most important, the fuel-feed setting was pre-calculated to provide an amount of fuel that would generate 28 million BTU. Although the unit was often run on semi-automatic, this kind of fuel feed setting would never occur in actual practice because (even allowing the plant to cool for a full winter night, and heating the hot ponds to temperatures forty percent above normal) the Olathe facility will simply never generate that great a heat demand.

In sum, the results of the March, 1985 test of the Konus heater at Olathe cannot be used to properly calculate the potential of that source to emit CO because during that test the device was operated in a manner contrary to its design and in a manner that would never occur in normal operations. The government's only evidence that the potential to emit CO at Olathe exceeded 250 TPY consisted of Frey's calculations, all of which were based on data from the March, 1985 test at Olathe. Since (for the reasons expressed above) this

evidence is unreliable, and in light of the fact that the CO results from the Kremmling test were unchallenged by the government and were so radically different from the Olathe CO data, I find the government's evidence on this matter unpersuasive.²¹ Accordingly, since plaintiff has failed to carry its burden of proof, the second claim for relief will be dismissed.

2. "Federally Enforceable" Restrictions

A crucial aspect of LPC's defense in the present case is its assertion that the operational limitations contained in the state emission permits must be considered in calculating the potential of the Kremmling plant to emit VOCs. With regard to such restrictions, the PSD regulations provide that any operational limitation to which a source is subject, including "restrictions on hours of operation or on the type or amount of material combusted, stored, or processed," should be taken into account in determining the source's potential to emit, but only if the limitation or the effect it would have on emissions is "federally enforceable." 40 C.F.R. § 52.21(b)(4). In the present case, since the permit limitation upon which LPC chiefly relies (an annual limitation on the amount of waferboard which may be produced) is clearly a restriction on the amount of material processed, it should indeed be included in the calculation of potential to emit if it is "federally enforceable."

The PSD regulations provide that the term "federally enforceable" refers to all limitations and conditions which are enforceable by the EPA. 40 C.F.R. § 52.21(b)(17). The term is broadly defined to

21. Additionally, I note that there is no evidence in the record (presented by either side) to indicate that the CO results from either of the other two tests (March, 1985 at Kremmling or June, 1985 at Olathe) would yield a potential to emit CO at Olathe of 250 TPY).

include any requirement or limitation contained in or created pursuant to any SIP, whether it be a SIP to enforce the national ambient standards or a SIP to enforce the PSD program. Additionally, the term embraces any requirements or limitations imposed to enforce new source performance standards or created pursuant to a new source review process. Id.

Caselaw confirms the proposition that restrictions on emissions imposed by a state in or pursuant to its SIP are federally enforceable. In the leading case of Union Electric Co. v. EPA, 515 F.2d 206, 211 (8th Cir. 1975), aff'd, 427 U.S. 246 (1976), reh'g denied, 429 U.S. 873 (1976), the court held that the requirements of an EPA-approved SIP "have the force and effect of federal law and may be enforced by the [EPA] in federal courts." Accord Friends of the Earth v. Carey, 535 F.2d 165, 171 n. 6 (2d Cir. 1976), cert. denied, 434 U.S. 902 (1977). Even state-adopted emission limitations which are more stringent than necessary to meet the federal ambient air standards are federally enforceable. Friends of the Earth v. Potomac Electric Power Co., 419 F.Supp. 528, 533 (D.D.C. 1976).

The state permits at issue in this case were issued under the terms of Colorado's air quality regulation No. 3, 5 C.C.R. § 1001-5. This regulation was part of Colorado's approved SIP for the enforcement of the National Ambient Standards. Thus, since the restrictions in question were established pursuant to a SIP, they are federally enforceable by definition.

3. Which Restrictions to Apply

Restrictions contained in state permits which limit specific types and amounts of actual emissions ("blanket" restrictions on emissions) are not properly considered in the determination of a

source's potential to emit. Memorandum Opinion at 20. However, federally enforceable permit conditions which restrict hours of operation or amounts of material combusted or produced are properly included in the calculation. Id. Within the latter category, however, where the permits at issue contain a number of different restrictions, a question arises as to the proper restriction to use in the calculation. The expert testimony on this issue was uncontroverted that the "most restrictive" of the several permit limitations is the one that should be employed in determining the potential to emit.²² I find that I agree with that proposition, and so hold.

In this particular case, however, such a ruling does not dispose of the issue, since the experts in this case were in disagreement over which permit limitation should be considered the most restrictive. Frey's calculations, it will be recalled, were based on an annual limit on operations of 8000 hours. In contrast, Bray employed the annual limit on production, contained in the original saw and press permits, of 49,950 tons.

To state the issue a bit more precisely, there was never any question about which limitation was the more restrictive of the two. All other factors and variables being equal (that is, if the parties had otherwise used the same methodology and test data), the limitation on annual tons of production would always yield a lower figure for potential to emit than the limitation on annual hours of operation. Thus, in that sense at least, the restriction utilized by Bray was clearly the more restrictive. Rather, the controversy on this issue

22. For an explanation of the concept behind the term "most restrictive permit limitation," see supra note 5.

stemmed from the government's contention that the restriction on tons of production was not an "effective" limit on operations and should not have been used at all.

Essentially, the government's position was that this restriction did not really limit production to 49,950 TPY because it applied only to finished production. Since some of the waferboard produced is removed during the trimming process, the government argued that more than 49,950 tons could actually be produced under this limitation. For example, if the LPC produced 49,950 tons of finished product, and in the process removed 1000 tons of waferboard as trim, the government would contend that 50,950 tons had actually been produced.

LPC's response to this concern was that Bray took the trimming process into account in making his calculations. In computing the "emission factor" upon which his results were based, Bray took the amount of total emissions generated during the test and divided by the total weight of finished product to come up with a figure of emissions per ton of finished production. Of central importance is the fact that the emission factor was based on production after the trimming process. Bray then multiplied the emission factor by the annual limit of 49,950 tons to determine the annual potential to emit.

After a thorough examination of the calculations submitted by the experts in this case, I find that the annual limitation on tons of production, properly employed, is indeed as effective a restriction on operations as any of the others contained in the permits. I further find that this restriction was properly utilized by Bray. Since the emission factor he computed stated the emissions generated per ton of finished product, the emissions generated in producing the

waferboard that was ultimately trimmed were included in the potential to emit figure. Moreover, if it is valid to assume that the emissions generated during a four-hour test are representative of and can be used to compute the emissions generated throughout the year, it is just as valid to assume that the amount of trim removed during such a test is representative of the trim removed throughout the year. Accordingly, since the annual limitation of tons of production is the most restrictive permit limitation, and since it is as effective a limitation on operations as any of the other restrictions contained in the permits, I find that it was the proper limitation to employ for purposes of determining potential to emit in the present case.

4. The Proper Effect of Permit Limitations That Are Willfully and Regularly Violated

Federally enforceable restrictions on operations that are contained in state permits are properly considered in determining potential to emit. 40 C.F.R. § 52.21(b)(4). Where a number of such restrictions exist, the "most restrictive" of the several provisions is the one that should be employed. In the case at hand, the annual limitation on tons of production is both federally enforceable and the most restrictive. Nonetheless, the government argues that this limitation should not be considered in this case.

The government argues generally that a source which knowingly and routinely violates the conditions of a permit should not get the benefit of those conditions in the computation of the source's potential to emit. Thus, since LPC regularly and knowingly violated the restriction on annual tons of production, the government urges that this restriction should not be considered in the present case. For the reasons which follow, I agree with the government on this point, and rule that conditions contained within state emission permits

are not to be considered in the determination of a source's potential to emit, notwithstanding 40 C.F.R. § 52.21(b)(4), where such conditions are knowingly and regularly violated.

First, as already noted, the definition of potential to emit at issue here was promulgated in response to the D.C. Circuit's holding in Alabama Power, 636 F.2d at 323. In that case, it will be recalled, the court ruled that the effect of pollution control equipment designed into a source must be considered in calculating the source's potential to emit. Id. at 355. While that rule of law is a good one, it is clear from the opinion that this holding is based upon the assumption that the control equipment in question will be used. Id. at 353-55. See also (prior opinion in same case) Alabama Power Co. v. Costle, 606 F.2d 1068, 1076 (D.C.Cir. 1979) ("The 'potential to emit' of any stationary source must be calculated on the assumption that air pollution control equipment incorporated into the design of the facility will function to control emissions in the manner reasonably anticipated when the calculation is made."). As a result, I am unconvinced that the D.C. Circuit would extend this protection to a source where the control equipment was never used, inoperable, or disconnected.

The EPA went beyond the narrow holding of the Alabama Power case when it drafted the new definition of potential to emit to encompass not only "air pollution control equipment," but also federally enforceable "restrictions on hours of operation or on the type or amount of material combusted, stored, or processed." 40 C.F.R. § 52.21(b)(4). In the same way that the court's holding in Alabama Power assumes that the control equipment will be used, however, I believe that the latter part of this definition contemplates that emission limitations appearing within state permits will be complied with. Thus,

as I am unconvinced that the Alabama Power court would extend the protections offered by its opinion to sources which fail to utilize their pollution control equipment. I am similarly unwilling to extend the rule that federally enforceable permit limitations are a component of potential to emit to a case where such limitations are repeatedly ignored or violated.

Second, to hold that permit limitations which are repeatedly violated should nonetheless be considered in determining potential to emit would give better treatment to sources which knowingly violate such conditions than the treatment currently afforded sources which comply with the law. For example, consider a source which has a potential to emit pollutants of less than 250 TPY solely by virtue of operational limitations contained within state permits issued to it. When faced with the need to expand operations, such a source can choose to either 1) apply for new permits with less restrictive limitations and comply with the old permits until the new ones are issued, or 2) violate the conditions contained within its current permits. Should it choose to obey the law and follow the former course of action, and should the relaxation of its permit limitations cause its potential to emit to exceed 250 TPY, it will become subject to the PSD program as soon as the new permits are issued. This is because the regulations currently provide that when a particular source becomes a major source solely by virtue of the relaxation of a federally enforceable limitation on operations, the source shall at that time become subject to the permit requirements of the PSD program. See 40 C.F.R. § 52.21(r)(4).

In the present case, it is established that LPC knowingly violated the annual restriction on tons of production contained in the state air emission permits at both Kremmling and Olathe. As a result, this

limitation (upon which Bray's calculations were based) may not be employed in determining potential to emit in this case. Therefore, my conclusion as to the potential to emit VOCs at Kremmling is based upon unrestricted operations.

In addition to the calculations based upon unrestricted operations, Frey also calculated the potential to emit VOCs at Kremmling employing an annual limitation on operations of 8000 hours per year. I have not considered these calculations in reaching my conclusion for a number of reasons. First, it does not appear that any of the Kremmling permits really do limit operations to 8000 hours per year. The only permit issued for Kremmling even containing a reference to 8000 hours of operation is the drier permit dated November 20, 1985, but the terms of that permit merely state that some of the specific restrictions that are set out in that permit were determined "based on" 8000 hours of operation per year.²³ Second, even if this permit did limit operations to 8000 hours of operation per year, such that it were necessary for me to decide the question, I would hold, for the reasons expressed above, that a regular and willful violation of one permit limitation (such as the annual restriction on tons of production) should eliminate consideration of any other permit limitations (such as the annual restriction on hours of operation) which would otherwise apply to the source.

Third, even if the rulings above are found to be too harsh, the ultimate conclusion regarding the potential to emit at Kremmling should still be based upon unrestricted operations, since both the permit containing the 49,950 ton limitation and the permit containing the 8000 hour reference were superceded in July of 1987. The new permits issued for Kremmling do not contain the 8000 hour reference,

23. See supra note 12.

and raise the restriction on annual production to 78,216 tons. Of course, if a violation were to be based upon this fact rather than upon the legal rulings in this opinion, the date of the violation would be July 20, 1987, rather than the end of November, 1986.

Without considering any restrictions on operations, Frey calculated the potential of the Kremmling plant to emit VOCs to be 265 TPY under EPA Method 25 and 293.5 TPY using his own unpublished methodology. Under either approach, the Kremmling plant obviously qualifies as a major stationary source.²⁴ Under the reasoning I have employed, the plant would have become a major source around November of 1986, which is when LPC first violated the limitation on production upon which it had been relying. Accordingly, I conclude that the violation alleged in the February 3, 1987 NOV (that the Kremmling plant was a major stationary source without a PSD permit) not only existed on that date, but persisted for more than 30 days thereafter. Therefore, I find in favor of the plaintiff on its First Claim for Relief in the Alternative.

C. Penalty

Where the EPA files a civil enforcement action and successfully establishes that a violation of the PSD regulatory scheme existed for more than 30 days following the issuance of an appropriate NOV, the court is empowered to assess a civil penalty of up to \$25,000 per day of violation. 42 U.S.C. § 7413(b)(2). Generally, "[d]etermination of the amount of [a civil penalty] is committed to the informed discretion of the district judge." United States v. Ancorp Nat'l Services, Inc., 516 F.2d 198, 202 (2d Cir. 1975). However, the penalty provision at issue expressly provides that

24. Accordingly, I need not reach the issue of whether Method 25 or Frey's methodology is the proper approach for calculating the potential to emit VOCs.

In determining the amount of any civil penalty to be assessed under this subsection, the courts shall take into consideration (in addition to other factors) the size of the business, the economic impact of the penalty on the business, and the seriousness of the violation.

42 U.S.C. § 7413(b).

All three of the factors enumerated in 42 U.S.C. § 7413 are important and should be considered. United States v. Chevron U.S.A., Inc., 639 F.Supp. 770, 779 (W.D.Tex. 1985). Contra United States v. General Motors Corp., 403 F.Supp. 1151, 1164 (D.Conn. 1975).²⁵ However, there is nothing to indicate that all three factors are equally important or deserve equal weight. As a result, a nominal fine may be imposed upon even the largest enterprise in the appropriate circumstances. General Motors, 403 F.Supp. at 1164. For purposes of computing the appropriate fine, the penalty period begins when the source first commits the violation, and not later when the NOV is issued. United States v. SCM Corp., 667 F.Supp. 1110 (D.Md. 1987). Delay on the part of the government in bringing the enforcement action should neither increase nor decrease the penalty amount. Id. at 1128.

There is little precedent providing guidance on how to assess the "seriousness" of the violations at issue. One recorded case

25. Since LPC is one of the largest businesses in the United States, it urges this court to rule that the first two factors enumerated in 42 U.S.C. § 7413 should not be considered, and in support thereof cites the case of United States v. General Motors, 403 F.Supp. at 1151. While I agree with the district judge in General Motors that the seriousness of the violation may well be the most important factor of the three, I am not prepared to say that the other two factors are irrelevant. First, the General Motors court was interpreting a different provision than the one at issue in this case and, while similar, it is not identical. Second, to ignore two of the three factors expressly listed in the statute would be contrary to both common sense and the clear instructions of the Congress. Third, I believe that the General Motors court was not inclined to consider the first two factors because the defendant was an enormous enterprise and the court had concluded that a nominal fine was appropriate under the unique circumstances of that case.

in which a fine was imposed for a violation of the PSD program is United States v. Chevron, 639 F.Supp. at 770. In that case, the oil company knowingly allowed treatment of hydrogen sulfide to cease for a period of 17 months at its El Paso refinery. This action greatly increased emissions of sulphur dioxide, a harmful chemical and principal cause of "acid rain." Id. at 772. The PSD rules were violated because the cessation of treatment constituted a "major modification" for which the company had failed to obtain a PSD permit. Due to the fact that Chevron had numerous opportunities to treat and control these emissions and "chose not to do so for purely economic reasons," the company was fined \$1000 per day for 522 days of violation. Id. at 779.

In contrast, the General Motors case dealt with a violation of the Clean Water Act. United States v. General Motors, 403 F.Supp. at 1151. In that case, vandals had entered an abandoned manufacturing facility that General Motors was trying to sell. Once inside, they opened the valves on the plant's oil storage tanks, causing oil to spill onto the ground and drain into a nearby creek which fed into the Pequabuck River. When General Motors acquired knowledge of the spill, it promptly notified the appropriate state and federal authorities, and directed a thorough clean-up operation which prevented all but about 25 of the 6-8000 gallons spilled from reaching the river. Id. at 1153. In light of these efforts, and the fact that the spill had been caused by third parties, a violation was found, but the court assessed a fine of only one dollar. Id. at 1165.

1. Mitigating Factors

In the present case, a number of factors going to the "seriousness" of the violation mitigate against the imposition of a heavy penalty. First, in LPC's defense, it should be noted that the PSD provisions create a most unusual and perplexing regulatory framework. These provisions prohibit the construction of a major stationary source until after a PSD permit is not only applied for, but actually received. Yet, one of the very propositions illustrated by this case is that it is impossible to know with certainty whether a source will qualify as a "major" source until after it is constructed and emission tests are performed.

As a result, the PSD framework makes no provision for a source which constructs in the good faith belief that it is not subject to the program, only to find out after operations are commenced that it is a major source.²⁶ In such a situation, the most a source can do (other than cease operations) is apply for PSD permits, and this was promptly done by LPC upon receipt of the NOV's.²⁷

Second, the only purpose to be served in requiring a new source to submit a PSD permit application -- the only real purpose of the PSD permitting program -- is to ensure that the new source contains the best available control technology ("BACT"). I am aware that the determination of what controls constitute BACT for a particular source is an agency determination to be made by the EPA, and not by

26. Where the owner of a proposed source does not believe that the PSD program is applicable, there is every incentive not to submit a PSD application, since the permitting program may legally take two to three years and, in practice, can take an infinitely long time.

27. In response to the government's contention that these applications did not contain "complete" monitoring information, it defies logic to criticize a source in this context (already constructed, and application required immediately) for failure to include a year's worth of pre-construction monitoring information in its PSD application.

this court. However, the testimony of numerous experts at trial did establish the fact that the pollution control equipment "pioneered" by LPC²⁸, and which was installed at Kremmling and Olathe at considerable expense, was the most effective control equipment for the particular application at issue that technology could provide. While this court cannot and does not hold that this equipment was BACT, I can and do hold that, in light of the ultimate purpose of the PSD program, these actions taken by LPC mitigate against the imposition of a heavy penalty.

Third, there is no evidence that the emissions from Kremmling and Olathe caused environmental damage in the sense that air quality standards were violated. In addition to the installation of BACT, the other requirement of the PSD permitting process is for the owner to demonstrate that operation of the source will not cause emissions in the area to exceed the National Ambient Air Quality Standards ("NAAQS") or any "increments" established for particular pollutants. The government conceded that no "increments" have been set for the pollutants at issue in this case, and that therefore a source need only stay within the NAAQS. Additionally, the evidence was undisputed that the existing ambient air quality, with the plants in operation, is far better than the NAAQS require for the pollutants at issue.

Fourth, I am unconvinced that LPC reaped any economic benefit from its delayed compliance with the PSD program. The benefits of delayed compliance are properly computed by attempting to quantify

28. Use of EPBs to control emissions at Kremmling and Olathe represented the first successful commercial application of that technology in the waferwood industry.

the savings a source obtains by installing the control equipment required by the PSD program not when it is legally required, but rather at some later point in time. The benefit consists of both the deferral of capital investment in the equipment and the complete avoidance of the expenses of operation and maintenance which would have been incurred if the equipment were in place. The economists proffered by both sides agreed that the benefit should be computed by determining the cost of the equipment as of the date of noncompliance, and then bringing that value forward to the date of compliance using an appropriate discount rate. The maintenance and operational expenses also create savings, and this cash flow must be discounted as well.

The date of noncompliance is the date that the control equipment that would have been required by the BACT analysis should have been paid for and installed. This, of course, must be a date when the source is in violation of the PSD program and when the equipment was technically available. The date of compliance is the date when the equipment is paid for, installed, and operational.²⁹ The economists that testified reached different conclusions because they employed different discount rates and were given different dates (by the parties) as the date of noncompliance. All of them used the date that the EPBs were installed and operational as the date of compliance.

In the present case, there was no economic benefit from delayed compliance for two reasons. First, the Kremmling and Olathe plants were the first plants of their kind in the country to install EPBs to control emissions. Since the control equipment required by the

29. This is the date of "compliance" -- regardless of whether PSD permits have been issued -- because the expenditure is tied to this date, and it is the avoidance of this expenditure that is being studied.

PSD program was installed as soon as it became commercially available,³⁰ it cannot be said that LPC delayed in installing this equipment. Second, and perhaps more important, is the fact that the EFBs were installed, and the required modifications were complete, by the end of 1986. As established in Part III B above, however, the violation at Kremmling did not occur until about the end of November, 1986, since it was at this time that the permit restriction on annual tons of production was first violated. Thus, since compliance (in economic terms) occurred at the same time the PSD program was first implicated, there cannot be said to have been any delayed compliance or resulting economic benefit.

I note for the record that the government proposed an alternative methodology for computing the proper penalty in a case such as this. The approach is to assess as a fine a percentage of the profits generated by the source for the period that it was in violation. This approach is rejected because it seems to this court to be so arbitrary and simplistic as to not really qualify as a "methodology" at all. If this method were used, two companies of exactly the same size could commit exactly the same violation, yet two drastically different fines would be imposed if one company were profitable and the other were not. Moreover, if the percentage is based solely on the magnitude of the violation as suggested, this approach leaves no room to consider

30. In stating that EFBs are the control equipment that would be required by the PSD permitting process, I do not mean to make any ruling that such equipment is BACT. As already noted, BACT is an agency determination. Nonetheless, the evidence at trial was overwhelming that the state-of-the-art equipment installed at Kremmling and Olathe would constitute BACT when that determination is ultimately made. Moreover, I note that the government's own economist used the date the EFBs were installed as the date of compliance in making her calculations. Thus, while I do not rule that the EFBs constitute BACT, I have, for purposes of computing the penalty in this case, no reason to believe that they do not.

the culpability of the offender. Thus, where a large emission or spill occurs, the method leaves no room to assess a nominal fine against a profitable defendant, as was properly done in the General Motors case.

2. Aggravating Factors

Notwithstanding the several factors above which mitigate against the imposition of a heavy penalty, I conclude that some penalty must be assessed nonetheless on the unique facts of this case. Initially, I note that LPC did knowingly violate the restriction on annual production contained within its state emission permits. Moreover, it was this willful act that caused the defendant to be in violation of the PSD program. In this sense, therefore, the violation in this case (however serious) was the result of a deliberate and willful act, and cannot be characterized as an accidental or inadvertent transgression.³¹

In determining whether a source is subject to the PSD program, the EPA, in good faith, takes into account state-imposed restrictions on operations. However, the definition of the term "potential to emit" -- and therefore the PSD program as a whole -- is based on the assumption that a source subject to such restrictions will make a good faith effort to comply. Were this court to assess a nominal penalty only in this case, it would give sanction to a willful disregard of the PSD regulatory framework, and encourage other sources in the future to disregard other lawful restrictions on operations whenever convenient to do so.

31. However, I do not wish to characterize LPC's actions as a knowing or willful violation of the PSD program. Prior to the issuance of this opinion, at least, a knowing violation of the conditions contained within a state-issued air emission permit was not necessarily the equivalent of a knowing violation of the PSD program.

As I have already noted, the regulatory framework at issue may be unusually difficult to comply with because it requires a source to guess what its emissions will be prior to construction and the commencement of operations. Nonetheless, there must be no question that the burden of guessing correctly remains with the source, and that a mistake in this process can indeed result in a penalty. Otherwise, future sources that are unsure of whether they will qualify as a major source will have no incentive to apply for PSD permits which, undisputably, is a burden. Rather, they will build first and wait for the issuance of an NOV before initiating the permit application process.

Finally, failure to assess a penalty might wrongly give some indication that the PSD provisions were somehow complied with in this case. LPC urges that by submitting PSD applications and installing state-of-the-art pollution control equipment, it complied "in substance" with the PSD program all along. Whatever effect these actions may have on the "seriousness" of the violation, they do not, in and of themselves, constitute compliance with the PSD regulatory framework. Although a source which has done these things has probably done all that the PSD program requires it to do, to hold that this constitutes compliance would be to entirely obliterate the EPA's role in the process. Rather, the requirements of the program have been met only upon receipt of PSD permits (not submittal of applications) after agency review and determination of BACT. As a result, the PSD framework still remains to be complied with in this case.

The violation at the Kremmling plant began around November of 1986 and continues to the present time. Since more than 30 days have passed since the NOV alleging this violation was issued on February 3, 1987, this court may impose a fine of up to \$25,000 per day of violation. On the basis of the several considerations discussed

above, I find that a fine of \$65,000.00 is the proper penalty to impose in this case.

D. Injunction

The purpose of an injunction is to prevent future violations. United States v. SCM Corp., 667 F.Supp. at 1128; United States v. W.T. Grant Co., 345 U.S. 629, 633 (1953). As a result, before an injunction may properly issue, the court must find that there exists some cognizable danger of recurrent violation. The moving party bears the burden of satisfying the court that such danger exists and that injunctive relief is necessary. Id.

Rule 65 of the Federal Rules of Civil Procedure requires that "[e]very order granting an injunction... shall be specific in terms [and] shall describe in reasonable detail... the act or acts sought to be restrained...". Fed.R.Civ.P. 65(d). One purpose of these requirements is to avoid the possible founding of contempt citations on an order that is too broad or vague. Schmidt v. Lesard, 414 U.S. 473 (1974); Calvin Klein Cosmetics Corp. v. Parfums de Couer, Ltd., 824 F.2d 665, 669 (8th Cir. 1987). Thus, broad language in an injunction that essentially requires a party to obey the law in the future is improper because it is basic to the intent of Rule 65(d) that those against whom an injunction is issued should receive fair and precisely drawn notice of what the injunction actually prohibits. Schmidt v. Lesard, 414 U.S. at 476; Calvin Klein, 824 F.2d at 669.

In the present case, LPC has submitted PSD permit applications that the EPA has found to be complete, and all indications are that the control equipment already installed will be found to constitute BACT. As a result, the government has failed to establish that there presently exists some danger of recurrent violation. Moreover, the

type of injunction requested by the government -- that this court enjoin LPC from further violations of the Clean Air Act and the Colorado SIP -- would merely require LPC to "obey the law." As such, it would fail to meet the specificity requirements of Fed.R.Civ.P. 65(d). Accordingly, the government's prayer for an injunction will be denied.

CONCLUSION

Based upon the above and foregoing,

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED that Plaintiff United States of America's Second Claim for Relief is DISMISSED with prejudice:

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that the DISMISSAL with prejudice previously entered in this case of Plaintiff United States of America's First Claim for Relief is hereby CONFIRMED;

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that the DISMISSAL with prejudice previously entered in this case of Plaintiff United States of America's Third Claim for Relief is hereby CONFIRMED;

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that the court finds in favor of Plaintiff United States of America and against Defendant Louisiana-Pacific Corporation on Plaintiff's First Claim for Relief in the Alternative; therefore

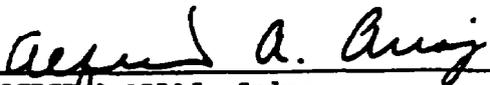
IT IS FURTHER ORDERED that a civil penalty is hereby assessed against Defendant Louisiana-Pacific Corporation in the amount of \$65,000.00. The Clerk is ordered to enter final judgment in this amount in favor of the plaintiff and against the defendant;

IT IS FURTHER ORDERED that Plaintiff United States of America's prayer for injunctive relief be, and the same hereby is, DENIED.

Costs shall be assessed to the defendant upon plaintiff's filing
of a bill of costs as provided by law.

DATED at Denver, Colorado this 22nd day of March, 1988.

BY THE COURT:


ALFRED A. ARRAJ, Judge
United States District Court

ENTERED
ON THE DOCKET

MAR 22 1988

JAMES R. MANSPEAKER
CLERK

BY _____

2.29 DATE: October 14, 1988
SUBJECT: Applicability of PSD and NSPS to Proposed Life Extension Project
at the Port Washington Steam Electric Generating Station
FROM: Lee M. Thomas, Administrator, EPA
TO: John W. Boston, Vice President, Wisconsin Electric Power Company,
Milwaukee, WI
DISCUSSION: This is the final applicability determination regarding the
proposed Port Washington steam electric generating station. The
renovations constitute physical changes for PSD purposes, and do
not come within the exclusions for routine maintenance, repair,
replacement; or for production rate or hours of operation. The
renovations will result in a significant net increase in emissions
of several pollutants for PSD and NSPS purposes, and are,
therefore, subject to both PSD and NSPS requirements, unless the
project is reconfigured.
CR: 4.38 [Hard Copy]

Reserved

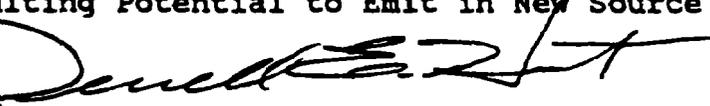


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 13 1989

MEMORANDUM

SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting

FROM: Terrell E. Hunt 
Associate Enforcement Counsel
Air Enforcement Division
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director 
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Addressees

This memorandum transmits the final guidance on conditions in construction permits which can legally limit a source's potential to emit to minor or de minimis levels. We received many helpful comments on the January 24, 1989 draft of this guidance, and have incorporated the comments into the final document wherever possible. A summary of the major changes which have been made to the guidance in response to these comments is provided below.

Several commenters noted that the draft guidance used the term "federally enforceable" to mean both federally enforceable as defined in the new source regulations (40 C.F.R. §§ 52.21(b)(17), 51.165(a)(1)(xiv), 51.166(b)(17)), and enforceable as a practical matter. We have tried to distinguish the places where each term should be used, explained the relationship between the two terms, and indicated that in order to properly restrict potential to emit, limitations must be both federally enforceable as defined in the regulations and practically enforceable.

Some commenters requested that the section on averaging times for production limits be more specific as to when it is appropriate to use limitations which exceed a one month time basis. We have tried to explain why it is not possible to develop generic criteria for making this distinction, and to indicate situations where exceptions to the policy that production and operation limitations not exceed one month may be warranted.

There were some requests for a section on enforcement. We have included a new Section VI which addresses this topic. We also received many good suggestions on the example permit limitations. The section on examples has been substantially reworked to reflect your comments.

Finally, we learned through the comments that in two specific circumstances, short term emission limits are the most useful and reasonable way to restrict and verify limits on potential to emit. These circumstances are: 1) when control equipment is installed but control equipment operating parameters are difficult to measure during enforcement inspections; and 2) in surface coating operations with numerous and unpredictable use of coatings containing varying VOC content, where add-on control equipment is not employed. Therefore, we have made a narrow exception to the flat prohibition on use of emission limits to restrict potential to emit for these specific circumstances, and only when certain additional conditions have been met.

Again, we appreciate the thoughtful comments we have received on this guidance. Please insert this document into your Clean Air Act Compliance/Enforcement Policy Compendium as Item Number H.3. If you have any questions, please contact Judith Katz in the Air Enforcement Division at FTS 382-2843, or Sally Farrell in the Stationary Source Compliance Division at FTS 382-2875.

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-3-

**Air, Pesticides, and Toxics Management Division Directors
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DOJ**

LIMITING POTENTIAL TO EMIT IN NEW SOURCE PERMITTING

JUNE 13, 1989

**AIR ENFORCEMENT DIVISION
OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING**

**STATIONARY SOURCE COMPLIANCE DIVISION
OFFICE OF AIR QUALITY PLANNING AND STANDARDS**

Limiting Potential to Emit in New Source Permitting

I. Introduction

II. The Louisiana-Pacific Case

III. Types of Limitations that will Limit Potential to Emit

IV. Time Periods for Limiting Production and Operation

V. Sham Operational Limits

A. Permits with conditions that do not reflect a source's planned mode of operation are void ab initio and cannot act to shield the source from the requirement to undergo preconstruction review.

1. Sham permits are not allowed by 40 CFR 52.21(r)(4)

2. Sham permits are not allowed by the definition of potential to emit: 40 CFR 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4)

3. Sham permits are not allowed by the Clean Air Act

B. Guidelines for determining when minor source construction permits are shams.

1. Filing a PSD or nonattainment NSR application

2. Applications for funding

3. Reports on consumer demand and projected productions levels

4. Statements of authorized representatives of the source regarding plans for operation

VI. Enforcement Procedures

VII. Examples

VIII. Conclusion

Limiting Potential to Emit in New Source Permitting

I. Introduction

Whether a new source or modification is major and subject to new source review under Parts C and D of the Clean Air Act is dependent on whether that source or modification has or will have the potential to emit major or significant amounts of a regulated pollutant. Therefore, the definition of "potential to emit" under the new source regulations is extremely important in determining the applicability of new source review to a particular source. The federal regulations define "potential to emit" as:

the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

40 C.F.R. §§ 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

Permit limitations are very significant in determining whether a source is subject to major new source review. This is because they are the easiest and most common way for a source to obtain restrictions on its potential to emit. A permit does not

have to be a major source permit to legally restrict potential emissions. A minor source construction permit issued pursuant to a state program approved by EPA as meeting the requirements of 40 C.F.R. § 51.160 is federally enforceable. In fact, any permit limitation can legally restrict potential to emit if it meets two criteria: 1) it is federally enforceable as defined by 40 C.F.R. §§ 52.21(b)(17), 51.165(a)(1)(xiv), 51.166(b)(17), i.e., contained in a permit issued pursuant to an EPA-approved permitting program or a permit directly issued by EPA, or has been submitted to EPA as a revision to a State Implementation Plan and approved as such by EPA; and 2) it is enforceable as a practical matter. The second criterion is an implied requirement of the first criterion. A permit requirement may purport to be federally enforceable, but, in reality cannot be federally enforceable if it cannot be enforced as a practical matter.

Non-permit limitations can also legally restrict potential to emit. These limitations include New Source Performance Standards codified at 40 C.F.R. Part 60 and National Emission Standards for Hazardous Air Pollutants codified at 40 C.F.R. Part 61.

The appropriate means of restricting potential to emit through permit conditions has been an issue in recent enforcement cases. Through these cases and through guidance issued by EPA, the Agency has addressed three questions: what types of permit

limitations can legally limit potential to emit; whether long averaging times for production limitations are enforceable as a practical matter; and whether sources may limit potential to emit to minor source levels as a means of circumventing the preconstruction review requirements of major source review.

II. The Louisiana-Pacific Case

In United States v. Louisiana-Pacific Corporation, 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988), Judge Alfred Arraj discussed the type of permit restrictions which can be used to limit a source's potential to emit. The Judge concluded that:

...not all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of materials combusted or produced are properly included, blanket restrictions on actual emissions are not.

682 F. Supp. at 1133.

The Court held that Louisiana-Pacific's permit conditions which limited carbon monoxide emissions to 78 tons per year and volatile organic compounds to 101.5 tons per year should not be considered in determining "potential to emit" because these blanket emission limits did not reflect the type of permit conditions which restricted operations or production such as limits on hours of operation, fuel consumption, or final product.

The Louisiana-Pacific court was guided in its reasoning by the D.C. Circuit's holding in Alabama Power v. Costle, 636 F. 2d 323 (D.C. Circuit 1979). Before Alabama Power, EPA regulations required potential to emit to be calculated according to a source's maximum uncontrolled emissions. In Alabama Power, the D. C. Circuit remanded those regulations to EPA with instructions that the Agency include the effect of in-place control equipment in defining potential to emit. EPA went beyond the minimum dictates of the D.C. Circuit in promulgating revised regulations in 1980 to include, in addition to control equipment, any federally enforceable physical or operational limitation. The Louisiana-Pacific court found that blanket limits on emissions did not fit within the concept of proper restrictions on potential to emit as set forth by Alabama Power.

Moreover, Judge Arraj found that:

...a fundamental distinction can be drawn between the federally enforceable limitations which are expressly included in the definition of potential to emit and ... (emission) limitations.... Restrictions on hours of operation or on the amount of material which may be combusted or produced ... are, relatively speaking, much easier to "federally enforce." Compliance with such conditions could be easily verified through the testimony of officers, all manner of internal correspondence and accounting, purchasing, and production records. In contrast, compliance with blanket restrictions on actual emissions would be virtually impossible to verify or enforce.

Id. Thus, Judge Arraj found that blanket emission limits were not enforceable as a practical matter.

Finally, the Court reasoned that allowing blanket emission limitations to restrict potential to emit would violate the intent of Congress in establishing the Prevention of Significant Deterioration (PSD) program.

III. Types of Limitations that will Restrict Potential to Emit

As an initial matter in this discussion, a few important terms should be defined. Emission limits are restrictions over a given period of time on the amount of a pollutant which may be emitted from a source into the outside air. Production limits are restrictions on the amount of final product which can be manufactured or otherwise produced at a source. Operational limits are all other restrictions on the manner in which a source is run, including hours of operation, amount of raw material consumed, fuel combusted, or conditions which specify that the source must install and maintain add-on controls that operate at a specified emission rate or efficiency. All production and operational limits except for hours of operation are limits on a source's capacity utilization. Potential emissions are defined as the product of a source's emission rate at maximum operating capacity, capacity utilization, and hours of operation.

To appropriately limit potential to emit consistent with the opinion in Louisiana-Pacific, all permits issued pursuant to 40 C.F.R. §§51.160, 51.166, 52.21 and 51.165 must contain a

production or operational limitation in addition to the emission limitation in cases where the emission limitation does not reflect the maximum emissions of the source operating at full design capacity without pollution control equipment.

Restrictions on production or operation that will limit potential to emit include limitations on quantities of raw materials consumed, fuel combusted, hours of operation, or conditions which specify that the source must install and maintain controls that reduce emissions to a specified emission rate or to a specified efficiency level. Production and operational limits must be stated as conditions that can be enforced independently of one another. For example, restrictions on fuel which relates to both type and amount of fuel combusted should state each as an independent condition in the permit. This is necessary for purposes of practical enforcement so that, if one of the conditions is found to be difficult to monitor for any reason, the other may still be enforced.

When permits contain production or operational limits, they should also have recordkeeping requirements that allow a permitting agency to verify a source's compliance with its limits. For example, permits with limits on hours of operation or amount of final product should require an operating log to be kept in which the hours of operation and the amount of final product produced are recorded. These logs should be available

for inspection should staff of a permitting agency wish to check a source's compliance with the terms of its permit.

When permits require add-on controls operated at a specified efficiency level, permit writers should include, so that the operating efficiency condition is enforceable as a practical matter, those operating parameters and assumptions which the permitting agency depended upon to determine that the control equipment would have a given efficiency.

An emission limitation alone would limit potential to emit only when it reflects the absolute maximum that the source could emit without controls or other operational restrictions. When a permit contains no limits on capacity utilization or hours of operation, the potential to emit calculation should assume operation at maximum design or achievable capacity (whichever is higher) and continuous operation (8760 hours per year).

The particular circumstances of some individual sources make it difficult to state operating parameters for control equipment limits in a manner that is easily enforceable as a practical matter. Therefore, there are two exceptions to the absolute prohibition on using blanket emission limits to restrict potential to emit. If the permitting agency determines that setting operating parameters for control equipment is infeasible in a particular situation, a federally enforceable permit

containing short term emission limits (e.g. lbs per hour) would be sufficient to limit potential to emit, provided that such limits reflect the operation of the control equipment, and the permit includes requirements to install, maintain, and operate a continuous emission monitoring (CEM) system and to retain CEM data, and specifies that CEM data may be used to determine compliance with the emission limit.

Likewise, for volatile organic compound (VOC) surface coating operations where no add-on control is employed but emissions are restricted through limiting VOC contents and quantities of coatings used, emission limits may be used to restrict potential to emit under the following limited circumstances. If the permitting agency determines for a particular surface coating operation that operating and production parameters (e.g., gallons of coating, quantities produced) are not readily limited due to the wide variety of coatings and products and due to the unpredictable nature of the operation, emission limits coupled with a requirement to calculate daily emissions may be used to restrict potential to emit. The source must be required to keep the records necessary for this calculation, including daily quantities and the VOC content of each coating used. Emission limits may be used in this limited circumstance to restrict potential to emit since, in this case, emission limits are more easily enforceable than operating or production limits.

IV. Time Periods For Limiting Production and Operation

As discussed above, a limitation specifically recognized by the regulations as reducing potential to emit is a limitation on production or operation. However, for these limitations to be enforceable as a practical matter, the time over which they extend should be as short term as possible and should generally not exceed one month. This policy was explained in a March 13, 1987 memorandum from John Seitz to Bruce Miller, Region IV. The requirement for a monthly limit prevents the enforcing agency from having to wait for long periods of time to establish a continuing violation before initiating an enforcement action.

EPA recognizes that in some rare situations, it is not reasonable to hold a source to a one month limit. In these cases, a limit spanning a longer time is appropriate if it is a rolling limit. However, the limit should not exceed an annual limit rolled on a monthly basis. EPA cannot now set out all-inclusive categories of sources where a production limit longer than a month will be acceptable because every situation that may arise in the future cannot now be anticipated. However, permits where longer rolling limits are used to restrict production should be issued only to sources with substantial and unpredictable annual variation in production, such as emergency

boilers. Rolling limits could be used as well for sources which shut down or curtail operation during part of a year on a regular seasonal cycle, but the permitting authority should first explore the possibility of imposing a month-by-month limit. For example, if a pulp drier is periodically shut down from December to April, the permit could contain a zero hours of operation limit for each of those months, and then the appropriate hourly operation limit for each of the remaining months. Under no circumstances would a production or operation limit expressed on a calendar year annual basis be considered capable of legally restricting potential to emit.

V. Sham Operational Limits

In the past year, several sources have obtained purportedly federally enforceable permits with operating restrictions limiting their potential to emit to minor or de minimis levels for the purpose of allowing them to commence construction prior to receipt of a major source permit. In such cases where EPA can demonstrate an intent to operate the source at major source levels, EPA considers the minor source construction permit void ab initio and will take appropriate enforcement action to prevent the source from constructing or operating without a major source permit.

The following example illustrates the kind of situation addressed in this section: An existing major stationary source proposes to add a 12.5 megawatt electric utility steam generating unit, and applies for a federally enforceable minor source permit which restricts operation at the unit to 240 hours per year. Because the project is designed as a baseload facility, EPA does not believe that the source intends to operate the facility for only 240 hours a year. Further investigation would probably uncover documentation of the source's intent to operate at higher levels than those for which it is permitted.

This situation raises the question of whether a source can lawfully bypass the preconstruction or premodification review requirements of Prevention of Significant Deterioration (PSD) and nonattainment New Source Review by committing to permit conditions which restrict production to a level at which the source does not intend to operate for any extensive time. If, after constructing and commencing operation, the source obtains a relaxation of its original permit conditions prior to exceeding them, does this constitute a violation of the preconstruction review requirements? This section discusses why it is improper to construct a source with a minor source permit when there is intent to operate as a major source, and provides guidelines for identifying these "sham" permits.

A. Permits with conditions that do not reflect a source's planned mode of operation are void ab initio and cannot act to shield the source from the requirement to undergo preconstruction review.

1. Sham permits are not allowed by 40 CFR §52.21(r)(4)

Section 52.21(r)(4) states:

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980 on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then (PSD) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

When a source that is minor because of operating restrictions in a construction permit later applies for a relaxation of that construction permit which would make the source major, Section 52.21(r)(4) prescribes the methodology for determining best available control technology (BACT). However, it does not foreclose EPA's ability, in addition to the retroactive application of BACT and other requirements of the PSD program, to pursue enforcement where the Agency believes that the initial minor source permit was a sham. EPA will limit its activity to requiring application of 40 CFR 52.21(r)(4) only for the cases where a source legitimately changes a project after finding that the operating restrictions which were taken in good faith cannot be complied with. Whether a source has acted in good faith is a factual question which is answered by available evidence in the particular case.

2. Sham permits are not allowed by the definition of potential to emit: 40 C.F.R. §§52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

The definition of potential to emit enables sources to obtain federally enforceable permits with operational restrictions as a means of limiting emissions to minor source levels. However, implicit in the application of these limitations is the understanding that they comport with the true design and intended operation of the project.

3. Sham permits are not allowed by the Clean Air Act

Parts C and D of the Clean Air Act exhibit Congress's clear intent that new major sources of air pollution be subject to preconstruction review. The purposes for these programs cannot be served without this essential element. Therefore, attempts to expedite construction by securing minor source status through the receipt of operational restrictions from which the source intends to free itself shortly after operation are to be treated as circumvention of the preconstruction review requirements.

B. Guidelines for determining when minor source construction permits are shams.

EPA's determination that a purportedly federally enforceable construction permit is a sham is made based on an evaluation of specific facts and evidence in each individual case. The following are criteria which should be scrutinized when making such a determination:

1. Filing a PSD or nonattainment NSR permit application

If a major source or major modification permit application is filed simultaneously with or at approximately the same time as the minor source construction permit, this is strong evidence of an intent to circumvent the requirements of preconstruction review. Even a major source application filed after the minor source application, but either before operation has commenced or after less than a year of operation should be looked at closely.

2. Applications for funding

Applications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has guaranteed a certain level of operation which is higher than that in its construction permit. If the project would not be funded or if it would not be economically viable if operated on an

extended basis (at least a year) at the permitted level of production, this should be considered as evidence of circumvention.

3. Reports on consumer demand and projected production levels.

Stockholder reports, reports to the Securities and Exchange Commission, utility board reports, or business permit applications should be reviewed for projected operation or production levels. If reported levels are necessary to meet projected consumer demand but are higher than permitted levels, this is additional evidence of circumvention.

4. Statements of authorized representatives of the source regarding plans for operation.

Statements by representatives of the source to EPA or to state or local permitting agencies about the source's plans for operation can be evidence to show intent to circumvent preconstruction review requirements.

Note that if a determination is made that a permit is a "sham" for one pollutant and, therefore, the source is a major source or major modification, the permit may possibly still contain valid limits on potential to emit for other pollutants.

In such cases, the entire source must still go through new source review, during which, for PSD review, all pollutants for which there is a net significant increase must be analyzed for BACT. In nonattainment new source review, new sources must have LAER determinations only for pollutants for which they are major. Major modifications, however, must have LAER determinations for all nonattainment pollutants emitted in significant amounts. If the valid limits in a partially void minor source construction permit keep certain pollutants below significance levels, then those pollutants would not have to be analyzed for BACT or LAER. However, if a source or modification is determined to be major for PSD or NSR because part of its minor permit is deemed void, it would have to undergo BACT or LAER analysis for all significant pollutants.

VI. Enforcement Procedures

This guidance has discussed permit conditions which will legally restrict potential to emit, shielding a source from the requirement to comply with major new source permitting regulations. Failure by a permitting agency to adhere to these guidelines may result in a permit that does not legally restrict potential to emit, thereby subjecting a source to major new source review. If that source has not gone through preconstruction review, it is a significant violator of the Clean Air Act and is subject to enforcement for constructing or

modifying without a major new source permit.

The enforcement options available to EPA in these situations include administrative action under §§167 or 113(a)(5) of the Act or federal judicial action under §§ 113(b)(2), 113(b)(5), 113(c), or 167. Which enforcement option is selected depends on the facts of the particular situation. (See July 15, 1988 guidance on EPA Procedures for Addressing Deficient New Source Permits.)

VII. Examples

The following examples are provided to illustrate the type of permit restrictions which would and would not legally limit potential to emit to less than major source thresholds. These examples are provided for purposes of clarifying the potential to emit and averaging time guidance only. They are not intended to reflect all the permit conditions necessary for a valid permit. Specific test methods, compliance monitoring and recordkeeping and reporting requirements are necessary to make permit limitations enforceable as a practical matter. The use of examples where averaging times are the longest times allowed under EPA policies is not intended to necessarily condone the selection of the longest averaging times; averaging times should in practice be as short as possible.

1. The minor source construction permit for a boiler contains the following restrictions: 250,000 gal fuel/month; 0.8% S fuel; 8000 hours/year.

These conditions are federally enforceable production and operation limits, but do not limit potential to emit because one of them does not meet EPA policies on enforceability as a practical matter. The averaging time for hours of operation, one of the operational limits necessary to restrict emissions to less than 250 tpy, exceeds a monthly or rolling yearly limit. If, instead of 8000 hours/year, the hourly restriction were stated as 666 hours/month, the permit would serve to keep the source a minor source, assuming the permit contains appropriate recordkeeping provisions.

2. A waferboard plant which has the physical capacity to emit over 300 tpy of carbon monoxide in the absence of using specific combustion techniques has the following permit restriction as the sole emission limitation: 249 tpy.

This does not limit potential to emit since an operational or production restriction is necessary for the source to be restricted to 249 tpy. The permit must contain a restriction on hours of operation or capacity utilization which, when multiplied by the maximum emission rate for the CO sources at the plant, results in emissions of 249 tpy. Additionally, while the

emission limit alone cannot restrict potential to emit, the emission limit is unenforceable as a practical matter since it is limited on an annual basis. The permit should contain a short term emission limit (in addition to the annual emission limit), consistent with the compliance period or parameter in the applicable test method for determining compliance.

3. A small scale rock crushing plant that cannot emit more than 240 tpy under maximum operation without controls (including plant-wide particulate emissions from transfer and storage operations) has the following permit restriction as the sole emission limitation: 240 tpy particulate matter.

Since no operational limitations are necessary for the source to emit below 250 tpy, no operational restrictions need be in the permit to limit potential to emit. However, although this is not a major source, the state agency should express the emission limit in this permit as a lb/hour measure or gr/dscf so that it will be enforceable as a practical matter.

4. A plant consisting solely of a small rock crusher has the following permit restrictions: 0.05 lb gr PM/dscf; fabric filter must be employed and maintained at 99% efficiency.

Assuming that maintaining the fabric filter at 99% efficiency will result in emissions of less than 250 tpy, this

permit would limit potential to emit if it also contained either 1) parameters that allowed the permitting agency to verify the fabric filter's operating efficiency or 2) a requirement to install and operate continuous opacity monitors (COMs) and a specification that COM data may be used to verify compliance with emission limits. Note that if this second alternative were adopted, it would not be necessary to require that the fabric filter be maintained at 99% efficiency.

To determine potential to emit, the efficiency rate of the fabric filter would be multiplied by the maximum uncontrolled emission rate, the maximum number of operating hours and maximum throughput capacity since there are no other operating or production limits. However, the efficiency rate of the fabric filter would not be enforceable as a practical matter unless there were an enforceable means to monitor ESP performance on a short term basis. The two alternatives mentioned above would satisfy this requirement.

5. A surface coating operation has the capability of utilizing 15,000 gal coating/month, with the following permit restrictions: 3.0 lb VOC/gal coating minus water; 20.5 tons VOC/month; monthly VOC emissions to be determined from records of the daily volumes of coatings used times the manufacturers specified VOC content.

This does not limit potential to emit since the source has the physical capacity to exceed 250 tpy of VOC, and the permit does not contain a production or an operational limitation. A monthly limit on gallons of coating used which when multiplied by 3.0 lb/gal equates to less than the 250 tpy threshold (e.g. 13,500 gallons/month), with appropriate recordkeeping, would generally be necessary to limit potential to emit. If, however, the permitting agency determines, due to the wide variety of coatings employed and products produced, that restrictions on operation or production are not practically enforceable, then the above emission limits could restrict potential to emit if there are requirements that the source calculate emissions daily, and keep the appropriate records.

If the source was alternatively to meet the 20.5 ton/month limit by employing add-on controls, the permit would need to contain an operational limit, such as the requirement to install and operate an incinerator at 99% efficiency. A requirement to monitor incinerator efficiency (either directly or indirectly via temperature monitoring for example), and appropriate recordkeeping requirements to verify compliance with each of the permit conditions would also be necessary to make the permit conditions enforceable as a practical matter. Note, however, that in the case where add-on controls are employed, the source may be able to meet a shorter term emission limit than the ton per month figure.

VIII. Conclusion

We hope this guidance will help EPA Regions identify sources which have the potential to emit major amounts of an air pollutant which will subject those sources to the requirements of preconstruction new source review. Every source which is subject to these requirements but has not obtained a major new source permit should be seriously considered for enforcement action.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

NOV 24 1989

OFFICE OF
GENERAL COUNSEL

MEMORANDUM

SUBJECT: Court of Appeals Decision Upholding PSD
"Actual-to-Potential" Applicability Rules
Puerto Rican Cement Co., Inc. v. EPA,
No. 89-1070 (1st Cir.)

FROM: Gregory B. Foote, Attorney *GBF*
Air and Radiation Division (LE-132A)

THRU: Alan W. Eckert *AWE*
Associate General Counsel
Air and Radiation Division (LE-132A)

TO: William G. Rosenberg
Assistant Administrator
for Air and Radiation

The First Circuit Court of Appeals has issued a decision which, in resounding terms, upholds the rules governing applicability of PSD to major modifications under the Clean Air Act. In Puerto Rican Cement Co., Inc. v. EPA, No. 89-1070 (slip op. Oct. 31, 1989) (copy attached), the court affirmed EPA's position that when a company makes a "physical or operational change" at an existing facility, there is a "major modification" subject to PSD review if a comparison of actual emissions before the change with potential emissions thereafter shows a "significant net increase." Essentially, the court embraced our view that alterations at a plant provide an economic incentive to increase production, and must undergo PSD review unless the company agrees to limit its actual emissions to current levels. The facts of the case and the court's holdings are summarized below.

Puerto Rican Cement planned to convert cement kilns from a "wet" process to a "dry" process. Overall production capacity would have increased, but because the new process was inherently less polluting, both total potential emissions and emissions per unit of production would have decreased. Nevertheless, because the plant had operated at 60% capacity in recent years, a comparison of actual emissions before the conversion with potential emissions thereafter showed a significant increase. The PSD regulations provide that a physical or operational change is subject to review as a major modification if there will be a significant net increase in actual emissions. However, because

actual emissions cannot be predicted before the modification occurs, the rules also provide that where a source has not begun "normal operations," its actual emissions are assumed to be its potential to emit. See, e.g., 40 C.F.R. § 52.21(b)(2)(i), (b)(3), (b)(21)(i), and (b)(21)(iv). Region II advised the company that potential emissions would be considered here, because the modified unit had not yet begun normal operations. Hence, the Region found, PSD would apply because there would be a significant net increase (taking contemporaneous increases and decreases into account). The company then sought review in the court of appeals¹

The court held first that EPA's "actual-to-potential" method of measuring emissions increases where an emissions unit has not begun normal operations is consistent with the terms of the regulations themselves and with the preamble. See slip op. at 13-16. The court also found that it was proper for EPA to apply this calculus to modified units as well as to new units. See slip op. at 19.

Second, the court rejected the company's argument that EPA's position would suppress the development of newer, less-polluting facilities, accepting instead EPA's rationale that modifications provide an economic incentive to increase production, and hence, emissions:

[the] company argues that EPA's interpretation . . . makes little sense because it would significantly discourage the Company, and others like it, from installing more efficient machinery that, at any production level, emits significantly less pollution. But we cannot agree. EPA has simply taken account of, and given controlling weight to, a different consideration: the fact that a firm's decision to introduce new, more efficient machinery may lead the firm to decide to increase the level of production, with the result that, despite the new machinery, overall emissions will increase.

Slip op. at 16 (emphasis in original).

¹ However, the parties also agreed that if EPA were upheld, Puerto Rican Cement would accept federally enforceable operational restrictions on its potential to emit, such that there would be no net increase, and no PSD coverage.

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Third, the court ruled that the provision in the PSD regulations that excludes emissions increases due to increased production rates or hours of operations (see, e.g., 40 C.F.R. § 52.21(b)(2)(iii)(f)) does not apply where those increases are linked to a physical or operational change. The company had argued that under this provision, it could increase production at its old kilns to 100 percent of capacity, and should also be allowed to do so with the more efficient kilns. The court rejected this claim, pointing to the statute's focus on "construction" of facilities (see section 169(2)(C)), and to "a prediction that, as a general rule, new building will more likely lead to increased emissions levels." Consequently, the court found no contradiction between allowing increased output at existing facilities to avoid review while subjecting increased output of new capacity to PSD coverage. Slip op. at 18-19.²

The issues addressed in Puerto Rican Cement are among those still pending before the Seventh Circuit in Wisconsin Electric Power Co. v. Reilly, Nos. 88-3264 and 89-1339 ("WEPCO"). We have advised that court of the First Circuit decision, which should have a favorable impact for us.

The Puerto Rican Cement decision is a ringing endorsement of an important facet of EPA's recent activist posture on PSD issues. It can be read as a green light for the Agency to proceed to rigorously apply new source requirements to a broad range of physical or operational changes at existing facilities where the changes provide an economic incentive that might result in increased emissions. However, there are many potential

²In addition, the court found that an isolated prior inconsistent interpretation of EPA's applicability rules did not invalidate the Agency's determination as to Puerto Rican Cement. Slip op. at 19-22. Also, the court upheld EPA's interpretation that the time period for calculating "contemporaneous" emissions increases and decreases runs backward from the commencement of construction on the particular change, not from the time the company sought a nonapplicability determination from EPA. Slip op. at 24-26. Finally, the court rejected Puerto Rican Cement's attempt to gain judicial review of the lawfulness of the PSD regulations themselves. The First Circuit noted that under section 307(b)(1), challenges to nationally applicable regulations may be lodged only in the District of Columbia Circuit, and that such a challenge is still pending in Chemical Mfrs. Ass'n v. EPA, No. 79-1112.

pitfalls to the Agency's approach. This case and the upcoming ruling in the WEPCO case thus underscore the need for EPA to address in a comprehensive manner the various PSD applicability issues that have arisen in the last year or so. They also increase the likelihood that industry petitioners will attempt to revive Exhibit B of the settlement agreement in Chemical Manufacturers Association v. EPA, No. 79-1112 (D.C. Cir.). Under that long-dormant agreement, EPA pledged to propose and take final action on revisions to the new source review regulations that would replace the actual-to-potential calculus with an applicability system based on changes in potential emissions. We are preparing a memorandum for Mike Shapiro on all of these issues, and hope to brief him on them in the near future.

Attachment

cc: Don Elliott
Gerald Yamada
Michael Shapiro
Lydia Wegman
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Gerald Yamada
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United States Court of Appeals
For the First Circuit

No. 89-1070

PUERTO RICAN CEMENT COMPANY, INC.,

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

ON PETITION FOR REVIEW OF AN ORDER OF
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Before

Bownes, Circuit Judge,

Fairchild, * Senior Circuit Judge,

and Breyer, Circuit Judge.

Grant S. Lewis, with whom Daniel R. Dominguez, Dominguez & Totti,
G.S. Peter Bergen, Ronald J. Gizzi and LeBoeuf, Lamb, Leiby & MacRae
were on brief for petitioner.

Michael A. McCord, Attorney, Department of Justice, Land and Natural
Resources Division, with whom Donald A. Carr, Acting Assistant Attorney
General, Land and Natural Resources Division, Michael S. Winer, Jeffrey
B. Renton, Attorneys, Office of General Counsel, and Joseph A. Siegel,
Office of Regional Counsel, U.S.E.P.A., were on brief for respondent.

OCTOBER 31, 1989

*Of the United States Court of Appeals for the Seventh Circuit,
sitting by designation.

BREYER, Circuit Judge. The Puerto Rican Cement Co. (the "Company") wishes to build a new cement kiln, replacing older kilns that it now operates at about 60 percent of their capacity. If operated to achieve about the same level of production, the new kiln will pollute far less than the older kilns; but, if the Company operates the new kiln at significantly higher production levels, it will emit more pollutants than did the older kilns. The Environmental Protection Agency, noting that it is possible that the new kiln will produce more pollution, has held that the Company cannot build it without obtaining a special kind of EPA approval, required when one wishes to "construct" a "major emitting facility" in a place where the air is particularly clean. (The facility must meet "prevention of significant deterioration" ("PSD") requirements. See 42 U.S.C. § 7475.) The Company appeals. We find that EPA's determination is lawful.

I.

Background

1. Factual: The Company's cement plant contains six kilns, which produce a fine powder called "clinker." In 1987 the Company decided to convert Kiln No. 6 from a "wet," to a "dry," cement-making process, and to combine that kiln with

Kiln No. 3. At that time, Kilns 3 and 6 were operating at about 60 percent of their combined capacity, producing about 424,000 tons of clinker per year. The converted kiln would have a total capacity of 961,000 tons of clinker per year, or about 35 percent more than the 705,000 ton capacity of Kilns 3 and 6. At any given level of production, the new kiln would emit less air polluting substance than the two older kilns combined, and would use less fuel to boot. However, if the Company decided to operate the new kiln close to its capacity, it might produce both more clinker and more pollution than the old kilns produced when operated at 60 percent of their capacity. In particular, information submitted by the Company suggests the following:

Pounds of Emissions per Ton of Clinker Produced

	NO _x	SO ₂	PM
Old (Wet) Process	4.9	6.32	0.234
New (Dry) Process	2.6	4.01	0.133

Fig. 1: Comparative Emissions Rates

	<u>Tons of Emissions Per Year</u>		
	NO _x	SO ₂	PM
Old (Wet) Process			
/Actual (operated at about 60% of capacity)	1100	1340	49.6
/Potential	1745	2230	82.6
New (Dry) Process			
/Actual	578	850	28.2
/Potential (operated at full capacity)	1250	1927	64.0

Fig. 2: Comparative Emissions Amounts

These charts show the rate and amount of emissions of three pollutants: nitrogen oxides, sulfur dioxide, and particulate matter. The "Actual" rate of production is the average rate for Kilns 3 and 6 for the years 1985-86, or 424,000 tons; the "Potential" rate equals 705,000 tons of clinker per year for the old wet process and 911,000 tons of clinker per year for the new dry process. The emboldened numbers are those used by EPA in comparing actual emissions of the old kilns with potential emissions of the proposed new kiln. The charts make clear that emissions will increase only if the company operates the new kiln at significantly higher production levels.

2. Legal: Since the cement plant is located near Ponce, Puerto Rico, where the air quality is better than national ambient air quality standards, new construction is subject to PSD provisions contained in Part C of Title I of the Clean Air Act. See 42 U.S.C. §§ 7470-7479. That part of the Act says that "[n]o major emitting facility . . . may be constructed in any [such] area" without various specified studies, reviews, demonstrations of compliance with certain substantive standards, and the issuance of a permit. See 42 U.S.C. § 7475 (emphasis added). The Act defines "major emitting facility" as a "stationary source[] of air pollutants," including Portland Cement plants that "emit, or have the potential to emit, one hundred tons per year or more of any air pollutant" (such as the facilities at issue here). 42 U.S.C. § 7479(1). It defines "construction" to include "modification," which it says

means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.

42 U.S.C. §§ 7411(a)(4), 7479(2)(C). The Act also provides that EPA itself must review the construction proposal and

provide necessary approvals where, as here, no EPA-approved "state implementation plan" is in effect. See 42 U.S.C. § 7478; 40 C.F.R. 52.21(a).

Because the permitting process is costly and time-consuming, EPA has developed an informal system for determining whether or not a particular construction proposal does, or does not, fall within the scope of the PSD permit law. If EPA decides that PSD review is unnecessary, it issues a "non-applicability determination" (known as a "NAD").

3. Proceedings: On July 9, 1987, the Company asked EPA for a NAD. It submitted information to EPA over an eight-month period. On August 30, 1988, EPA denied the Company the NAD. The Company has appealed EPA's determination to this court. Subsequent to the docketing of this appeal the Company and EPA agreed that, if the Company loses this appeal, it will operate its new facility at a sufficiently low capacity to prevent any actual increase in emissions levels. EPA will then issue a NAD, see 40 C.F.R. 52.21(b)(4) (federally enforceable limitations on emissions will be taken into consideration in determining "potential to emit"), but the Company will lose its right to ask for a PSD permit, thereby giving up the possibility of obtaining EPA's approval for an increase of emissions.

II.

Jurisdiction

The Company can appeal the EPA's decision denying a NAD only if that decision is a "final action of the administrator." 42 U.S.C. § 7607(b)(1); cf. 5 U.S.C. § 704 (specifying actions reviewable under the Administrative Procedure Act). As other courts have recognized, see Hawaiian Elec. Co. v. EPA, 723 F.2d 1440, 1442-44 (9th Cir. 1984), one might question the "finality" of such a decision either 1) because the agency must take further action to obtain an enforceable order (a problem of "ripeness"), or 2) because the Company can take further administrative steps (i.e., it can invoke the PSD review process) and thereby perhaps obtain the permission to build that it seeks (a problem of "exhaustion of administrative remedies").

The first of these problems -- that of "ripeness" -- is not particularly serious here. Even though the NAD denial does not, by itself, order the Company to refrain from building (EPA would have to bring an enforcement action to stop the Company from building, see 42 U.S.C. § 7477), it is well established that "ripeness" turns not upon such formal considerations, but rather upon such functional considerations as "the fitness of the issues for judicial decision and the

hardship to the parties of withholding court consideration." Abbott Laboratories v. Gardner, 387 U.S. 136, 149 (1967). (But compare Justice Brandeis' now-outdated description of finality in United States v. Los Angeles & Salt Lake R.R. Co., 273 U.S. 299, 309-310 (1927)). Here, the EPA's position on the legal question (of PSD applicability) is final and authoritative; court review will not "deprive the agency of the opportunity to refine, revise or clarify the . . . matter at issue." Roosevelt Campobello Int'l Park Comm'n v. EPA, 684 F.2d 1034, 1040 (1st Cir. 1982). Moreover, the fact-based record makes the legal issue "sufficiently concrete" to permit a court's focused attention. Id. At the same time, to withhold review would work considerable hardship on the Company, forcing it either to abandon its building plans, to compromise them by agreeing to emissions limitations, or to engage in a long, costly PSD review process. Under these circumstances, we consider the issue sufficiently "ripe." See Abbott Laboratories, 387 U.S. at 148-49; Hawaiian Elec. Co., 723 F.2d at 1443. Cf. Roosevelt, 684 F.2d at 1040 (issue not "ripe" where agency may well take legal action that would moot the controversy).

The second problem is more serious. The Company, in a sense, may not yet have "exhausted" its agency remedies;

in principle it could, by following the PSD review procedures, possibly obtain from EPA permission to build the new kiln and to operate it at whatever levels it wishes. Of course, it is most unlikely that EPA, in the process, will reverse its determination that PSD review applies to the kiln. But, that fact does not end the matter, both because the Company may obtain a form of building permission and because the Supreme Court has held that an "interlocutory" agency decision may not be sufficiently "final" to warrant review. The Court held that a roughly analogous type of agency decision -- a Federal Trade Commission decision to initiate an expensive, time consuming agency proceeding against a company -- was "interlocutory" and not "final" for review purposes despite the "substantial burden" that forced participation in the administrative proceeding would impose upon the company. FTC v. Standard Oil Co., 449 U.S. 232, 244 (1980). And, in so holding, the Court noted that "the expense and annoyance of litigation is part of the social burden of living under government." Standard Oil, 449 U.S. at 244 (quoting Petroleum Exploration, Inc. v. Public Service Comm'n, 304 U.S. 209, 222 (1938) (quoting Bradley Lumber Co. v. NLRB, 84 F.2d 97, 100 (5th Cir. 1936))).

While we recognize the possible analogy to Standard Oil, we also recognize that legal doctrines concerning "finality," particularly those related (closely or distantly) to "exhaustion of remedies," are riddled with exceptions. See, e.g., 4 K. Davis, Administrative Law Treatise § 26:1, at 414 (1983) (The doctrine that administrative remedies must be exhausted is "false almost as often as [it is] true."). We believe this is a case to apply the exception, not the rule.

First, the legal question at issue -- the applicability of PSD review -- is plainly separable from, and therefore collateral to, all the matters that the agency would consider in a PSD review itself. The collateral nature of the issue diminishes the likelihood that further agency proceedings will make it unnecessary for a court to decide the issue (as does the fact that PSD review cannot give the Company precisely what it wants without a few conditions, such as a use of "best available" anti-pollution technology, that it may not want). See, e.g., City of New York v. Heckler, 742 F.2d 729, 736-37 (2d Cir. 1984) (court may waive statutory exhaustion requirement when factors such as collaterality, futility, and irreparable harm indicate waiver would be appropriate), aff'd, 476 U.S. 467 (1986); Kuehner v. Schweiker, 717 F.2d 813, 822-25 (3d Cir. 1983) (Becker, J.,

concurring) (judicial waiver of statutory exhaustion requirement appropriate when unexhausted claim substantially collateral, agency has taken final position on claim, and requiring exhaustion would cause substantial hardship), vacated, 469 U.S. 977 (1984) (remanding case for reconsideration in light of new statute).

Second, the agency itself can waive "exhaustion" requirements. See Mathews v. Diaz, 426 U.S. 67, 76-77 (1976); Mathews v. Eldridge, 424 U.S. 319, 328 (1976); Dugan v. Ramsay, 727 F.2d 192, 194 (1st Cir. 1984). The EPA here has created an administratively separate agency decision making process for granting or denying NADs. The EPA has agreed with the Company to grant a NAD if and only if the Company not only promises not to increase emissions but also promises not to seek permission, through the PSD process, to increase emissions levels. And, the EPA has not raised any objection to our reviewing this case. We therefore find a waiver of whatever exhaustion requirements might otherwise apply.

Together these considerations mean that, whether one views the statutory "finality" problem through the lens of "ripeness," of "exhaustion of remedies," or of "interlocutory decision," the EPA determination before us is sufficiently "final" to warrant review under 42 U.S.C. § 7607(b)(1). See

Hawaiian Elec. Co., 723 F.2d at 1442-44 (holding that the determination that a proposed change is a "major modification" requiring PSD review is a "final action" under § 7607(b)(1)).

III.

The Merits

A.

Interpreting EPA's Regulations

The statute applies its PSD requirements to the Company's proposed modification of its kilns only if the modification will "increase[] the amount of any air pollutant emitted." 42 U.S.C. §§ 7411(a)(4), 7479(2)(C). In deciding whether or not the kiln conversion would result in such an increase, EPA calculated the actual historical amount of pollutants that Kilns 3 and 6 emitted in the past (which, under the regulations, equals the average emissions over the past two years, see 40 C.F.R. § 52.21(b)(21)(ii)) and compared that with the amount of pollutants that the converted kiln would be capable of emitting in the future. Since the Company operated the kilns at only 60 percent of their capacity in 1985-86, the new kiln, though cleaner and more efficient, is obviously capable of emitting significantly more pollutants.

The Company argues that the EPA's application of this "actual/potential" method of measurement to its proposed

kiln modification represents an improper, arbitrary, and contradictory interpretation of EPA's own regulations. After reading the regulations themselves, we disagree.

First, the language and expressed intent of the regulations both support EPA's interpretation. The regulations provide that a "major modification," subject to PSD review, includes "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant" 40 C.F.R. § 52.21(b)(2)(i) (emphasis added). They go on to define "net emissions increase" as the amount by which the "sum of . . . any increase in actual emissions" (plus or minus other "contemporaneous" changes in emissions) "exceeds zero." 40 C.F.R. § 52.21(b)(3) (emphasis added). And, most importantly for present purposes, they define the words "actual emissions" in a special way.

They state that

"[a]ctual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs . . . (ii) through (iv) [below].

40 C.F.R. § 52.21(b)(21)(i) (emphasis added). Paragraph (ii) says that

[i]n general, actual emissions as of a particular date shall equal the average

rate, in tons per year, at which the unit actually emitted the pollutant during [the preceding] two-year period.

40 C.F.R. § 52.21(b)(21)(ii). But, paragraph (iv) adds that

[f]or any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

40 C.F.R. § 52.21(b)(21)(iv) (emphasis added). The regulations also define "emissions unit" to include "any part of a stationary source which . . . would have the potential to emit any pollutant." 40 C.F.R. § 52.21(b)(7) (emphasis added).

The Company's proposed modified kiln is "part of a stationary source" and it has the "potential to emit" a pollutant. 40 C.F.R. § 52.21(b)(7). EPA considered it to be an "emissions unit which has not begun normal operations." 40 C.F.R. § 52.21(b)(21)(iv). It therefore counted as its "actual emissions," the modified kiln's "potential to emit" pollution, id., namely, in the case of SO₂, 1927 tons per year. See p. 4, supra. It counted the "actual emissions" of the existing kilns as "the average rate . . . at which" they "actually emitted the pollutant during the [preceding] two year period," 40 C.F.R. § 52.21(b)(21)(ii), namely, in the case of SO₂, 1340 tons per year. See p. 4, supra. It

therefore found an increase in what the regulations call "actual emissions" (1927 minus 1340 equals 587 tons per year). And, after setting off allowable contemporaneous changes, it found that the net increase was significantly greater than zero. See 40 C.F.R. §§ 52.21(b)(2)(i), 52.21(b)(3)(i).

EPA's application of its regulation to the facts of this case complies with the expressed intent of the regulation's writers as well. In a preamble to the regulation, EPA says that, when calculating whether a physical change will bring about a significant net increase in emissions, "the source owner must [first] quantify the amount of the proposed emissions increase. This amount will generally be the potential to emit of the new or modified unit." 45 Fed. Reg. 52,677 (emphasis added).

In considering the lawfulness of an agency's interpretation of its own regulations, courts often give that interpretation "controlling weight unless it is plainly erroneous or inconsistent with the regulation." Udall v. Tallman, 380 U.S. 1, 16-17 (1965) (quoting Bowles v. Seminole Rock & Sand Co., 325 U.S. 410, 414 (1945)); accord Donovan v. A. Amorello & Sons, Inc., 761 F.2d 61, 63 (1st Cir. 1985). In this case, EPA needs little help from this principle; for

both language and expressed purpose indicate that EPA applied the regulations properly.

Second, the Company argues that EPA's interpretation of the regulation is arbitrary -- that the interpretation makes little sense because it would significantly discourage the Company, and others like it, from installing more efficient machinery that, at any production level, emits significantly less pollution. But we cannot agree. EPA has simply taken account of, and given controlling weight to, a different consideration: the fact that a firm's decision to introduce new, more efficient machinery may lead the firm to decide to increase the level of production, with the result that, despite the new machinery, overall emissions will increase. Indeed, EPA points out that a firm introducing such machinery can escape PSD review simply by promising that it will ensure its actual emissions do not in fact increase (that is, by promising that it will not run the machinery at such a rate as to create an actual increase in emissions levels.) See 40 C.F.R. 52.21(b)(4) (federally enforceable physical or operational limitations which effect emissions will be taken into consideration in determining "potential to emit").

One can imagine circumstances that might test the reasonableness of EPA's regulation. An electricity company,

for example, might wish to replace a peak load generator -- one that operates only a few days per year -- with a new peak load generator that the firm could, but almost certainly will not, operate every day. And, uncertainties about the precise shape of future electricity peak demand might make the firm hesitate to promise EPA it will never increase actual emissions (particularly since EPA insists, as a condition of accepting the promise and issuing the NAD, that the firm also promise not to apply for permission for an actual increase under the PSD review process). Whatever the arguments about the "irrationality" of EPA's interpretation in such circumstances, however, those circumstances are not present here. The Company is not interested in peak load capacity; it operated its old kilns at low levels in the past; its new, more efficient kiln might give it the economic ability to increase production; consequently, EPA could plausibly fear an increase in actual emissions were it to provide the NAD. Thus, this seems the very type of case for which the regulations quoted above were written. We can find nothing arbitrary or irrational about EPA applying those regulations to the Company's proposal.

Finally, the Company points to another regulation with which, it argues, EPA's interpretation conflicts. That regulation says that

a physical change or change in the method of operation shall not include . . . an increase in the hours of operation or in the production rate.

40 C.F.R. § 52.21(b)(2)(iii)(f). The Company notes that, given this regulation, it could increase production at its old kilns to 100 percent of capacity, thereby vastly increasing actual emissions; why, it argues, should it not be permitted to do the same by building a more efficient kiln and then increasing output?

The answer to this question likely lies in the statute itself, for the statute refers to the "construction" of facilities, not to increased use of existing facilities. See 42 U.S.C. § 7479(2)(C). It may also lie in a prediction that, as a general rule, new building will more likely lead to increased emissions levels. Regardless, there is no logical contradiction in rules that, on the one hand, permit firms using existing capacity simply to increase their output and, on the other, use the potential output of new capacity as a basis for calculating an increase in emissions levels. And, we can find no policy conflict sufficiently serious for

a court to ~~to~~ override the policymaking authority that Congress has entrusted to the agency.

B.

Inconsistency

The Company argues that EPA has interpreted its regulations inconsistently; it says that sometimes EPA has interpreted the words "emissions unit which has not begun normal operations" to include only new units, while here it has interpreted those words to include modified units as well. The Company points to the well-established legal doctrine that an agency "'must either follow its own precedents or explain why it departs from them.'" Shaw's Supermarkets, Inc. v. NLRB, 884 F.2d 34, 36 (1st Cir. 1989) (quoting 2 K. Davis, Administrative Law Treatise § 8:9 at 198 (1979)). And, it argues that EPA has provided no explanation for any such departure here.

We have examined the relevant agency materials that the parties have submitted, however, and we cannot find any significant conflict. First, the more official EPA documents -- the ~~regulations~~ and the written materials explaining them -- make clear that EPA does mean to include "modified units" in the category of units that have "not begun normal operations." The preamble to which we earlier referred, for

example, says that the "amount of the proposed emissions increase" will "generally be the potential to emit of the new or modified unit." 45 Fed. Reg. 52,677 (emphasis added). Second, a number of EPA internal memoranda concerning specific projects clearly follow this interpretation. Third, two or three internal memoranda and NAD letters are ambiguous about whether modified units are, or are not, included. Fourth, as EPA concedes, one NAD letter clearly contains a contrary interpretation.

In our view, these materials do not show a significant, legally recognizable "conflict" within the agency for two reasons. First, the "deviant" interpretation occurs but once. EPA materials written both before, and after, the deviant letter are consistent with its present interpretation. As the Fifth Circuit stated in NLRB v. Sunnyland Packing Co., 557 F.2d 1157 (5th Cir. 1977):

{O}ne swallow doesn't make a summer, and one inconsistent precedent does not entitle an agency litigant to demand that the [agency] ignore prior and subsequent holdings which have followed a uniform approach. . . . [Plaintiff] must do more than point to a single potentially deviant precedent before the reviewing court can find such inconsistency in agency action as to constitute arbitrary treatment of litigants.

Sunnyland, 557 F.2d at 1160-61. Second, the NAD letters and internal memoranda were written by different regional administrators and division directors on different occasions. No large agency can guarantee that all its administrators will react similarly, or interpret regulations identically, throughout the United States. The purpose of the "consistency" doctrine in administrative law is not so much to assure that lower level officials will properly interpret an agency's well-established pre-existing policies as to prevent the agency itself from significantly changing those policies without conscious awareness of, and consideration of the need for, change. See, e.g., Atchison, Topeka & Santa Fe Ry. Co. v. Wichita Bd. of Trade, 412 U.S. 800, 808 (1973) (plurality opinion) (ground for departure from prior norms must be clearly set forth so that the reviewing court may understand the basis of the agency's action and judge the consistency of that action with the agency's mandate); Shaw's Supermarkets, 884 F.2d at 41 ("Unless an agency either follows or consciously changes the rules developed in its precedent, those subject to the agency's authority cannot use its precedent as a guide for their conduct; nor will that precedent check arbitrary agency action."); Chisholm v. Defense Logistics Agency, 656 F.2d 42, 47 (3d Cir. 1981)

(obligation to explain departures from precedent is an aspect of requirement that agency not act arbitrarily or capriciously); Miner v. FCC, 663 F.2d 152, 157 (D.C. Cir. 1980) (agencies must explain departures from prior precedent because "'the Rule of Law requires that agencies apply the same basic standard of conduct to all parties appearing before them'") (quoting Teamsters Local Union 769 v. NLRB, 532 F.2d 1385, 1392 (D.C. Cir 1976)). The material we have described shows no such change in EPA policy.

C.

Lawfulness of the Regulations

The Company argues that EPA's regulations, insofar as they apply the "actual/potential" method to plant modifications, fall outside the scope of the statute's regulation-writing authority. However, judicial review under these circumstances is governed by 42 U.S.C. § 7607(b), which provides that "[a]ny petition for review [of the lawfulness of a regulation] shall be filed within 60 days from the date notice of [the regulation's] promulgation . . . appears in the Federal Register." 42 U.S.C. § 7607(b)(1). EPA promulgated the regulations in question in 1980, see 45 Fed. Reg. 52,735 (1980); other parties have challenged their lawfulness in a suit filed in the Court of Appeals for the

District of Columbia, see Chemical Mfrs. Ass'n v. EPA, No. 79-1112 (D.C. Cir.). The Company has not tried to intervene in that suit (which is still pending). It seems obviously too late for the Company to mount an independent legal challenge here. See Hawaiian Elec. Co., 723 F.2d at 1441 (holding that a challenge to another provision of 40 C.F.R. § 52.21 was untimely under 42 U.S.C. § 7607(b)(1)).

Regardless, the regulations in question apply to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards.

40 C.F.R. § 52.21(a) (emphasis added); see 42 U.S.C. § 7478. The list of states changes as implementation plans are approved and disapproved; as of July 1, 1988, for example, provisions of § 52.21 were applicable to numerous states other than Puerto Rico. See, e.g., 40 C.F.R. §§ 52.144 (Arizona); 52.270 (California); 52.382 (Connecticut); 52.499 (District of Columbia); 52.632 (Hawaii); 52.738 (Illinois); 52.793 (Indiana); 52.931 (Kentucky); 52.1116 (Maryland); 52.1165 (Massachusetts); 52.1180 (Michigan); 52.1234 (Minnesota); 52.1280 (Mississippi); 52.1529 (New Hampshire); 52.1603 (New Jersey); 52.1689 (New York); 52.1884 (Ohio); 52.2178 (South

Dakota); 52.2303 (Texas); 52.2451 (Virginia); 52.2497 (Washington); 52.2581 (Wisconsin); 52.2676 (Guam); 52.2779 (Virgin Islands); 52.2827 (American Samoa). These facts, in our view, mean that the regulations are "nationally applicable" and also "based on a determination of nationwide scope or effect." 42 U.S.C. § 7607(b)(1). Hence, the statute requires the Company to challenge their lawfulness in the Court of Appeals for the District of Columbia; it cannot proceed in this court. *Id.* (challenges to nationally applicable regulations must be brought in the District of Columbia Circuit; challenges to regulations of only local or regional applicability may be brought in any appropriate circuit.)

IV.

Credit for "Contemporaneous" Decreases in Emissions

The regulations, as we have previously mentioned, measure any increase in emissions by, first, calculating the "actual" increase in emissions, and second, offsetting any "contemporaneous" decrease in emissions, due, say, to other changes the firm has made at the plant. *See pp. 13-15, supra.* The Company undertook a coal conversion project in 1982-1983, which led to a significant decrease in emissions. The EPA refused to credit the Company with this decrease because, it

found, the increase was not "contemporaneous" with the present proposed project. The Company now argues that the EPA is wrong.

The EPA's regulations, however, make clear that the coal project was not "contemporaneous." They say that a decrease is "contemporaneous" if it occurs between

the date five years before construction on the particular change commences[,] and . . . the date that the increase from the particular change occurs.

40 C.F.R. § 52.21(b)(3)(iii). Since construction on the kiln modification has not yet "commence[d]", and since more than five years has passed since the coal conversion, the Company cannot bring itself within this "contemporaneous" window. The Company says that it filed its NAD application within five years of the time it converted to coal, but that fact is irrelevant; the regulation speaks of "construction on the [kiln] . . . change," not of an application to make the change. 40 C.F.R. § 52.21(b)(3)(iii). And, the history of the regulation, referring to an alternative, shorter (three year) window measured with respect to "the date an application was complete," makes clear that reference to a construction date (along with the longer five year window) was intended. See 45 Fed. Reg. 6803 (1980) (soliciting comments on proposed

regulations defining "contemporaneous" for purposes of offsetting emissions).

Since the regulation is clear, since it does not count the 1982-83 coal conversion project as "contemporaneous," since the Company made no request of the agency to waive the rule, and since it cannot challenge the lawfulness of this "nationally applicable" regulation in this court, see pp. 22-24, supra; 42 U.S.C. 7607(b)(1), we must reject its claim.

For these reasons, the petition for review is denied and the order of the United States Environmental Protection Agency is affirmed.

2.33 DATE: January 8, 1990
SUBJECT: Clarification of "Secondary Emissions" as defined in 40 CFR 52.21(b)(18).
FROM: John Calcagni, Director, Air Quality Management Division
TO: Ken Waid, President, Waid and Associates, TX
DISCUSSION: (1) The definition of secondary emissions in the 1988 CFR at 40 CFR 52.21(b)(18) is incomplete; the second sentence was inadvertently omitted by the Federal Register during revision.
(2) Portions of the 1982 revisions to the PSD regulations have been vacated and remanded to EPA, including the way the Agency treats vessel emissions. Consequently, the August 7, 1980, PSD regulations, with the exception of to and from emissions counting, shall apply to determinations on how to treat vessel emissions. Under the 1980 regulations, emissions from certain activities of a ship docked at a terminal may be considered terminal emissions.

CR: 5 [Hard Copy]; 3.36

2.34 DATE: January 30, 1990
SUBJECT: Comment on Permit Proposed by Indiana DEM for NIPSCO Bailly
Generating System
FROM: David Kee, Director, Air and Radiation Division, EPA Region 5
TO: Timothy J. Method, Asst. Commissioner, Indiana DEM
DISCUSSION: The new control device and related improvements under the Clean
Coal Technology (CCT) program at the NIPSCO Bailly generating
station are not "major modifications" under NSR or "modifications"
under NSPS. The backup diesel generator is also not a major
modification if operating limits are federally enforceable. If a
source solely adds or enhances systems or devices whose primary
functions are the reduction of air pollution, and are determined
to be not less environmentally beneficial than any emission
control system or device they replace, if any, such activities
would not trigger new source requirements.
CR: 4.47 [Hard Copy]

2.35 DATE: June 8, 1990
SUBJECT: EPA's Revised PSD Applicability Determination in Response to Court's Remand Concerning the "Potential to Emit" Concept
FROM: William G. Rosenberg, Asst. Administrator for Air and Radiation, US EPA
TO: John Boston, President, WEPCO
DISCUSSION: This letter is EPA's revised PSD applicability determination in response to the remand by the US Court of Appeals of one issue advanced by EPA in the NSPS and PSD determinations for WEPCO. Traditionally, EPA has used an "actual-to-potential" method to calculate emissions increased for PSD purposes. The court instructed EPA to consider past operating conditions at a plant when addressing modifications that involve "like-kind replacement". This instruction, in essence, causes EPA to recognize a new subcategory of "like-kind replacements" under the "major modification" definition of EPA's NSR provisions. In these cases, EPA will use an "actual to actual" method, which involves projections based on historical capacity utilization, to calculate emission increases.
CR: 4.48 [Hard Copy]

3. PSD

Definition/Classification of Source

3.29 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 10.51; 14.9



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 9 1988

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive
or Point Source Emissions

FROM: Ronald Shafer, Chief
Policy and Guidance Section

TO: John Dale
Air Programs Branch, Region VIII

This is in response to your May 9, 1988 memorandum to Sally Farrell which requested assistance in determining whether to regard emissions from rocket nozzles as fugitive or point sources. We have consulted with the New Source Review Section in the Air Quality Management Division, and both sections agree that emissions from rocket nozzles are point sources. Fugitive emissions are defined as "...those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." The nozzle of the rocket would be considered a vent or functionally equivalent opening. Therefore, emissions from rocket firing should not be considered fugitive emissions.

If you have any questions, please contact Sally Farrell at FTS-382-2875.

cc: David Solomon
John Dale

Dennis



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

AUG 31 1988

Michael A. Stawarz, P.E.
New York Department of
Environmental Conservation
Region 5 - Environmental Quality
Hudson Street
Warrensburg, New York 12885

Dear Mr. Stawarz:

This is in response to your August 16, 1988 letter to Gary McCutchen requesting some clarification of the term "glass fiber processing plant." You specifically asked if this term was "intended to include facilities that use glass fibers (such as a manufacturer of fiberglass storage tanks)." In a subsequent telephone conversation with Mr. John Conover of your staff, Mr. McCutchen said he would investigate the matter and respond in writing.

Facilities that use glass fibers to manufacture other products, such as fiberglass-reinforced composites, were not intended to be included in the "glass fiber processing" category. After investigating the origin of the source category listing and subsequent rulemakings by the Environmental Protection Agency, we have concluded "glass fiber processing" was intended to include only those facilities engaged in making glass fiber. While the plants that produce glass fiber and filament sometimes integrate the manufacture of insulating wools and 100 percent glass fiber fabrics, the manufacture of fiberglass-reinforced composites is a substantially different process, which is more similar to a surface coating process. The typical pollutant from the production of glass fiber would be particulate; whereas, the pollutant from manufacturing fiberglass-reinforced storage tanks, for example, would be primarily volatile organic compounds.

Please call me at (919) 541-0871 if you have further questions regarding the definition of "glass fiber processing."

Sincerely,

Dennis W. Crumpler
Dennis W. Crumpler

New Source Review Section
Noncriteria Pollutant Programs Branch

cc: G. McCutchen

Reserved



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

3.33

January 12, 1989

Mr. Michael J. Hayes, Manager
Division of Air Pollution Control
Illinois Environmental Protection Agency
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Mr. Hayes:

This is in response to your letters of August 17, 1988 and September 9, 1988, requesting guidance on several issues related to determining applicability of new major source regulations in the granting of construction permits to sources of air emissions. These issues arose as a result of CPC International's "Argo II Rebuild Project Phase II" in Bedford Park, Illinois.

The questions you asked concern the following issues:

1. What definitions should be used to determine whether the CPC Phase II Rebuild Project is a major modification?

2. If the Phase II project in and of itself does not represent an increase in emissions, much less a significant increase, should contemporaneous and creditable emission increases and decreases determine whether a major modification has occurred?

3. How would netting provisions in the regulations apply to the CPC situation?

These questions were discussed in a telephone conversation on August 17, 1988, in which Gary McCutchen of my office concurred with the positions previously taken by the Environmental Protection Agency (EPA), Region V, but stated that he would consider the matter further upon receipt of a written request for guidance. The Office of Air Quality Planning and Standards (OAQPS) had a chance to review your letters. As a result, this office reiterates the positions we have taken before.

Background Information

Before responding to your specific questions, it may be helpful to summarize key modifications at CPC that resulted in changes in particulate matter emissions. In 1981, CPC reportedly decreased its particulate emissions by 262 tons per year (tpy). In 1985, it constructed the "Phase I Rebuild Project" which increased particulate emissions by 49.5 tpy. This increase was netted against the prior 262 tpy decrease achieved in 1981, so that the Phase I project was not subject to major new source permitting requirements (i.e., the net emissions increase was less than the de minimis emission rate of 25 tpy).

Construction of the Phase II project began in 1986, but the company did not get a construction permit until June 1988. The permit that was issued was a minor source permit. Prior to the Phase II project, CPC emitted approximately 600 tpy of particulate matter. It was, therefore, a major stationary source. In Phase II, certain pieces of obsolete equipment were shut down, reportedly reducing emissions by about 600 tpy, but new equipment was added at the same time. The new equipment resulted in an increase in emissions of approximately 600 tpy.

Question 1:

What definitions should be used to determine whether the CPC Phase II Rebuild Project is a "major modification"?

As a preliminary matter, when making a major source applicability determination, a permitting agency must base the determination on "major" source definitions, not on "minor" source definitions. The specific definitions to use in making an applicability determination are found in the specific new source review (NSR) regulations under which the proposed new construction or modification is reviewed. The area of Bedford Park, Illinois, is nonattainment for total suspended particulate (TSP), and Illinois does not have approved Part D NSR requirements in its State implementation plan. For this reason, 40 CFR Part 51, Appendix S, Emission Offset Interpretative Ruling, applies to new major stationary sources and major modifications to existing sources of TSP in that area.

The CPC also emits PM_{10} . Since Bedford Park is attainment for PM_{10} , prevention of significant deterioration (PSD) requirements found at 40 CFR Part 52.21 also apply. Therefore, CPS is subject to the definitions contained in Appendix S (for TSP purposes) and in Part 52.21 (for PM_{10} purposes).

Question 2:

If the Phase II project in and of itself does not represent an increase in emissions, much less a significant increase,

should contemporaneous and creditable emissions increases and decreases determine whether a major modification has occurred?

Because the Phase II Rebuild Project was to result in an increase in emissions of approximately 600 tpy of particulate matter, the change is "significant" (i.e., greater than 25 tpy) and should be scrutinized for applicability to new source requirements using the definitions of "major modification" in 40 CFR Part 51, Appendix S and Part 52.21. Whether a change is "significant" is determined before any netting calculation is done.

A determination as to whether a significant change is a "major modification," as defined at 40 CFR Part 51, Appendix S, II.A.10, requires a decision as to whether the change has resulted in a "significant" net emissions increase (i.e., greater than or equal to 25 tpy for particulate matter). The definition of "net emissions increase" in Appendix S mandates a calculation of all creditable increases and decreases which occurred during the contemporaneous time period and specifies that time period. It begins 5 years before the date construction "commenced" on the project and ends on the date the emissions increase from the particular modification occurs (if after the commencement date). A necessary condition for establishing the commencement date is that the owner or operator has all necessary preconstruction approvals or permits. The Phase II Project was permitted in June 1988; consequently, the contemporaneous time period began in June 1983. How each of the increases and decreases in emissions is taken into account to determine if the change will result in a major modification is discussed in the response to your third question.

Question 3:

How would netting provisions in the regulations apply to the CPC situation?

The mechanics of performing the netting calculation, once the contemporaneous time period has been established, can be found in the definition of "net emissions increase" at 40 CFR Parts 51.165(a)(1)(vi); 51.166(B)(3); Appendix S, section II.A.6; and 52.21(b)(3). The definitions specifically state:

. . . an increase or decrease in actual emissions is creditable only if the Administrator has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs.

The preamble to the 1980 PSD regulations at 45 FR 52701 explains that the:

. . . prior increase or decrease is creditable only if the relevant reviewing authority has not relied upon it in issuing a permit under the relevant NSR program . . .

As such, EPA's policy is that any prior increase or decrease that has been used in issuing a previous major source permit has been "relied" upon, and therefore cannot be creditable to a subsequent increase. However, emissions increases or decreases that have been used by a source only to net out of review (versus those used in NSR review) have not been "relied" upon and are, therefore, still subject to further consideration. In other words, if a source is able to net out of review, the increase in emissions that triggered the netting action will not have been subject to NSR. Its effect on increments and ambient air quality would not have been determined, and it would only be determined if it happens to fall in a contemporaneous time period of a subsequent project that is determined to be a major new source or major modification. Once included in a major NSR action, the increase that originally netted out of review, but was later subjected to it, will not be subject to review again (i.e., the slate is wiped clean). Similarly, if no major modifications are made for 5 years after the source that netted out of review received its permit, then the slate is wiped clean.

For the reasons stated above, we reaffirm the guidance that Region V and OAQPS conveyed in previous discussions with you. Each netting transaction involves a "snapshot" of the creditable emissions increases and decreases within the applicable contemporaneous time period. Emissions reductions that have occurred prior to the current contemporaneous time period are not creditable, even though they may have been used to allow one or more individual increases which are still inside the current contemporaneous time period to net out of review. To consider netting transactions that involve emission increases and decreases which occur outside of the current contemporaneous time period would effectively lengthen the contemporaneous time period to greater than 5 years. This is contrary to the existing NSR regulations. Any increases that occur inside the current contemporaneous time period are not double counted as you have alluded, because they will never be subjected to NSR more than once.

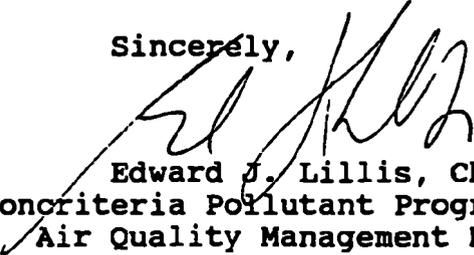
The netting calculation for the Phase II project starts with the 600 tpy increase from the new equipment. It is not clear that the 600 tpy decrease that occurred simultaneously with the 600 tpy increase is creditable because of issues concerning the requirement that the decrease be federally enforceable at the time actual construction commenced, but if we assume that the 600

tpy decrease was creditable, the 600 tpy increase and 600 tpy decrease essentially cancel each other out. However, these are not the only emissions changes within the 5-year contemporaneous time period, and the NSR regulations require that all such changes be totaled, not just certain ones. Therefore, the 49.5 tpy increase from Phase I must be added, because it occurred within the 5-year contemporaneous period. The 262 tpy decrease in particulate matter emissions in 1981, which had been used to net out of review the 49.5 tpy increase in 1985, cannot be used because it occurred outside of the five-year contemporaneous time period.

It would appear then that CPC has two options for resolving the permitting requirements for the Phase II project. The first option would be for CPC to determine if its emissions were reduced by at least 25 tpy due to other changes within the contemporaneous time period (in addition to the 600 tpy reductions associated with the Phase II Project) to net against the 49.5 tpy and enable the source to obtain a minor source permit. Of course, a second option would be for the source to go through NSR, (i.e., install LAER, obtain offsets greater than 1:1, etc.), and thereby "wipe the slate clean."

Please contact me at (919) 541-5586 or Gary McCutchen at (919) 541-5592 if you have additional questions regarding the matters discussed in this letter.

Sincerely,



Edward J. Lillis, Chief
Noncriteria Pollutant Programs Branch
Air Quality Management Division

cc: Richard Wagner, Region V
David Kee, Region V
Judy Katz, OECM
Sally Farrell, SSCD
Gary McCutchen, AQMD



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EPA 446

1445 P STREET, N.W.
DALLAS, TEXAS 75207

July 28, 1989

Mr. Steve Spaw, P.E.
Deputy Executive Director
Texas Air Control Board
6330 Hwy. 290 East
Austin, Texas 78723

RE: Request for PSD Applicability Determination
Golden Aluminum Company, San Antonio, Texas

Dear Mr. Spaw:

I am writing in response to your July 25, 1989, request for a Prevention of Significant Deterioration (PSD) applicability determination for the above-referenced source. While I agree that Golden Aluminum's facility, as proposed, is properly considered a "secondary metal production plant", I would like to take this opportunity to explain the basis for this determination. Enclosed please find a copy of our PSD applicability determination, which goes into considerable detail in explaining the regulatory background and EPA's interpretation of the applicable PSD regulations.

Should you have any further questions concerning this matter, please do not hesitate to call me.

Sincerely yours,

W. B. Hathaway
William B. Hathaway, Director
Air, Toxics and Pesticides Division

Enclosure

cc: Elizabeth A. Hurst, Jenkins & Gilchrist
Joseph S. Lamb, Golden Aluminum

PSD Applicability Determination
for Golden Aluminum Company
San Antonio, Texas

BACKGROUND

Golden Aluminum Company, a subsidiary of Adolph Coors Company, is proposing to construct a new facility in San Antonio, Texas. The proposed source will include four melting furnaces and a rolling mill. The feedstock for the plant will consist of used aluminum beverage cans, scrap aluminum and small amounts of primary (refined) aluminum. The melting and rolling will be a continuous, integrated process, and the plant will not have the capability to produce aluminum ingots from the furnaces. Although the predicted emissions have not been clearly established, it appears that the particulate emissions will exceed 100 tons per year. Golden Aluminum and EPA Region 6 agree that if the proposed plant is determined to be a "secondary metal production plant," then PSD review would be required if the potential to emit any pollutant regulated by the Clean Air Act exceeds 100 tons per year. However, Golden Aluminum believes its plant will not be a "secondary metal production plant" because the primary end product or service will be flat rolled aluminum, the melting operation is merely a support for the primary activity (i.e. the production of rolled aluminum), and no ingots or other products will be made as intermediates from the molten aluminum.

ISSUE

The issue presented by the facts described above is whether or not Golden Aluminum's proposed plant is a "secondary metal production plant" within that term's meaning in Section 169(1) of the Clean Air Act and 40 C.F.R. § 52.21(b)(1)(a).

ANALYSIS

If a proposed "stationary source" will have the "potential to emit" more than 100 tons per year of any pollutant regulated under the Clean Air Act (Act), then it will be subject to PSD review provided the source falls within one of the 28 listed source categories found in 40 C.F.R. § 52.21(b)(1)(i)(a). "Secondary metal production plants" are among the 28 listed source categories; however, neither the Clean Air Act nor the federal PSD regulations (found at 40 C.F.R. § 52.21) define that term. Review of the legislative history provides little guidance on the meaning of "secondary metal production plants"; however, it is obvious that Congress compiled the list of 28 source categories based upon information that such sources contributed significantly to ambient air concentrations of air pollutants. Thus, Congress saw the need to list such sources specifically as being subject to PSD if the source's

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potential to emit would exceed 100 tons per year. In fact, the Senate suggested that additional sources be examined to see whether they should be added to the list of 28 source categories through additional legislation [See Senate Report 127, 95th Cong. 1st Session, 96-97 (1977)]. "Secondary metal production plants" typically emit large amounts of particulates, as evidenced by Golden Aluminum's own estimates that the proposed plant would emit several thousand tons of particulates without control equipment. Thus, it is clear that Golden Aluminum's plant is the type of source Congress intended to be covered by the PSD provisions of the Act if it has the potential to emit more than 100 tons per year of any regulated pollutant.

Another source of information relevant to the proper categorization of the proposed plant is the Standard Industrial Classification (SIC) Manual. Although the term "secondary metal production plant" does not appear in the SIC Manual, it is closely reflected by SIC Code 3341 - "Secondary Smelting and Refining of Nonferrous Metals." A source is classified under SIC Code 3341 if it is primarily engaged in recovering nonferrous metals and alloys from new and used scrap and dross or in producing alloys from purchased refined metals. Thus, a plant that is primarily engaged in recovering aluminum from new or used scrap would be considered a secondary aluminum smelter. It is interesting to note that the form the smelted aluminum takes is not determinative of whether or not the plant is a secondary smelter; rather, a secondary smelter is defined by the principal activity or process and not the final product resulting from that process. Since the smelting process, not the rolling process, causes the majority of the particulate emissions from the source, it is only logical that Congress intended EPA to focus on those activities which could cause significant emissions of pollutants and hence, significant deterioration of air quality. Thus, EPA interprets the Congressional intent in determining whether or not a source is within one of the 28 listed source categories, as based upon the source's pollutant emitting activity (e.g. smelting) rather than the source's finished product.

Golden Aluminum argues that its proposed plant is primarily engaged in rolling aluminum. This would be true if the plant was merely taking primary aluminum (e.g. aluminum ingots) and heating it up to make it malleable and then rolling it into sheets or coils. Such a process would not be considered a "secondary metal production plant" but rather an aluminum rolling mill (See SIC Code 3353). However, Golden Aluminum is proposing to smelt the plant's feedstock, over 90% of which is in the form of used beverage containers and scrap aluminum, in four melting furnaces. Based upon these facts, EPA finds that the smelting operation (i.e. secondary metal production) is the primary pollutant-generating activity of the plant, and the rolling mill is merely the process by which the owner has chosen to form the recovered aluminum into an end product.

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Golden Aluminum also points to the language in the preamble to the current PSD regulations that describes how the agency should classify a source (See 45 Fed. Reg. 52895, August 7, 1980). Golden Aluminum claims that EPA should look to the principal product of the plant (i.e. rolled aluminum) in categorizing the source. However, as discussed below, this argument must fail for two reasons.

First, the preamble language referred to concerns the scope of the categorization of a source under the SIC Code. This section of the preamble addressed how EPA would group pollutant-emitting activities at a site. EPA chose to group together as one "source" all pollutant-emitting activities falling under the same two-digit (Major Group) SIC Code. However, in order to address those situations involving plants with several support operations or several totally unrelated final products EPA stated that support activities and nonprimary products should be grouped with the two-digit SIC Code of the plant's principal activity or product for purposes of defining the scope of the "stationary source" under 40 C.F.R. § 52.21(b)(5),(6). In this case, both "Secondary Smelting and Refining of Nonferrous Metals" (SIC Code 3341) and "Aluminum Sheet, Plate, and Foil" (SIC Code 3353) are within the same two digit SIC Major Group - "Primary Metal Industries" (Major Group 33). Thus, the preamble language referred to by Golden Aluminum cannot assist in a determination whether a proposed source is within one of the 28 listed source categories; rather, the language simply concerns which pollutant emitting activities at a plant should be grouped together to determine whether the proposed plant will be considered a single major "stationary source."

Second, Golden Aluminum's argument also fails because it would be illogical for a source clearly within one of the 28 listed categories to fall outside the listed category by merely altering the form of its end product or by the addition of certain processes that do not significantly alter the pollutant-emitting characteristics of the source. For example, under Golden Aluminum's logic, a primary copper smelter (one of the 28 listed categories) could integrate a copper wire facility into the smelter and thus the plant becomes a copper wire plant (not one of the 28 listed category sources). Likewise, Golden Aluminum would lead us to believe that if its plant made ingots from the aluminum scrap and sold such ingots, then it would be a "secondary metal production plant," but if it added a continuous caster to its process later, then it would no longer be characterized as a secondary metal production plant but rather an aluminum rolling mill. Clearly, Congress could not have intended the PSD program to be interpreted in this manner and EPA cannot allow for such an interpretation either; to do so would permit circumvention of the PSD program.

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Finally, Golden Aluminum contends that EPA has classified other plants which smelt used aluminum cans and form aluminum coils as "aluminum rolling mills" not "secondary metal production plants." However, EPA Region 6 has confirmed that all such plants, with the exception of the Alumax facility in Texarkana, Texas, referred to by Golden Aluminum have the potential to emit less than 100 tons per year for each pollutant regulated under the Clean Air Act and thus proper categorization of the source was not relevant to the permitting decisions since PSD did not apply in any event. With respect to the Alumax facility in Region 6, EPA determined that the primary activity of the plant was rolling aluminum since more than 50% of the feedstock would consist of aluminum ingots which would not be fed into a melting furnace but rather were merely preheated to make them malleable enough to roll into coils. Unlike Alumax, Golden Aluminum intends to smelt all of its feedstock, which will consist of over 90% aluminum scrap and used beverage containers. EPA finds that this is a reasonable basis upon which to distinguish between the applicability determination and this case.

Golden Aluminum also contends that other agencies and other programs administered by EPA (e.g. the Clean Water Act) have classified similar facilities as aluminum rollings mills. However, it must be understood that other statutes have different goals and criteria for the classification of sources consistent with their respective statutory purposes. Accordingly, those criteria are not determinative under the Clean Air Act. In other words, one agency or program may call the proposed source a rolling mill while another may consider it secondary metal production plant; both may be correct for their specific program.

CONCLUSION

Golden Aluminum's proposed plant is properly categorized as a "secondary metal production plant" and thus subject to PSD review if the plant will have the potential to emit more than 100 tons per year for any pollutant regulated under the Clean Air Act.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Office of Air Quality Planning and Standards
 Research Triangle Park, North Carolina 27711

11 AUG 1988 ← 1989

MEMORANDUM

SUBJECT: Prevention of Significant Deterioration (PSD) Applicability
 Determination for Multiple Owner/Operator Point Sources Within
 a Single Facility

FROM: John Calcagni, Director
 Air Quality Management Division (MD-15)

TO: Irwin L. Dickstein, Director
 Air and Toxics Division (8AT-AP)

This is in response to your June 15, 1989 request for clarification of the Environmental Protection Agency's (EPA's) policy concerning how nonfugitive emissions should be considered in determining applicability for major new sources or modifications with multiple owners or operators. This issue must be addressed in order to determine PSD applicability and permitting requirements for a new airport being planned by the City and County of Denver, Colorado (Denver). In short, you need to know whether the entire airport should be considered a single stationary source or whether the activities under the control of each airline (or other independent entity operating at the airport) should each be considered a separate source.

I understand that, at this point, Denver has submitted neither information concerning the type and size of airport facilities (including emission sources) it plans to build, nor data indicating the type and amount of air emissions anticipated from operations at the new airport. Also, Denver has not provided either the Colorado Department of Health (the permitting authority) or Region VIII with any information on the proposed airport's ownership, leasing agreements, or operation that would assist in judging control of the construction and eventual operation of the airport (for the purpose of determining "stationary source"). With virtually no specific information upon which to base a well-informed decision, my staff has evaluated the situation in general terms and discussed the project with several EPA new source review experts for their interpretation.

The PSD regulations define a "building, structure, facility, or installation," for source definition and emissions accounting purposes, as follows:

". . . all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control

of the same person (or persons under common control) . . .
Pollutant-emitting activities shall be considered as part of
the same industrial grouping if they belong to the same "Major
Group" (which have the same two-digit code) as described in
the Standard Industrial Classification Manual . . ."

The Standard Industrial Classification (SIC) Manual classifies virtually all activity at an airport under Major Group 45, so that if the SIC Manual grouping was the only criterion to consider, then the airport and all pollutant-emitting activities therein would be considered a single source. However, the definition requires that, for applicability purposes, emissions be aggregated not just on the basis of the SIC code but also based on a determination of "control" of the pollutant-emitting activities at a stationary source. Thus, the question of control appears to be the key criterion in determining what constitutes a "stationary source" at the proposed Denver airport.

The PSD applicability determination for a new stationary source must be made before construction commences so that, if the source is major, the source may obtain the necessary preconstruction PSD permit. When PSD applicability involves a determination of "control," the determination should be based on control at the time construction would commence on the proposed source. Control at this stage of a project would most often rest with the source owner. In cases where an airport authority (or an equivalent managing entity) acquires property, develops plans, and establishes a contract for the construction of a new airport, the airport authority (or equivalent) would be considered to be in "control" of the airport buildings or facilities for which it establishes a construction contract. Therefore, we believe, in the absence of information to the contrary, that the City and County of Denver is the owner (and as such is in "control") of the proposed airport and that the airport, as defined by SIC Major Group 45, is a single stationary source for the purpose of determining PSD applicability. This finding remains the same even if Denver intends after construction to lease discrete portions of the airport's pollutant-emitting facilities to an airline or other independent entity such that the lessee would have "control" over certain pollutant-emitting activities.

As a result of the finding that the airport is a single stationary source, all potential emissions of each pollutant must be aggregated to determine whether the airport is subject to PSD. If the airport emits more than 250 tons per year (tpy) of any pollutant regulated by the Clean Air Act, the source would be required to obtain a PSD permit. If it emits less than 250 tpy, no PSD permit is required. However, other State air quality permitting requirements may apply (i.e., minor source permit).

I hope that this will be helpful to you in future discussions with the Colorado Department of Health and Denver. If you have questions about this determination or wish to discuss this when you obtain additional information from Denver, please call Gary McCutchen of my staff at FTS 629-5592.

cc: NSR Contacts, Regions I-X

G. Foote

J. Dale

E. Lillis

G. McCutchen

R. Shafer

D. Skie

3.36 DATE: January 8, 1990
SUBJECT: Clarification of "Secondary Emissions" as defined in 40 CFR 52.21(b)(18).
FROM: John Calcagni, Director, Air Quality Management Division
TO: Ken Waid, President, Waid and Associates, TX
DISCUSSION: (1) The definition of secondary emissions in the 1988 CFR at 40 CFR 52.21(b)(18) is incomplete; the second sentence was inadvertently omitted by the Federal Register during revision.
(2) Portions of the 1982 revisions to the PSD regulations have been vacated and remanded to EPA, including the way the Agency treats vessel emissions. Consequently, the August 7, 1980, PSD regulations, with the exception of to and from emissions counting, shall apply to determinations on how to treat vessel emissions. Under the 1980 regulations, emissions from certain activities of a ship docked at a terminal may be considered terminal emissions.
CR: 5.26 [Hard Copy]; 2.33

49

3.37 -



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

June 4, 1990

MEMORANDUM

SUBJECT: Definition of Postapproval Monitoring
FROM: Ed Lillis, Chief
Noncriteria Pollutant Program Branch (MD-15)
TO: Marcia Spink, Chief
Air Programs Branch (3AM10)

This is in response to your April 30, 1990 request to clarify the definition of "postapproval monitoring" as the term is used in the regulations for prevention of significant deterioration (PSD) at 40 CFR 51.166(m)(v). As you know, the term is used to identify the time when ambient ozone monitoring is to be undertaken when the normal PSD requirement for preconstruction ozone monitoring is waived. The correct interpretation is that the postapproval period may begin any time after the source receives its PSD permit. This is explained in the Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD) [EPA-450/4-87-007, May 1987], which further provides that "in no case should the postapproval monitoring be started later than 2 years after the start-up of the new source or modification." (See page A-19.)

Please give me or Dan deRoock a call if you have any questions.

cc: Air Branch Chief, Regions I-X
NSR Contacts
Regional Modeling Contacts

4. PSD Modification

Reserved



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 9 1988

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPCO) Port Washington Life Extension Project

FROM: Don R. Clay, Acting Assistant Administrator
for Air and Radiation (ANR-443)

TO: David A. Kee, Director
Air and Radiation Division, Region V

This is in further response to your March 25, 1988 memorandum requesting guidance on PSD applicability regarding the proposed renovation of the Port Washington Power Plant by the WEPCO. I have also addressed the question whether the renovations proposed for this facility would subject the individual units to Subpart Da of the NSPS.

Based on the information presented in your memorandum, subsequent written information received from WEPCO, information provided by the State of Wisconsin, and other information contained in the Environmental Protection Agency's (EPA's) files on this matter, I have concluded that, as proposed, this renovation project would not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. It also appears that the project would increase emissions within the meaning of these two programs. Thus, the renovation project likely would be subject to PSD review as a major modification of an existing stationary source and that the renovations proposed for units 1-5 at this facility probably would subject the individual units to Subpart Da of the NSPS as a modification. However, WEPCO has not yet requested EPA to make an applicability determination. In any case, it would not be possible to make final applicability determinations at this point, for three basic reasons.

First, EPA must be supplied sufficient data regarding the various pollutants emitted by the Port Washington facilities to determine, on a pollutant-specific basis, how the proposed renovations would affect emissions levels. Second, WEPCO might avoid both PSD and NSPS applicability by adding or enhancing pollution control equipment, or in the case of PSD, restricting

operations below maximum potential such that the emissions increases necessary to trigger applicability would not occur. The WEPCO should discuss its plans in this regard with EPA. Third, regarding NSPS applicability to unit 1, additional information is necessary to determine whether a physical or operational change would occur.

Thus, although this memorandum will serve to answer many of the questions necessary to reaching final determinations, you should advise WEPCO that ultimately applicability depends upon changes in emissions after the renovations and whether the company decides to take the steps which would enable it to lawfully avoid coverage. Also, NSPS coverage of unit 1 can only be determined after an evaluation of the additional information regarding the work to be performed. In addition, as to NSPS, WEPCO should be advised to submit a formal request pursuant to 40 CFR 60.5 if it desires a final applicability determination.

As the need for further factual development here suggests, determinations of PSD and NSPS applicability are fact-specific, and must be made on a case-by-case basis. This memorandum provides a framework for analyzing the proposed changes at Port Washington and gives EPA's views on relevant issues of legal interpretation. It should also be useful in assessing other so-called "life extension" projects in the future. However, any such project would need to be reviewed in light of all the facts and circumstances particular to it. Thus, a final decision regarding PSD and NSPS applicability here would not necessarily be determinative of coverage as to other life extension projects.

If you have any further questions regarding the discussion or conclusions in this memorandum, please have your staff contact David Solomon of the New Source Review Section at FTS 629-5375.

I. Background

As mentioned in your March 25 request, the five coal-fired units at Port Washington began operation in 1935, 1943, 1948, 1949, and 1950, respectively. Each unit was initially rated at 80 megawatts electrical output capacity. In recent years, however, the performance of the units began to deteriorate due to age-related degradation of the physical plant. In particular, inspections performed by a WEPCO consultant in 1984 revealed extensive cracks originating from the internal surfaces of the rear steam drums and boiler bank boreholes in units 2, 3, 4, and 5, creating significant safety concerns. Because of these safety concerns and other age-related problems, in 1985 the operating levels of units 2, 3, and 4 were reduced, and unit 5 was removed from service. As a result of the plant's deteriorating condition, the maximum rated physical capacities of units 1, 2, 3, and 4 at this time are 45, 65, 75, and 55 megawatts, respectively.

The life extension project includes extensive capital improvements to the common facilities and each of the individual units, including replacement of the rear steam drum in units 2, 3, 4, and 5. The renovation work will restore the physical and operational capability of each unit to its original 80 megawatt nameplate capacity, and extend the useful life of the units well beyond the planned retirement dates that would otherwise apply. Upon completion of the project, WEPCO intends to substantially increase the actual operations at the Port Washington plant.

II. PSD Applicability

The life extension project at Port Washington is subject to preconstruction review and permitting under the Act's PSD provisions if it is a "major modification" within the meaning of the Act and EPA's regulations. The PSD regulations at 40 CFR 52.21 govern this determination because Wisconsin has been delegated PSD permitting authority under the provisions of 52.21(u). The definition of "major modification" in 52.21(b)(2)(i) requires an analysis of several factors. These factors may be grouped under two general questions. Will the work entail a "physical change in or change in the method of operation of a major stationary source"? If so, will the change "result in a significant net emissions increase of any pollutant subject to regulation under the Act" [see 52.21(b)(2)(i)]? The Port Washington facility is an existing major stationary source because it emits well in excess of the PSD threshold amount for several pollutants.

A. Physical Change or Change in the Method of Operation

This requirement of a major modification is satisfied if either a physical or operational change would occur.

1. Physical Change

The renovation work called for under the proposed life extension project at Port Washington would constitute a "physical change" at a major stationary source. The clear intent of the PSD regulations is to construe the term "physical change" very broadly, to cover virtually any significant alteration to an existing plant. This wide reach is demonstrated by the very narrow exclusion provided in the regulations: other than certain uses of alternate fuels not relevant here, only "routine maintenance, repair and replacement" is excluded from the definition of physical change [see 52.21(b)(2)(i)(a)].

In determining whether proposed work at an existing facility is "routine," EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding. In this case, all of these factors suggest that the work required under WEPCO's life extension project appears not to be "routine." The available information indicates that the work proposed at Port Washington is far from being a regular, customary, or standard undertaking for the purpose

of maintaining the plant in its present condition. Rather, this is a highly unusual, if not unprecedented, and costly project. Its purpose is to completely rehabilitate aging power generating units whose capacity has significantly deteriorated over a period of years, thereby restoring their original capacity and substantially extending the period of their utilization as an alternative to retiring them as they approach the end of their useful physical and economic life. The most important factors that would support these conclusions are outlined below.

a. The project would involve the replacement of numerous major components. The information submitted by WEPCO shows that the company intends to replace several components that are essential to the operation of the Port Washington plant. In particular, as noted above, WEPCO would replace the rear steam drums on the boilers at units 2, 3, 4, and 5. According to WEPCO, these steam drums are a type of "header" for the collection and distribution of steam and/or water within the boilers. They measure 60 feet long, 50.5 inches in diameter, and 5.25 inches thick, and their replacement is necessary to continue operation of the units in a safe condition. In addition, at each of the emissions units, WEPCO plans to repair or replace several other integral components, including replacement of the air heaters at units 1, 2, 3, and 4. The WEPCO also plans to renovate major mechanical and electrical auxiliary systems and common plant support facilities. The WEPCO intends to perform the work over a 4-year period, utilizing successive 9-month outages at each unit.

In its July 8, 1987 application for authority to renovate to the Public Service Commission of Wisconsin (PSC), WEPCO described the life extension project and explained its purpose and necessity. The WEPCO took care to distinguish the proposed renovation work from routine maintenance that did not require PSC approval, explaining that:

. . . [work items] falling into the category of repetitive maintenance that are normally performed during scheduled equipment outages do not require specific commission approval and, accordingly, are not included in this application.

Thus, WEPCO's own earlier characterization of this project supports a finding that the planned renovations are not routine.

b. The purpose of the project is to significantly enhance the present efficiency and capacity of the plant and substantially extend its useful economic life. In its application to the PSC, WEPCO pointed out that due to age-related deterioration, total plant capability had declined by 40 percent. The company noted that the currently planned retirement dates for the Port Washington units, as set forth in its Advance Plan filed with the State, ranged from 1992 to 1999. However, WEPCO asserted that "extensive renovation of the five units and the plant common facilities is needed if operation of the plant is to be continued." In any event, WEPCO stated that the renovation work would allow the Port Washington plant to generate power at its designed capacity until the year 2010, and thus "represents a life extension of the units."

In contrast, in its July 29, 1988 letter to EPA headquarters (pages 9-13), WEPCO characterized the renovation work as the timely, routine correction of equipment problems--principally, the steam drum cracks. However, the information presented leads to the conclusion that this is not the case. While replacement of the steam drums is necessary to restore lost generating capacity, that is not the only work proposed to be done. Based upon maximum capacity figures for past years, it appears that the units had experienced deterioration in physical generating capacity even prior to the discovery of the steam drum cracks in 1984. Thus, WEPCO proposes a wide-ranging project encompassing a broad array of tasks that would not only correct the steam drum problem, but correct other age-related deterioration that is essentially independent of the steam drums. Such other work (e.g., replacement of air handlers) apparently is also necessary as a practical matter to restore original nameplate capacity. Thus, it appears that even if WEPCO had undertaken this renovation work immediately following discovery of the steam drum cracks, it would have been proper to characterize the proposed work as a nonroutine life extension project.¹

c. The work called for under the project is rarely, if ever, performed. The WEPCO's application to the PSC asserted that the work to be performed under the life extension project was not frequently done:

Generally, the renovation work items included in this application are those that would normally occur only once or twice during a unit's expected life cycle.

The EPA asked WEPCO to submit information regarding the frequency of replacement of steam drums, the largest category of work item called for under the project. WEPCO reported that to date, no steam drums have ever been replaced at any of its coal-fired electrical generating facilities. WEPCO did point out that it had replaced other "headers" comparable in design pressure and function. However, the largest of these was 16 inches in

¹It is important to note in this regard that not all renovation, repair, or "life extension" projects would properly be characterized as modifications potentially subject to PSD and NSPS. For example, nonroutine repairs to correct unexpected equipment outages, even of major components such as steam drums, would not be subject to NSPS if they did not increase the maximum capacity of the affected facility as it existed prior to the outage. Conversely, undertaking a program of repair and maintenance properly characterized as routine would not subject a facility to the Act's requirements.

diameter, and EPA does not believe that they are comparable in diameter, wall thickness, function, or importance to the rear steam drums at Port Washington.²

d. The work called for under the project is costly, both in relative and absolute terms. The latest information supplied by WEPCO is that the renovation work at Port Washington will cost \$87.5 million, of which at least \$45.6 million is designated as capital costs.³ The WEPCO reports that, in terms of annualized costs, the renovation project will cost \$7.8 million, as compared to \$51.6 million for a new 400 megawatt plant. Thus, renovation costs represent approximately 15 percent of replacements costs.

2. Change in the Method of Operation

The renovation work at Port Washington would not constitute a "change in the method of operation" within the meaning of the PSD regulations. However, it is clear that the "physical change" and "operational change" components of the "major modification" definition are discrete and independent. Thus, as explained below, PSD still applies if there is a physical change that will significantly increase net emissions.

In addition, the regulations exclude from the definition of physical or operational change "an increase in the hours of operation or in the production rate" [see 40 CFR 52.21(b)(2)(iii)(f)]. The preamble to the rule [45 FR 52676, 52704 (August 7, 1980)], makes it clear that this exclusion is intended to allow a company to lawfully increase emissions through a simple change in hours or rate of operation up to its potential to emit (unless already subject

²The WEPCO's July 29, 1988 letter to EPA stated (on page 13) that after further investigation, the company "learned of several examples" of steam drum failure and replacement. However, WEPCO provides no further details, other than noting that in one instance, the drum failed during initial testing and was replaced. Replacement of a failed component at a new facility presumably would not increase emissions from the facility, and probably would be viewed as routine if the alternative was to forego operation of that new facility. Under such circumstances, it is unlikely that the replacement would trigger the Act's requirements.

³The WEPCO's July 8, 1987 application to the PSC included a project cost estimate of \$83.9 million, of which \$45.6 million was designated as capital costs. A more recent cost estimate provided to EPA by WEPCO indicates that several work items are now deemed unnecessary, such that the cost of the original project is now estimated at \$70.5 million. However, all but \$89,000 of these reductions are designated as "maintenance" items. The recent submission also relates that the scope of the original project has now been expanded to include flue gas conditioning equipment and associated air heater work costing approximately \$17 million. Although WEPCO has not broken down these additional costs into capital and maintenance (or "expense") expenditures, it would appear that most, if not all, of this additional work would be classified as capital costs. Thus, it is highly likely that actual capital costs would be significantly higher than \$45.6 million.

to any federally enforceable limit) without having to obtain a PSD permit. Thus, emissions increases at Port Washington associated with increased operations would not, standing alone, subject WEPCO to PSD requirements. However, as discussed in greater detail below, the exclusion for increases in hours of operation or production rate does not take the project beyond the reach of PSD coverage if those increases do not stand alone but rather are associated with non-excluded physical or operational changes.

In its March 17, 1988 letter to Region V and its July 29, 1988 letter to EPA Headquarters, WEPCO asserted that the exclusion for increases in operational hours or production rate also would serve to render PSD review not applicable to the renovation work proposed at Port Washington because the project's purpose was to restore the original design capacity of 80 megawatts per unit, but not to exceed that level. However, a plant's original design capacity is irrelevant to a determination of PSD applicability.

B. Significant Net Emissions Increase

Under the PSD regulations, whether the life extension project at Port Washington would result in a "significant net emissions increase" depends on a comparison between the "actual emissions" before and after the physical changes resulting from the renovation work. Where, as here, the source has not yet begun operations following the renovation, "actual emissions" following the renovation are deemed to be the source's "potential to emit" [see 40 CFR 52.21(b)(21)(iv)]. Apparently, there would be a "significant net emissions increase" within the meaning of the PSD regulations as a result of the proposed renovations as currently planned, because potential emissions after the project--reflecting the restoration of 80 megawatt capacity at each unit--would greatly exceed representative actual emissions prior to the physical changes. (The fact that the project is intended to restore the plant's original design capacity is irrelevant to that calculation.)⁴ If this is so, the project would be a "major modification" subject to PSD review. However, PSD applies on a pollutant-specific basis, and EPA has not been furnished with adequate data regarding the impact of the proposed renovations on the various pollutants to determine whether a significant net emissions increase would indeed occur for any pollutant. Such data must be provided before EPA can make a final determination of PSD applicability.

⁴The WEPCO also contends (July 29, 1988 letter, page 35) that EPA should instead compare representative actual emissions prior to the change with "projected" actual emissions after the renovations. The PSD regulations provide no support for this view. Where, as here, a source is not currently subject to a PSD permit containing operational limitations, EPA must presume that the source will operate at its maximum capacity and, hence, its maximum potential to emit. However, as discussed below, a source is entitled to reduce its potential to emit by embodying its "projections" of future emissions in federally enforceable restrictions on its operations that may serve to lawfully avoid PSD review.

It is important to note in this regard that WEPCO, at its option, could "net out" of PSD review by accepting federally enforceable restrictions on its potential to emit after the renovation. This could occur through enhancement of existing pollution control equipment, addition of new equipment, acceptance of federally enforceable operational restrictions, or some combination of these measures, limiting potential emissions to a level not significantly greater than representative actual emissions prior to the renovations. Theoretically, WEPCO could minimize the needed restrictions on its potential to emit following the renovations if it could show that some period other than the most recent two years is "more representative of normal source operation" [see 52.21(b)(21)(ii)]. (Obviously, such a showing would be most important with respect to unit 5, because it has been shut down and has had zero emissions since 1985.) Since these matters are within WEPCO's control, you should advise the company to enter discussions with Region V and Wisconsin, as appropriate, if WEPCO desires to "net out" of PSD review.

The WEPCO also argued in its July 29, 1988 letter, at pages 33-41, that even if EPA is correct that the Port Washington life extension project would involve physical changes within the meaning of the PSD regulations, any emissions increases would be due to increased production rates or hours of operation rather than higher emissions per unit of production. Therefore, WEPCO contends that these increases should be excluded from consideration in determining whether a net significant emissions increase and, hence, a major modification, would occur. The WEPCO is incorrect in this regard.

As noted above, the exclusions cited by WEPCO are intended to apply where a source increases emissions by simply combusting a larger amount of fuel, or processing a larger amount of raw materials during a given time period, or by expanding its hours of operation "to take advantage of favorable market conditions" (see 45 FR 52704). In this instance, however, it is obvious that WEPCO's plans to increase production rate or hours of operation are inextricably intertwined with the physical changes planned under the life extension project. Absent the extensive renovations proposed at Port Washington, WEPCO would have little market incentive to, and in part would be physically unable to, increase operations at these aged and deteriorated facilities which, absent the renovations, would likely be retired from service in the near future. Thus, WEPCO's plans call for precisely the type of "change in hours or rate or operation that would disturb a prior assessment of a source's environmental impact [and] should have to undergo [PSD review] scrutiny" (see 45 FR 52704). Conversely, accepting WEPCO's interpretation of the major modification regulations would serve to exclude from consideration all physical or operational changes except those which cause increased emissions per unit of production. Clearly, EPA never intended this result. It would allow, through substantial capital investment, significant expansion of the pollution-emitting capacity and longevity of major industrial facilities without PSD review of the impacts on air quality and opportunities for future economic growth.

C. Baseline Date

The November 9, 1987 letter from the Wisconsin Department of Natural Resources to Region V asked whether a complete March 28, 1986 PSD permit application for certain work at Port Washington triggered the PSD baseline date, despite the fact that the permit was never issued. The answer to this question is yes. Baseline dates are triggered by the first complete application and remain in effect regardless of whether the application is revised or withdrawn, or whether the permit is finally issued and the source constructed or modified.

III. NSPS Applicability

The Port Washington renovations are subject to the Act's NSPS if they constitute "modifications" within the meaning of section 111 and 40 CFR Part 60. Under 60.1, the NSPS applies to modifications at an "affected facility." Each unit at Port Washington is properly characterized as an "affected facility" subject to the NSPS at 40 CFR Part 60, Subpart Da, which applies to electric utility steam generating units [see 60.40(a)]. Pursuant to 60.14(a), a modification for NSPS purposes is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies." Increase in emission rate is in turn defined as an increase in kilograms per hour (kg/hr) [see 60.14(b)].

Pursuant to longstanding EPA interpretations, the emission rate before and after a physical or operational change is evaluated at each unit by comparing the hourly potential emissions under current maximum capacity to emissions at maximum capacity after the change. In addition, under the Act's NSPS provisions, only physical limitations on maximum capacity are considered in determining potential emissions at power plants. Thus, any prospective changes in fuel or raw materials accompanying the physical or operational change are not considered in determining maximum capacity. Consequently, 60.14(b)(2) requires that, in conducting emissions tests before and after a change to determine whether an increase in emission rate has occurred, "operational parameters" which may affect emissions must be held constant. Fuel and raw materials are "operational parameters" for this purpose. Similarly, 60.14(e)(4) provides that use of an alternative fuel or raw material which the existing facility was designed to accommodate before the change would not be considered a modification. Thus, for example, a physical change which increases the maximum capacity of the facility would have a corresponding increase in the sulfur dioxide emissions if the facility used fuel with the same sulfur content before and after the change. Such a prospective increase cannot be offset by instead using fuel with a lower sulfur content after the change, because, under the regulations, the facility would always have the option of changing back to the higher sulfur-content fuel at a later date without triggering a modification for NSPS purposes. However, any offsetting reductions in emission rate caused by the concurrent addition of pollution control equipment would be considered in determining whether a physical or operational change results in an increase in emission rate.

The WEPCO contends (July 29, 1988 letter, at pages 20-27) that baseline capacity for the purpose of determining whether an increase in emission rate occurs for purposes of an NSPS modification is the original design capacity of the facility. This is incorrect. The thrust of the NSPS modification provisions is to compare actual maximum capacity before and after the change in question. Thus, original design capacity is irrelevant. The provision in 40 CFR 60.14(b)(2) for manual emission tests to determine whether an increase has occurred clearly contemplates that tests will be done just prior to and after the physical or operational change. The original design capacity of a unit, to the extent it differs from actual maximum capacity at the time of the test due to physical deterioration--and, hence, derating--of the facility, is immaterial to this calculation.

A. Physical or Operational Change

As with the Act's PSD provisions, a modification occurs for NSPS purposes, if there is either a physical or operational change [see 40 CFR 60.14(a)].

1. Physical Change

As is the case under the PSD provisions, the proposed renovations at Port Washington would constitute a physical change for NSPS purposes, at least at units 2, 3, 4, and 5. The WEPCO would need to supply more information, if EPA is to make a definitive determination as to unit 1.

The rear steam drums are part of the steam generating unit which constitutes the "affected facility" within the meaning of 40 CFR 60.41(a), and the drum replacements at units 2, 3, 4, and 5 are integral to the planned increase in maximum capacity, which is the purpose of the life extension project. With respect to unit 1, other physical changes would increase maximum capacity from 45 to 80 megawatts. However, there is some question whether those changes, in significant part, would occur at the steam generating unit or will be limited to the turbine/generator set, which is not part of the affected facility. We suggest that you pursue this matter with WEPCO to the extent necessary to determine NSPS applicability regarding unit 1.

As with PSD, the NSPS regulations exclude routine maintenance, repair, and replacement [see 60.14(e)(2)]. However, the renovations at the Port Washington steam generating units are not routine for NSPS purposes for the same reasons--detailed above--that they are not routine for PSD purposes.

2. Operational Change

Operational changes include both increases in hours of operation and increases in production rate. Section 60.14(e)(3) provides that an increase in hours of operation is not, by itself, a modification. However, an increase in production rate at an existing facility constitutes a modification, unless it can be accomplished without a capital expenditure on that facility [see 60.14(e)(2)].

It is highly likely that the life extension project at Port Washington constitutes an operational change under this standard, for two reasons. First, restoring nameplate capacity at units 1, 2, 3, and 4 presumably entails, among other things, changes that will allow the units to combust a larger amount of fuel at maximum capacity through operation at higher working pressures than the units have been able to accommodate in recent years. In the case of unit 5, the renovations presumably involve an increase over zero fuel and pressure. These changes constitute an increase in production rate within the meaning of the regulations. Second, as noted above in the discussion of PSD applicability, this increase in production rate entails substantial investments to improve the capital stock at each affected facility. It appears that these investments are large enough to qualify as "capital expenditures" under the formula specified in 60.2, although WEPCO should be asked to supply actual calculations should this become necessary to determine NSPS applicability.

B. Increase in Emission Rate

It seems clear that, absent some creditable offsetting changes, the increases in maximum generating capacity proposed for each of the Port Washington units would represent an increase in the hourly potential emission rate for each pollutant to which a standard applies over the emission rate prior to the renovation. As noted above, burning cleaner fuels would not be creditable. Similarly, voluntarily restricting the production rate following the renovations also would not be creditable for NSPS purposes, because WEPCO could, at a later date, increase production without triggering NSPS [see 40 CFR 60.14(e)(2)]. Accordingly, to avoid triggering NSPS, WEPCO would need to install additional air pollution control equipment, or upgrade existing equipment, to offset the potential emissions increases, such that no increase would occur at maximum capacity. The information submitted indicates that WEPCO may plan some enhancement of the current control equipment, but it is unclear whether this would be adequate to prevent an increase in emission rates. As with PSD applicability, such steps can lawfully avoid NSPS requirements. Accordingly, you should advise the company that it should address these contingencies if it desires EPA to rule on whether WEPCO can avoid NSPS requirements in this fashion.

C. Reconstruction

Based upon data provided by WEPCO, it seems that the Port Washington renovations would not qualify as a "reconstruction" for NSPS purposes under 40 CFR 60.15, because the capital cost for the upgrades to each of the five units, while substantial, apparently is less than 50 percent of the fixed capital cost of constructing a comparable, entirely new steam generating unit [see 60.15(b)(1)]. However, the modification and reconstruction provisions of NSPS are independent. The former provisions are intended to apply in circumstances where physical or operational changes which increase emissions make NSPS coverage appropriate at levels well below 50 percent of the capital cost of a replacement unit. Conversely, the reconstruction provisions are aimed at changes to an existing unit irrespective of associated emissions

increases, but trigger NSPS requirements only if the higher 50 percent level is reached. Thus, the suggestion made by WEPCO in its July 29, 1988 letter (at pages 14-15) that EPA must undertake rulemaking to amend the reconstruction regulations before NSPS could be applied to the Port Washington project is not well taken.

IV. Conclusion

In adopting the PSD and NSPS programs, Congress sought to focus air pollution control efforts at an efficient and logical point: the making of long-term decisions regarding the creation or renewal of major stationary sources. The Port Washington life extension project, as it has been presented to EPA, would involve a substantial financial investment at pollution-emitting facilities that may significantly increase potential emissions of air pollutants over a period well beyond the current life expectancy of those facilities. If the additional factual information called for in this memorandum shows that emissions increases would indeed result from this project, the project would be subject to PSD and NSPS requirements. Such a result would be in harmony with the broad policy objectives that Congress intended to achieve through these programs.

cc: Gerald Emison, OAQPS
Alan Eckert, OGC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C 20460

OCT 14 1988

THE ADMINISTRATOR

Mr. John W. Boston
Vice President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

As you requested in our meeting on September 15, 1988, I have made final determinations regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) requirements to the proposed life extension project at the Port Washington steam electric generating station, which is owned and operated by Wisconsin Electric Power Company (WEPCO). For the reasons discussed below, I have determined that, as proposed, the renovations at Port Washington are subject to both PSD and NSPS requirements. However, EPA remains willing to work with you regarding methods of compliance. As we have discussed, one alternative would be to reconfigure the project such that no emissions increases would occur. My staff is ready to meet with you to discuss these matters at any time.

I. BACKGROUND

On September 12, 1988, David Kee, Director, Air and Radiation Division, EPA Region V, wrote you regarding PSD and NSPS coverage of the Port Washington renovations. Enclosed with that letter was a memorandum dated September 9, 1988 from Don R. Clay, Acting Assistant Administrator, addressing the background of the Port Washington project, and analyzing at some length the relevant interpretative issues. For purposes of brevity, I will not repeat that material here, but rather incorporate it by reference.

The September documents concluded that the life extension project, as proposed, likely would be subject to PSD and NSPS requirements. However, EPA also stated that final applicability determinations could not be provided at that time in the absence of certain factual information. In our subsequent meeting you requested that EPA furnish final determinations, and agreed to provide the necessary additional information. You also asked EPA to reconsider certain of the conclusions in Don Clay's memorandum. These matters are discussed below.

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II. FINAL DETERMINATIONS

Your staff has responded to our requests for additional information, and I want to thank you for WEPCO's continued cooperation in doing so. Based on this, and the other information in EPA's files, I now make the following final determinations:

(1) The life extension project, as proposed, will render WEPCO's Port Washington plant subject to the PSD requirements of Part C of the Clean Air Act as a major modification within the meaning of the Act and the EPA regulations at 40 C.F.R. § 52.21.

(2) The proposed life extension project will render each of the five steam generating units at the Port Washington plant subject to the NSPS requirements of section 111 of the Clean Air Act as a modification within the meaning of the Act and the EPA regulations at 40 C.F.R. Part 60.

In reconsidering the memorandum and letter of September 9 and 12, I have taken a careful look at the issues you raised in our meeting: whether the renovations are routine; whether EPA has treated similar projects in a different fashion; and whether there would be an emissions increase due to a physical or operational change. However, I find no reason to depart from the reasoning of the September documents. Accordingly, I conclude that WEPCO's life extension project, if carried out as proposed, will involve a substantial and non-routine renewal of the Port Washington facilities that will significantly increase both hourly maximum and annual emissions of air pollutants.

Specifically, regarding the nature of the proposed work at Port Washington, I find that these renovations constitute physical changes for PSD purposes within the meaning of 40 C.F.R. § 52.21(b)(2)(i), and physical and operational changes for NSPS purposes within the meaning of 40 C.F.R. § 60.14(a). I find further that these changes do not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. (See 40 C.F.R. §§ 52.21(b)(2)(iii) and 60.14(e)).

Regarding the emissions changes from the life extension project, based upon the emissions data and certain factual assertions submitted by WEPCO, I find that the Port Washington renovations will result in a significant net increase in emissions of several pollutants for PSD purposes within the meaning of 40 C.F.R. § 52.21(b)(2)(i), (b)(3), and (b)(21). I find further that the renovations will result in an increase in the emission rate of several pollutants at each of units 1-5 for NSPS purposes within the meaning of 40 C.F.R. § 60.14(a) and (b).

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Enclosures A and B detail the emissions changes underlying these findings for PSD and NSPS purposes. As indicated above, EPA's calculations and determinations are based on data supplied by WEPSCO. We will use the data in Enclosures A and B in the event you would like to work with us to establish an acceptable arrangement for satisfying PSD and NSPS requirements through the addition or enhancement of pollution control equipment, physical capacity restrictions, or, in the case of PSD, federally enforceable limitations on potential emissions.

III. DISCUSSION

As you requested, I have reconsidered the question of whether the physical and operational changes at Port Washington are routine, whether applying PSD and NSPS here would be inequitable in light of EPA's past treatment of renovation projects, and whether the renovations will result in emissions increases. These matters are addressed below, as is EPA's reasoning with respect to the baselines for calculating the PSD and NSPS emissions increases reflected in Enclosures A and B.

Regarding the question of routineness, the renovations involve the replacement of steam drums, air heaters, and other major components that are integral to the continued operation of the source. The work will not simply maintain the facilities in their current state, but rather will significantly enhance their present efficiency and capacity, and substantially extend their useful economic life. In addition, the work called for here is rarely, if ever, performed. Moreover, this work is costly, both in relative and absolute terms. Based on these and other factors, I reaffirm Don Clay's findings on the non-routine character of the Port Washington changes. The September 9 memorandum contains a complete discussion of EPA's reasoning on this issue.

On the related equity question, I find no inconsistency here with EPA's prior determinations regarding routine and non-routine changes. I note initially that PSD and NSPS applicability determinations are made on a case-by-case basis. Thus, it is very difficult to analogize to other projects, which almost inevitably present significant factual differences. Nevertheless, my staff has reviewed the additional material you submitted on September 19, and September 27, 1988 regarding certain other renovation projects, and has informally surveyed EPA Regional Offices and state agencies.

I have concluded that none of the four steam drum replacements identified in your September 19 submission are sufficiently similar to the Port Washington project to support determinations of nonapplicability in this matter. The Carolina

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Power and Light case involved a faulty steam drum replaced prior to the initial start-up of a new unit, and would not have increased emissions for PSD or NSPS purposes. The Great Western Sugar example did not involve a utility boiler, and was too small to be affected by NSPS. The Ashland Oil facility was not at a utility, involved a waste heat boiler that was not fossil-fuel fired, and hence, was not an emissions unit subject to PSD or NSPS. The Algoma Steel Co. facility was not a utility boiler, and not located in the United States.

In addition, the informal survey conducted by the Office of Air and Radiation disclosed no closely analogous cases that were ever reviewed by EPA headquarters for purposes of PSD or NSPS applicability. In particular, EPA found no examples of steam drum replacement at aged electric generating facilities. Moreover, EPA could find no examples in which the Agency had analyzed and issued an applicability determination for a "life extension project" for any category of major source. Regarding the four utility projects identified in your September 27 submission, I note that they do not involve steam drum replacement. In addition, permit applications were not submitted to the state agencies for the Duke Power and Texas Utilities projects you cite. Consequently, they were not reviewed by any air pollution control agency. The Cincinnati Gas and Electric project was reviewed by the state, but not EPA. The state determined, and EPA Region II concurred, that the Hydraco Enterprises project was not subject to PSD based on a net decrease in emissions of all pollutants. Our informal survey and review of the projects you identified reveal that major construction activities undertaken by utilities that may be subject to Clean Air Act requirements have not been brought to the attention of EPA. The Agency is considering what steps may be necessary to address this situation.

EPA has discovered only two state agency determinations addressing life extension questions in a manner possibly inconsistent with EPA's analysis of the Port Washington project. These instances, which apparently were not brought to EPA's attention prior to the states' determination, do not create an inequity that would justify a different conclusion by EPA in this case.

As to the question of emissions increases at Port Washington, I believe that EPA has properly interpreted the PSD and NSPS regulations as applying to increases in emissions due to increases in hours of operation or production rate, where, as here, such operational or production increases are closely related to physical or operational changes. A contrary interpretation would allow even massive emissions increases stemming from significant new capital investment -- as distinguished from routine fluctuations in the business cycle --

- 5 -

to escape scrutiny under the Clean Air Act simply because the new investment did not involve an inherently more polluting production process. I do not believe that Congress intended such a result.

I would like to point out that the figures on emissions increases in Enclosures A and B reflect my conclusions regarding the proper points in time from which to calculate emissions changes. For PSD, I have determined under 40 C.F.R. § 52.21(b)(21)(ii) that the two-year period of 1983 and 1984 -- prior to the source curtailments due to discovery of cracks in the rear steam drums -- are more representative of normal source operations than the most recent two-year period. This conclusion is appropriate in light of WEPCO's historical operations.

As to NSPS, there is no "representative emissions" concept under that program. Rather, under the circumstances presented by this case, the baseline emission rates for units 1-5 are determined by hourly maximum capacity just prior to the renovations. At this time, EPA is relying on the actual operating data you submitted to determine current maximum capacity. Although EPA is certainly open to further discussion on this point, the information contained in your September 27 and October 11, 1988 submissions is inadequate to support WEPCO's assertions that higher-than-actual capacities could be achieved on an economically sustainable basis. For example, you indicate that operation at higher levels at units 1-4 "could increase equipment deterioration thus causing further damage." Regarding Unit 5, you state that "safety concerns" dictated the decision to shut down that unit. Based on this information, we are unable to rely on WEPCO's statements as to maximum "achievable" capacity in determining the emissions changes at each of these units. Thus, for example, in the case of unit 5, the current capacity must be regarded as zero.

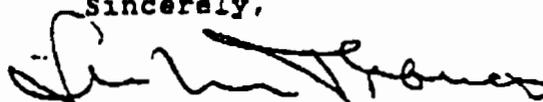
IV. CONCLUSION

In adopting the PSD and NSPS programs, Congress intended to address the type of long-term capital investments in pollution-emitting facilities at issue in the Port Washington life extension project. Thus, as proposed, these renovations would be subject to the requirements of both programs. However, as indicated above, my staff remains ready to work closely with WEPCO to discuss specific pollution control equipment and permitting measures that would minimize the cost to WEPCO of complying with the requirements of the Clean Air Act. I have asked Don Clay to work with you in seeking a final resolution of the compliance issues by December 1.

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Again, thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Lee M. Thomas". The signature is fluid and cursive, with a prominent initial "L" and a long, sweeping tail.

Lee M. Thomas

Enclosures

cc: Senator Robert W. Kasten, Jr.
Representative F. James Sensenbrenner, Jr.
Don Clay, EPA (ANR-445)
David Kee, Air & Radiation Div., Region V

Enclosure A

PSD Applicability

Port Washington Power Plant Renovation Project

(all emissions calculations are in tons per year)

<u>Pollutant</u>	<u>Actual Emissions Baseline (1)</u>	<u>Potential Emissions (2)</u>	<u>Net Emissions Increase</u>	<u>PSD Level</u>	<u>Subject to PSD Review</u>
Total suspended particulate	170	283 (3)	108	25	yes
Sulfur dioxide	24,236	52,621 (3)	28,385	40	yes
Nitrogen oxides	2,991	8,201	5,210	40	yes
Carbon monoxide	144	397	253	100	yes
Hydrocarbon	17	47	30	40	no
Beryllium	0.0016	0.005	0.0034	0.0004	yes
Fluorides	18	98	60	3	yes

NOTE: PSD applicability for the other PSD regulated pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) has not been determined at this time.

- 1) Average emissions for two-year period defined by calendar years 1983 and 1984.
- 2) As calculated by WEPCO based on 1992 coal type, actual emissions after ESP, and an annual capacity utilization factor of 90%.
- 3) An EPA estimate of potential emissions, based on existing federally enforceable limits (i.e., applicable SIP), may be higher. The indicated PSD applicability determination would, however, not change.

Enclosure B

NSPS Applicability
Port Washington Power Plant Renovation Project

FULL LOAD EMISSIONS AT CURRENT CAPACITY
(BEFORE RENOVATION)

	UNIT-1 -----	UNIT-2 -----	UNIT-3 -----	UNIT-4 -----	UNIT-5 -----
SO ₂ (LBS/HR)	1417	1828	2043	1580	-0-
PM (LBS/HR)	15	16	12	12	-0-
NO _x (LBS/HR)	480	352	289	221	-0-

FULL LOAD EMISSIONS AT FUTURE CAPACITY
(AFTER RENOVATION)

	UNIT-1 -----	UNIT-2 -----	UNIT-3 -----	UNIT-4 -----	UNIT-5 -----
SO ₂ (LBS/HR)	2046	2037	2088	2269	2695
PM (LBS/HR)	16	16	12	17	15
NO _x (LBS/HR)	696	392	297	316	369

SUBJECT TO NSPS (AFTER RENOVATION)

	UNIT-1 -----	UNIT-2 -----	UNIT-3 -----	UNIT-4 -----	UNIT-5 -----
SO ₂ (LBS/HR)	YES(a)	YES(a)	YES(a)	YES(a)	YES
PM (LBS/HR)	YES(b)	NO	NO	YES(b)	YES
NO _x (LBS/HR)	YES(c)	YES(c)	YES(c)	YES(c)	YES(c)

Notes:

(a) With less add-on control than NSPS requirement, emissions (lb/hr) would not increase and NSPS would not apply.

(b) Because of planned ESP upgrade, PM emissions (lb/MM Btu) after renovation are expected to be less than NSPS requirement. However, NSPS would require CEMS for opacity.

(c) Because arch-fired boilers are used at Port Washington, current NO_x emissions (lb/MM Btu) are expected to be less than NSPS requirements. However, NSPS would require a CEMS for NO_x.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 28 1983

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Review of De Minimis Emissions - Sanctions

FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division

TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26)
Region V

The purpose of this memorandum is to comment on your draft reply to the State of Illinois explaining SSCD's January 5, 1983 applicability determination. The 1983 memorandum addressed the question of whether nonsignificant (de minimis) net emission increases that accumulate over time will trigger PSD reviews when the total net emissions exceed significance levels.

The 1983 memorandum stated that even though the preamble to the PSD regulations addressed the question of accumulation of emissions, the PSD regulations themselves did not. SSCD decided that those changes which occur over time (within a contemporaneous time frame, that is, five years) and whose emissions when reviewed as distinct entities are not significant, should not be combined and would not trigger PSD review (PSD permit issuance and imposition of BACT controls) when significance levels are reached. This was a policy decision based on concerns about the reasonableness of requiring permitting and imposition of controls for the most recent small increase in emissions. These policy considerations apply only to the permitting requirements for PSD and NSR and do not apply to the rules governing sanctions (§52.24).

It is very important to note that the 1983 memorandum affirmed that even though individual de minimis increases do not accumulate to trigger a PSD review, they do consume PSD increment and ambient air quality must be protected. Likewise, in nonattainment areas, de minimis net emission increases must be aggregated and considered in evaluating air quality impacts so the NAAQS will be attained. Under the nonattainment rules, aggregated de minimis emissions will trigger sanctions when significance levels are reached. Emissions are aggregated as follows: any emissions increase as a result of a physical change or change in the method of operation must be evaluated to see if the cumulative net emissions increase over the past five years is significant.

We are now reconsidering the January 5, 1983 applicability determination and intend to write to you later about this. If you have any comments or further questions, please call me or Myra Cypser on my staff (382-2872).

cc: Judy Katz, OECM
Greg Foote, OGC
Dennis Crumpler, AQMD
NSR contacts, Regions I-X

4.40 **DATE:** January 12, 1989
SUBJECT: Guidance on Several Issues Related to Determining Applicability of New Major Source Regulations in Granting Construction Permits
FROM: Edward J. Lillis, Chief
Noncriteria Pollution Programs Branch
Air Quality Management Division
TO: Michael J. Hayes, Manager
Division of Air Pollution Control, Illinois EPA
DISCUSSION: Memo provides guidance on several issues related to determining applicability of major source regulations in granting construction permits to modified sources.
(1) A reviewing agency must base determination of whether a source is "major" on "major" source definitions in the Federal Register.
(2) Whether the emissions increase related to a modification is significant is determined before any netting calculation is done. If it is, netting calculations are then performed to determine whether the "net emissions increase" associated with that modification is significant.
(3) Contemporaneous emissions increases and decreases are discussed, as well as other factors affecting whether they are "creditable".
(4) An example of netting calculation is shown.
CR: 3.33 [Hard Copy]; 23.30

4.41 DATE: June 13, 1989
SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting
FROM: Terrell E. Hunt, Associate Enforcement Counsel, Air Enforcement
Division, Office of Enforcement and Compliance Monitoring
John S. Sietz, Director, Stationary Source Compliance Division,
Office of Air Quality Planning and Standards
TO: Addressee's (Regions I-X, Regional Counsels, Air Branch Chiefs,
Air Division Directors)
DISCUSSION: This 22-page memo contains final guidance on conditions in
construction permits that can legally limit a source's potential
to emit to minor or de minimus levels. The memo includes sections
of the Louisiana Pacific rulings. Types of limitations that are
Federally enforceable, and, therefore, legitimate restrictions on
potential to emit, are discussed, including restrictions on
production rates, operating hours, control device limitations, and
averaging periods for determining emission rates and control
efficiencies. Characteristics of "sham" permits are identified
and enforcement is discussed. The memo includes sections of the
Louisiana-Pacific rulings as a basis for policy and includes
several examples to illustrate the principles.
CR: 2.31 [Hard Copy]; 22.7



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

ant 4.42

18 SEP 1989

MEMORANDUM

SUBJECT: Request for Clarification of Policy Regarding
the "Net Emissions Increase"

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: William B. Hathaway, Director
Air, Pesticides, and Toxics Division (6T)

This is in response to your August 10, 1989 memorandum regarding guidance on several issues related to the calculation of "net emissions increase" (as defined in 40 CFR 52.21(b)(3)(i)) for prevention of significant deterioration (PSD) applicability purposes. These issues arose from a PSD pre-application package submitted to Region VI by Conoco Inc. of Westlake, Louisiana.

As was discussed in an August 17, 1989 conference call between Region VI staff and members of the New Source Review Section, our response provides general guidance on the four basic netting questions raised in your memorandum, as opposed to a more detailed response specific to the Conoco application.

Question 1:

Which of the following approaches is correct for determining if a contemporaneous net emissions increase has occurred at an existing major source?

- A. Not including contemporaneous emissions unless the project emissions exceed PSD significance levels for a pollutant.
- B. Using a literal interpretation of the definition of "net emissions increase" as contained in 40 CFR 52.21(b)(3)(i) which suggests that, even if the project's emissions do not exceed the PSD significance levels, a series of less than significant changes would still be accumulated.

Response:

Although the definition of "net emissions increase" could be interpreted differently, the Environmental Protection Agency's (EPA's) historic policy has been not to consider accumulated emissions from a series of small (i.e., less than significant) emissions increases if the emissions increase from the proposed modification to the source is, standing alone without regard to any

decreases, less than significant. In other words, the netting calculus (the summation of contemporaneous emissions increases and decreases) is not triggered unless there will be a significant emissions increase associated with the proposed modification. This policy was discussed in detail in a 1983 EPA memorandum (copy attached) titled "Net Emission Increases Under PSD." In October 1988 the Policy and Guidance Section of the Stationary Source Compliance Division (SSCD) sent a memorandum (copy attached) to Region V restating the policy and indicating that it applied only to applicability determinations made under PSD and did not apply to nonattainment rules. The memorandum also indicated that SSCD was reconsidering the policy as it applies to PSD. We have, however, discussed this matter with SSCD and understand that there are no plans to revise the policy.

This office has reviewed the considerations (as discussed in the 1983 memorandum) which led to the policy and continue to find them to be reasonable and appropriate. For example, it would not be sensible to subject a small increase (e.g., 2 tons per year [tpy]) to a full PSD review because of an unrelated 39 tons per year increase 3 years earlier. The PSD reviews of such small emissions could place a significant resource burden on both applicants and review agencies and would likely result in minimal, if any, emissions reductions or air quality benefits from the application of BACT. Consequently, I reaffirm that EPA's current policy is not to aggregate less than significant increases at a major source when the emissions increase from a proposed modification is less than significant. Of course, attempts by applicants to avoid PSD review by splitting a modification into two or more minor modifications constitutes circumvention of the PSD requirements. Two or more related minor changes over a short period of time should be studied for possible circumvention.

Question 2:

Once PSD review is triggered for one pollutant, does the triggering mechanism (i.e., as described in question 1) remain the same for other pollutants or is the net contemporaneous emissions increase for these other pollutants compared to the PSD significance levels? In other words, if PSD review is triggered for one pollutant, is the source then required to consider all contemporaneous emissions changes for the other pollutants when determining applicability, even if new emissions from the proposed project will be less than significant?

Response:

No. The criteria used to determine if a significant net emissions increase has occurred from a proposed modification at an existing major source are applied on a pollutant-by-pollutant basis.

For example, a major source experienced insignificant increases of NO_x (30 tpy) and SO₂ (15 tpy) 2 years ago, and a decrease of SO₂ (50 tpy) 3 years ago. The source now proposes to add a new process unit with an associated emissions increase of 35 tpy NO_x and 80 tpy SO₂. For SO₂, the proposed 80 tpy increase from the modification by itself (before any netting) is significant,

so we then determine the contemporaneous net emissions change, the algebraic sum of $(-50)+(15)+(80)$, which equals +45 tpy. Therefore, the proposed modification is major and a PSD review for SO_2 is required. However, the NO_x increase from the proposed modification is by itself less than significant. Consequently, netting is not performed for NO_x even though the modification is major for SO_2 .

Question 3:

Is the approach of comparing new, allowable emissions to old, actual emissions still appropriate for determining PSD applicability?

Response:

Under the PSD regulations, whether a physical change or change in the method of operation at a source will result in a "net emissions increase" requires a comparison of the "actual emissions" of the source before and after the change. For an existing emissions unit at a source, "actual emissions" before the change equal the average rate in tons per year at which the unit actually emitted the pollutant during the 2-year period (or more representative period) which precedes the change [see 40 CFR 52.21(b)(21)(ii)]. Where the change will affect the normal operations of an existing emissions unit (as in the case of a change which could result in increased use of the unit), "actual emissions" after the change must be assumed to be equal to "potential to emit." The PSD regulations are quite clear regarding such circumstances [40 CFR 52.21(b)(21)(iv)]:

For any emissions unit that has not yet begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date. (Emphasis added.)

Where "allowable emissions" are the same as or less than the "potential to emit" for an emissions unit, "allowable emissions" may be used to define the "actual emissions" of that unit after the change. Consequently, for determining PSD applicability, the comparison of prior "actual" versus new "potential" emissions (or "allowable" where appropriate) is the correct methodology to use.

The comparison of prior "actual" to future "potential" emissions is made on a unit-by-unit basis for all emissions units at the source that will be affected by the change. It is done for the emissions unit(s) undergoing the physical change or change in the method of operation and also for any other units at which normal operations could be affected by the change at the source. This, for example, includes a review for possible emissions increases at process-related emissions units due to a physical change which removed a bottleneck at only one of the units.

Question 4:

When determining contemporaneous increases and decreases, are all emissions points at the source reviewed, or only those emissions points that

have had emissions changes incorporated into State permits, in terms of actual emissions changes at the beginning and end of the contemporaneous period to determine the contemporaneous emissions changes?

Response:

Generally all emissions points at the source (including fugitive emissions where applicable) are reviewed for emissions changes, including those points with emissions changes that have not been incorporated into permits. The PSD regulations at 40 CFR 52.21(b)(3)(i)(b) require that "any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable" be included in the calculation of "net emissions increase." (Emphasis added.)

In regard to emissions changes incorporated into permits, the regulations at 40 CFR 52.21(b)(3)(iii) provide that a contemporaneous increase or decrease (to the extent the decrease is federally enforceable) is creditable only if the relevant reviewing authority has not relied on it in issuing a PSD permit for the source, and the permit is still in effect when the increase in actual emissions from the particular change occurs. A reviewing authority relies on an increase or decrease when, after taking the increase or decrease into account, it concludes that the proposed project would not cause or contribute to a violation of an increment or ambient standard. In other words, an emissions change at an emissions point which was considered in the issuance of a PSD permit for the source is not available to be used in subsequent netting calculations. For example, an emission change incorporated in a source's PSD permit (State or Federal) would not be available to be used as a contemporaneous increase or decrease in a subsequent netting calculation.

On the other hand, where an emissions change was not relied upon in issuing a PSD permit for the source, the regulations make no distinction between an emissions point with an emissions change incorporated into a State permit and any other emissions point at the source when defining an otherwise creditable contemporaneous change. Consequently, except for emissions changes considered in issuing a PSD permit, all emissions points at the source are reviewed in terms of actual emissions changes to determine the contemporaneous emissions changes at a source, including those emissions points that have not had emissions changes incorporated into State permits. Although emissions changes incorporated into State permits do not affect which emissions points must be considered, conditions in State permits (if federally enforceable) may be used to define an emissions unit's "allowable emissions."

If you have any questions in regard to this matter, please contact David Solomon of the New Source Review Section at FTS 629-5375.

Attachments

cc: NSR Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

SUBJECT: Net Emission Increase Under PSD

FROM: Sheldon Meyers, Director
Office of Air Quality Planning and Standards

TO: David P. Howekamp, Director
Air Management Division - Region IX

This is in response to your memo dated May 3, 1983 to Kathleen M. Bennett concerning net emission increases under PSD. I have looked into the question of inconsistency in interpretation of the de minimus provisions of the PSD regulations as raised in your memorandum, and have concluded that the interpretation made by the Stationary Source Compliance Division is the most practical.

The issue, as I understand it, is whether sources and control agencies need to aggregate small changes (i.e., those below de minimus levels) which occur over time so that once the cumulative effect of the changes exceeds de minimus levels, PSD is triggered. The preamble to the PSD regulations implied that this aggregation would be required. However, the Agency has maintained since 1981 that no such aggregation is required. This interpretation was first articulated in a memo from SSCD (then DSSE) to Region VII dated January 22, 1981, and has been reiterated in memoranda to Region IX and X since then. The SSCD interpretation was concurred in by the Office of General Counsel (Peter Wyckoff) as legally supportable since the regulations themselves are not clear. The policy considerations leading to this interpretation were:

- (a) aggregation could impose a significant resource burden on sources which might never become subject to PSD.
- (b) aggregation would only require installation of BACT level controls on the last piece of equipment which triggered the review, with a minimum air quality benefit, and
- (c) air quality would be protected since these changes would consume increment in any event.

CONCURRENCES

RECOL	EN-341						
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DATE	6-2-83	6 5 83	6/3/83				

In conclusion, I feel that the interpretation made by SSCD to be the most reasonable. However, I recognize that a clarifying amendment to the PSD regulation is advisable and will include it as part of the next set of proposed changes to the PSD regulations. If you would like to discuss this further, please contact me.

cc: Darryl Tyler
Ed Reich
Peter Wyckoff

En-341:R.Biondi:kw:Draft 5-31-83 382-2831 Rm. 3202 Final 6-2-83
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 28 1983

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Review of De Minimis Emissions - Sanctions

FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division

TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26)
Region V

The purpose of this memorandum is to comment on your draft reply to the State of Illinois explaining SSCD's January 5, 1983 applicability determination. The 1983 memorandum addressed the question of whether nonsignificant (de minimis) net emission increases that accumulate over time will trigger PSD reviews when the total net emissions exceed significance levels.

The 1983 memorandum stated that even though the preamble to the PSD regulations addressed the question of accumulation of emissions, the PSD regulations themselves did not. SSCD decided that those changes which occur over time (within a contemporaneous time frame, that is, five years) and whose emissions when reviewed as distinct entities are not significant, should not be combined and would not trigger PSD review (PSD permit issuance and imposition of BACT controls) when significance levels are reached. This was a policy decision based on concerns about the reasonableness of requiring permitting and imposition of controls for the most recent small increase in emissions. These policy considerations apply only to the permitting requirements for PSD and NSR and do not apply to the rules governing sanctions (§52.24).

It is very important to note that the 1983 memorandum affirmed that even though individual de minimis increases do not accumulate to trigger a PSD review, they do consume PSD increment and ambient air quality must be protected. Likewise, in nonattainment areas, de minimis net emission increases must be aggregated and considered in evaluating air quality impacts so the NAAQS will be attained. Under the nonattainment rules, aggregated de minimis emissions will trigger sanctions when significance levels are reached. Emissions are aggregated as follows: any emissions increase as a result of a physical change or change in the method of operation must be evaluated to see if the cumulative net emissions increase over the past five years is significant.

We are now reconsidering the January 5, 1983 applicability determination and intend to write to you later about this. If you have any comments or further questions, please call me or Myra Cypser on my staff (382-2872).

cc: Judy Katz, OECM
Greg Foote, OGC
Dennis Crumpler, AQMD
NSR contacts, Regions I-X

4.43 DATE: November 24, 1989
SUBJECT: Court of Appeals Decision Upholding PSD "Actual-to-Potential"
Applicability Rules Puerto Rican Cement Co., Inc. v. EPA, No. 89-
1070 (1st Cir.)
FROM: Gregory B. Foote, Attorney, Air and Radiation Division
TO: Alan W. Eckert, Associate General Counsel, Air and Radiation
Division
William G. Rosenberg, Assistant Administrator for Air and
Radiation
DISCUSSION: This memo discusses the court's decision affirming EPA's position
that, when a company makes a "physical or operational change" at
an existing facility, there is a "major modification" subject to
PSD review if a comparison of actual emissions before the change
with potential emissions thereafter shows a significant net
increase. A copy of the court's ruling is attached.
CR: 2.32 [Hard Copy]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

DEC 29 1989

MEMORANDUM

SUBJECT: Use of Netting Credits

FROM: *for* John Calcagni, Director *W. J. Hamilton*
Air Quality Management Division (MD-15)

TO: Bruce P. Miller, Chief
Air Programs Branch, Region IV

This memorandum is in response to your October 27, 1989 memorandum which asked several questions concerning the Environmental Protection Agency's (EPA's) position on netting. Specifically, you asked the following questions:

1. Can "leftover" contemporaneous emissions reductions be used in future netting transactions?
2. If so, can these emissions credits be sold or otherwise be used by a separate facility with a different, major, standard industrial classification (SIC) number under any circumstances?
3. If a source is allowed to use the leftover emissions credits in the future, is the 5-year netting time frame opened for all pollutants, even though a modification may be major for only a limited number of pollutants?

The following response is based on our reading of the Federal regulations. However, States with federally approved prevention of significant deterioration (PSD) State implementation plans are free to follow a more stringent interpretation of their regulations.

Your first question asked whether a source could use "leftover" emissions reduction credits from a netting transaction in future netting transactions. We assume by "leftover" emissions reductions you mean some portion of an emissions decrease that does not appear to be fully utilized in allowing a source to net out of review. As explained below [and in the January 12, 1989 (3.33) letter (see attached) from Ed Lillis to Michael Hayes], the procedure we recommend for considering emissions increases and decreases in a netting calculation does not result in "leftover" emissions credits, since emissions increases and decreases are considered in their entirety.

The pertinent PSD criteria for emissions increases and decreases to be creditable for netting transactions is CFR 40 Part 52.21(b)(3)(iii) or Part 51.166(b)(3)(iii), which states that the emissions increases and decreases are creditable:

b)... "if the reviewing authority has not relied on it (e.g., an emissions decrease) in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual emissions from the particular change occurs."
 [NOTE: EPA's policy is to interpret the permit to be a PSD permit.]

There are situations, such as when a source nets out of review, when the permitting authority does not rely on creditable emissions increases or decreases "in issuing a PSD permit." For example, when a source nets out of review, no PSD permit is issued. As such, the reviewing authority has not relied on any creditable emissions increases or decreases in issuing a permit, so the emissions increases and decreases are still available for future applications.

For example, a major source proposes to replace a boiler that emits 30 tons per year (tpy) of sulfur dioxide (SO₂) with a new unit that has a potential to emit 50 tpy SO₂. Also, the source shut down a 40 tpy SO₂ unit 3 years prior to the proposed modification. As such, the netting equation for the example is:

$$\begin{aligned} &+50 \text{ tpy (proposed increase) minus } 30 \text{ tpy (current shutdown)} \\ &\text{minus } 40 \text{ tpy (previous shutdown)} = -20 \text{ tpy SO}_2 \end{aligned}$$

Note that these shutdowns, as all other decreases, must be federally enforceable in order to be creditable. Consequently, the source nets out of review, and no PSD permit is issued.

We do not view the -20 tpy SO₂ that results from the netting calculation as "leftover" credit. Rather, we view each of the contemporaneous and otherwise creditable emissions increases and decreases considered by the source in netting out of review as still being fully available, and must therefore be included in the next netting transaction at the source. To further illustrate, suppose the source in the example plans to add another new boiler in 3 years, which will increase SO₂ emissions by 50 tpy without replacing any existing units. A new net emissions increase must be calculated. The 40 tpy reduction that was creditable in the previous netting transaction will have passed out of the contemporaneous window, so it is no longer available. The new net emissions increase is calculated as follows:

$$\begin{aligned} &+50 \text{ tpy (proposed increase) plus } 50 \text{ tpy (previous increase)} \\ &\text{minus } 30 \text{ tpy (previous shutdown)} = 70 \text{ tpy SO}_2 \end{aligned}$$

In this case, the source does not net out of review and must get a PSD permit.

Where a source is not able to net out of review, any emissions increase or decrease used in the netting equation to determine source applicability must also be used in its entirety in the subsequent air quality impact analysis. In this manner, a reviewing authority relies on the full emissions

increase or decrease in determining whether the proposed project would or would not cause, or contribute to, a violation of an increment or ambient standard. At this point, these increases and decreases are no longer creditable.

Your second question asked if "leftover" credits existed, could those credits be sold or otherwise used by a separate facility (with a different major SIC number) under any circumstances. As a hypothetical example, you asked if a new major source, with a different SIC number and under separate ownership, located on the property of another source, could it use the "leftover" netting credits under any circumstances. The answer to this situation is no, since netting is source-specific. Emissions reduction credits cannot be sold to, or used by, separate sources for PSD netting purposes, even if they are collocated at the same site.

(A.43) The answer to your third question is no. It was addressed in my September 18, 1989 memorandum to William B. Hathaway, Director of the Air, Pesticides, and Toxics Division, EPA Region VI, a copy of which is attached. Please refer to the response to question 2 in that memorandum.

If you have any questions, please contact Gary McCutchen or Dennis Crumpler of my staff at FTS 629-5592 or FTS 629-0871, respectively.

2 Attachments

cc: G. Foote, OGC
Air Branch Chief, Regions I-III, V-X
New Source Review Contacts



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JAN 0 2 1990

MEMORANDUM

SUBJECT: Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring

FROM: John Calcagni, Director, Air Quality Management Division (MD 15)

TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV

This is in response to your October 20, 1989 memorandum concerning whether and when the beneficial air quality impacts that result from raising an existing stack height at a source can be considered as part of a proposed PSD modification. You asked for our comments on your draft response to Mr. Richard Grusnick's (Alabama Department of Environmental Management) September 11, 1989 letter on this issue. I have reviewed your draft response concerning the following specific examples provided by Mr. Grusnick.

Example 1. A baseline (non-increment consuming) unit raising its stack (from 100 feet to 250 feet) at the time of a mill expansion. The reason for raising the stack is:

- (a) to produce enough air quality credit to reduce the ambient impact caused by the expansion; and
- (b) to prevent a nuisance to workers in a new 200-foot building.

Example 2. An existing PSD increment-consuming unit raising its stack (from 100 feet to 250 feet) in conjunction with a mill expansion to avoid worker exposure inside a new 200-foot building.

Example 3. An existing PSD increment-consuming unit (with a wet scrubber and a 100-foot stack) whose emissions would be merged with new emissions from a proposed new adjacent unit (with an ESP) with a 300-foot stack.

I agree with your position that the reason why a source raises a stack is not relevant in deciding whether the air quality benefit to be derived from the stack increase can be considered in the PSD analysis. However, the maximum height creditable as the good engineering practice (GEP) stack height without providing a demonstration is 65 meters (approximately 213 feet). For a height greater than 65 meters to be fully creditable as the GEP stack height, it must be established in a manner consistent with the stack height rules.

In response to the question of when the increase in a stack height can be considered as part of a proposed modification, I believe that the increase must be proposed in conjunction with the overall modification, but need not be directly related to other physical changes or changes in the method of operation being proposed by the source. That is, the stack being raised need not be physically tied to the emissions unit(s) being constructed or modified. Thus, when a stack height increase is proposed in a PSD (modification) application, any creditable air quality improvements resulting from the higher stack (whether or not any increase in emissions resulting from the proposed modification are to be released through such stack) should be considered in the preliminary modeling analysis to determine whether further modeling or preconstruction monitoring would be required.

In each of the examples provided by Mr. Grusnick, I would consider the proposed stack height increase to be part of the proposed modification, and such increase, in general, should therefore be used in the determination of whether PSD modeling or preconstruction monitoring would be required. However, before any new stack exceeding 65 meters (approximately 213 feet) could be fully creditable, it would have to be verified as the GEP height in accordance with approved stack height rules. There are additional requirements with regard to the merging of exhaust gas streams that should be carefully evaluated to determine the creditable stack parameters in the third example.

If you have any questions concerning this response, please contact Dan deRoeck at 629-5593.

cc: J. Calcagni
E. Lillis
G. McCutchen
E. Ginsberg
Air Branch Chief, Regions I-III, V-X
NSR Contacts

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Sola 4.46



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JAN 18 1990

Mr. Morton Sterling, Director
Environmental Protection
Detroit Edison Company
200 Second Avenue, 482 WCB
Detroit, Michigan 48226

Dear Mr. Sterling:

This is a followup to the October 19, 1989 meeting during which Detroit Edison further discussed its position that the addition of natural gas firing capacity to the Greenwood Unit I Power Plant should not be subject to a prevention of significant deterioration (PSD) review. At the meeting, you requested that Environmental Protection Agency (EPA) Headquarters review Region V's previous determination that the proposed fuel conversion was a "major modification" for PSD purposes.

As you are aware, in a letter dated December 20, 1988, EPA Region V concluded that the proposed conversion of the oil-fired Greenwood Unit to dual capacity for oil and gas firing would subject the plant to a PSD review for nitrogen oxides (NO_x). The Region's conclusion was based on a determination that 1) the source was not capable of firing natural gas prior to January 6, 1975 (and therefore was not covered by the PSD exemption for modifications under 40 CFR 52.21(b)(2)(iii)(e)(1)); and 2) there would be a significant net increase of NO_x resulting from the change. As you have requested, we have reevaluated this finding in light of the additional information submitted by Detroit Edison during the October 19 meeting.

The information presented by Detroit Edison indicates that the emissions unit at the source was initially designed and permitted to fire both oil and gas. However, there is no evidence to demonstrate that the source as a whole had, or at any time initiated construction on, the equipment necessary to deliver natural gas to the combustion unit. Without such equipment, it would not be possible for the source to utilize natural gas as an alternate fuel. Consequently, it is our view that the source was not capable of accommodating natural gas prior to January 6, 1975. Therefore, the changes necessary to accommodate the firing of natural gas at the Greenwood Plant would, for PSD purposes, be considered a "physical change" to the source.

As requested, we have also evaluated the net emissions change at the source that would result from the modification. It is Detroit Edison's position that the large decreases in "allowable" emissions of sulfur dioxide, particulate matter, and NO_x when burning natural gas rather than oil as a result of the modification, warrants special consideration. Specifically, Detroit Edison feels that the use of a cleaner fuel at the Greenwood Plant warrants a finding that there is no increase in actual emissions and accordingly no "major modification."

Under the PSD regulation, a "major modification" occurs when the physical or operational change at the source (in this case the installation of natural gas handling facilities and the firing of natural gas) would result in a significant net emissions increase for any regulated pollutant at the source. Whether the proposed use of natural gas at the Greenwood Plant would result in a "significant net emissions increase" depends on a comparison between the "actual emissions" before and after the physical or operational change. Where, as here, the source has not yet begun operations firing natural gas, "actual emissions" after the change to natural gas firing are deemed to be the source's "potential to emit" for that fuel [see 40 CFR 52.21(b)(21)(iv)]. Potential annual NO_x emissions when firing natural gas at the Greenwood Plant greatly exceed its current actual emissions. Therefore, as a result of the ability to fire natural gas after the change, the emissions of NO_x at the source would experience a "significant net emissions increase," within the meaning of the PSD regulations. The fact that current annual "allowable emissions" for the Greenwood Plant when firing oil may greatly exceed future allowable (or potential) emissions when firing natural gas is not relevant for PSD applicability purposes. See Puerto Rican Cement Co., Inc. v. EPA No.89-1070 (First Circuit) (slip op. October 31, 1989).

In summary, our review indicates that Region V correctly applied the PSD applicability criteria.

The PSD requirements include an air quality and additional impact analysis and the application of best available control technology (BACT). The BACT requirement applies to "each proposed emissions unit at which a net emissions increase would occur as a result of a physical change or change in the method of operation in the unit" [see 52.21(j)(3)]. Consequently, although the addition of gas firing would subject the source as a whole to a PSD review, the requirement to apply BACT is applicable only to those emissions units at the source which undergo both a physical or operational change and a significant net emissions increase. It appears that the only emissions unit at the Greenwood Plant affected by the proposal to fire gas would be the existing boiler. Historically, it has been EPA's policy that where the individual boiler being converted is capable of accommodating the alternate fuel, BACT would not apply.

In this case, in addition to the physical changes at the source necessary to deliver natural gas to the existing boiler, a number of canes capable of burning natural gas would be installed in the existing burner assemblies. Modifications to the unit's overfired air duct are also planned. We also understand that there will be no changes in the present oil burning system, which will be retained.

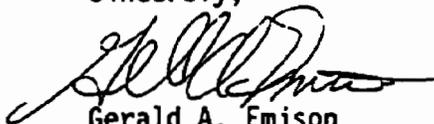
Our review indicates that, by itself, the addition of gas canes to the burners is not a physical change or change in the method of operation in the unit and, consequently, would not subject the boiler to a BACT review. Therefore, if the sole change to the boiler is the addition of the canes, then, in this case, the only requirements necessary for a PSD permit are an air quality analysis, additional impacts analyses, and (if applicable) a Class I impact analysis--the application of BACT is not required. However,

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the information submitted by Detroit Edison indicates that changes to the boiler's overfired air duct are also planned. At this time, without additional information on the nature and scope of the work to be done on the overfired air duct, we cannot determine whether these are physical or operational changes to the boiler that are necessary to make the boiler capable of accommodating natural gas. If the ducting work is necessary for this purpose, then a BACT analysis would likely be required.

In addition, it is unclear from the information submitted whether Detroit Edison plans to undertake further modifications to the boiler which would allow 100 percent load when firing natural gas. Currently, the unit as presently configured has the potential of achieving only 75 percent load when firing natural gas. To achieve a higher load, substantial modifications to the unit apparently would be required. These types of physical changes to the boiler likely would require a full PSD review, including a BACT analysis for the boiler. The BACT analysis would require that the source evaluate the use of all available additional air pollution controls for reducing NO_x emissions. The analysis would consider retrofit costs for add-on controls and the fact that gas is a relatively clean-burning fuel. Consequently, in this case, it is possible that the currently planned use of a low-NO_x burner design may be BACT for gas firing. However, such a conclusion would have to be demonstrated through the requisite BACT analysis. I have asked Region V to work with you should you need assistance in preparing the analysis.

Sincerely,



Gerald A. Emison
Director

Office of Air Quality Planning
and Standards

cc: J. Calcagni, EPA/AQMD
D. Kee, EPA/Region V
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GARY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

JAN 30 1990

REPLY TO THE ATTENTION OF

Mr. Timothy J. Method
 Assistant Commissioner
 Office of Air Management
 Indiana Department of Environmental Management
 105 South Meridian Street
 P.O. Box 6015
 Indianapolis, Indiana 46206-6015

Dear Mr. Method:

The purpose of this letter is to comment on the permit proposed by the Indiana Department of Environmental Management (IDEM) for Northern Indiana Public Service Company's (NIPSCO) Bailly generating station. The permit provides for the construction of an air pollution control device and directly related improvements under the Clean Coal Technology (CCT) program. The Environmental Protection Agency (EPA) agrees with the determination by IDEM that the State and EPA rules for prevention of significant deterioration (PSD) and new source performance standards (NSPS) are not intended to apply to the CCT project at Bailly. In other words, the project should not be considered a "major modification" under new source review (NSR) or a "modification" as set forth under NSPS provided certain requirements are met. In a separate but related issue, EPA also agrees with the determination by IDEM that the addition of a diesel generator as a backup power supply to the scrubber to be installed at Bailly is not a major modification if the limits on operating the generator agreed to by NIPSCO are federally enforceable.

Introduction

For NSPS purposes, a modification is defined as any physical change in, or change in the method of operation of, a stationary source which increases (in terms of hourly emissions capacity) the amount of any air pollutant regulated under the Clean Air Act (Act) which is emitted by such source, or which results in the emission of any air pollutant not previously emitted. For NSR purposes, a major modification is a modification which results in a significant net emissions increase (in terms of actual annual emissions).

The EPA has become aware that these definitions can be interpreted in such a manner as to subject to NSR or NSPS, or both, certain environmentally desirable activities at existing stationary sources which neither Congress nor EPA intended to be covered by the Act's new source requirements. Moreover, NSR or NSPS coverage would, in some instances, have the effect of discouraging such activities. The EPA believes that such activities, including CCT demonstration projects, are not physical changes or changes in the method of operation, so long as they meet certain criteria discussed herein and EPA issues an applicability exclusion. Hence, such activities are not "modifications" for NSPS purposes, or "major modifications" for NSR purposes.

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Over the past several months, EPA has held numerous internal meetings to discuss the Clean Air Act regulatory issues raised by the CCT program. As a result of these discussions, the EPA has decided to issue an interpretative ruling as soon as possible to provide guidance on the definition of a physical or operational change as it applies to new source requirements. In a letter dated January 5, 1990, EPA advised NIPSCO of this intention.

Essentially, this ruling would clarify that if a source solely adds or enhances systems or devices whose primary functions are the reduction of air pollution, and that are determined to be not less environmentally beneficial (as determined by the Administrator) than any emission control system or device it replaces, if any, such activities would not constitute a physical or operational change triggering new source requirements. Consequently, NSPS and PSD and nonattainment new source review would not apply to these types of activities. This interpretative ruling would include permanent, as well as temporary projects under the CCT program. However, it would not extend to projects that primarily are intended to extend the life of a plant or increase capacity. In addition, any changes, permanent or temporary, which are expected to significantly increase emissions to the atmosphere, such as changes which increase a source's hourly operating capacity (e.g., eliminating a bottleneck), hourly emissions rate (e.g., one pollutant decreases but another increases), or utilization rate (e.g., an anticipated increase in hours per year of operation resulting from the installation of controls) would still be subject to NSR and NSPS.

Based on our review of the draft permit, we believe that the Bailly project is consistent with the provisions EPA is developing for its interpretative ruling. On this basis, we have reached the conclusion that this project in particular is not subject to NSPS or major NSR requirements, so long as it continues to meet the criteria discussed herein.

The balance of our comments outlines the grounds for EPA's conclusion and contains a discussion of the anticipated terms of EPA's upcoming interpretative rule. The EPA is still deliberating the specific terms and provisions of its interpretative ruling. While today's comments reflect EPA's current expectations of what will be contained in that document, the actual terms of the ruling may differ from those discussed herein.

Background

A. The NSR and NSPS Provisions of the Clean Air Act

The NSR and NSPS provisions of the Act apply to wholly new facilities, and to modifications at existing facilities, when certain conditions are met. The rules governing the applicability of NSR and NSPS to modifications at existing facilities are described in detail in the EPA regulations (see 40 CFR 51.165 and Appendix S, 52.21, 60.14 and 60.15). In general, the modifications that would trigger these new source requirements are those involving physical or operational changes which increase emissions over baseline levels. (In addition, for NSPS purposes under EPA regulations, a reconstruction occurs and a source is considered "new" if the physical or operational change costs more than 50 percent of the replacement cost of the

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affected facility, regardless of whether an emissions increase occurs). The term "physical or operational change" is construed broadly and may include the installation, use, or dismantling of pollution control equipment.

1. Background of the NSPS and NSR Modification Provisions.

The 1970 Amendments to the Act required EPA to promulgate technology-based new source performance standards applicable to the construction or modification of stationary sources that cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. 42 U.S.C. 7411(b)(1)(A). Congress decreed that, in addition to wholly new sources, NSPS would apply to the modification of an existing source, defined broadly as: any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted. Clean Air Act section 111(a)(4), 42 U.S.C. 7411(a)(4).

The NSPS provisions were "designed to prevent new [air] pollution problems" by regulating both newly constructed sources of pollution and existing sources that increase their emissions. National Asphalt Pavement Assoc. v. Train, 539 F.2d 775, 783 (D.C. Cir. 1976) [see also H.R. Rep. No. 1146, 91st Cong., 2d Sess. 3, reprinted in 1970 U.S. Code Cong. & Admin. News 5356, 5358]. The effect of including modified sources as well as newly-constructed sources under the provisions of section 111 was to establish a current level of emissions above which an existing source may not pollute without becoming subject to the NSPS. In August 1977, Congress adopted further extensive changes to the Act (Pub. L. 95-95). These included review-and-permitting programs for new and modified sources combining the technology-based approach of NSPS with specific measures to insure that ambient air quality goals under the Act are met. Congress intended NSR to apply "where industrial changes might increase pollution in an area." Alabama Power Co. v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1979). Part D applies to areas which have not met national ambient air quality standards (NAAQS) under section 109. To receive a permit in such areas, major new and modified sources must (among other things) obtain emissions offsets that assure reasonable progress toward attainment of the NAAQS and must comply with the "lowest achievable emission rate," which can be no less stringent than an applicable NSPS (see sections 171-173). The 1977 amendments also added a new Part C to the Act including, in sections 160 - 169, an NSR program for the prevention of significant deterioration of air quality (the "PSD" program) in areas which have attained the NAAQS. To receive a PSD permit, a prospective major new or modified source must (among other things) show that it will not exceed the available air quality "increment" (designed to prevent pollutant concentrations from deteriorating beyond certain levels), and will use the "best available control technology", which must be at least as stringent as any applicable NSPS. Both the Part D NSR program applicable to nonattainment areas and the Part C NSR program applicable to attainment areas adopted the NSPS definition of "modification," but not all the exclusions to that definition [see sections 171(4) and 169(2)(C)].

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It is evident from the structure of the NSR and NSPS programs that Congress sought to focus air pollution control efforts at an efficient and logical point: the making of substantial capital investments in, or other long-term decisions regarding, pollution-generating facilities. In adopting NSR measures in particular, Congress sought to reconcile the legislative goal of environmental protection with a concurrent desire for continued economic growth [see sections 160(1)-(4)]. Consequently, a key theme of the NSR program is the careful evaluation of, and public participation in, "any decision to permit increased air pollution" [see section 160(5)]. As discussed below, the current regulations implementing NSPS and NSR were designed to apply these programs in a manner consistent with their respective statutory purposes. Today's comments represent our interpretation of these existing regulations under the facts presented by the Bailly project. The EPA expects that its upcoming interpretative ruling will further focus EPA's position on the basic legislative intent of these important programs.

2. The Two-Step Test for Modifications.

The modification provisions of the NSPS and NSR programs grow from a single statutory trunk, the very broad definition of "modification" in section 111(a)(4). Under both respective programs, EPA developed a two-step test for determining whether activities at an existing facility constitute a modification subject to new source requirements. In the first step, which is largely the same for NSPS and NSR, EPA determines whether a physical or operational change has occurred. If so, EPA proceeds in the second step to determine whether the physical or operational change will result in an emissions increase over baseline levels. In this second step, the applicable rules branch apart, reflecting the fundamental distinctions between the technology-based purposes of NSPS and the technology and air quality concerns of NSR. Briefly, the NSPS program is concerned with hourly emissions rates, expressed in kilograms or pounds per hour. [An hourly emissions rate is the product of the instantaneous emissions rate, i.e., the amount of pollution emitted by a source, after control, per unit of fuel combusted or material processed, (such as pounds of sulfur dioxide emitted per ton of coal burned) times the production rate (such as tons of coal burned per hour)]. Emissions increases for NSPS purposes are determined by changes in the hourly emissions rates at maximum capacity. The NSR is concerned with total annual emissions to the atmosphere, expressed in tons per year. (Annual emissions are the product of the hourly emissions rate, which is the sole concern of NSPS, times the utilization rate, expressed as hours of operation per year). Emissions increases under NSR are determined by changes in annual emissions to the atmosphere.

3. Physical or Operational Change.

The very broad definition of physical or operational change in section 111(a)(4) could, standing alone, encompass the most mundane activities at an industrial facility — even the repair or replacement of a single leaky pipe or a change in the way that pipe is utilized. The definition certainly is broad enough to encompass the addition or enhancement of pollution control equipment. However, EPA has always recognized that Congress obviously did not intend to require every activity to be potentially subject to new source requirements, and that it would be administratively impracticable to do so. Accordingly, EPA has substantially narrowed this term in its NSPS and NSR

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regulatory definitions through the adoption of common-sense exclusions. For example, both sets of regulations contain similar exclusions for routine maintenance, repair, and replacement; for certain increases in the hours of operation or in the production rate; and for certain types of fuel switches [see 40 CFR 60.14(e); see also, e.g., 40 CFR 52.21 (b)(2)(iii)]. In

addition, with respect to pollution control equipment, the NSPS regulations contain an exclusion for:

The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial [40 CFR 60.14(e)(5)].

The EPA has held that this exclusion does not apply to a source which, upon original construction, employed wet scrubbers, but later (upon relaxation of a State plan under section 111(d)) desired to remove the control equipment, which would have resulted in much higher levels of pollution than the plant had ever emitted [National Southwire Aluminum Co. v. EPA, 838 F.2d 835 (6th Cir.), cert. denied, 109 S.Ct. 390(1988), herein after National Southwire]. In the past, EPA has taken various views as to whether the exclusion in section 60.14(e)(5) should apply for NSR purposes. As noted earlier, the NSR statutory definitions of modification simply adopt the NSPS definition in section 111(a)(4). In addition, the legislative history reflects that, as a general matter, Congress intended to conform the meaning of "modification" for PSD purposes to usage under NSPS [see 123 Cong. Rec. H11957 (Nov. 1, 1977)]. For this reason, EPA initially ruled that the NSPS exclusion for addition of control devices applied automatically to PSD (Memorandum from Edward E. Reich, OAQPS, and William F. Pedersen, OGC, to EPA Region VI, April 21, 1983). The EPA reversed course in a 1986 applicability determination issued for both PSD and nonattainment NSR purposes, noting that the NSPS exclusion was highly qualitative, and failed to give due account to either the air quality management component or the largely quantitative orientation of the NSR applicability regulations. (Memorandum from Gerald A. Emison, Director, OAQPS, to Regional Air Division Directors, July 7, 1986).

Comments on NSPS Applicability

An NSPS modification is any "physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies" (40 CFR 60.2). Under NSPS, emissions increases, for applicability purposes, are calculated by comparing the hourly emission rate immediately before and after the physical or operational change. All operating parameters which may affect emissions must be the same to the maximum feasible degree for the before and after testing, and tests must be conducted under representative conditions. Absent the exclusions from modifications specified at 40 CFR 60.14(e), any increase in emissions to the atmosphere over the previous emissions rate will subject the modification to NSPS [see section 60.14(a) and (b)]. In addition, modifications which would cost 50 percent or more of the cost of a comparable new facility are classified as reconstruction (see 40 CFR 60.15) and are subject to NSPS as a new source even if there is no emissions increase.

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Thus, unless the reconstruction provisions come into play, it is clear that under the existing regulations NSPS would not apply to the installation or improvement of emission control equipment which reduces hourly emissions rates. If the reconstruction provisions do apply, then such changes would trigger NSPS.

Based on NIPSCO's permit application and representations made by NIPSCO's September 14, 1989 and December 4, 1989 information submittals to EPA, NSPS would not apply to the Bailly Station if the new scrubber is not removed (i.e., if it is a permanent demonstration) because hourly emission rates will not increase as a result of the addition of these CCT controls. As a permanent CCT demonstration project, it would satisfy the requirements of the exemption contained in 40 CFR 60.14(e)(5) for the addition or use of any control system or device whose primary function is the reduction of air pollution. (The definition of "modification" for NSPS is found at 40 CFR 60.14). In addition, the Bailly project would not qualify as a reconstruction under 40 CFR 60.15.

However, the NSPS provisions could also apply to major facilities with temporary CCT demonstration projects at the end of the demonstration when the control equipment is removed and emissions rise back to the level that existed before the demonstration. Thus, while the placement of CCT controls at Bailly will reduce the hourly sulfur dioxide (SO₂) emissions rate, if NIPSCO later dismantles the CCT controls, this would result in an increase in hourly SO₂ emissions up to pre-demonstration levels and the source could be considered subject to NSPS.

Today's comments reflect EPA's position that the Bailly plant would not be subject to NSPS at the conclusion of the project, if NIPSCO decides to make it only temporary, as the result of an increase in emissions rates back up to the levels which existed before the changes were made to accommodate the temporary demonstration project. The EPA expects that its forthcoming interpretative rule will take this position with respect to all temporary CCT and similar demonstration projects which reduce emission rates. Unlike the situation presented in National Southwire, it is clear that the addition of pollution control in a temporary CCT demonstration was never intended to result in permanent emissions reductions. In addition, removal of temporary controls will not result in a level of emissions higher than that experienced in the past. (Reconstruction provisions, however, could subject both temporary and permanent CCT demonstration projects, and certain other emission control system installations or improvements, to NSPS. Still, as indicated by the Bailly project, the reconstruction provisions of the Act should rarely, if ever, apply to the type of activity which would be considered for exclusion from the definition of a physical change or a change in the method of operation. Thus, the triggering of the reconstruction provisions is an indication that the proposed activities are more extensive than just the addition, or replacement, of an emission control system or device, and so are not appropriate for exclusion.)

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Comments on NSR Applicability

Modified sources are subject to NSR if the modification is "major." Major modifications must consist of a physical change or change in the method of operation of a major stationary source [40 CFR 52.21(b)(1)] which results in a net emissions increase of any pollutant subject to regulation under the Act that is significant. Significance levels are expressed in tons per year and differ for each pollutant [40 CFR 52.21(b)(23)]. Net emissions increases are determined [40 CFR 52.21(b)(3)] by summing all contemporaneous creditable actual emissions increases and decreases. The definition of "actual emissions" is such that generally the comparison is between actual emissions before the physical or operational change in question and the potential to emit of the facility afterwards [40 CFR 52.21(b)(21)]. If the source has not been operating near full capacity, even the addition of a control device could be considered a significant net emissions increase when comparing historic actual emissions with a new potential to emit, even though there may be a substantial reduction from historic actual emissions.

Specifically, actual emissions before the change at a facility are generally determined by averaging the emissions for the 2 years prior to submittal of the permit application (or some other period if the last 2 years are not representative of normal unit operation) [see, e.g., section 52.21(b)(2)(ii)]. Since the emissions rate after a physical or operational change cannot be predicted in advance, EPA regulations assume that a source's actual emissions will equal its maximum "potential to emit", which is based on constant full load operation for an entire year (unless restricted by federally enforceable limitations) [see, e.g., sections 52.21(b)(21)(iv); 52.21(b)(4)]. Thus, a physical or operational change will trigger NSR if the annual potential to emit of the source is significantly greater after the change than its representative actual annual emissions before the change, unless the company agrees to federally enforceable operational restrictions which limit its potential to emit to levels not significantly greater than its actual emissions before the change. This actual-to-potential methodology applies to physical or operational changes at new or "modified" (i.e., altered or changed) emissions units [see 45 FR 52676, 52677, 52718 (1980)].

As explained below, EPA believes that this methodology generally serves the purposes of NSR because it subjects to review projects that might lead to an increase in actual pollution. However, the NSR provisions in the existing regulations could be interpreted to apply to major facilities simply installing or improving control equipment, including OCT demonstration projects, under circumstances where a permanent increase in pollution is highly unlikely.

Under EPA's prospective interpretative ruling, existing sources which would otherwise become subject to NSR only because they decide to install or improve emission controls, or participate in the OCT program or similar demonstration projects approved by EPA, would instead be excluded from NSR coverage, so long as certain criteria intended to ensure that permanent increases in actual emissions do not occur are met.

With respect to the Bailly project in particular, it appears that the plant has been operated at a rather high level of approximately 60 percent of capacity, reflecting baseload utilization of the plant. There is no

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indication that NIPSCO intends to increase this level of usage at any time following installation of the OCT controls. In addition, it appears that the Bailly project will meet the criteria EPA expects to set forth in its interpretative ruling for both temporary and permanent projects.

The EPA now believes it is appropriate to devise and apply such criteria both for the Bailly project and for the upcoming interpretative ruling. The EPA has recommended the position taken in its 1986 memorandum, discussed earlier, regarding use of the NSPS exclusion in 40 CFR 60.14(e)(5). While EPA continues to believe that this exclusion does not apply automatically for NSR purposes, the criteria discussed herein provide due consideration of air quality management concerns and the need for quantitative analyses.

Conditions for Permanent Controls or Devices to be Considered Not Less Environmentally Beneficial

As noted above, EPA is preparing an interpretative ruling which will clarify that if a source solely adds or enhances systems or devices whose primary functions are the reduction of air pollution, and which are determined to be not less environmentally beneficial, such activities would not constitute a physical or operational change triggering new source requirements. At this time, EPA anticipates that its ruling will provide that such pollution controls will be considered not less environmentally beneficial, with respect to permanent controls, if they meet at least the following criteria:

- (1) The source will continue to meet all current requirements and standards applicable to existing sources under the Act. This includes meeting applicable NAAQS, PSD increments, permit conditions, and State implementation plan (SIP) limitations.
- (2) There is no environmental harm resulting from the proposed activities. This includes conditions that the proposed activities would not cause the source to:
 - (a) increase the maximum hourly actual emissions rate of any pollutant regulated under the Act;
 - (b) increase the annual emissions of any pollutant regulated under the Act as a result of an increase in capacity utilization rate;
 - (c) adversely impact an air quality related value (e.g., visibility) in any Class I area; or
 - (d) allow an increase in emissions of toxic pollutants not regulated by the Act which would cause an adverse health or welfare impact.

Based on the information provided by NIPSCO, it appears at this time that the Bailly project, if it is made permanent, will meet the above criteria. Accordingly, as to the Bailly project in particular, EPA believes that major NSR requirements clearly will not apply if the project is made permanent, so long as these criteria are in fact met.

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Temporary OCT Changes

In its upcoming interpretative ruling, EPA expects to follow criteria for "temporary" OCT projects which are somewhat different from those for permanent projects. The EPA likely will consider a project to be temporary if it lasts less than 5 years from the date the project commences construction. However, the ruling probably will provide that the Administrator would consider an additional period of time, up to 5 additional years, in certain cases. At the end of a temporary project, the facility would be returned to pre-demonstration conditions and hourly emission rates (or lower). It is not clear if the proposed Bailly station permit is for a permanent or temporary OCT project. It is our understanding that NIPSCO considers the first 3 years of the OCT demonstration project to be "temporary" and will view the changes as "permanent" for the following 17 years if they are continued after the 3 year period.

The EPA expects that its interpretative ruling will provide that for temporary demonstration projects, the conditions relating to actual emissions increases and hours of operation criteria under 2a, b and d above would not apply to minor, temporary variations from nominal operating conditions. Temporary increases may occur due to testing procedures or some failure in unique but unproven equipment, but should not willfully contribute to adverse health or welfare impacts. The EPA believes that the benefits inherent in OCT and other similar technology demonstration projects counterbalance the limited, temporary impacts that may occur during these temporary projects. Under the ruling, temporary demonstration project applications likely would have to meet all of the other criteria applicable to the permanent projects discussed above. This interpretation would provide the flexibility to encourage temporary demonstration projects which are considered to be environmentally beneficial overall, despite unpredictable, temporary increases in emissions of some pollutants or in the hours of operation that may occur during the course of a demonstration.

The EPA expects the ruling to state that temporary changes would become permanent at any time during or at the end of a demonstration period if the owner/operator seeks a revised applicability determination addressing all criteria applicable to permanent air pollution control system improvements. In submitting these comments, EPA is applying the above criteria in its review of the Bailly project. If NIPSCO ultimately decides that the Bailly OCT project is to become a permanent OCT demonstration, the project should meet all the criteria discussed earlier for permanent projects at the time the project is to be converted to permanent status (i.e., after 3 years).

Procedures for Environmentally Beneficial Exclusions from Applicability

The EPA expects that under its forthcoming interpretative rule, an owner or operator proposing to make an environmentally beneficial change in an air pollution control system will be called upon to request an applicability determination from the appropriate NSR/NSPS permit authority. The request should include a general description of the facility and the proposed activity, information on the current and projected use of the facility, and

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sufficient information to justify a nonapplicability determination. For any air pollution control system improvement, the request should include a rationale for why the emission control system or device should be considered equal to or more efficient than existing control technology at the source.

The EPA also anticipates that its interpretative ruling will state that in providing information to the reviewing authority, an owner or operator should submit sufficient modeling to demonstrate that any new or increased emissions of unregulated toxic pollutants resulting from the change in control equipment will not cause or contribute to adverse health or welfare impacts. The owner or operator should also demonstrate that the source will not operate at greater hourly emissions rates, or for more hours, than it has been during the most recent 2 years (or some other period, if the last 2 years are not representative of normal operation). In assessing whether actual emission increases of any pollutant are likely to occur, the reviewing agency should consider the economic incentives to increase production rates or hours of operation associated with the change. Any change which could reasonably result in increased emissions due to possible increased utilization of the facility as a result of the changes should not be considered environmentally beneficial. The authority reviewing the proposed change should explicitly determine, based on consideration of these and other relevant criteria, that the net effect will not be one of environmental harm.

Operating Limits on New Diesel Generator

The EPA considers the addition of a backup diesel generator at Bailly not to be an integral part of the CCT demonstration, in that the generator could serve multiple functions once installed. In general, EPA views changes to be subject to NSR and NSPS if such changes are not strictly related to the addition of the improved air pollution control system and the changes have any possible additional application. However, EPA agrees with IDEM that the addition of a new diesel generator does not constitute a "major modification" if the State's limits on the generator's hours of operation, preventing concomitant increases in emissions from exceeding significance levels, are federally enforceable.

In closing, EPA agrees with the State that NSPS and NSR do not apply if the conditions outlined in this letter are met. If you have any further questions, please contact Mr. Ron Van Mersbergen at, (312) 886-6056 or Mr. Don Abella at, (312) 886-6543.

Sincerely yours,


David Xee, Director
Air and Radiation Division

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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JUN 5 1990

OFFICE OF
AIR AND RADIATION

Mr. John Boston
President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

On January 19, 1990, the United States Court of Appeals for the Seventh Circuit in Wisconsin Electric Power Co. v. Reilly, Nos. 88-3264 and 89-1339, issued its decision regarding a challenge by Wisconsin Electric Power Company (WEPCO) to two final determinations issued by the Environmental Protection Agency (EPA). In these determinations, EPA concluded that WEPCO's proposed renovations to its Port Washington power plant would be subject to new source performance standards (NSPS) and prevention of significant deterioration (PSD) requirements.

In its decision, the court upheld all but one of the positions advanced by EPA in the NSPS and PSD applicability determinations. However, the court rejected EPA's position on the issue of whether the "actual-to-potential" method--referred to by the court as the "potential to emit concept"--should be used to calculate emissions increases for PSD purposes in this case. Consequently, the Seventh Circuit vacated and remanded the PSD determination to EPA for further action consistent with the court's decision.

As you know, EPA decided to acquiesce in the court's holding rather than seek rehearing. This letter constitutes EPA's revised PSD applicability determination in response to the court's remand order.

The Agency believes that the court's principal instruction--that EPA consider past operating conditions at the plant when addressing modifications that involve "like-kind replacements"--can be reasonably accommodated within the present regulatory framework without further litigation in this case. The net result of the court's ruling is the recognition of a subcategory of "like-kind replacements" under the "major modification" definition of EPA's new source review provisions.

As explained below, EPA will employ an "actual-to-actual" method to calculate emissions increases for WEPCO's proposed renovations to its Port Washington power plant. The outcome in this case is that WEPCO will not be subject to PSD review for

sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide, or hydrocarbons. However, there will be a significant net increase in actual emissions of nitrogen oxides (NO_x), and WEPCO must obtain a PSD permit for that pollutant.

I. BACKGROUND

A. Factual Background.

The WEPCO owns and operates five coal-fired, steam-generating units at its Port Washington facility near Milwaukee. All units had an original design capacity of 80 megawatts when they were placed in service between 1935 and 1950. However, due to age-related deterioration and loss of efficiency, both the physical capability and actual utilization of the plant have declined over time. Unit 5 was shut down completely due to a cracked rear steam drum. Consequently, by 1987, WEPCO was faced with removing the units from service as they reached their planned retirement dates beginning in the early 1990's, unless it undertook a costly "life extension" program to restore the physical and economic viability of the units and extend their useful life for approximately 20 years. The WEPCO proposed such a life extension to include replacement of the steam drums, air heaters, and other major capital improvements totaling over \$80 million. It should be noted that this program is not a pollution control project (i.e., it is not intended to add on or improve pollution control systems even though modest improvements to the particulate matter control devices are a part of the program).

In a series of applicability determinations in 1988 and 1989, EPA ruled that the renovations planned under WEPCO's life extension program would constitute a "modification" for purposes of the NSPS provisions of the Clean Air Act (Act), and a "major modification" under the PSD provisions of the Act. Thus, WEPCO would have had to install some level of control equipment or physical capacity restriction to avoid NSPS coverage for three of the five units proposed to be renovated. As to PSD, the company would have had to accept operational restrictions or lower emissions rates to "net out" of review. Regarding SO₂, for example, WEPCO could have almost doubled its projected level of future operations without triggering PSD review. However, WEPCO did not want to be constrained by new source requirements, and so sought review in the Seventh Circuit Court of Appeals.

B. The Court's Decision.

1. Physical Change.

The court unequivocally agreed with EPA that the replacement of steam drums, air heaters, and other major components was a nonroutine "physical change," and thus met the first of two tests for a modification under NSPS and PSD. The Agency found that the

renovations proposed by WEPCO were exactly the type of industrial changes that were meant to be addressed by the NSPS and PSD programs. In upholding EPA's finding that a physical change would occur, the court strongly endorsed EPA's reading of the basic congressional intent in adopting the modification provisions of the NSPS and PSD programs, because to rule otherwise "would open vistas of indefinite immunity from the provisions of NSPS and PSD" (slip op. at 11). The court also relied on the reasonableness of EPA's consideration of the magnitude, purpose, frequency, and cost of the work in upholding EPA's finding that the renovations are not "routine" (slip op. at 14-18). In addition, the court rejected WEPCO's argument that the renovations could not be deemed a modification for NSPS purposes because they did not constitute a "reconstruction" under 40 CFR 60.15 (slip op. at 18-20).

2. NSPS Emissions Increase.

The court upheld EPA's decision that there would be an increase in hourly emissions at three of the units, and thus for those three units, WEPCO met the second test for NSPS applicability. The Agency had argued that the regulations require NSPS emissions increases to be determined by comparing the current (pre-change) hourly emissions capacity of each affected facility with the post-renovation hourly emissions capacity of each unit. The Seventh Circuit agreed, and rejected WEPCO's argument that original design capacity or past "representative" capacity no longer achievable at the plant should be used for the baseline emissions rate (slip op. at 20-25).

3. PSD Emissions Increase.

The regulatory preamble to the PSD regulations provides that the set of emissions units that have "not begun normal operations" includes both "new or modified" units (45 FR 52676, 52677, 52718) (1980). Consequently, EPA used the "actual-to-potential" calculus in evaluating WEPCO's life extension project. The court rejected this methodology in the case of WEPCO's "like-kind replacement," asserting that EPA's reasoning was circular (slip op. at 28). [In addition, the court held (slip op. at 27 n. 11) that the exemption in 40 CFR 52.21(b)(2)(iii)(f) for emissions increases due to expanded operations did not apply, because WEPCO's increased operations were directly tied to the life extension project.] Instead, the court ruled that EPA should recalculate post-change emissions considering past operating conditions where it is possible to make a more realistic assessment of future emissions (slip op. at 29-31). Alternatively, the court stated that EPA could conduct new rulemaking to explicitly apply the "actual-to-potential" calculus to "like-kind replacements" (slip op. at 30).

II. THE WEPCO DECISION IN THE CONTEXT OF THE PSD PROVISIONS

The Seventh Circuit held that EPA could not wholly disregard past operating history and automatically apply the actual-to-potential methodology for determining PSD applicability to WEPCO's "like-kind replacements." In describing the WEPCO changes as "like-kind replacements" and limiting its decision to such changes, the court did not dispute the correctness of EPA's application of the actual-to-potential test to the full spectrum of new and modified sources not covered by this subcategory of change. The recent decision in Puerto Rican Cement Co. v. EPA, 889 F.2d 292 (1st Cir. 1989), explicitly upheld EPA's position that the actual-to-potential concept should be applied to "modified" emissions units. The First Circuit case involved the modernization and reconfiguration of existing emissions units [see 889 F.2d at 293 (company planned to "convert kiln No. 6 from a 'wet' to a 'dry' cement-making process, and to combine that with Kiln No. 3")]. A key issue was whether EPA properly held that the "modified" units had "not begun normal operation" and therefore the actual-to-potential concept applied in calculating emissions increases. The First Circuit affirmed EPA's position that the actual-to-potential concept should be applied to the company's "modified" units. Puerto Rican Cement, 889 F.2d at 297. Consequently, the court found that both the language and expressed purpose of the regulations indicate that EPA applied the regulations properly in using the actual-to-potential test for a proposed modification. The Seventh Circuit in WEPCO did not dispute the correctness of EPA's application of the actual-to-potential test to the full spectrum of changes not covered by the subcategory of changes (like-kind replacements) created by the court.¹ Therefore, in the case of nonroutine physical or

¹ EPA will leave to future case by case applicability determinations what is a "like-kind replacement." But for guidance of the parties, EPA presently considers that only for projects that are genuine "like-kind replacements" can future emissions projections be calculated using "estimated future actual emissions" in lieu of potential to emit. EPA does not consider "like-kind replacements" to mean the entire replacement (or reconstruction) of an existing emissions unit with an identical new one or one similar in design or function. Rather, EPA considers "like-kind replacements" to encompass the replacement of components at an emissions unit with the same (or functionally similar) components. Under this interpretation of the term, new components that perform essentially the same function as old ones will be viewed as "like-kind replacements." In addition, even if the design or purpose of a new component is identical to that of an old one, if the new component is part of a project that will fundamentally change the production process at an existing stationary source, this would be beyond the scope of a "like-kind replacement." Under either of those

operational changes at an existing major source which are not specifically "like-kind replacements" in nature, EPA will continue to apply the actual-to-potential test for PSD applicability purposes.

III. THE AGENCY'S RESPONSE TO THE COURT'S REMAND ORDER

A. The PSD Baseline Emissions.

Determining the "baseline" level of actual emissions before a physical or operational change is a necessary first step to determine if emissions increase as a result of the physical change. The Agency's regulations define the baseline for PSD purposes, as follows:

In general, actual emissions as of a particular date shall equal the average rate, in tons-per-year (tpy), at which the unit actually emitted the pollutant during a 2-year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period [see 40 CFR 52.21(b)(21)(11)].

The purpose of the definition is to establish a baseline that is "representative" of "normal" source operations prior to the change. The Agency historically has followed a presumption

circumstances, it would be unreasonable to rely on pre-modification usage patterns to estimate future levels of capacity utilization. Instead, in such cases, EPA believes that it is reasonable to assume that in the absence of federally-enforceable limits on hours of operation or production rates, the new components may result in a substantial increase over historical levels of utilization of the emissions unit following modification [see Puerto Rican Cement, supra, 889 F.2d at 297 ("a firm's decision to introduce new, more efficient machinery may lead the firm to decide to increase the level of production")] and will compare pre-modification actual emissions to post-modification potential emissions. In addition to this circumstance, there are cases in which sources that undergo changes that qualify as add-on control systems would, under certain circumstances, be exempt from new source review. See Letter to Timothy J. Method, Assistant Commissioner, Indiana Department of Environmental Management, from David Kee, EPA Region V, January 30, 1990.

that the most recent 2 years should be used, but has allowed another period where the source demonstrates that recent operations are abnormal [see 40 CFR 52.21(b)(21)(ii); see also 45 FR 52676, 52718 (1980)]. The WEPCO baseline period is an example of this. In this instance, plant utilization was disrupted by physical problems that led to nonroutine physical changes to remedy those problems. Consequently, EPA determined that a period prior to the onset of such problems was representative of normal operations, and as required by its regulations, used this period to establish the baseline. The period used was also within the contemporaneous period specified in 40 CFR 52.21(b)(3)(ii). It should be emphasized that, in the WEPCO case, the parties and the court agreed that 1983-84 (prior to discovery of steam drum cracks) should be the baseline years (slip op. at 26); these years had an average 29 percent utilization rate. We continue to believe this is the appropriate baseline period for the Port Washington renovation.

B. Calculating Post-Change Emissions Under PSD.

The court concluded that "EPA's reliance on an assumed continuous operation as a basis for finding an emissions increase is not properly supported" (slip op. at 30). Although the court held that EPA cannot, in this case, wholly disregard past operating conditions at the plant, it also held that EPA could not reasonably rely on the company's own unenforceable projection of operating conditions (slip op at 29). The court remanded the question of PSD applicability to EPA for further proceedings not inconsistent with its decision.

Before the court remanded EPA's determination, it attempted to ascertain whether, in fact, the proposed project would be a major modification even using the assumptions least likely to result in an emissions increase. The court felt (and we agree) that such a "best" case scenario for WEPCO would assume that the "present hours and conditions" would not change at all following the renovations (despite, of course, WEPCO's own estimates of at least tripling of utilization over current levels) (slip op. at 31, n. 14). The court, however, lacked the data to make this calculation, so it could not determine whether a major modification would result using a set of assumptions most favorable to WEPCO. Therefore, the court remanded the determination to EPA for further consideration.

A conceivable interpretation of the court's opinion is that EPA must calculate WEPCO's post-modification emissions increases based on "present hours and conditions." However, for the reasons discussed below, EPA believes that this interpretation is incorrect. Under such an interpretation, EPA would determine WEPCO's post-renovation annual emissions in tons per year (tpy) by simply projecting into the future the hours of operation and conditions (i.e., hourly emissions rate) that existed just before

the renovations. This is the interpretation urged by WEPCO in a February 9, 1990 letter to EPA. Such a calculus will always result in exactly the same level of emissions before and after the physical change, and thus would always exempt "like-kind replacements" from PSD review. In addition, calculating emissions increases using this assumption would flatly contradict the record in this case. The WEPCO has stated that it will greatly increase capacity utilization over both current levels and the baseline levels used in the previous determinations. Capacity utilization in terms of heat input to the plant (based on nameplate capacity) during 1978-1979 was about 40 percent (Record item 7.4, WEPCO Submission, April 19, 1988 meeting with EPA). During the 1983-1984 baseline period, it was approximately 27 percent. *Id.* It has since declined to less than 10 percent (1988-1989 data). *Id.* The WEPCO has advised the State of Wisconsin that it intends to return to a forecasted 42 percent utilization level in the years following renovation, with an upper maximum forecast of 50 percent [Letter from Walter Woelfle, WEPCO, to Dale Zeige, Wisconsin Department of Natural Resources, March 29, 1990, Table 7 (enclosed)]. It would be wrong to assume that unit 5 would not be operated at all in the future when an explicit purpose of the renovation is to bring the unit back on line at its original design capacity; moreover, unit 5 is presently inoperative. Most importantly, this methodology is not fairly discernible from any reading of the current regulations. In addition, using "present hours and conditions" would disregard planned changes at WEPCO that will affect the post-renovation hourly emissions rate [e.g., increased capacity, lowering of sulfur content, and enhancement of the electrostatic precipitators (ESP)].

The court upheld EPA's position that increased utilization in the future that is linked to construction or modification activity should not be excluded in determining post-renovation emissions. Nevertheless, the court told EPA not to automatically assume 100 percent utilization in the future when historical data are available. The WEPCO has definite plans to return the plant to historical levels of utilization that are well above baseline levels of utilization, and which could not be physically or economically attained but for the renovation project. Accordingly, EPA believes it is consistent with the court decision for EPA to base its remand decision on these facts and not rely on the present hours and conditions as conclusive of post-renovation emissions. After a thorough review of the possibilities, EPA has concluded that the court intended that estimates of future emissions for WEPCO's "like-kind replacements" should consider historic pre-renovation operating hours and production rates, as well as other relevant factors, in estimating future utilization levels, and should also consider the increased capacity, switching to lower-sulfur fuel, and other changes affecting the hourly emissions rate for PSD purposes. Consequently, for WEPCO's "like-kind replacements," EPA will

compare representative actual emissions for the baseline period to estimated future actual emissions based on all the available facts in the record. Specifically, in calculating post-renovation actual emissions, this approach takes into account 1) physical changes and operational restrictions that would affect the hourly emissions rate following the renovation, 2) WEPCO's pre-renovation capacity utilization, and 3) factors affecting WEPCO's likely post-renovation capacity utilization.

To quantify WEPCO's estimated future actual emissions after the proposed changes EPA relied heavily on projected and historical operational data (e.g., fuel consumption, MMBTU consumed) representative of the source. Specifically, the Agency considered available information regarding (1) projected post-change capacity utilization filed with public utility commissions; (2) Federal and State regulatory filings; (3) the source's own representations; and (4) the source's historical operating data. As described below, EPA determined an appropriate utilization factor for future operations and combined this with post-change emissions factors (to the extent they are or will be made federally enforceable) to estimate a future level of annual emissions for the purpose of determining whether the proposed physical and operational changes would be considered a major modification for PSD purposes. Where a significant emissions increase is projected to occur, WEPCO could voluntarily agree to federally-enforceable limits on any aspect of its future operation (including physical capacity and hours of operation) to ensure that no significant emissions increase will occur.

IV. THE AGENCY'S REVISED PSD APPLICABILITY DETERMINATION

A. Estimated Future Actual Emissions.

The Agency has revised its October 14, 1989 PSD applicability determination for WEPCO's proposed Port Washington renovation based on a "representative actual" to "estimated future actual emissions" comparison (as outlined above). As previously discussed, estimated future actual emissions projections take into account the likelihood that the plant will operate in the future as it has in the past.

The stated purpose of WEPCO's renovations is to refurbish the power plant units to an "as-new" condition in terms of their capacity, efficiency, and availability. Consequently, EPA has used actual, historical, operational data representative of the plant's past operations, approximating an "as-new" configuration, to calculate "estimated future actual emissions." The Agency has verified these data by comparison to WEPCO's own projections of post-renovation capacity utilization and industry averages.

As to the emissions factors used to calculate future emissions, EPA has used WEPCO's own emissions factors for future

hourly emissions rates. These emissions factors are based on WEPCO's own assumptions regarding future sulfur in fuel and control technology performance levels. However, since these assumptions go beyond current State implementation plan (SIP) requirements, they must be made federally enforceable for EPA to continue to consider them for PSD applicability purposes.

Operational data (i.e., heat input) from the years 1978-1979 show a capacity utilization factor of 42 percent. These data points represent the closest projection of WEPCO's operational characteristics, approximating an "as-new" state, as currently available to EPA. The data currently available to us regarding WEPCO's past operational levels are limited to a 10-year period. The Agency believes that these historical levels of operation are representative of the plant's past operations in an "as-new" condition. In addition, the 1978-79 data points appear consistent with WEPCO's own projection of future operations for the year 2010 (as submitted to the Wisconsin Department of Natural Resources on March 29, 1990) and common capacity levels for the utility industry, in general, for new units. However, by this letter, EPA is requesting that WEPCO submit operational data from previous years (i.e., pre-1978), if such data show heat input levels notably higher than the 1978-1979 levels.

As previously mentioned, to calculate future emissions levels for each pollutant, EPA assumed that the amount of future coal consumed in terms of heat input to the plant would be comparable to WEPCO's annual average 1978-1979 coal-consumption figure. On March 29, 1990, WEPCO submitted to the Wisconsin Department of Natural Resources information which contained estimates of future emissions for different levels of coal and heat input to the plant. The Agency used these estimates to establish future emissions based on 1978-1979 heat-input values. Again, it is important to note that EPA's calculation of "estimated future actual emissions" is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post-renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the emissions factors (based on control technology performance levels and sulfur in fuel) used to calculate future emissions are made federally enforceable. Otherwise, the calculation of estimated future actual emissions for each pollutant will need to be revised by EPA based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions in the current SIP would result in higher projected future emissions than assumed in EPA's calculations and, consequently, could affect the indicated PSD applicability finding.

B. Revised Finding

In sum, EPA has considered past operations at WEPCO's Port Washington plant in estimating future actual emissions. Specifically, EPA has relied on the 42 percent utilization level (in terms of heat input) during 1978-1979. The Agency believes this is a reliable indicator of future utilization because it is consistent both with WEPCO's own projections of post-renovation operations and typical industry usage. The Agency has also considered post-renovation emissions rates on the assumption that they will be made federally enforceable. Compared to the 1983-1984 baseline period, those hourly rates are lower for SO₂ and PM, and unchanged for NO_x. The 42 percent estimated post-renovation capacity utilization is substantially higher than the 29 percent utilization level during the baseline period. However, in calculating total annual actual emissions, that increased usage is offset for SO₂ and PM by the decreased hourly emissions rates resulting from improvements to control systems and the use of low sulfur coal. Consequently, WEPCO is not subject to PSD review for those pollutants.

In the case of NO_x, there will be a direct correlation between increased utilization resulting from the renovations and increased actual emissions. Hence, WEPCO is subject to review for that pollutant and must obtain a PSD permit. The company should contact the Wisconsin Department of Natural Resources regarding the processing of a permit application for NO_x. Due to insufficient source-specific information regarding emissions factors, PSD applicability for PM-10, lead, and noncriteria pollutants listed at 40 CFR 52.21 (b)(23)(i) and (ii) cannot be determined at this time. The PSD applicability for these pollutants should also be based on the "actual-to-actual" emissions test described herein.

This PSD applicability determination applies to WEPCO's currently planned renovations to units 1-5 (see Enclosure A), or, if WEPCO no longer wishes to proceed with renovating unit 5, only the renovation of units 1-4 (see Enclosure B). However, a decision to cancel the currently planned renovations to unit 5 could result in a PSD review for that unit should WEPCO reconsider renovating it some time in the future.

It is our understanding that WEPCO proposes to avoid triggering NSPS for SO₂ and PM at units 1 and 4 by using dry sorbent injection and improving the existing ESP's to offset the potential emissions increases of these pollutants. To the extent that the controls are federally enforceable, and no increase in hourly emissions would occur at maximum capacity, WEPCO can use these options to avoid triggering NSPS for PM and SO₂ at units 1 and 4. However, the two units are still subject to the NSPS requirements for NO_x. Unit 5 cannot, however, avoid triggering

11

NSPS for any pollutant and, therefore, is subject to the NSPS requirements for NO_x , SO_2 , and PM.

Sincerely,



William G. Rosenberg
Assistant Administrator
for Air and Radiation

3 Enclosures

Table 7

03/29/90

PORT WASHINGTON POWER PLANT
MAY 1989 FORECAST
Units 1 - 5

YEAR	MEGAWATT HOURS GENERATED	CAPACITY FACTOR	FUEL CONSUMPTION COAL (13200 Btu/lb) BURNED TONS
1995	825,288	0.24	365,548
1996	941,779	0.27	415,332
1997	1,081,002	0.31	475,624
1998	1,114,313	0.32	490,868
1999	1,247,296	0.36	546,546
2000	1,349,329	0.38	589,569
2001	1,391,882	0.40	608,621
2002	1,481,464	0.42	646,417
2003	1,420,120	0.41	620,153
2004	1,432,122	0.41	625,174
2005	1,431,412	0.41	624,904
2006	1,460,471	0.42	637,519
2007	1,488,124	0.42	649,133
2008	1,481,423	0.42	646,909
2009	1,463,981	0.42	638,750

PORT WASHINGTON POWER PLANT
UPPER MAXIMUM FORECAST
Units 1 - 5

YEAR	MEGAWATT HOURS GENERATED	CAPACITY FACTOR	FUEL CONSUMPTION COAL (13200 Btu/lb) BURNED TONS
1995	1,074,957	0.31	473,981
1996	1,202,460	0.34	528,838
1997	1,341,074	0.38	587,412
1998	1,390,470	0.40	609,237
1999	1,501,584	0.43	654,718
2000	1,600,500	0.46	696,483
2001	1,651,930	0.47	718,252
2002	1,748,046	0.50	760,000
2003	1,690,000	0.48	735,000
2004	1,690,000	0.48	734,000
2005	1,690,000	0.48	734,000
2006	1,710,000	0.49	741,000
2007	1,720,000	0.49	748,000
2008	1,720,000	0.49	747,000
2009	1,695,000	0.48	737,000

Enclosure A

**Revised PSD Applicability Determination
Port Washington Power Plant Renovation of Units 1-5**

(all emissions calculations are in tons per year)

<u>Pollutant</u>	<u>Actual Emissions Baseline (1)</u>	<u>Estimated Future Actual Emissions (2)</u>	<u>Net Emissions Change</u>	<u>PSD Significance Level</u>	<u>Subject to PSD Review (3)</u>
Particulate matter (4) (5)	328	323	-5	25	no
Sulfur dioxide (4)	24,236	15,919	-8,317	40	no
Nitrogen oxides (5)	2,592	3,405	813	40	yes
Carbon monoxide	144	217	73	100	no
Hydrocarbon	17	25	9	40	no

Other Regulated Pollutants: Due to insufficient source-specific information regarding emission factors, PSD applicability for PM-10, lead and noncriteria pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) cannot be determined at this time.

1) Average actual emissions for 2-year period defined by calendar years 1983 and 1984.

2) Calculated by EPA based on the following information submitted by WEPCO:

a. The average historic firing rate (approximately 17×10^6 lbs per year) for the 2-year period defined by calendar years 1978 and 1979.

b. The emissions estimates for the renovated units based on future coal characteristics (e.g., sulfur and heat content) and actual emissions after pollution controls for particulate.

c. Sulfur dioxide controls applied to unit 5 at 75 percent sulfur dioxide removal to comply with NSPS Subpart Da. Sulfur dioxide removal of 22 and 13 percent at units 1 and 4, respectively, to exclude these units from NSPS requirements for greater control of sulfur dioxide.

3) If new data indicate that annual, historic-firing rates at the Port Washington facility exceeded historic 1978 and 1979 levels, the indicated applicability determination could change.

4) The calculation of estimated, future, actual emissions for this pollutant is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post-renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the specific particulate and sulfur dioxide emissions factors used for units 1-5 to calculate future emissions (based on particulate and SO₂ control technology performance levels and fuel sulfur and heat content) are made federally enforceable. Otherwise, the calculation of estimated, future, actual emissions for this pollutant will be revised by EPA, based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions factors would result in higher, projected, future emissions and, consequently, could affect the indicated PSD applicability finding.

5) Baseline emissions (actual emissions for 2-year period defined by calendar years 1983 and 1984) have been revised based on additional information submitted by WEPCO.

Enclosure B

Revised PSD Applicability Determination Port Washington Power Plant Renovation of Units 1-4

(all emissions calculations are in tons per year)

<u>Pollutant</u>	<u>Actual Emissions Baseline (1)</u>	<u>Estimated Future Actual Emissions (2)</u>	<u>Net Emissions Change</u>	<u>PSD Significance Level</u>	<u>Subject to PSD Review (3)</u>
Particulate matter (4) (5)	328	339	11	25	no
Sulfur dioxide (4)	24,236	18,505	-5,731	40	no
Nitrogen oxides (5)	2,592	3,396	804	40	yes
Carbon monoxide	144	217	73	100	no
Hydrocarbon	17	25	9	40	no

Other Regulated Pollutants: Due to insufficient source specific information regarding emission factors, PSD applicability for PM-10, lead and noncriteria pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) cannot be determined at this time.

1) Average actual emissions for 2-year period defined by calendar years 1983 and 1984.

2) Calculated by EPA based on the following information submitted by WEPCO:

a. The average, historic-firing rate (approximately 17×10^6 Btu per year) for the 2-year period defined by calendar years 1978 and 1979.

b. The emissions estimates for the renovated units based on future coal characteristics (e.g., sulfur and heat content) and actual emissions after pollution controls for particulate.

c. Unit 5 inoperative. Sulfur dioxide removal of 22 and 13 percent at units 1 and 4, respectively, to exclude these units from NSPS requirements for greater control of sulfur dioxide.

3) If new data indicate that annual, historic-firing rates at the Port Washington facility exceeded historic 1978 and 1979 levels, the indicated applicability determination could change.

4) The calculation of estimated, future, actual emissions for this pollutant is based on WEPCO's projection of control technology performance levels and/or fuel sulfur content for post renovation operations. Consequently, EPA's PSD applicability determination is valid only to the extent that the specific particulate and sulfur dioxide emissions factors used for units 1-4 to calculate future emissions (based on particulate and SO₂ control technology performance levels and fuel sulfur and heat content) are made federally enforceable. Otherwise, the calculation of estimated, future, actual emissions for this pollutant will be revised by EPA, based on existing federally-enforceable limits (i.e., applicable SIP, NSPS). The use of current, federally-enforceable emissions factors would result in higher, projected, future emissions and, consequently, could affect the indicated PSD applicability finding.

5) Baseline emissions (actual emissions for 2-year period defined by calendar years 1983 and 1984) have been revised based on additional information submitted by WEPCO.

5. PSD

Geographic/Pollutant Applicability

5.23 **DATE:** June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point
Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 3 [Hard Copy]; 23.27; 24.13

5.24 DATE: October 28, 1988
SUBJECT: Review of De Minimis Emissions - Sanctions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division
TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26)
Region V
DISCUSSION: De minimis net emission increases that accumulate within a contemporaneous (5 year) time frame should not be combined and would not trigger PSD review when significance levels are reached. However, de minimis increases do consume PSD increment, and, in nonattainment areas, aggregated de minimis emissions will trigger sanctions when significance levels are reached.
CR: 4.39 [Hard Copy]; 27.5

Reserved



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Yenn

5.26

JAN 8 1990

Mr. Ken Waid, President
Waid and Associates
8000 Centre Park Drive, Suite 270
Austin, Texas 78754

Dear Mr. Waid:

This is in response to your November 22, 1989 letter to Gerald Emison in which you asked for clarification on two questions concerning "secondary emissions" as defined in the Code of Federal Regulations (CFR) at 40 CFR 52.21(b)(18). First, you asked whether the definition found in the 1988 edition of the CFR was the correct definition. Second, you asked whether any emissions from a vessel are considered secondary emissions.

You are correct in your conclusion that the secondary emissions definition in the 1988 CFR at 40 CFR 52.21(b)(18) is incomplete. The second sentence of the definition in the 1981 CFR apparently was inadvertently omitted when the CFR was revised by the Federal Register of June 25, 1982 (47 FR 27554), which promulgated an amendment to the definition.

Concerning whether any vessel emissions are secondary emissions, the June 25, 1982 revisions to the prevention of significant deterioration (PSD) regulations exempted all vessel emissions from consideration in PSD review of new or modified marine terminals on the basis that vessels are mobile sources and mobile source emissions are excluded by the Clean Air Act from attribution to a stationary source. However, on January 17, 1984 the Court of Appeals for the D.C. Circuit vacated and remanded to the Environmental Protection Agency (EPA) portions of the June 25, 1982 promulgation, including the way in which the Agency treated vessel emissions (Natural Resources Defense Council v. U.S. EPA, 725 F.2d 761). The Court stated that EPA was correct to interpret the term "mobile sources" to include vessels, but that the Agency acted "far too precipitously" in concluding that it therefore had no authority to attribute any vessel emissions to marine terminals. The EPA, the Court went on to say, should have examined the nature of the interactions between a vessel and a terminal to determine specifically which categories of emissions, if any, should be attributed to the terminal.

The Court affirmed the portion of the 1982 promulgation that excluded "to and fro" vessel emissions from attribution to the terminal as secondary emissions, but vacated EPA's 1982 blanket repeal of the dockside vessel emissions component from PSD emissions counting as either primary or secondary emissions. In so doing, the Court acknowledged that, with the exception of to and fro emissions, it implicitly reinstated the PSD regulations promulgated on August 7, 1980 (45 FR 52676). In essence, the Court removed from the CFR the total exclusion of vessel emissions counting which now appears in 40 CFR 52.21(b)(6) as the phrase "...except the activities of any vessel," and in

40 CFR 52.21(b)(18) as the phrase "...or from a vessel." Consequently, the August 7, 1980 PSD regulations (with the exception of to and fro emissions counting) shall apply to determinations on how to treat vessel emissions.

The preamble to the 1980 regulations explains that emissions from certain activities of a ship docked at a terminal (i.e., when the vessel is stationary) may be considered emissions of the terminal if the activities would "directly serve the purposes of the terminal and be under the control of its owner or operator to a substantial extent" (45 FR 52696). Vessel emissions which are not to be taken into account in determining whether a marine terminal is subject to PSD review (i.e., they are not primary emissions) are those which result from activities which do not directly serve the purposes of the terminal and are not under the control of the terminal owner or operator. The Court ordered EPA to perform the analyses necessary to distinguish which dockside emissions, if any, should be assigned to the terminal and which should be assigned to the vessel. However, EPA has not yet completed the analyses necessary to define which dockside vessel emissions, and under what conditions, should be assigned to the terminal and whether these would be considered primary or secondary emissions. States with Federally-approved PSD implementation plans are free to develop regulations more stringent than the Federal regulations, and some may have done so already with regard to the treatment of vessel emissions. Thus, I recommend that you check with individual States to learn whether any dockside vessel emissions are considered secondary (or primary) emissions in that particular State.

Finally, as you have noted in your letter, a correction of the Federal PSD regulations is in order. I prefer that any changes to the CFR with respect to vessel emissions not only correct the error of omission cited in your letter, but also carry out the Court's instruction to resolve the issue of dockside emissions attribution for PSD purposes. We hope that our resources will allow us to initiate work on such rulemaking in the near future.

I hope that this has answered your questions. Should you wish to discuss further EPA's policies concerning secondary or vessel emissions, please call Gary McCutchen of my staff at (919) 541-5592.

Sincerely,


John Calcagni
Director
Air Quality Management Division

cc: G. Emison
R. Bartley, Region VI

6. PSD

Baseline/Increment Consumption/Impact Analysis



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Office of Air Quality Planning and Standards
 Research Triangle Park, North Carolina 27711

JUL 5 1988

MEMORANDUM

Subject: Air Quality Analysis for Prevention of Significant Deterioration (PSD)

From: Gerald A. Emison, Director 
 Office of Air Quality Planning and Standards (MD-10)

To: Thomas J. Maslany, Director
 Air Management Division (3AM00)

Your memorandum of May 9, 1988, pointed out that two different procedures are currently being used by the Regional Offices in certain PSD permit analyses. The inconsistency involves the question of how to interpret dispersion modeling results to determine whether a source will cause or contribute to a new or existing violation of a national ambient air quality standard (NAAQS) or PSD increment. This memorandum serves to resolve the inconsistency by reaffirming previous Office of Air Quality Planning and Standards guidance provided in a December 1980 policy memorandum (attached).

As you know, the regulations for PSD stipulate that approval to construct cannot be granted to a proposed new major source or major modification if it would cause or contribute to a NAAQS or increment violation. Historically, the Environmental Protection Agency's (EPA's) position has been that a PSD source will not be considered to cause or contribute to a predicted NAAQS or increment violation if the source's estimated air quality impact is insignificant (i.e., at or below defined de minimis levels). In recent years, two approaches have been used to determine if a source would "significantly" (40 CFR 51.165(b) defines significant) cause or contribute to a violation. The first is where a proposed source would automatically be considered to cause or contribute to any modeled violation that would occur within its impact area. In this approach, the source's impact is modeled and a closed circle is drawn around the source, with a radius equal to the farthest distance from the source at which a significant impact is projected. If, upon consideration of both proposed and existing emissions contributions, modeling predicts a violation of either a NAAQS or an increment anywhere within this impact area, the source (as proposed) would not be granted a permit. The permit would be denied, even if the source's impact was not significant at the predicted site of the violation during the violation period. You have indicated that this is the approach you currently use.

The second approach similarly projects air quality concentrations throughout the proposed source's impact area, but does not automatically assume that the proposed source would cause or contribute to a predicted NAAQS or increment violation. Instead, the analysis is carried one step further in the event that a modeled violation is predicted. The additional step determines whether the emissions from the proposed source will have a significant ambient impact at the point of the modeled NAAQS or increment violation when the violation is predicted to occur. If it can be demonstrated that the proposed source's impact is not "significant" in a spatial and temporal sense, then the source may receive a PSD permit. This approach is currently being used by Region V and several other Regional Offices, and is the approach that you recommend as the standard approach for completing the PSD air quality analysis.

In discussing this matter with members of my staff from the Source Receptor Analysis Branch (SRAB) and the Noncriteria Pollutant Programs Branch (NPPB), it appears that different guidance has been provided, resulting in the two separate approaches just summarized. We have examined the history and precedents which have been set concerning this issue. I also understand that this issue was discussed extensively at the May 17-20, 1988 Regional Office/State Modelers Workshop, and that a consensus favored the approach being used by Region V and several other Regions. Based on this input, as well as your own recommendation, I believe the most appropriate course of action to follow is the second approach which considers the significant impact of the source in a way that is spatially and temporally consistent with the predicted violations.

By following the second approach, three possible outcomes could occur:

(a) First, dispersion modeling may show that no violation of a NAAQS or PSD increment will occur in the impact area of the proposed source. In this case, a permit may be issued and no further action is required.

(b) Second, a modeled violation of a NAAQS or PSD increment may be predicted within the impact area, but, upon further analysis, it is determined that the proposed source will not have a significant impact (i.e., will not be above de minimis levels) at the point and time of the modeled violation. When this occurs, the proposed source may be issued a permit (even when a new violation would result from its insignificant impact), but the State must also take the appropriate steps to substantiate the NAAQS or increment violation and begin to correct it through the State implementation plan (SIP). The EPA Regional Offices' role in this process should be to establish with the State agency a timetable for further analysis and/or corrective action leading to a SIP revision, where necessary. Additionally, the Regional Office should seriously consider a notice of SIP deficiency, especially if the State does not provide a schedule in a timely manner.

(c) Finally, the analysis may predict that a NAAQS or increment violation will occur in the impact area and that the proposed source will have a significant impact on the violation. Accordingly, the proposed source is considered to cause, or contribute to, the violation and cannot be issued a permit without further control or offsets. For a new or existing NAAQS

-3-

violation, offsets sufficient to compensate for the source's significant impact must be obtained pursuant to an approved State offset program consistent with SIP requirements under 40 CFR 51.165(b). Where the source is contributing to an existing violation, the required offsets may not correct the violation. Such existing violations must be addressed in the same manner as described in (b) above. However, for any increment violation (new or existing) for which the proposed source has a significant impact, the permit should not be approved unless the increment violation is corrected prior to operation of the proposed source (see 43 FR p.26401, June 19, 1978; and 45 FR p.52678, August 7, 1980).

Your memorandum also states that other air quality analysis issues exist within the NSR program which need consistent national guidance. You recommend a more coordinated effort between SRAB and NPPB to review outstanding NSR issues. We agree; however, rather than establishing a formal work group as you propose, we are optimistic that the formal participation of representatives of the NSR program in the Modeling Clearinghouse will help resolve coordination problems. Earlier in the year, the Modeling Clearinghouse was officially expanded to include representation from the NPPB to coordinate PSD/NSR issues which have a modeling component.

I trust that this is responsive to the concerns which you have raised. By copy of this memorandum, we are also responding to a Region V request for clarification on the same issue (memorandum from Steve Rothblatt to Joe Tikvart/Ed Lillis, dated February 18, 1988).

Should you have any further questions concerning this response, please feel free to contact Gary McCutchen, Chief, New Source Review Section, at FTS 629-5592.

Attachment

cc: Air Division Directors, Regions I-X
Air Branch Chiefs, Regions I-X
D. Clay
J. Calcagni
J. Tikvart
E. Lillis
G. McCutchen
D. deRoek

--- RETYPE OF ORIGINAL SIGNED MEMORANDUM ---



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Date: December 16, 1980 12.12
Subject: Interpretation of "Significant Contribution" PN-165-80-12-16-007
From: Richard G Rhoads, Director
Control Programs Development Division (MD-15)
To: Alexandra Smith, Director
Air & Hazardous Materials Division, Region X

We have received your memo of October 27, 1980 regarding the applicability of PSD and the Emission Offset Interpretative Ruling when the proposed sources (such as Northern Tier) would be locating in a PSD area and would cause or contribute to a new or existing violation of the National Ambient Air Quality Standards (NAAQS). You asked for clarification of existing policy in two areas. This memo is intended to finalize the draft transmittals we have exchanged since receiving your request.

Your first question asked whether EPA is using the concept of significant contribution within the PSD regulations when assessing whether a proposed source, locating in a PSD area, would "contribute to air pollution in violation of the NAAQS." As discussed in the PSD workshops and the PSD workshop manual, EPA continues to apply the significant impact concept using the values defined in the 1978 preamble, 43 FR 26398, and in 40 CFR Part 51 Appendix S. If the proposed source or modification has no significant contribution to the nonattainment problem, then the proposed project does not contribute to this violation. Provided that it would not cause any new NAAQS violations, such a source is not subject to the requirements of 40 CFR 51.18(k) or 40 CFR Part 51 Appendix S; the proposed project must, however, still demonstrate that it will not cause or contribute to air pollution in violation of the PSD increments. See 40 CFR 52.21(k)(2).

Your second question asked about the need for a significant impact by the proposed source to occur simultaneously with the actual violation at a particular nonattainment site. In general, a PSD source with significant new emissions of the applicable pollutant which constructs in an area adjacent to a nonattainment area should be presumed to contribute to the violation if it would have a significant impact at any point in the nonattainment area. However, if the proposed PSD source can demonstrate that its new emissions would not have a significant impact at the point of the violation when that violation is actually occurring, then the proposed source would meet the requirements of 40 CFR 52.21(k)(1) provided that it

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would not cause any new violations of the NAAQS. This answer would apply whether the nonattainment area was newly discovered or was formally designated nonattainment under §107. I should like to add that, while such a demonstration is allowed, it will be extremely difficult to prove an insignificant contribution, especially in the short term.

Several examples will clarify this response. For instance, a proposed new major stationary source may locate near a designated nonattainment area for SO₂. Suppose that the source owner has shown in his PSD application that his SO₂ impacts are significant only on the edge of the §107 area which is demonstrated to actually be in attainment of standards. The source owner also demonstrated that his impacts are not significant in the area of actual violation of the SO₂ standards. A second scenario is the case where the owner demonstrates that on the days when the 24-hour SO₂ standard violation is actually occurring, the proposed source's 24-hour averaged impacts are not significant. The owner has also shown that on other days when the air quality meets the 24-hour SO₂ standard, his impacts are significant but do not cause the air quality to exceed the 24-hour standard. The third example is where the area was only nonattainment for the SO₂ annual standard. The source owner shows his impacts on the nonattainment area are significant for the 24-hour averaging time and insignificant on an annual basis. For all three scenarios, the source owner has demonstrated that he will not contribute to air pollution in violation of the NAAQS and has met the PSD review requirements of 40 CFR 52.21(k)(1) for SO₂, providing that he will not cause any new violations. This source would also not be subject to nonattainment NSR requirements under 40 CFR 51.18(k).

If you have further questions, please contact Mike Trutna (FTS 629-5291) for more information.

cc: D. Hawkins
W. Barber
Director, Air & Hazardous Materials Division, Regions I - X
Director, Enforcement Division, Regions I - X
NSR, PSD Regional Contact, Regions I - X

Reserved

Reserved



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

16 MAR 1983

MEMORANDUM

SUBJECT: Use of Allowable Emissions for National Ambient Air Quality Standards (NAAQS) Impact Analyses Under the Requirements for Prevention of Significant Deterioration (PSD)

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
William G. Laxton, Director
Technical Support Division (MD-14)

TO: Thomas J. Maslany, Director
Air Management Division, Region III

William B. Hathaway, Director
Air, Pesticides, & Toxics Div., Region VI

This memorandum is in response to recent requests from your offices for clarification of the Environmental Protection Agency's (EPA) policy concerning the implementation of the PSD air quality impact analysis under 40 CFR 51.166(k) [also §52.21(k)]. Of specific concern is the question of whether the required analysis for new major sources and major modifications is to be based on actual or allowable emissions from existing background sources. This memorandum sets forth the position that allowable emissions should generally be used. However, as explained below, certain allowances may be made, primarily with respect to the evaluation of impacts on the long term NAAQS, to consider an existing source's actual annual operations. This position best resolves the inconsistencies between previous written guidance for PSD and the guidance applicable to NAAQS attainment demonstrations for State implementation plans (SIP's).

The PSD regulations at 40 CFR 51.166(k) stipulate that "allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases... would not cause or contribute to air pollution in violation of [any national ambient air quality standard (NAAQS)]." (Emphasis added.) While this provision clearly requires the use of allowable emissions for the new or modified source, it offers no similarly explicit requirement regarding emissions to be used for existing source contributions.

Nationally, States and EPA Regional Offices have utilized several interpretations which have lead to a consistency problem in implementing the requirement for a NAAQS demonstration under 40 CFR 51.166(k). Some States presently accept the use of actual source emissions for existing background point sources, and reference EPA guidance to support their position. Regions, on the other hand, encourage the use of emissions estimates more closely reflecting legally allowable emissions.

Available EPA guidance for PSD, which dates back to 1980, supports the use of actual emissions to project the air quality impacts caused by existing point sources. Specifically, the "Prevention of Significant Deterioration Workshop Manual" (EPA-450/2-80-081, October 1980) states that "actual emissions should be used... to reflect the impact that would be detected by ambient air monitors" for the PSD NAAQS analysis. However, because many sources typically emit at rates well below their legally allowable emission rate on an annual basis, we now believe that the use of actual emissions to demonstrate NAAQS attainment could substantially underestimate the potential air quality impacts resulting from existing sources.

The EPA's policy for demonstrating stationary point source compliance with the NAAQS for SIP purposes clearly requires the use of emissions which are more closely tied to allowable emissions. The model emission input data requirements for such SIP demonstrations are contained in Table 9-1 of the "Guideline for Air Quality Models (Revised)" (GAQM), EPA-450/2-78-02R, July 1986. For "nearby background sources" an adjustment to the allowable emission rate¹ may be made only for determinations of compliance with the annual and quarterly NAAQS, and only with respect to the annual operating factor. For "other background sources" an adjustment to both the operating level and the operating factor, as explained in Table 9-1, could be made for determinations of compliance with the long term and short term NAAQS.

The referenced model emission input data requirements for existing point sources are contained in the GAQM which has undergone rulemaking and is incorporated by reference in EPA's PSD regulations under Parts 51 and 52. Although a footnote in Table 9-1 indicates that the model input data requirements may not apply to PSD NAAQS analyses, we now believe that such requirements should be applied to PSD rather than using actual emissions as indicated in the 1980 PSD guidance. Thus,

¹Emission rates for model input consist of three components: 1) the emission limit, e.g., #/mmBtu; 2) the operating level, e.g., mmBtu/hour; and 3) the operating factor, e.g., hours/day, hours/year.

compliance demonstrations for PSD and for stationary source control strategies under SIP's will be accomplished in a consistent manner.

In order to apply Table 9-1 in the GAQM to PSD NAAQS analyses, certain clarifications need to be provided. First, the proposed major new source or major modification must be modeled at its maximum allowable emission rate. Second, the existing facility to which a major modification has been proposed, but whose actual emissions (not including emissions from the proposed modification) will remain unchanged, may be considered as the "stationary point source subject to SIP emission limit(s)..." to determine the model emission input requirements. Portions of the existing facility where the emission rate is expected to increase as a result of the proposed modification should be modeled at the allowable emission rate. Finally, background point sources 1) having already received their construction permit but not yet in operation, or 2) with less than two years of operational history, should also be modeled at their allowable emission rate.

Of course, an analysis which demonstrates no contravention of the standards, based entirely on maximum allowable emissions rates (including full operation for the entire year) for all modeled point sources is acceptable. If a violation of any NAAQS is revealed by this type of analysis, then the adjustments described above may be made in cases where it can be shown to the satisfaction of the permit granting agency that historical operating levels and/or operating factors will be representative of future conditions.

This use of Table 9-1 of the GAQM for accomplishing the required PSD NAAQS analysis will supersede the various procedural interpretations presently being applied. Since different procedures are currently in use, we believe that it is necessary to provide a grace period for implementing the required procedure. Consequently, modeling analyses for any PSD application submitted to the reviewing agency on or after October 1, 1989 should be based on legally allowable emissions or must use the model emission input data requirements contained in Table 9-1 of the GAQM as clarified above for PSD purposes.

cc: Air Branch Chief, Regions I-X
New Source Review Contacts
Regional Modeling Contacts
E. Lillis
J. Tikvart
T. Helms
B. Bauman

6.26 DATE: June 15, 1989
SUBJECT: Timing of BACT Determination for a New Emission Source
FROM: Gary McCutchen, Chief, New Source Review Section
TO: John Daniel, Asst. Executive Director, Dept. of Air Pollution
Control, Commonwealth of Virginia
DISCUSSION: A BACT decision is not final or "locked-in" until the final permit
is issued; until that time, a permit issuing agency is free to
share a tentative preliminary BACT determination as soon as
appropriate. An applicant does not need a final BACT decision to
conduct modeling; modeling is based on the level of control
recommended by the applicant. Decisions on technology transfer
should be carefully scrutinized to ensure that "reasonable
technology transfer" is defined broadly enough to prevent
circumvention of use of certain controls by selection of some
slightly different unit.
CR: 8.38 [Hard Copy]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

AUG 24 1989

6.27
David

MEMORANDUM

SUBJECT: Guidance on Implementing the Nitrogen Dioxide (NO₂)
Prevention of Significant Deterioration (PSD)
Increments

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: William B. Hathaway, Director
Air, Pesticides, and Toxics Division, Region VI

This memorandum is in response to your request for guidance on meeting the requirements of the NO₂ PSD increments regulation. General points are discussed below, while the specific questions you posed in your memorandum are listed in the attachment, followed by our responses.

We believe that promulgation of the NO₂ increments regulation creates some new, but manageable, aspects of the PSD program. Studies show that excessive NO₂ increment consumption on an area-wide basis, particularly for Class II areas, should not be a problem for many years. Thus, there should be time available for most States to develop the programs needed to address NO₂ increments before potential problems arise. While considerable guidance exists to implement the NO₂ increments, the additional guidance needed to prepare State implementation plan (SIP) and delegation agreement revisions is under development and scheduled for completion within the next few months.

More specifically, guidance is now being developed which outlines the necessary revisions to SIP's (and delegation agreements) that States need to make to have approvable SIP's. This guidance will be distributed in memorandum form to Regional Offices and incorporated into the New Source Review (NSR) Guidance Manual (which is currently being updated). A technical procedures document is also being developed which will provide a step-by-step description of how to develop an emissions inventory and gather the information needed to model mobile source and area emissions. It will also contain examples of NO₂ increment consumption analyses.

One aspect of the NO₂ increment program that does need some attention is the fact that NO₂ increment consumption began with the date of the proposal of the NO₂ increments (February 8, 1988). Since State programs to implement the NO₂ increments are not required to be in place until November 17, 1990, there is a possibility that some major NO₂ sources that would violate the NO₂ increments would submit a permit application before the State NO₂ increments regulations are in effect. While we do not believe that many such situations will occur, especially in Class II areas, the situation has already occurred

in Region II and may arise elsewhere. We pointed this potential situation out in the preamble of the regulations and suggested that States require NO₂ increment consumption analysis as soon as possible. Since major sources of NO₂ are already required to perform a NAAQS analysis, this may provide much of the data base which will be needed to determine how much increment has already been consumed.

Various actions should be considered by the State or by EPA if it is determined that a proposed new source will violate an NO₂ increment before the State's NO₂ increments regulations are in effect. There is no need for the permitting agency to be blind to a future violation. Therefore, if a source will be in violation of an NO₂ increment once the revised SIP or delegation agreement is approved, the Regions should call upon the State to indicate how the violation will be cured. A notice in the permit to the effect that the source may later be required to reduce its NO_x emissions might also be prudent. An individual source which could cause or contribute to NO₂ increment exceedances should at the very least be forewarned that further emissions reductions may be required (once the NO₂ increment rules are effective) to avoid such exceedances.

To minimize any potential impact of the time lag, the promulgated NO₂ regulations allow States to obtain SIP approval as early as October 1989. A similar procedure is also available for States with delegated authority to do likewise. This procedure was outlined in a memorandum entitled "Guidance on Early Delegation of Authority for the NO₂ Increments Program," dated February 15, 1989. You are encouraged to explore early delegation or SIP submittals with your States. In fact, the first early delegation we are aware of occurred on August 11 when Region I delegated the NO₂ increment program to New Hampshire (see the attached Federal Register). Lynne Hamjian, the Region I contact, has details on the procedure they used to go direct final on this action.

If there are any questions, please call me at FTS 629-5621 or Gary McCutchen at FTS 629-5592.

Attachments

cc: Regional Division Director, Regions I-X
 Chief, State Air Programs Branch, Region I
 Chief, Air Programs Branch, Regions II, III, IV, VI,
 VIII, IX, and X
 Chief, Air and Radiation Branch, Region V
 Chief, Air Branch, Region VII
 Chief, Air Compliance Branch, Region II
 Chief, Air Enforcement Branch, Regions III, VI
 Chief, Air Operations Branch, Region IX
 NSR Contacts

ATTACHMENT

Responses to Questions:

1. Recognizing the lack of regulatory authority at present and [the delayed] effective implementation date, what is the EPA policy and recommended actions for planning and implementation of the NO₂ increment standards between now and November 17, 1990?

Regions are encouraged to begin working with their States to obtain early delegation agreements or approvable SIP's prior to the submittal deadline of July 17, 1990. Later this year we will be providing documents that will give more detailed guidance on a number of specific topics, such as modeling and emissions inventories, but Regions can begin at any time to start working with the States on general agreements.

There is one issue that is likely to arise early in your negotiations. In the preamble to the NO₂ increments regulations, EPA recommends that States require all major sources to provide NO₂ increment consumption analyses even before their NO₂ increment programs are in place. This is because NO₂ increment consumption in an area can begin as early as February 8, 1988, and thus may begin before the State's NO₂ increment rules are in effect. Most of the data needed to determine increment consumption should already be available. For example, NO₂ emissions modeling for NAAQS compliance (which is already required for major new sources and major modifications) should provide much of the data needed to determine NO₂ increment consumption. This is because a PSD source must model its new emissions (or emissions increase) to determine the boundaries of its impact area [the area(s) where the impact of

emissions from the proposed source is $1 \mu\text{g}/\text{m}^3 \text{NO}_2$ (annual average) or more]. A source may also need to model to determine whether preconstruction monitoring is required [preconstruction monitoring is not required if ambient air quality impacts are below $14 \mu\text{g}/\text{m}^3 \text{NO}_2$ (annual average)]. Either of these modeling exercises can provide the amount of NO_2 increment the new source or modification will consume. States should ask that these modeling analyses, including the maximum air quality impact, be provided to them in the application. The only data not provided from this modeling would be the increment consumption from other nearby increment-consuming sources. We believe it would be highly unusual for many situations to occur in the first 2-3 years of this program (February 1988 to November 1990) where two or more major NO_2 increment-consuming sources locate close to each other so as to have overlapping impacts. If this does occur, the proposed source will likely have to model emissions from those nearby increment-consuming sources to ascertain compliance with the NO_2 NAAQS (which has always been required in the PSD analysis). This information can be provided with the permit application, at little or no extra cost or effort, to determine increment consumption. States could also request increment consumption data on a voluntary basis or through a section 114 letter. Having sources generate these data now will be less expensive and time-consuming for all concerned than to try to make this determination after the fact.

2. Is the Regional Office responsible for emission inventory and increment analysis for stationary and mobile sources to identify the areas where the increments for NO_2 were exceeded on or before February 8, 1988 (determining the baseline areas)?

First, there was no NO_2 increment consumption before February 8, 1988, the major source baseline date. Second, States, rather than Regional Offices,

are directly responsible, after their revised SIP or delegation agreements are approved, for ensuring that emission inventories are developed and maintained, and for requiring permit applicants to perform NO₂ increment consumption analyses. In the interim, the Regional Offices should encourage their States to obtain increment consumption data or analyses from all major sources. Also, when necessary, they can use Clean Air Act section 114 authority to require major sources to conduct NO₂ increment analyses. They can also delegate this authority to the States.

3. Is it necessary at this time to add a caveat to each PSD permit, issued between February 8, 1988 and November 17, 1990, that would enable the permitting agency in the future to revisit and adjust the NO₂ emission limitations if the NO₂ increments are found to be exceeded in that area (similar to stack height regulations/PSD permits)?

Certainly, adding a caveat to a permit before it is issued, that expressly constitutes a conditional approval, could be very useful in circumstances where the source would cause an increment exceedance. If that were done, the permit itself could be amended, or even rescinded, after the effective date of the increment regulations, if it is determined that the source is located in an area which in fact exceeds the NO₂ increment allowance. A lesser measure would be a caveat advising the source that, while the permit will remain unchanged, the source may be required to reduce emissions at a later date. Such caveats should help get the point across to the applicant that it is prudent to perform a NO₂ increment consumption analysis and inadvisable to build a facility which would cause or contribute to NO₂ increment exceedances. Of course, States will have to cure any NO₂ increment violations within their borders once their revised SIP or delegation agreements are approved, regardless of the terms of a permit. Accordingly, a State can take whatever steps are necessary, even after a permit has been

issued, and even if there are no caveats in the permit, to effect a change in emissions limitations, source configuration, or other requirements applicable to the source in order to cure the increment violation. Issuance of a permit does not free an applicant of the need to meet other requirements and regulations [see section 52.21(r)(3), Approval to Construct]. (In States where the NSR permits program is run by the EPA Region, the Region has the same rights and privileges as a State would have if it were running the program and should consider conditions in the permit, or some other measure, to avoid or correct NO₂ increment violations).

4. Will all affected sources which received PSD permits after February 8, 1988 be subject to re-analysis to determine if any of these sources exceeded the NO₂ increment when the increment standards become effective on November 17, 1990 (SIP approval)?

As explained in the response to question 1, most, if not all of the data needed to determine whether a source will cause or contribute to a violation of an increment should already be available as a result of other required analyses. As such, we do not anticipate that "re-analysis" will be needed in many cases. However, sources could be subject to re-analysis, depending on how the State elects to determine and track NO₂ increment consumption and cure increment violations. Each State must explain in its revised SIP or delegation agreement how it will determine the amount of NO₂ increment already consumed. The State must also describe the process by which any exceedance of the NO₂ increment will be corrected. We do not anticipate many situations, especially in Class II areas, where the NO₂ increments will be exceeded prior to States developing their NO₂ increments programs.

5. Several questions arise which an example may clarify. A PSD permit for NO_x was issued to a source after February 8, 1988. Later, the permitting agency found that the NO_2 increments were exceeded on or before February 8, 1988. The questions are: a) will the source have a valid permit after November 17, 1990, and b) will this source be required to do an NO_2 increment analysis and potentially be required to reduce its NO_x emissions to an acceptable level?

As discussed in question 2, NO_2 increment violations could not have occurred prior to February 8, 1988. In response to question (a), sources that are issued permits before the State NO_2 increments requirements are in place will have valid permits, even in those situations where they may cause or contribute to an NO_2 increment violation. However, States are required to take action to remedy increment exceedances, once their revised SIP or delegation agreements are approved. Accordingly, even though a State may not have the authority to revoke or directly revise a permit, it can override or supercede the permit conditions (e.g., a SIP revision), since issuance of a permit does not free an applicant of the need to meet other requirements and regulations [see sect. 52.21(r)(3), Approval to Construct]. Action to correct an increment violation could focus on one large source, on all new sources, or on all sources of that pollutant in that area. The choice of strategy is up to the State, so it could involve revocation of permits (in States with that authority), additional analyses by sources, new control requirements to control emissions, or other measures.

With respect to question (b), the Part 52 NO_2 increments regulations contain a provision that grandfathers permit applications which are already complete on the effective date of the regulation, including those projects with approved permits, from being required by EPA to perform NO_2 increment consumption analyses. It is therefore possible that some sources may be

grandfathered from being required to do the NO₂ increments analysis. Some delegated States have statutes which prohibit rules more stringent than EPA's and may have to accept the EPA grandfathering provision. However, States are not required to include these grandfathering provisions in their SIP regulations, and EPA encouraged them in the preamble of the NO₂ increments regulations not to do so.

6. Can (or should) an agency (between now and November 17, 1990) issue a permit to a source if, in fact, the permitting agency is aware that the NO₂ increments have already been exceeded in the area under consideration?

A permit should not be rejected by either EPA or a State agency solely because the available NO₂ increment has been (or will be) exceeded, until such time as either: 1) the State's revised NO₂ increment SIP or delegation agreement is in effect, or 2) the EPA has taken over responsibility for this facet of the permitting program. However, there is no need for a permitting agency to be blind to a future violation. A State has broad authority to deny or condition a permit, as long as it has some rational basis for doing so, and States with approved PSD programs are free to factor NO₂ increment consumption into the permitting decision. Also, EPA can insist that the State show, as part of the permit review package, how excessive increment consumption or an exceedance will be cured once the increment regulations are effective. In the absence of an explanation of how an exceedance will be cured at a later time, EPA can insist that the State include appropriate conditions in the permit for the new or modified source that could be relied on by the State to alleviate or prevent possible future increment exceedances. As noted in the response to question 3, EPA has the same rights as the States, when it runs the NSR

program, to require a source to show how excessive increment consumption will be cured.

Assume, for example, that modeling shows that a proposed new source would cause an NO₂ increment exceedance when the increment becomes effective, and the only way to prevent such an exceedance is to reduce emissions from that source. If such future reductions would entail significant retrofit costs, this would be an adequate basis for requiring a more stringent BACT determination or other permit conditions to reduce the source impact prior to construction. Such conditions represent a valid exercise of the permitting agency authority to manage clean air resources in a manner consistent with the goals and purposes of the PSD program.

7. Can (or should) an agency (between now and 11/17/90) issue a PSD permit to a source if this source (by itself) "causes or contributes" to NO₂ increment exceedances?

See responses to questions 3 and 6.

8. Will the sources that received PSD permits before February 8, 1988 but increased production rate and emissions for NO_x after February 8, 1988 (but before November 17, 1990) be grandfathered from the NO₂ increments [consumption]? Our concern stems from the fact that there is no mechanism to track consumption from increased production of the industries that had been in an economic downturn until recently. These types of sources can increase their actual emissions up to allowable levels without applying for a permit.

In general, increased emissions from such sources would not be grandfathered. Increases in emissions resulting from increased hours or capacity utilization at sources contributing to baseline concentrations consume increment, since actual emissions are used in increment consumption analyses. However, if a source can demonstrate that its operation after the baseline date is more representative of normal source operation than its operation preceding the baseline date, the more representative period may be

used to calculate the source's actual emission contribution to the baseline concentration.

Emission increases of less than 40 tons per year associated with a modification at a major source after February 8, 1988 consume NO₂ increment even if the minor source baseline date has not been triggered, but would not trigger the minor source baseline date (only major new sources or major modifications do that). Increment consumption analyses are not required under PSD for any non-major modifications, but must be taken into account when the next major source conducts an increment consumption analysis.

9. The NO_x emissions from area sources in several parishes of Louisiana exceed the NO_x emissions from point sources. How will increment [consumption] from area sources be quantified as of February 8, 1988?

With the exception noted in the previous response, increment consumption by minor sources (which includes area and mobile sources) will not begin until the minor source baseline date is triggered. This does not occur in an area until receipt (after February 8, 1988) of the first complete major source permit application with significant NO_x emissions. This applicant must determine the baseline ambient air quality for NO₂ from a combination of monitoring and modeling data as of the date of the submittal of the permit application; this level becomes the baseline concentration. Each subsequent major source applicant must calculate the ambient air quality impact of all NO_x emission changes from major, minor, mobile and area sources since the previous major source permit application. Guidance for States to consider in developing procedures for developing and maintaining inventories of NO_x emissions from major, minor, mobile and area sources are currently under development.

10. The following questions concern source shutdowns:

a. If a source is shut down before the baseline date, will it be subject to the NO₂ increment analysis if it restarts between February 8, 1988 and November 17, 1990?

b. If a source shuts down before the baseline date and then restarts after November 17, 1990, will it be subject to the NO₂ increment analysis?

c. If a source shuts down after the baseline date, but before November 17, 1990 (and restarts after November 17, 1990), will it be subject to the NO₂ increment analysis?

For all of the above cases, a new permit would be needed if the shut down is considered to be permanent under EPA policy (expired or rescinded permit, no longer in inventory, or torn down). In that eventuality, the source "restart" would be considered a new source and an NO₂ increment consumption analysis would be required. If, however, for cases "a" and "b", the "shutdown" was considered temporary (e.g., it remained on the State's emission inventory), EPA would not require the source to do an NO₂ increment consumption analysis, since it is not a new or modified source.

When an existing major source shuts down (e.g., no valid operating permit) after the baseline date (February 8, 1988), as in case "c", it expands available increment. When that source is restarted it consumes increment and, at least in those States which have an approved SIP or a delegated program in place, an NO₂ increments analysis would be required.

11. If a source submitted an application before November 17, 1990, and the application was considered complete before that date (assuming the permit will be issued after that date), is this source subject to the NO₂ increment analysis?

Since States can adopt and implement the program prior to November 17, 1990, the answer will vary depending on Federal and State requirements and

when they went into effect. For example, if a State's requirements went into effect on January 1, 1990 and the source submitted its complete permit application on March 1, 1990, it would be subject to the NO₂ increment rules. Sources are required by EPA to submit NO₂ increment consumption analyses for permit applications which are completed after November 17, 1990 or the date the State SIP (or delegation agreement) is approved, whichever is earlier. States may require NO₂ increment consumption analyses prior to approval of their SIP's or delegation agreements, and they are encouraged to do so.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

DAVID

7/14/89 -> Lopez - SR
Dennis - see if 6.28 ft
lth on BB
Din - pls review -
of concerns.

gm
ant
H

August 25, 1989

REPLY TO: 6T-AN

MEMORANDUM

SUBJECT: Texas Air Control Board (TACB) Inquiry Regarding Allowable Emissions in PSD NAAQS Analyses

FROM: *for* William B. Hathaway *W. B. Hathaway*
Director
Air, Pesticides & Toxics Division (6T)

TO: John Calcagni
Director
Air Quality Management Division (MD-15)

I have attached for your information a recent letter from TACB that discusses the implications of your March 16, 1989, memorandum that clarified the use of Guideline on Air Quality Models (Revised) Table 9-1 emissions in PSD NAAQS analyses. I have also included my reply to TACB.

No specific response to this memo is expected, but I do encourage your attention to point three in TACB's letter, which discusses the implications of the March 16 memo on inventorying baseline sources. I believe that this calculation of "potential to emit" may be required in many states.

Should you have questions or comments, please call me or have your staff call Jim Yarbrough. Thank you.

Attachments

cc: William Laxton (MD-14)

AUG 28 1989

AUG 25 1989

REPLY TO: 6T-AM

Mr. Steve Spaw, P.E.
Deputy Executive Director
Texas Air Control Board (TACB)
6330 Highway 200 East
Austin, Texas 78723

RE: Your August 3, 1989, Letter About Allowable Emissions in Prevention of Significant Deterioration (PSD) Modeling for National Ambient Air Quality Standards (NAAQS)

Dear Mr. Spaw:

Thank you for your August 3, 1989, letter providing the TACB's viewpoints on John Calcagni's recent decision about the use of allowable emissions in NAAQS analyses. I would like to respond to the points you raised in your letter in the order you presented them.

First, you mentioned that the change to allowable emissions in modeling background sources represents "a significant change in the PSD rules." Based upon input from my staff, I believe that the use of allowables does not signal a change in the PSD regulations; instead, it changes the 1980 PSD Workshop Manual (which itself is currently being revised), which was designed as an implementation aid and was not subjected to public comment before its release. For Texas PSD applicants, I believe that the change from the use of actuals to allowables in PSD NAAQS analyses was neither disruptive nor surprising. Since at least early 1988, Region 6 has commented to PSD applicants that emissions as noted in Table 9-1 of the Guideline on Air Quality Models (Revised) or allowable emissions must be used in PSD NAAQS analyses. In fact, most PSD applicants had been using allowables in modeling background sources (both for NAAQS and PSD increments) before that time. Further, I understand that State permit modeling requires the use of allowable emissions for background sources in determining compliance with air quality standards.

Thus, given the nature of the Workshop Manual as an aid (not a regulation), the length of time Region 6 advised TACB of the need for this change prior to my May 9, 1989, letter, the rationale provided in John Calcagni's March 16, 1989, memo (previously forwarded to TACB), and the provisions of my May 9, 1989, letter, I believe that this decision does not constitute a change in the PSD program of the type necessary to warrant federal rulemaking procedures.

Second, you said the use of allowable emissions is inconsistent with the Alabama Power court case results. Based upon my staff's analysis of your discussion and the Alabama Power case, I do not believe the use of allowable emissions for PSD source modeling is restricted by the Alabama Power decision. In your August 3 letter (page 2) the statement is made "The sum of the baseline and PSD increment should equal the value that is compared to the NAAQS." I disagree and I believe this is one source of confusion in this complicated issue. In PSD modeling the NAAQS should be compared against the total air quality. The total air quality is the sum of concentrations due to current point sources (including those explicitly modeled using emissions as defined in Table 2-1 of the Guideline and those not modeled), concentrations due to current area and mobile sources, concentrations due to natural sources and the predicted concentrations resulting from the applicant's proposed new emissions. Because total air quality is dependent upon modeled results, the emission inputs to the modeling influence the total air quality. John Calcagni's March 10, 1989 memo recognized the correctness of applying Guideline Table 2-1 (i.e., allowable) emissions over actual emissions in calculating total air quality. I believe it is based upon similar logic to that behind the Texas policy for air quality standards -- namely requiring emissions inputs as near to legally allowable emissions as practicable.

Third, you made the point that this action would increase workload requirements for regulatory agencies. The Region 6 - TACB discussions are proceeding on the most efficient way to estimate "potential to emit" for baseline sources and to incorporate these numbers into TACB's Point-Source Data Base System (PSDB). This is a necessary step to realize full application of John Calcagni's March 10 memo. However, I do not believe this is a decisive issue in halting use of allowable emissions for all affected (i.e., including non-baseline) sources. Please note that I remain interested in identifying a mutually agreeable way to compile such a "potential to emit" data base, and I appreciate your comment.

Fourth, you mentioned that this decision will have a significant impact on the regulated community. As our staffs have discussed several times, it is not our intention to unfairly restrict further growth in industrialized areas of Texas. However, in a PSD modeling analysis it is necessary to compute a total air quality concentration that is a reasonable reflection of what explicitly modeled background sources can legally emit. John Calcagni's March 10, 1989 memo relates these specifics. Because many Texas PSD sources in industrialized areas of the State have provisions for burning fuel oil but rarely if ever do so, I suggest that a plan be proposed that industry agree to a reduction in its permitted emissions of (in this case) sulfur dioxide. This will decrease the probability that a NAAQS violation will be modeled in a PSD analysis. Finally, although I can appreciate the reference in your August 3 letter (page 3) to page 52710 of the August 7, 1988, Federal Register, this passage relates to calculating increment consumption and not total air quality to compare against a NAAQS.

I hope this conveys additional information regarding the region's policy in applying guideline table 2-1 missions in PSE mixing modeling. Additional discussions will be pursued by our staffs in an effort to effect this policy as smoothly and equitably as possible. Please do not hesitate to call me with any further questions you may have.

Sincerely yours

Original signed by: Gerald Fontana

William B. Hathaway
Director
Air Pesticides & Toxics Division (CT)

TEXAS AIR CONTROL BOARD

6330 HWY. 290 EAST, AUSTIN, TEXAS 78723, 512/451-5711

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August 3, 1989

Mr. William B. Hathaway
Director
Air, Pesticides and Toxics Division (6T)
U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202

Re: Clarification of Use of
Allowable Emissions

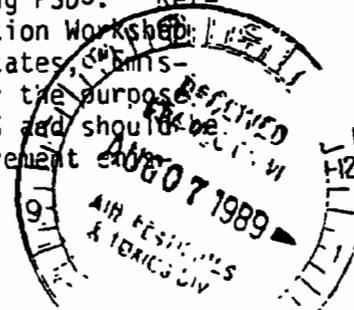
Dear Mr. Hathaway:

This is in response to your letter of May 9, 1989 regarding the use of allowable emissions in Prevention of Significant Deterioration (PSD) National Ambient Air Quality Standards (NAAQS) analyses.

The Texas Air Control Board (TACB) staff has conducted a preliminary review of the March 16, 1989 memo from Mr. John Calcagni on Use of Allowable Emissions for NAAQS Impact Analyses Under the Requirements for PSD. We believe it would be appropriate for the Environmental Protection Agency (EPA) to go through proper federal rulemaking procedures before moving from the use of actual emissions to the use of allowable emissions for the NAAQS analysis performed in PSD permit review. There are four primary reasons we believe this would be appropriate:

- (1) The use of allowable emissions represents a significant change in the PSD rules.

The PSD regulations at 40 CFR 52.21(k) state that, "All estimates of ambient concentrations required under this paragraph shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models (Revised)" (1986), which is incorporated by reference." Page 1-1 of the "Guideline on Air Quality Models (Revised)" (GAQM) states, "This guideline recommends air quality modeling techniques that should be applied to State Implementation Plan (SIP)1 revisions for existing sources and to new source reviews2, including PSD3." Reference 3 is the "Prevention of Significant Deterioration Workshop Manual, 1980" (Manual). Page I-C-20 of the Manual states, "Revisions inventories for the last two categories are for the purpose of demonstrating compliance with the applicable NAAQS and should be gathered and compiled in a similar manner to the increment



[Handwritten signature]

August 3, 1989

sions inventory. For existing sources, this inventory should be based on actual emissions if data are available." The "last two categories" of emission inventories refers to inventories of (1) existing emission sources, and (2) permitted sources which are not yet operating. This is a clear statement that actual emissions should be used for the NAAQS analysis. To change to the use of allowable emissions for the NAAQS analysis, the Manual should be changed and since it is referenced in the GAQM which is incorporated in the PSD regulations by reference, the only proper process for making this change is to follow the appropriate federal rule-making procedures.

- (2) The use of allowable emissions represents a significant departure from the PSD program's reliance on actual emissions consistent with the Alabama Power court case.

We believe that the general import of the PSD rules as established consistent with the Alabama Power court case clearly indicates that the NAAQS analysis should be performed with actual emissions. The comments in the Federal Register (FR) of August 7, 1980 state that the baseline and PSD increment should be determined with actual emissions. Furthermore, the baseline should be established with monitoring data, which reflects actual emissions. Specifically on page 52718 of the August 7, 1980 FR, "Increment consumption or expansion is directly related to baseline concentration. Any emissions not included in the baseline are counted against the increment. The complementary relationship between the "baseline" and "increment" concepts supports using the same approach for calculating emissions contributions to each. Since the Alabama Power decision and the statute both provide that actual air quality be used to determine baseline concentrations, but provide no guidance on increment consumption calculations, EPA has concluded that the most reasonable approach, consistent with the statute, is to use actual source emissions, to the extent possible, to calculate increment consumption or expansion." The sum of the baseline and PSD increment should equal the value that is compared to the NAAQS. If both parts of the sum are to be determined with actual emissions, the only logical conclusion is that the sum should be determined with actual emissions. Thus, it is inconsistent and contrary to the intent of the August 7, 1980 FR and the Alabama Power court case to use allowable emissions to calculate the concentrations to be compared to the NAAQS while performing the air quality review for PSD permits.

- (3) The use of allowable emissions would impose a significant increased workload on state (or federal) regulatory agencies.

The Point Source Data Base (PSDB) maintained by the TACB contains permit allowable emissions and actual emissions. For sources that are not permitted, it does not contain the value for the "potential to emit" which is the only interpretation for allowables for these

Mr. William B. Hathaway

-3-

August 3, 1989

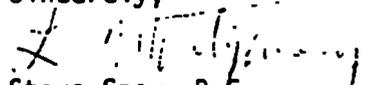
sources. "Potential to emit" would be the lower of: (1) the highest emission rate the source could emit without undertaking a modification requiring a state or federal permit, or (2) the emission rate limitation established consistent with state or federal rules applicable to the source. To collect this data for the PSD, the TACB would have to conduct an extensive inventory of all non-permitted sources in Texas. This would be an expensive and time-consuming effort that would need to be addressed through grant negotiations. Furthermore, this would increase the resources required in evaluating each PSD permit application which should also be addressed through grant negotiations. Federal rulemaking procedures would allow all affected parties the chance to comment on the resource impacts of this requirement and for those impacts to be considered in establishing the final rules. As discussed at our meeting on June 7, 1989, we are preparing resource estimates to assist both agencies in examining this issue.

- (4) The use of allowable emissions may have a significant impact on the regulated community which should be considered through the rule-making process.

The result of moving to allowable emissions will be that it may not be possible to issue PSD permits involving increases in sulfur dioxide emissions in large areas of Harris, Galveston, Jefferson, Orange and Nueces counties. This is based upon a study performed by Radian Corporation for the TACB in 1978 which showed large areas exceeding the NAAQS in these counties if the sources were modeled at permit allowable emissions. This result is in direct conflict with the quote on page 52718 of the August 7, 1980 FR, "EPA believes it is unwise to restrict source growth based only on emissions a source is permitted to emit but which in many instances have not been and are not likely to ever be emitted." Federal rulemaking procedures would allow all interested parties the chance to comment on the impact of these proposed changes.

We look forward to resolving this matter as part of our current dialogue regarding PSD permitting matters.

Sincerely,


Steve Spaw, P.E.
Deputy Executive Director

cc: Mr. Robert E. Layton, Jr., Regional Administrator, U.S.
Environmental Protection Agency, Region 6, Dallas



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

11/24/89
Copies to: 6.29
Ed Zeller
David

OCT 17 1989

MEMORANDUM

SUBJECT: Ambient Air

FROM: Robert D. Bauman, Chief *Bob*
SO₂/Particulate Matter Programs Branch (MD-15)

TO: Gerald Fontenot, Chief
Air Programs Branch, Region VI (6T-A)

My staff and I have discussed the ambient air case outlined in the August 24, 1989 memorandum from Jim Yarbrough of your staff to Doug Grano of my staff. Specifically, Region VI and the Texas Air Control Board propose that prevention of significant deterioration (PSD) modeling for Mitsubishi Industries can discount the contribution of a background source to the predicted concentration as follows:

1. Assume Mitsubishi and background plants B and C.
2. Mitsubishi and plants B and C are modeled and total concentrations are estimated.
3. Where a receptor is located on plant B's nonambient air property, the contribution from plant B (only) may be subtracted from the total concentration.

This situation is similar to a case raised to OAQPS's attention in 1987 by Region V. Guidance on this case was provided by OAQPS to Region V in a memorandum dated April 30, 1987 (attached). That guidance is consistent with your proposed approach and, therefore, we agree with your position.

However, the State should be advised that, when modeling Mitsubishi, all receptors off Mitsubishi property are in ambient air and that the ambient air policy does not allow sources to excessively pollute their neighbors. Note that a background source could, in the future, change their operation and make portions of their property accessible to the public. Care should be taken to avoid situations that could result in undue exposure to excessive concentrations and which could result in adverse public health impacts.

In response to your position on issuance of the permit where Mitsubishi makes a significant contribution to predicted violations of either the national ambient air quality standards (NAAQS) or PSD increments, policy contained in the July 5, 1988 memorandum from OAQPS to Region 3 should be

applied (attached). For a new or existing NAAQS violation, the permit may be granted under specific conditions. However, for any increment violation for which the proposed source has a significant impact, the permit should not be approved unless the increment violation is corrected prior to operation of the proposed source.

If you have any questions regarding this memorandum, please call Doug Grano at FTS-629-5255.

Attachments

cc: Air Branch Chief, Regions I-V, VII-X
SO₂ Contacts

bcc: John Calcagni
Dan deRoeck
✓ Gary McCutchen
Joe Tikvart
Dean Wilson
Jim Yarbrough
Regional Modeling Contact, Regions I-X

6.30 DATE: January 2, 1990
SUBJECT: Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring
FROM: John Calcagni, Director, Air Quality Management Division
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: An increase in stack height can be considered as part of a proposed modification whether or not it is physically tied to the emissions unit(s) being constructed or modified. The stack height increase must be proposed in conjunction with the overall modification. Thus, any creditable air quality improvements resulting from the higher stack should be considered in the preliminary modeling analysis. Note that for a height greater than 65 meters to be fully creditable as the GEP stack height, it must be established in a manner consistent with the stack height rules.
CR: 4.46 [Hard Copy]; 7.9

6.31

6.31 DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have
Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department
of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD
permits in areas with modeled violation(s) both to sources with no
significant impacts and to sources with significant impacts. In
the latter case, procedures for processing the associated SIP
revisions are also discussed.
CR: 10.49 [Hard Copy]; 12.17; 15.11

7. PSD

Ambient Monitoring/Analysis

7.8 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others
DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.

1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
2. Unregulated pollutants (Denied)
3. Prescribed emission limits for entire life of the permit (Remanded)
4. BACT for PM (Remanded)
5. Ambient Air and Public access (Remanded)
6. BACT for CO (Denied)
7. Preconstruction monitoring (Denied)

CR: 8.39 [Hard Copy]; 10.43; 11.13

7.9 DATE: January 2, 1990
SUBJECT: Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring
FROM: John Calcagni, Director, Air Quality Management Division
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: An increase in stack height can be considered as part of a proposed modification whether or not it is physically tied to the emissions unit(s) being constructed or modified. The stack height increase must be proposed in conjunction with the overall modification. Thus, any creditable air quality improvements resulting from the higher stack should be considered in the preliminary modeling analysis. Note that for a height greater than 65 meters to be fully creditable as the GEP stack height, it must be established in a manner consistent with the stack height rules.
CR: 4.45 [Hard Copy]; 6.30

8. PSD

BACT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

8.25
D. Davis

MAR 3 | 1988

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Transmittal of OAQPS Interim Control Policy Statement

FROM: John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Air Management Division Directors
Regions I, III and IX

Air and Waste Management Division Director
Region II

Air, Pesticides and Toxics Management Division
Directors
Regions IV and VI

Air and Toxics Division Directors
Regions VII, VIII and X

Air and Radiation Division Director
Region V

Attached is the final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. Comments solicited from the Air Compliance and Air Programs Branch Chiefs, OECM, and SSCD by a memorandum of January 20, 1988, have been addressed, resulting in a few minor language clarifications and one change to the policy.

The change resulted from a comment on the requirement to maintain existing controls in the interim. In lieu of maintaining the operation of the existing control equipment during the interim period, allowance has been made for installing interim controls which may be more effective in reducing emissions. The usage of interim controls may not result in a delay of the installation of the final control equipment.

Also, clarification has been made concerning the installation of redundant equipment on new control systems. Design requirements mentioned in this policy apply to those sources which require continuous operation of the process equipment. Temporary shutdown during maintenance periods is always a possible compliance alternative to adding redundant control equipment. The policy now states this specifically.

One notable recommended change has not been included. The comment was made that performance bonds should not be applied to activities which may be beyond the control of the source, such as the delivery of materials. Installation of control equipment frequently involves the activities of several contractors and requires careful scheduling to avoid delays. Late delivery of equipment can have a serious adverse effect on the ability of a source to meet a tight installation schedule. A source must take the necessary steps to select the most reliable, rather than the lowest cost vendor, to ensure that schedules are met.

Thank you for your assistance with the development of this policy statement. If you have questions concerning it, please contact Pam Saunders of my staff at FTS 382-2889, EMail EPA6264.

Attachment

INTERIM CONTROL POLICY

PURPOSE

The purpose of this policy is to provide uniform criteria for developing final compliance requirements, schedules, and interim requirements for sources in situations where failing, deteriorating or inadequate air pollution control equipment must be replaced or upgraded.

APPLICABILITY

This policy applies to situations where a determination to rebuild or replace existing control equipment has been made. Situations mentioned in this policy may also be subject to applicable civil penalties as stated in the Civil Penalty Policy.

OBJECTIVES

The objectives of this policy are to require subject sources to:

1. Minimize and continuously monitor emissions during the interim period;
2. Attain final and continuing compliance as quickly as feasible using all available means;
3. Maintain continuous compliance in the future by appropriate design of the final control system, including the continuous monitoring of excess emissions.

POLICY

INTERIM MEASURES

Interim measures combined with continued operation and maintenance of existing controls must be required wherever existing controls are inadequate. During the interim period until the new or upgraded control equipment is operational and the source is in compliance, emissions from the source must not be allowed to increase. The existing though inadequate control equipment must remain operational to the maximum extent possible, including being maintained and

repaired, until such time that construction or tie-in of new equipment requires its shutdown or removal. In lieu of maintaining the existing though inadequate control equipment, interim controls which offer a higher degree of emission reduction and are readily and reasonably available may be installed. The use of such interim controls shall not unduly delay the installation of final control equipment.

When existing control equipment must be taken off line to tie-in or complete construction of new or upgraded equipment, additional interim controls or other interim measures are required to ensure no increase in excess emissions occurs during the tie-in period. Such measures may include installation of additional temporary control equipment or operational controls, e.g., curtailment of production rates, relocation of production to complying process lines or facilities, purchase of power or product elsewhere as needed, or temporary shutdown.

The source should be required to implement an interim continuous emissions monitoring program, to enable the agency to monitor the emissions performance of the source during the interim period.

COMPLIANCE REQUIREMENTS

All compliance schedules must contain specific milestones for design, construction, installation and operation of new or rebuilt control equipment.' The milestones should reflect the shortest feasible schedule for achieving compliance and should include, but not be limited to, the following:

1. Submittal of a control plan, including necessary permit applications, to agency;
2. Award of major contract(s) to vendors;
3. Delivery of materials or control equipment;
4. Initiation of off-site fabrication or on-site construction or installation of the control equipment;
5. Completion of installation or rebuilding of control equipment;

- 3 -

6. Testing and demonstration of final compliance by the source.

Performance bonds or stipulated penalties must be associated with every milestone specified in the schedule. To promote an expeditious schedule, the use of prefabricated equipment or the use of double or triple shifts for the construction or installation of equipment should be considered.

CONTINUOUS COMPLIANCE AND MONITORING REQUIREMENTS

A fundamental principle of this policy is that the source must make every possible effort to maintain continuous compliance after the new or rebuilt equipment becomes operational. To assure continuous compliance during future maintenance periods, all new or upgraded equipment must normally include spare compartments (or units) and parts (or equipment) that can maintain emissions at a compliance level while the remainder of the equipment is being replaced, repaired, or maintained. In lieu of this, those sources that do not require continuous availability of the process equipment may shut down during such periods.

To assure the ability of the agency to monitor continuous compliance in the future, the source must periodically report excess emissions to the appropriate air pollution control agency. This may be accomplished by requiring the installation, operation and reporting of data from continuous emissions monitoring equipment. These requirements are to be set out specifically in the compliance agreement.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 22 1988

OFFICE OF
AIR AND RADIATIONMEMORANDUM

SUBJECT: Interim Policy on Stack Height Regulatory Actions

FROM: J. Craig Potter *W. Ray Cunningham*
Assistant Administrator
for Air and Radiation (ARR-443)TO: Director, Air Management Division
Regions I, III, IX
Director, Air and Waste Management Division
Region II
Director, Air, Pesticides, and Toxics Management Division
Regions IV, VI
Director, Air and Radiation Division
Region V
Director, Air and Toxics Division
Regions VII, VIII, X

On January 22, 1988, the U.S. Court of Appeals for the District of Columbia issued its decision in NRDC v. Thomas, 838 F. 2d 1224 (D.C. Cir. 1988), regarding the Environmental Protection Agency's (EPA's) stack height regulations published on July 8, 1985 (50 FR 27892). Subsequent petitions for rehearing were denied. Although the court upheld most provisions of the rules, three portions were remanded to EPA for review:

1. Grandfathering pre-October 11, 1983 within-formula stack height increases from demonstration requirements [40 CFR 51.100(kk)(2)];
2. Dispersion credit for sources originally designed and constructed with merged or multiflue stacks [40 CFR 51.100(hh)(2)(ii)(A)]; and
3. Grandfathering of pre-1979 use of the refined H + 1.5L formula [40 CFR 51.100(ii)(2)].

A number of pending State implementation plan (SIP) and other rulemaking actions may be affected by this decision in advance of EPA's promulgation of further revisions of the stack height regulations. This includes not only rulemaking packages developed to respond to the 1985 stack height regulations, but also such actions as issuance of new source review (NSR) and prevention of significant deterioration (PSD) permits, permit modifications, SIP revisions

dealing with specific source emission limitations, and redesignations under section 107 of the Clean Air Act. Consequently, until resolution of litigation and completion of any rulemaking activity to respond to the court decision, the following policy will be applied.

In general, actions to approve States' rules may proceed provided appropriate caveat language is inserted which notes that the action is potentially subject to review and modification as a result of the recent court decision. Actions addressing State permitting authority should require States to provide notice that permits are subject to review and modification if sources are later found to be affected by revisions to stack height regulations. Where States currently have the authority to issue permits under fully-approved or delegated NSR and PSD programs, any permits issued prior to EPA's promulgation of revised stack height regulations should provide notice as described above that they may be subject to review and modification. Regional Office staff are requested to contact their State officials and notify them accordingly. Where EPA has retained authority to issue permits, it should also insert appropriate cautionary language in the permit.

The EPA will try to avoid taking source-specific actions that may need to be retracted later. Such actions may include certain emission limitations and good engineering practice demonstrations which reflect dispersion credit affected by the remand. The EPA may approve these State submittals on a case-by-case basis, with the explicit caution that they and the sources affected by them may need to be evaluated for compliance with any later revisions to the stack height regulations, as a result of the litigation. The EPA will continue to process, under normal procedures, any source-specific actions which do not involve the remanded provisions.

Requests for redesignation of areas from nonattainment to attainment which are affected by any of the remanded provisions of the stack height regulations will be put on hold until EPA has completed any rulemaking necessary to comply with the court's remand. This is due to the issue of whether EPA has authority to unilaterally change attainment designations.

During this interim period, the Regional Office staff should review with their States all regulatory actions involving dispersion credit and identify those actions or sources affected by the remanded provisions. The Region should consult with their States on appropriate action for all such packages, consistent with this policy.

If you have any questions regarding the application of this policy, please contact Doug Grano at FTS 629-0870 or Janet Metsa at FTS 629-5313.

cc: D. Clay
A. Eckert
J. Emison
D. Grano
J. Metsa

Attachment B

The following boilerplate, or variations tailored to suit particular situations, should be used in rulemaking actions affected by the stack height remand.

General Addition

"The EPA's stack height regulations were challenged in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). On January 22, 1988, the U.S. Court of Appeals for the D.C. Circuit issued its decision affirming the regulations in large part, but remanding three provisions to the EPA for reconsideration. These are:

1. Grandfathering pre-October 11, 1983 within-formula stack height increases from demonstration requirements [40 CFR 51.100(kk)(2)];
2. Dispersion credit for sources originally designed and constructed with merged or multiflue stacks [40 CFR 51.100(hh)(2)(ii)(A)]; and
3. Grandfathering pre-1979 use of the refined $H + 1.5L$ formula [40 CFR 51.100(ii)(2)]."

Addition for Stack Heights-Rules Packages

"Although the EPA generally approves [State's] stack height rules on the grounds that they satisfy 40 CFR Part 51, the EPA also provides notice that this action may be subject to modification when EPA completes rulemaking to respond to the decision in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). If the EPA's response to the NRDC remand modifies the July 8, 1985 regulations, the EPA will notify the State of [] that its rules must be changed to comport with the EPA's modified requirements. This may result in revised emission limitations or may affect other actions taken by [State] and source owners or operators."

Additions for Stack Negative Declaration Packages

"The EPA is not acting on _____ sources (identified in table form or by asterisk) because they currently receive credit under one of the provisions remanded to the EPA in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir 1988). The [State] and EPA will review these sources for compliance with any revised requirements when the EPA completes rulemaking to respond to the NRDC remand."

**Additions for Stack Height Emission Limitation Changes or
Good Engineering Practice Demonstration**

The OAQPS and OGC will provide language on a case-by-case basis when the EPA is acting on a source-specific package which is affected by the remand.

Language for Proposed NSR and PSD SIP Approvals

"Under this program, [State] will be issuing permits and establishing emission limitations that may be affected by the court-ordered reconsideration of the stack height regulations promulgated on July 8, 1985 (50 FR 27892). For this reason, EPA requires that the State include the following caveat in all potentially affected permit approvals until the EPA completes its reconsideration of remanded portions of the regulations and promulgates any necessary revisions:

'In approving this permit, [name of agency] has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised-emission limitations or may affect other actions taken by the source owners or operators.'

[State] must make an enforceable commitment to include this caveat in all affected permits before the EPA can take final action approving the [NSR or PSD] program."

Language for Final NSR and PSD SIP Approvals

"Under this program, [State] will be issuing permits and establishing emission limitations that may be affected by the court-ordered reconsideration of the stack height regulations promulgated on July 8, 1985 (50 FR 27892). For this reason, the EPA has required that the State include the following caveat in all potentially affected permit approvals until the EPA completes its reconsideration of remanded portions of the regulations and promulgates any necessary revisions:

'In approving this permit, [name of agency] has determined that the application complies with the applicable provisions of the stack height regulations as revised by the EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F.2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when the EPA revises the regulations in

response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators.'

[State] has made an enforceable commitment to include this caveat in all affected permits by letter dated [__]. This commitment is being incorporated into the Code of Federal Regulations for the State of [__] as part of EPA's approval action."

See Attachment D for sample CFR amendment.

The Regional Offices are requested to contact those States that currently have permitting authority and request that they include similar language in any permits issued until EPA has completed its reconsideration of the stack height regulations and has promulgated any necessary revisions.

Attachment C

<u>State</u>	<u>AQMD #</u>	<u>Description</u>	<u>Disposition</u>
AZ/CA/NV	3059	Promulgation of Stack Height Reqs.	HQ
AZ/CA/NV	3210	App. and Disapp. of Stack Height Req.	RO
SC	3243	Negative Declaration	RO
MS	3330	Mississippi's Negative Declaration	RO
NJ/NY/VI	3418	Stack Height Revisions	RO
WA	3480	Stack Height Rules	HQ
MD	3543	Negative Declaration	RO
AR	3548	Stack Height Rules	HQ
OH	3570	Stack Height Regulations	HQ
TX	3572	Stack Height Regulations	HQ
LA	3592	Revisions to Stack Height Rules	HQ
DE	3600	Stack Height Regulations	HQ
OH	3334	Redesignation of Galia County to Attainment	Hold
SD	3618	Administrative Rules	RO
CO	3623	Negative Declaration	RO



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

8.27

JUL 28 1988

MEMORANDUM

SUBJECT: Supplemental Guidance on Implementing the North County
Prevention of Significant Deterioration (PSD) Remand

FROM: *for* John Calcagni, Director *Kent Berry*
Air Quality Management Division (MD-15)

TO: Addressees

On September 22, 1987, Gerald Emison issued guidance on implementation of the Administrator's remand decision in the North County PSD permit appeal, PSD Appeal No. 85-2. That document sets forth, in general terms, the essence of the remand--that all pollutants, including those not directly regulated by the Clean Air Act are to be considered in making the best available control technology (BACT) determination for a PSD applicant. Now that the guidance is out, various issues beyond the scope of the September 22, 1987 document have arisen. I am addressing two of them. The first deals with the flexibility that the permitting authority has with respect to pollutants considered and controls selected, while the second involves the level of detail needed in the PSD public notice.

Consideration of Air Toxics in the BACT Determination

The BACT requirement is implemented through case-by-case decisionmaking. While this necessarily involves significant use of judgment by the permitting authority, certain policy presumptions apply: that it consider the full range of pollution control options available and choose the most effective means of limiting emissions, subject only to a showing of compelling reasons of economic or energy impracticality. Those are the important lessons underscored by the North County and H-Power remands. The presumption of employing a top-down BACT analysis was further emphasized in Craig Potter's memorandum of December 1, 1987, entitled "Improving New Source Review (NSR) Implementation," to the Regional Administrators. Other policy presumptions were articulated in the September 22, 1987 guidance requiring that the BACT determination for regulated pollutants be sensitized to the control of unregulated air pollutants (including air toxics).

The September 22, 1987 policy does not identify which toxic substances, require consideration in the BACT analysis, and at what levels. Among the reasons for this is that the information with respect to the type and magnitude of emissions of noncriteria pollutants for many source categories is limited.

For example, a combustion source emits hundreds of substances, but knowledge of the magnitude of some of these emissions or the hazard they produce is sparse. While the Environmental Protection Agency (EPA) is pursuing a variety of projects that will help permitting authorities to determine pollutants of concern, EPA believes it is appropriate for agencies to proceed on a case-by-case basis using the best information available. Thus, the determination of whether the pollutants would be emitted in amounts sufficient to be of concern is one that the permitting authority has considerable discretion in making. Reasonable efforts should be made to address these issues. The EPA expects these efforts to include consultation with the Regional Office and with the Control Technology Center (CTC), National Air Toxics Information Clearinghouse, and Air Risk Information Support Center in the Office of Air Quality Planning and Standards (OAQPS) and review of the literature, such as EPA-prepared compilations of emission factors. Source-specific information supplied by the permit applicant is often the best source of information, and it is important that the company be made aware of its responsibility to provide for a reasonable accounting of air toxics emissions.

Similarly, once the pollutants of concern are identified, the permitting authority has flexibility in determining the methods by which it factors air toxics considerations into the BACT determination, subject to the obligation to make reasonable efforts to consider air toxics. Consultation by the review authority with EPA's implementation centers, particularly the CTC, is again advised. One exception to this approach is where a municipal waste combustor is involved. Here, the OAQPS has provided rather detailed guidance regarding pollutants of concern and their control. (See memorandum of June 22, 1987, from Gerald Emison to EPA Regional Air Division Directors.) Similar guidance on other source categories will be developed as appropriate.

It is important to note that several acceptable methods, including risk assessment, exist to incorporate air toxics concerns into the BACT decision. Whatever the methods selected, these serve only to affect the selection of the control strategy. The overall approvability of a project once it applies BACT depends on other criteria, as well, and is outside the scope of the North County remand and this guidance.

Level of Detail in Public Notice

The September 22, 1987 guidance strongly emphasizes public participation. The purpose of the PSD public notice is to provide sufficient information as to the type of source involved, and its projected emissions and proposed controls, such that potentially interested citizens will be apprised of the main issues. Individuals wishing to investigate those issues in depth can turn to the technical support document. Our intent regarding air toxics is to provide the public with adequate notice of potential issues. The identification of specific toxic substances and the degree of detail in the notice should be consistent with the concern posed by air toxics.

For example, if there are no air toxics projected to be emitted in amounts sufficient to be of concern to the permitting authority, the notice

can be handled very simply. One way, but by no means the only way, of doing this would be to note that "the [permitting authority] also considered the impact of available control alternatives on emissions of other pollutants, including those not regulated by the Clean Air Act, in making the BACT determination, but found that no such pollutants would be emitted in amounts sufficient to cause concern."

When any toxic pollutants of concern have been identified, it is appropriate that the public be informed of them more directly. A variety of approaches is acceptable. Public notice requirements would be met if all these pollutants are mentioned individually, by name, or addressed by referring to them by groups (e.g., "toxic metals"). It might be reasonable to note the main representative pollutants (e.g., "the State has examined other pollutants of potential concern, including compounds A, B and C"). In short, the permitting authority can provide adequate notice in several ways, including the names of the pollutants at issue and an indication that the compounds are toxic. The notice can be quite brief on this subject (1-2 sentences), deferring any detailed analyses and discussion to the technical support document.

EPA Oversight

The EPA Regional Offices are now supporting State and local implementation of PSD review in virtually all cases and are charged with taking enforcement action, as necessary, to ensure proper implementation of the September 22, 1987 policy. Action is contemplated only where basic procedural steps are missed, such as appropriate public notice, or inclusion of discussion of relevant control alternatives in the technical support document, or where the substantive technical analysis is clearly inconsistent with general practice. Priority should be given to those cases in which there is a practical impact to any followup--for example, more effective and affordable controls were not considered.

The OAQPS is taking steps to facilitate continuing effective implementation of this policy. One step toward this goal is the recent addition of this policy in reviews of PSD permits under the National Air Audit System.

Thank you for your progress in carrying out this significant regulatory requirement. If you need further assistance, please contact Michael Trutna at FTS 629-5345 or Kirt Cox at FTS 629-5399.

Addressees:

Director, Air Management Division, Regions I, III, and IX
Director, Air and Waste Management Division, Region II
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Air, Pesticides, and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, and X

cc: Air Branch Chiefs
New Source Review Contacts
Air Toxics Coordinators
OAQPS Division Directors
G. Emison
J. O'Connor
E. Lillis
G. McCutchen
M. Trutna
K. Cox

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:)

Pennsauken County, New Jersey)
Resource Recovery Facility)

PSD Appeal No. 88-8

REMAND ORDER

In separate petitions filed pursuant to 40 CFR §124.19 (1987), ^{1/} the Township of Cinnaminson et al. ^{2/} and Robert Filipczak requested review of a Prevention of Significant Deterioration (PSD) permit issued to the Pennsauken Solid Waste Management Authority for construction of a municipal waste combustor. The permit determination was made by the New Jersey Department of Environmental Protection (NJDEP) pursuant to a delegation of authority from EPA Region II, New York, New York. Because of the delegation, NJDEP's permit determination is subject to the review provisions of 40 CFR §124.19, and any permit it issues will be an EPA-issued permit for purposes of federal law. 40 CFR §124.41; 45 Fed. Reg. 33,413 (May 19, 1980).

^{1/} All references to the Code of Federal Regulations are to the 1987 edition.

^{2/} The Township of Cinnaminson is joined in the petition by the Borough of Palmyra and the Borough of Riverton, which are municipalities located in Burlington County, New Jersey, and by Allied Citizens Opposing Pollution (ACOP), a civic association.

Under the rules governing this proceeding, there is no appeal as of right from the permit decision. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Region level * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioners.

Discussion

Cinnaminson et al. object to issuance of the permit because they believe NJDEP's determination of best available control technology (BACT) is deficient. ^{3/} According to these petitioners, NJDEP did not give adequate consideration to thermal de-NO_x

^{3/} To obtain a PSD permit, the applicant must demonstrate that the proposed facility will employ BACT for each regulated pollutant. Section 169 of the Clean Air Act defines BACT as an "emission limitation reflecting the maximum degree of reduction" that the "permitting authority," on a "case-by-case basis, taking into account energy, environmental, and economic impacts and other costs" determines is "achievable." 42 U.S.C. §7479(3). Because BACT is determined on a case-by-case basis and takes into account energy, environmental, and economic impacts and other costs, which may vary from location to location, a BACT determination for a municipal waste combustor at one site may differ from one reached at another site, even though the technology employed may be identical. In other words, the emission limitations for the sites can differ.

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technology in performing the BACT analysis. Petitioners argue that NJDEP's determination not to set an emission limitation based on thermal de-NO_x technology was based on an inadequate record, resulting in part from NJDEP having made its BACT determination prior to the time of permit issuance. Petitioners also argue that the BACT analysis submitted by the permit applicant did not adequately justify use of combustion controls (the means chosen by the applicant for controlling NO_x emissions from the proposed facility) instead of thermal de-NO_x technology. NJDEP responded to these contentions by arguing that the record actually discloses that the BACT determination was made at the time of permit issuance; that the permit applicants' BACT evaluation fully evaluates alternative control technologies, including thermal de-NO_x technology; and that thermal de-NO_x technology is not yet "available" within the meaning of the statutory definition of BACT. Regarding the last point, NJDEP stated that there was just one facility in the United States (the Commerce facility in Whittier, California) employing thermal de-NO_x technology, and that it had been in operation only one year; that there is just one facility currently under construction (in Modesto, California); and that a third (in Long Beach, California) began operations after the Pennsauken permit was issued and therefore could not have been considered at the time of permit issuance. With respect to these facilities, NJDEP says they were reviewed

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under legal standards ^{4/} and NO_x control strategies ^{5/} not pertinent to the Pennsauken facility.

An examination of the materials identified by NJDEP as representing the NO_x BACT analysis ^{6/} generally bears out petitioners' contention that the BACT analysis on which NJDEP relied is inadequate. Specifically, the record fails to disclose that the applicant met its burden of showing that an emission limitation based on combustion controls alone represents BACT. The basic attributes of that burden are set out in Honolulu Resource Recovery Facility ("H-Power"), PSD Appeal No. 86-8 (June 22, 1987), where I interpreted the statutory definition of BACT as placing the burden on the applicant of "demonstrating that signi-

^{4/} NJDEP points out that the South Coast Air Quality Management District in California (SCAQMD) treats NO_x as a non-attainment pollutant requiring lowest achievable emission rate (LAER). In point of fact, however, one of the three facilities (Modesto) is located in an area that is attainment for NO_x, and EPA issued a PSD permit for it with a BACT limitation based on thermal de-NO_x. EPA Region IX issued the permit on August 11 1986. Telephone conversations between Ronald L. McCallum, EPA Chief Judicial Officer, and Bob Baker, EPA Region IX (October 5 and November 11, 1988).

^{5/} According to NJDEP, the Commerce facility was permitted under California rules as innovative technology, and all of the facilities are in locations where NO_x emissions fall under the South Coast Air Quality Management District's (SCAQMD's) control strategy for ozone. Conversely, New Jersey focuses on volatile organic compounds (VOC's) for its ozone control strategy.

^{6/} See Final Environmental and Health Impact Statement ("FEHIS"), Volume I, at 5-36 through 5-56 (Jan. 1987); FEHIS Response to Comments, Volume I at 211-213 (June 1987); Hearing Officer's Report at 226 (June 30, 1988).

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ficant technical defects, or substantial local economic, energy, or environmental factors or other costs warrant a control technology less efficient than [the most stringent available technology]." *Id.* at 7, 6 n.9. This interpretation was disseminated in operational guidance for municipal waste combustors on June 26, 1987, ^U and was further refined in general guidance issued by EPA's Assistant Administrator for Air and Radiation on December 1, 1987. The latter guidance refers to the applicant's burden as the "top-down" approach to BACT analysis:

The first step in this approach is to determine, for the emission source in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental or economic objections. Thus, the "top-down" approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available. It also differs from other processes in that it requires the applicant to analyze a control technology only if the applicant opposes that level of control; the other processes required a full analysis of all possible types and levels of control above the baseline case.

The "top-down" approach is essentially required for municipal waste combustors pursuant to the June 22, 1987, Administrator's remand to Region IX of the H-Power BACT decision and the OAQPS June 26, 1987, "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors (MWC's)." It is also currently being successfully implemented by many permitting agencies and some of the

^U Memorandum from Gerald Emison, Director, EPA Office of Air Quality Planning and Standards (OAQPS) to EPA Regional Air Office Directors, enclosing "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors."

Regional Offices for all sources. I have therefore determined it should be adopted across the board. ^{9/}

The H-Power decision, the operational guidance for municipal waste combustors, ^{9/} and the "top-down" guidance are all applicable to the Pennsauken permit determination. H-Power was my direct administrative interpretation of the statutory BACT requirement; the subsequent operational guidance and "top-down" guidance implement H-Power through statements of Agency policy. All three documents antedate issuance of the permit. ^{10/} These

^{9/} Memorandum from J. Craig Potter, Assistant Administrator, to Regional Administrators (Regions I-X) at 4 (Dec. 1, 1987) (the Potter Memorandum).

^{9/} The Operational Guidance expressly states that it applies to all PSD permits issued through State and local agencies pursuant to delegation agreements made under 40 CFR §52.21(u), except where a final permit was issued and administrative appeals under 40 CFR Part 124 were exhausted prior to June 26, 1987. Operational Guidance at 7; see also 52 Fed. Reg. 25399, 25406 (July 7, 1987); 52 Fed. Reg. 47826 (December 16, 1987). The "top-down" guidance contains statements to the same effect. Potter Memorandum 4.

^{10/} The chronology of the Pennsauken permit is as follows: the permit application was filed in January 1987; it was supplemented with a BACT analysis for NO_x in June 1987 (including an evaluation of thermal de-NO_x technology); NJDEP completed its BACT assessment in December 1987; hearings were held and public comment was solicited in January-February 1988, in which commenters questioned the absence of an NO_x emission limitation based on application of thermal de-NO_x technology; and lastly, the permit was issued in July 1988, specifically rejecting thermal de-NO_x as representing BACT for this facility.

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interpretations and policy statements were therefore available to the applicant and NJDEP for the Pennsauken permit. ^{11/}

The permit applicant's burden of showing that a more stringent technology is not BACT obviously does not come into existence unless the so-called "more stringent" technology is available. If the technology is not available, the permit applicant is under no duty to consider it in the BACT analysis. Here, NJDEP contends that thermal de-NO_x technology is not available; however, there is nothing of substance in the applicant's BACT analysis to bear out this contention. If anything, it is

^{11/} As a practical matter, BACT determinations will ordinarily be made at some time prior to actual issuance of the permit, for there is always a lag between closure of the administrative record (usually the close of the public comment period) and the time when the permit determination is announced. As noted in Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978), quoting ICC v. Jersey City, 332 U.S. 503 (1944):

Administrative consideration of evidence * * * always creates a gap between the time the record is closed and the time the administrative decision is promulgated [and, we might add, the time the decision is judicially reviewed] * * *. If upon the coming down of the order litigants might demand rehearings as a matter of law because some new circumstance has arisen, some new trend has been observed, or some new fact discovered, there would be little hope that the administrative process could ever be consummated in an order that would not be subject to reopening.

435 U.S. at 554-55; see Nance v. EPA, 645 F.2d 701 (9th Cir. 1981) (quoting Vermont Yankee supra).

Absent unusual delay between the close of the public comment period and the date of permit issuance, or the presence of other extraordinary circumstances, the close of the public comment period can be used as the reference by which the adequacy of the administrative record is judged.

refuted by reference to the Commerce facility, which was in existence and operating during NJDEP's review of the permit application, and by reference to the evident willingness of the Modesto and Long Beach applicants to commence construction of their municipal waste combustors during the same period of consideration. The fact that these projects were undertaken to comply with allegedly different legal requirements (LAER or California rules) and different control strategies is not especially material to the issue of availability.^{12/} The question of availability for purposes of BACT is a practical, factual determination, using conventional notions of whether the technology can be put into use.^{13/} The record here raises a strong presumption in favor of concluding that thermal de-NO_x technology is available in the sense just described. The operational guidance, issued June 26, 1987, also treats thermal de-NO_x technology as an available technology that "should be considered by permitting authorities in making BACT determinations." Operational Guidance at 6. In short, the applicant's BACT analysis must evaluate thermal de-NO_x as an available technology.

The applicant's BACT analysis, however, does not contain the level of detail and analysis necessary to satisfy the applicant's

^{12/} See notes 4 and 5 supra.

^{13/} The dictionary defines the word "available" as that which can be "used," or is "usable," or can be "got, had, or reached; * * * accessible." Webster's New World Dictionary of the American Language 96 (2d College ed. 1972).

burden, as previously described, of showing that thermal de-NO_x technology is technically or economically unachievable for this source. The applicant's assertions that the technology has not yet been demonstrated to be efficient, ^{14/} reliable, and cost effective in controlling NO_x are merely conclusory. ^{15/} Moreover, they were made in a January 1987 submission and are undoubtedly out-of-date in view of the rapid developments in the application of this technology. Although the BACT analysis shows control costs in the range of \$1300-1500 per ton of NO_x removed, ^{16/} there is no serious discussion of cost effectiveness. For example, the applicant estimated annual costs of removing NO_x at \$200,000 to \$250,000 using thermal de-NO_x technology. FEHIS (Response to Comments) at 212 (Table 16.1-1). However, there is no discussion that even purports to show that these costs are unusually high. Greater efforts must be made by the applicant to show that thermal de-NO_x is economically infeasible or otherwise not achievable in this case. This might be done, for example, by

^{14/} The applicant's own submissions refute this contention. According to the applicant, NO_x emissions for the proposed facility would be 88.9 lb/hr using combustion controls compared with 35.6 to 62.2 lb/hr using thermal de-NO_x technology. FEHIS Response to comments 211-212 (Table 16.1-1 (June 1987)). Pollutant reductions of this magnitude are clearly significant.

^{15/} See FEHIS at 5-48.

^{16/} When operated at the peak fuel feed rate of 500 tons per day, for 365 days per year, the total annual emissions of NO_x at the proposed facility are estimated at 389.3 tons. FEHIS at 5-37 (Table 5.3-3).

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obtaining and analyzing operating data and other information from the Commerce facility -- and perhaps also from the Long Beach facility, which recently commenced operations. H-Power and EPA's guidance implementing that decision contemplate a much more thorough explanation, based on consideration of objective technical and economic data, to substantiate the contention that thermal de-NO_x is an experimental, unproven technology. In sum, the BACT analysis does not contain sufficient justification, specific to the proposed facility, to justify the level of control proposed in the permit. More detail and analysis is required.

Petitioner Robert Filipczak's fundamental objections to the Pennsauken permit are not with the control technology, but rather, with the municipal waste combustor itself. He urges rejection of the combustor in favor of co-firing a mixture of 20% refuse derived fuel and 80% coal at existing power plants. These objections are beyond the scope of this proceeding and therefore are not reviewable under 40 CFR §124.19, which restricts review to "conditions" in the permit. Permit conditions are imposed for the purpose of ensuring that the proposed source of pollutant emissions -- here, a municipal waste combustor -- uses emission control systems that represent BACT, thereby reducing the emissions to the maximum degree possible. These control systems, as stated in the definition of BACT, may require application of "production processes and available methods, systems, and techniques, including fuel cleaning as treatment or innovative

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fuel combustion techniques" to control the emissions. 42 U.S.C.A. §7479(3). The permit conditions that define these systems are imposed on the source as the applicant has defined it. Although imposition of the conditions may, among other things, have a profound effect on the viability of the proposed facility as conceived by the applicant, the conditions themselves are not intended to redefine the source, as petitioner Filipczak would have them do. In other words, the source itself is not a condition of the permit. Therefore, petitioner's objections to the permit are not within the scope of this proceeding. Other matters raised by petitioner that are arguably within the scope of the proceeding, for example, the adequacy of the BACT analysis as it relates to mercury emissions and removal of metals as a fuel cleaning procedure, have not been presented in a manner to convince me that NJDEP committed clear error or that an important issue warranting review has been raised at this time. Therefore, the petition is denied.

Conclusion

The deficiencies in the BACT analysis leave two courses of action open at this juncture of the proceedings. One is to grant review of the permit and enter into the briefing phase contemplated by 40 CFR §124.19(c). However, the deficiencies in the record can not be rectified through the submission of briefs, and any ensuing decision would likely conclude that the permit should be denied (because of the deficiencies) or that it should be remanded to the permit-issuing authority to allow the ap-

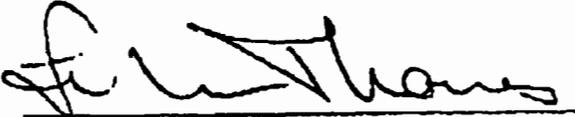
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plicant to supplement the BACT analysis. Considerations of time favor remanding the permit in the first instance. Therefore, rather than receiving additional briefs on appeal, I am remanding the case to NJDEP for further consideration of the BACT analysis, solely as it relates to NO_x emissions. This remand should not be viewed as prejudging the issue. NJDEP is simply directed to reopen the permit proceeding for the limited purpose of allowing the applicant to supplement its original BACT analysis in accordance with the guidance described in this decision. If, after a full review of the data NJDEP determines that NO_x emission levels obtained from combustion controls alone represent BACT, it may reissue the permit as written. It may, of course, revise the limitations and other conditions of the permit as appropriate.

After making the determination, NJDEP should reopen the public comment period to receive any supplemental comments from petitioners Cinnaminson et al. on the issue of the NO_x limitations in the permit. NJDEP's determination on remand will be subject to review under 40 CFR §124.19, and appeal of its decision on remand will be required to exhaust administrative remedies under section 124.19(f)(1)(iii).

So ordered.

Dated: Nov. 10, 1988



Lee M. Thomas
Administrator

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order on Petitions for Review in the matter of Pennsauken County, New Jersey, Resource Recovery Facility, PSD Appeal no. 88-8, was mail to the following by first class mail, postage prepaid.

Michael S. Caro
Deputy Attorney General
Department of Law & Public Safety
Division of Law, CN 112
Environmental Protection Section
Richard J. Hughes Justice Complex
Trenton, NJ 08625

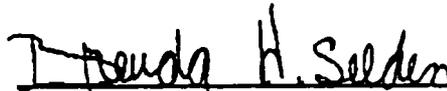
William J. Muszynski
Acting Regional Administrator
U.S. EPA, Region II
26 Federal Plaza
New York, NY 10278

Thomas J. Germino
19 Market Street
Morristown, NJ 07960

Robert Filipczak
402 Dahlia Street
Northfield, NJ 08225

Robert P. Bedell
Myerson, Kuhn and Sterrett
1330 Connecticut Avenue, NW
Washington, DC 20036

Dated: November 10, 1988


Brenda H. Selden, Secretary
to the Chief Judicial Officer



12/10/12 8.29
K. M. ... (213 ...)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MEMORANDUM

DATE: NOV 14 1988

SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Columbia Gulf Transmission Company, Clementsville Compressor
Station, Kentucky

FROM: Greer C. Tidwell *Joe R. Frazer for*
Regional Administrator

TO: Lee M. Thomas
Administrator

I am requesting that, pursuant to 40 C.F.R. §124.19, you review the Prevention of Significant Air Quality Deterioration (PSD) portion of the air pollution permit issued by the Commonwealth of Kentucky to Columbia Gulf Transmission Company (Columbia Gulf) for the construction of a stationary natural gas-fired turbine at Clementsville, Kentucky. The failure of the Kentucky Division for Air Quality (Division) to properly require best available control technology (BACT) for the nitrogen oxides (NO_x) emissions is the basis for reviewing the Division's actions in issuing the permit and for staying the effectiveness of the permit until all PSD requirements have been met. As explained below, if you agree that review of this permit pursuant to Section 124.19(b) is appropriate, you will have to notify the permittee by November 15, 1988, that you are initiating review of the PSD portion of the permit. Conversely, if you determine that it is more appropriate to initiate review under Section 124.19(a), it will, likewise, be necessary to serve copies of the appeal on the appropriate parties as identified below.

This permit was issued on October 13, 1988, by the Division under various authorities including EPA's PSD permitting authority, 40 C.F.R. §52.21, which has been delegated to the Division. The area in which the construction is contemplated is classified as attainment for all pollutants. My staff has concluded that the permit does not adequately control NO_x emissions under the applicable PSD regulations. The analysis of the NO_x control technology undertaken by the Division fails to demonstrate that the system selected would provide the best degree of emission control currently available.

The Delegation of PSD Authority to the Kentucky Division for Air Quality

EPA Region IV delegated PSD review authority to the Kentucky Division for Air Quality pursuant to 40 C.F.R. §52.21 on January 25, 1978, at 43 Federal Register 3361, as amended at 45 Federal Register 52741, August 7, 1980 (see 40 C.F.R. §52.931). (See Enclosure 6.)

Applicability of NO_x Requirements to Columbia Gulf

Columbia Gulf's consultant, Entrix Inc., filed a permit application with the Division on or about May 26, 1988, requesting approval for the construction and installation of one 11,864 horsepower (8.9 MW) gas turbine at the Clementsville Compressor Station in Clementsville, Kentucky. Supplemental information was filed on June 13 and August 22, 1988. The existing facility consists of two turbine compressor sets, three emergency generator sets, two boilers, and seven gas compressors. The facility has the potential to emit NO_x from these sources in the amount of 1583.22 tons per year (TPY). The primary uncontrolled pollutants emitted by the new unit would be 282.5 TPY of NO_x, 7.4 TPY of unhalogenated hydrocarbons (UHC), and 2.9 TPY of CO. Therefore, the proposed construction constitutes a major modification for NO_x emissions to an existing major source. See 40 C.F.R. §52.21(b). Clementsville is located in a county designated as attainment for all pollutants. See 40 C.F.R. §81.318. Therefore, the emissions of NO_x are subject to review under the PSD regulations contained in 40 C.F.R. §52.21, authority for the implementation of which has been delegated to the Division by EPA, as set forth above.

BACT Emission Limit for NO_x

The permit establishes an emission limit of 178 parts per million volume (ppmv) NO_x when burning natural gas. This limitation is below the 196 ppmv NO_x limit specified in the New Source Performance Standards (NSPS) Subpart GG limitations for turbines less than 30 MW; however, this limit is substantially less stringent than BACT limitations imposed in pending and existing PSD permits for other stationary turbines of approximately the same size, and that use the same type fuel. My staff has determined that BACT for this facility consists of water injection for NO_x control to reduce emissions to about 0.2 lb NO_x per mmbtu when burning natural gas. Such a reduction is normally achieved at a cost of about \$3,000-\$6,500 per ton of NO_x removed.

The State BACT Analysis

The preliminary determination dated June 20, 1988, submitted by the Division to EPA during the public comment period states that the following alternatives for NO_x control were analyzed by Columbia Gulf:

1. Selective Catalytic Reduction (SCR)
2. Water Injection
3. Dry Controls

The Division rejected SCR because of temperature constraints and water injection because of increased CO emission, operating costs, and fuel consumption. The Division determined that dry controls represents BACT. "Dry controls," which Columbia Gulf proposed to use, merely means that the Solar turbines were designed in such a way to meet the minimum requirements of Subpart GG (which was promulgated almost 10 years ago). Since its promulgation, more efficient turbine designs, such as the Solar Mars turbine, have been developed, resulting in better combustion and lower NO_x formation. Based on the degree of NO_x reduction, however, "dry controls" should not be considered a "top" control option, but merely a more efficiently designed turbine.

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Public Comment Period

By letter dated June 20, 1988, the Division notified EPA that a public notice announcing the commencement of the public comment period had been sent to the newspaper on June 13, 1988. Attached was a copy of the preliminary determination, modeling analysis, and a copy of the proposed permit (see Enclosure 1). The preliminary determination stated that BACT for the proposed turbine was the use of dry controls. EPA Region IV reviewed this material and provided comments to the Division on July 21, 1988 (see Enclosure 2). Region IV's primary concern was that BACT for the NO_x emissions had not properly been determined. Region IV stated that, in the absence of an acceptable technical or economic justification to the contrary, a valid BACT determination regarding NO_x emissions from this source would be water injection, resulting in a NO_x limit of about 0.2 lb NO_x per mmBtu.

By letter dated October 13, 1988, the same date as the permit issuance, the Division notified Region IV of their final determination. The final determination did not adequately address all of Region IV's comments regarding BACT, and concluded that BACT for the proposed turbine was dry controls. The NO_x emission limit in the final permit was below the NSPS emission level but above a level determined by Region IV to be BACT in this case.

The following is a brief summary of EPA's responses made during the comment period regarding the Division's BACT determination.

Division Position: The proposed turbine will operate approximately 6000 hours per year and the incremental reduction cost associated with the use of water injection would be \$2,121 per ton of NO_x removed. This cost is unreasonable; therefore, water injection should not be considered as BACT.

Region IV's Response: Historically, water injection has been used to control NO_x emissions from gas turbines without adverse effects. Because it is a "top" technology, we feel that water injection should be considered as BACT. Additionally, incremental reduction cost of \$2,121 per ton of NO_x is not unreasonable. *high (same number as Valerio) but different g.t.*

Division Position: The addition of water injection controls would increase fuel consumption by 2.2 percent. This 2.2 percent increase represents a 7 percent decrease in fuel efficiency gain.

Region IV's Response: The 2.2 percent increase is insignificant and therefore would not be considered a unique and convincing argument against the use of water injection in this case.

Division Position: Previously permitted Solar turbines did not require water injection as BACT.

Region IV's Response: Because BACT determinations are made on a case-by-case basis, the fact that other permitted Solar turbines were not required to install water injection controls is irrelevant. According to the BACT/LAER Clearinghouse, the use of water injection for gas turbines is technically feasible. Unless unique and convincing arguments are presented showing that the use of water injection controls will pose a financial hardship on the company, we feel that water injection is economically feasible.

Additionally, there is at least one permitted Solar Mars turbine that is using water injection as a result of a NSR determination and two other permits pending that will require water injection.

In addition to the above written comments, the following comments were made after the public comment period during a telephone conversation on October 26, 1988, between William Eddins of the Kentucky Division for Air Quality and Bruce P. Miller of EPA, Region IV:

Division Position: Although the use of water injection would reduce NO_x emissions, CO emissions would increase threefold.

Region IV's Response: It is true that CO emissions could increase from 2 TPY to 6 TPY with the use of water injection; however, NO_x emissions will be reduced from 193 TPY to 79 TPY, a 114 TPY reduction. The large reduction in NO_x emissions compared to the small increase in CO emissions justifies using NO_x controls.

Division Position: An annualized cost of \$243,000 to reduce the maximum annual average impact by 0.02 ug/m³ is unreasonable when the NAAQS is 100 ug/m³.

Region IV's Response: The predicted impact of this source is independent of the requirement to apply BACT. Although Columbia Gulf has indicated its intent to operate this facility only 6000 hours per year, there are no operating restrictions in the permit. Therefore, at full operation, with no controls, this source could emit approximately 282 TPY of NO_x.

Division Position: EPA's comparison of Columbia Gulf's BACT analysis with other projects subject to LAER or other local restrictions is inappropriate since the analyses have different requirements.

Region IV's Response: Regardless of what pollution controls other projects were required to install, the modification of this source triggered a PSD review, which in turn requires a "top-down" BACT analysis. The "top-down" BACT analysis requires that the most stringent controls be evaluated first, the second most stringent controls evaluated second, and so on. Only after convincing arguments are presented showing that a control is either technically infeasible or is unreasonable based upon energy, environmental or economic concerns, can this control be rejected as BACT.

Region IV has determined that regardless of what other similar sources were required to do, the facility has not made unique and convincing arguments to obviate water injection as BACT.

Division Position: Pollution controls installed on turbines used for co-generation should not be compared to turbines used at gas transmission compressor stations because the facilities are different.

Region IV's Response: It is true that co-generation facilities should not routinely be compared to facilities without heat recovery when selective catalytic reduction controls are being evaluated. The use of water injection on gas turbines, however, is not affected by heat recovery systems or lack thereof.

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The turbines at these two facilities can be compared to each other because each turbine used in the comparison use the same fuel (natural gas), have the same energy rating (8.9 MW), and are the same model (Mars, manufactured by Solar). Regardless of what type of facilities the turbines are installed at, each will create NO_x in the combustion chamber while producing electricity. Since water injection is considered technically feasible for reducing NO_x emissions for the chosen turbines located at co-generation facilities, water injection appears to be feasible as BACT for the turbine to be installed at Columbia Gulf's facility.

Recommendation

I am asking that you initiate review of the Columbia Gulf permit with respect to compliance with the PSD review procedures applicable to BACT determinations. Specifically, the review should address the adequacy of the review and determination of BACT for NO_x emissions.

Procedures and Time Limitations

If you desire to evaluate these important issues as they relate to this permit, review procedures must be initiated within the time period allowed by the regulations, 40 C.F.R. Part 124. Under Section 124.19(a), if this is construed as a petition for review, the petition must be filed within 30 days of service of the notice by the Division of its final permit decision, and the Administrator must issue an order granting the review within a reasonable time following the filing of the petition. Section 124.19(c). If for any reason you determine that Section 124.19(a) is not the proper procedure, we would request you to initiate review on your own initiative under Section 124.19(b), which likewise requires you to act within the initial 30 days.

Based on the permit issuance date of October 13, 1988, we calculate that the 30 day period from the issuance of the permit will end on November 12, 1988. Pursuant to Section 124.20(a), the time began to run on the day after permit issuance. Since service of the Division notice was by mail, we have added three days to the prescribed time in accordance with Section 124.20(d). The thirty-third day after October 13, 1988, is November 15, 1988. If this is construed as a review on your own initiative pursuant to Section 124.19(b), notice must be given by this date. If this is construed as a petition for review, it must be served as specified in 40 C.F.R. §124.10. I have enclosed, for your review, a draft Notice of Decision to Review Permit (Enclosure 7).

The regional office filed comments on the draft permit within the Division comment period. We construe the definition of person in Section 124.41, as well as that in the Act, 42 U.S.C. §7602, to include an EPA regional office and/or an EPA Regional Administrator. Therefore, the Region, and/or the Regional Administrator, as a person on whose behalf comments were filed, is a proper party to file a petition for review under Section 124.19(a).

Section 124.19(a) requires a statement that the issues being raised for review were raised during the comment period to the extent required by Part 124. All facts or issues raised herein except as noted above were raised during the public comment period.

Notice of the initiation of the review procedures or service of this document as a petition for review should be sent to:

1. Mr. William Eddins, Director
Division for Air Quality
Kentucky Department for Environmental
Protection
Frankfort Office Park
18 Reilly Road
Frankfort, Kentucky 40601
2. Mr. Richard D. Bayley
Manager of Design Engineering
Columbia Gulf Transmission Company
P. O. Box 683
Houston, Texas 77001
3. Mr. Daniel Ransbottom
Senior Consultant
Entrix, Inc.
P. O. Box 56288
Houston, Texas 77256-6288

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Enclosed are copies of the following documents upon which this request is based:

1. Letter dated June 13, 1988, from William Eddins, Kentucky Division for Air Quality to Winston Smith, EPA, transmitting the Division's pre-construction review and preliminary determination for Columbia Gulf Transmission Company's construction of a Solar Mars Turbine at their Clementsville Compressor Station located in Clementsville, Kentucky.
2. Letter dated July 21, 1988, from Bruce P. Miller, EPA, to William Eddins, Kentucky Division for Air Quality, acknowledging receipt of the preliminary determination for Columbia Gulf Transmission Company and providing comments on their determination.
3. Letter dated August 22, 1988, from William Eddins, Kentucky Division for Air Quality to Winston Smith, EPA, transmitting Columbia Gulf Transmission Company's rebuttal to EPA's July 21, 1988, comments on the preliminary determination.
4. Letter dated September 23, 1988, from Bruce P. Miller, EPA, to William Eddins, Kentucky Division for Air Quality responding to Columbia Gulf Transmission Company's rebuttal to EPA's comments on the preliminary determination.
5. Final determination and permit dated October 13, 1988, issued by the Kentucky Department for Environmental Protection to Columbia Gulf Transmission Company to construct a Solar Mars Gas Turbine at the Clementsville Compressor Station located in Clementsville, Kentucky.
6. Letter dated May 19, 1980, from Rebecca W. Hanmer, EPA, to Jackie Swigart delegating authority for all portions of the Federal PSD program, as described in 40 CFR 52.21, to the Commonwealth of Kentucky. (See 45 Federal Register 52741, August 7, 1980).
7. Draft Notice of Decision to Review Permit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

8.30

December 14, 1988

MEMORANDUM

SUBJECT: Review of Valero Hydrocarbons BACT Analysis

FROM: Allen C. Basala, Chief *Allen C Basala*
Economic Analysis Section, ASB (MD-12)

TO: Anthony Wayne, Chief
Texas, New Mexico Enforcement Section (6T-ET)
Region VI

This memo is in response to your request of November 8. In our judgment, the Valero hydrocarbons BACT economic analysis is unacceptable. The employed methodology is not supported as valid for purposes of project budgeting and cost-effectiveness assessments. To remedy this deficiency, Valero should redo their analyses using more conventional techniques. Also, the BACT analysis fails to include other alternate control options which are potentially as effective as, and less costly than, those control techniques presented.

Frank Bunyard's detailed review is attached.

cc: G. McCutchen
F. Bunyard
E. Noble
D. Solomon



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

8.30

December 8, 1988

MEMORANDUM

SUBJECT: Review of Valero Hydrocarbons BACT Analysis

FROM: Frank L. Bunyard *Frank Bunyard*
Economic Analysis Section, ASB (MD-12)

TO: Allen C. Basala, Chief
Economic Analysis Section, ASB (MD-12)

Per your request of November 8, I have reviewed the subject document and prepared the following comments regarding my concerns on the economic issues of the BACT proposals offered by Valero. I have also coordinated our reviews with Eric Noble of the Noncriteria Pollutants Programs Branch for his technical insights in preparing these comments. In addition, I have discussed these thoughts at some length with Stanley Spruiell and Rick Bartley of EPA Region VI staff by phone earlier in this week.

My major concerns with the technical, cost and economic issues are summarized as follows:

- (1) Inconsistent annualization methods to estimate cost-effectiveness
- (2) Omission of analyses of alternatives, such as combined cycle steam generation for gas turbines and retrofitting dry controls on internal combustion engines (ICE)
- (3) Questionable incorporation of downtime in the operating costs and unreasonable concerns regarding catalyst regeneration and/or disposal, brine disposal and water purification costs.

The following discussion will explore each of these points in detail. First, my chief concern is the annualization method used in the derivation of the cost-effectiveness figures that are the focus of the arguments presented by Valero.

The method, as discussed in Section 3, page 20, of the Valero BACT analysis, uses the sinking fund, or future value method, to determine cost-effectiveness. Standard cost estimating methodologies used by the Agency program offices are based on present value methods. All the criteria for EPA

rulemaking, such as NSPS, and NAAQS/PSD program implementation, such as RACT determinations and BACT determinations, employ this present value method. This philosophy is in agreement with both academicians and practitioners familiar with modern financial theory in capital budgeting and asset allocation activities.

The estimate of \$14,724 per ton, which is derived from the future 10-year value of \$53,947,000, is equivalent to a \$5676 per ton NO_x removed for Selective Catalytic Reduction (SCR) technology presented in Table 3, page 25. Similarly, the \$5,865 for water injection in Table 2 is equivalent to \$1545 per ton NO_x removed; and, the \$9,292 in Table 3 for SCR for the ICE engines is equivalent to \$ 3,582 per ton. In short, the choice of a present value versus future value metric is a time preference issue that should not be an argument introduced into the test of reasonableness of BACT determinations. To repeat, Agency standardized procedures use the present value method.

I concur with Valero's concept for normalizing annualized costs for projects with nonuniform cash outlays, such as replacing catalyst. I also concur conceptually with most of the remaining line-by-line items, with the exception of specific items, such as those discussed below (e.g., lost production).

On the second point, Valero excludes discussion on alternative technical options, which would include: (1) operating some gas turbines in the combined cycle mode, (2) retrofitting existing ICE with new heads to meet the 2 gram NO_x per horsepower-hour emission limit or, (3) purchase or rental of new simple cycle gas turbines capable of meeting the NO_x limit with little or no water or steam injection.

Regarding the discussion on page 32 of the Valero analysis, Valero could have included a discussion on the viability of installing one or more combined cycle gas turbines rather than utilizing all simple cycle units. The addition of heat recovery steam generators and steam turbines would increase plant efficiency and, as a side benefit, make steam available for injection into the gas turbines. Steam improves the heat rate of the gas turbines and reduces the maintenance impacts associated with water injection. I understand that Solar Turbines was promoting this concept a few years ago.

Concerning the technical discussion of ICE's on page 47, Valero did not address retrofitting the ICE's with the new heads that would achieve the desired emission limit of 2 gram NO_x per hp-hr without further control. This would be cheaper and more reliable than SCR technology on existing ICE's in achieving the same environmental objective. Alternatively, newer model engines with new NO_x control technology could possibly be rented.

On the third issue regarding inclusion of specific operating cost elements, we should not concur with the philosophy underlying the assumptions for downtime and associated lost production, brine disposal, and water purification problems. We believe the case for maintenance problems and including lost production as an out-of-pocket expense is overstated. We believe that expensing a full-time technician to monitor these turbines and engines should diminish potential downtime problems. Accordingly, adding an expense for lost production is a redundant item. Furthermore, enough experience should now be available on both wet controls and SCR to prevent, or at least be prepared for, potential maintenance problems. If not, then the source should consult with equipment manufacturers, users, and states for documentation of maintenance experience regarding SCR. As a minimum, EPA should request more analyses of dry controls in the Valero permit application.

As for brine disposal, this requirement is not unique to Corpus Christi. This is a problem common to all facilities producing steam, as well as gas turbines with water injection. Therefore, this is not an argument for unreasonableness. Likewise, catalyst regeneration is a routine recycling operation carried out by the catalyst manufacturer. Regarding the discussion on page 28, the concerns with handling the handling and disposition (recycling) of vanadium pentoxide as a hazardous waste is a legitimate issue; however, proper care of this material is a normal cost of doing business and should not be considered as an economic argument, without additional documentation.

The loss in efficiency attributed to water injection also seems to be excessive. The permit presumes (to meet a 42 ppm NO_x limit) a fuel penalty of at least 2.2% for a 0.62:1 water-to-fuel ratio. This is about 3 1/2 times the impact reported in the background document for the gas turbine NSPS. Incidentally, both the Solar and Allison gas turbines may be able to meet the 25 ppm limit with water injection at a water-to-fuel ratio less than 1.0.

In summary, Valero has not presented sufficient information to render the emission limits of 25 or 42 ppm for gas turbines and 2 grams per hp-hr for ICE inappropriate.

To: David Solomon 8.31.
From: Allen Basala

JAN 04 1989

Mr. Lawrence E. Pewitt, P.E.
Director, Permits Division
Texas Air Control Board
6330 Highway 290 East
Austin, Texas 78726

Re: Valero Hydrocarbons BACT Analysis, PSD-TX-746

Dear Mr. Pewitt: ORIGINAL SIGNED BY TOMMY WAYNE

We have evaluated the information provided by Valero Hydrocarbons on August 19, 1988, concerning the feasibility of best available control technology (BACT) alternatives for its proposed natural gas processing plant near Corpus Christi, Nueces County, Texas. Our evaluation was coordinated with the Economic Analysis Section in Research Triangle Park, North Carolina, whose review is enclosed.

Major concerns with the technical, cost, and economic issues are as follows:

Inconsistent annualization methods to estimate cost-effectiveness.

Omission of analyses of alternatives, such as combined cycle steam generation for gas turbines and retrofitting dry controls on internal combustion engines.

Questionable incorporation of downtime in the operating costs and unreasonable concerns regarding catalyst regeneration and/or disposal, brine disposal, and water purification.

These items are discussed in detail in the Enclosure.

We recommend that Valero re-evaluate its economic analyses using more conventional techniques. We further recommend that Valero include in its BACT analysis a review of the alternate control options which are described in the Enclosure, which are potentially as effective as, and less costly than, those control techniques presented.

6T-ET:SPRUIELL:t1:12/28/88:x7229

PEW746.PSD

hcc

It is, furthermore, important that you be aware that the Clean Air Act requires us to take final action to either grant or deny a Prevention of Significant Deterioration (PSD) permit within one year after the date of filing a completed permit application. See 42 U.S.C. 7475(c). Although Valero's original application was dated January 22, 1988, significant changes to the BACT analysis were made subsequent to the public comment period. Presently, EPA is considering denial of the permit because of the numerous and significant deficiencies in the permit application as described herein and in the Enclosure. However, if Valero submits a written request that EPA delay its final permit decision beyond the January 22, 1989 date, then EPA will allow Valero to respond to the concerns detailed by this letter. The written request should also include a schedule mutually agreed upon by the Texas Air Control Board, the Environmental Protection Agency, and Valero to complete action on this permit within a reasonable time. Such schedule must be agreed upon before January 22, 1989; otherwise EPA may proceed to disapprove Valero's request for a PSD permit. Finally, this letter, Valero's comments, and any additional information supplied to the Texas Air Control Board since the previous public comment period must again be submitted for public comment.

If you have any questions concerning this letter, please contact Mr. Stanley M. Spruiell of my staff at (214) 655-7229.

Sincerely yours,

Anthony P. Wayne
Chief
TX/NM Enforcement Section (6T-ET)

Enclosure

cc: Mr. Allen Eli Bell w/Enclosure
Executive Director
Texas Air Control Board

Mr. Tom Palmer w/Enclosure
Region 5 Director
Texas Air Control Board

Mr. John W. Ehlers w/Enclosure
Senior Vice President
Valero Hydrocarbons Company

Ms. Nina Sisley, M.D. w/Enclosure
Director
Corpus Christi-Nueces County Department of Public Health

Mr. William J. Moltz, Esquire w/Enclosure
Brown, Marony, Rose, Barber, and Dye

bcc: Wayne (6T-ET)	w/Enclosure
Basala (MD-12)	w/Enclosure
Bartley (6C-T)	w/Enclosure
Lindsey (6T-ET)	w/o Enclosure
PEA-7	w/o Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

January 27, 1989

MEMORANDUM

SUBJECT: Discounted Cash Flow (DCF) Analysis for Craven County
Project New Source Review

FROM: Frank L. Bunyard *Frank Bunyard*
Economic Analysis Section, ASB, AQMD (MD-12)

TO: Allen C. Basala, Chief
Economic Analysis Section, ASB, AQMD (MD-12)

Per your request, I have reviewed the DCF submitted with the permit application for New Source Review under the Prevention of Significant Deterioration regulations.

I have conducted a partial sensitivity analysis to test assumptions on selected key variables. One of the important results was that allowing for constant revenues over 15 years does make the project with thermal deNO_x feasible for both target rate of return and debt service coverage.

The most important factors subject to scrutiny are concerned with the following:

- The revenue stream over the project life, particularly the assumed rates for the years 2001 through 2005.
- The escalation rate for wood waste prices (i.e., 1990 price of \$11 per ton for wood wastes rises to \$21 per ton in 2005).
- The depreciation schedule assumed for the analysis (i.e., write-off of equipment in 5 years.)
- The inconsistent cost of capital for base plant (7.5%) and thermal deNO_x (11.5%).

To reiterate our teleconference discussion, there are two points regarding the analysis that seem to be counter intuitive with reality. I do not believe that a project to be viable which shows declining revenues with rising fuel costs over time, the thermal deNO_x controls notwithstanding. Secondly, we do not

*Note: Also see 8.33
and 8.35*

believe that prices for waste wood would escalate at the rate as assumed. Given that wood wastes represent an undesirable commodity, namely the worst part of the tree, we would think that prices for residual wood (chips and saw dust) would continue to be relatively flat in the Southeast U.S., as they have been historically.

I would recommend the following contacts for providing accurate answers to interject a more realistic scenario in the analysis:

- (a) North Carolina Utilities Commission, Electric Division for renegotiation of utility rates on rate schedules (e.g., CSP-6c). Phone (919) 733-2267
- (b) Phillip Badger (TVA), Southeast Biomass Program, Mussel Shoals, Alabama for information on costs and availability for wood wastes. Phone (205) 386-3086.

Also, Robert Brooks (TVA), Norris, Tennessee. Project manager for a computer model of availability and costs for forest resources for the Southeast. Phone (615) 632-1513.

Also, Fred Allen, Georgia Forestry Commission, Macon, Georgia. Phone (912) 744-3357.

- (c) Refer to the 1986 IRS (or later years) Tax Code for depreciation schedules.

I have followed up on some of these contacts listed herein and have found that the Craven Project assumptions on revenues and fuel costs are very pessimistic or conservative. Consequently, it would appear that the scenario portrayed in the Craven County project shows that the thermal deNO_x represents the knife-edge for project feasibility.

In conclusion, I would recommend that the documentation for the Craven County Project provide more substantive justification for the assumptions concerning the key variables discussed in this analysis. As the analysis stands, the findings are not convincing as a test of infeasibility.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

FEB 8 1989
EPA-REGION IV
ATLANTA, GA.

January 27, 1989

MEMORANDUM

SUBJECT: Review of Craven County Wood Energy Project
FROM: Allen C. Basala, Chief *Allen C. Basala*
Economic Analysis Section, ASB (MD-12)
TO: Bruce P. Miller, Chief
Air Programs Branch, Region IV

We reviewed the documentation on the subject project regarding its economic viability with non-catalytic ammonia reduction of NO_x controls. We find the arguments, from an economic perspective, neither unique nor convincing.

In reaching this conclusion, we had no quarrel with the analytical framework. The discounted cash flow methodology is in our judgement appropriate. However, sensitivity analysis on the revenue and fuel cost assumptions together with interest rate and leverage factors (e.g., debt/equity mix and depreciation schedules) resulted in findings counter to those in the applicant's analysis. In particular, the project could under certain yet undramatic conditions be economically viable with the NO_x controls. Resolution of course requires verification/validation of the plausibility of applicant's assumptions regarding the aforementioned variables.

To not burden the applicant nor the State permitting authority, we provided a list of contacts who could provide unbiased evidence regarding those variables.

Frank Bunyard of my staff performed our analysis and helped develop the list of contacts. His attached memo provides further details of the analysis and the list of contacts.

Attachment

- cc: W. Aronson
- J. Calcagni
- B. Jordan
- G. McCutchen
- P. Wilms (NCDNR-Archdale Building)

Note: Also see 8.32 and 8.35



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 3 1989

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: BACT Determination for Davidson Exterior Trim/Textron

FROM: John S. Seitz, Director *John S. Seitz*
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Winston A. Smith, Director
Air, Pesticides and Toxics Management Division
Region IV

On October 14, 1988 you forwarded to this division a request regarding the BACT determination for the Davidson Exterior Trim/Textron facility in Georgia. We have coordinated a response to your request with the New Source Review Section in AQMD, the Chemical Application Section in ESD, and the Air Enforcement Division in OECM. The following responses to your questions are provided:

1. Does Davidson Exterior present "unique and convincing" arguments which would justify elimination of add-on spray booth and/or over controls as BACT?

While Davidson has supplied data on the control cost, cost effectiveness, and percent increase in the cost per unit of product, they have not presented an argument as to why the control cost is unreasonable. It also appears that there are control alternatives available which Davidson has not explored (see response to question 2 & 3 below). Therefore, we agree that Davidson Exterior has failed to make a case for rejecting as BACT the add-on controls in question.

2. Are there other fascia plants which have been required to install both spray booth and oven controls?

We know of no other fascia plants which have been required to install both spray booth and oven controls. The General

Motors parts plant in Oshawa, Ontario, Canada has recently installed an exhaust air recirculation and VOC control (incineration) system on the clear coat portion of the fascia spray booths.

3. Has EPA established spray booth and/or oven controls as BACT at fascia painting operations?

Bake oven exhaust controls have been required in several BACT/LAER permits for fascia painting (Subaru-Isuzu, DuPont, Saturn, etc.). Spray booth exhaust controls have not been required in BACT/LAER permits for fascia painting. The number of controlled spray booths is growing (e.g., automobiles, aerospace, metal parts), and the cost of control is becoming lower with experience and the development and demonstration of new technologies (e.g., recirculation, control equipment for low VOC concentration exhaust streams). Spray booth exhaust controls, therefore, must receive serious consideration in current and future permitting of fascia painting operations.

4. Were the oven controls installed on the fascia operations at the Subaru/Isuzu facility, located in Lafayette, Indiana, the result of a BACT evaluation or necessitated for some other reason?

The bake oven exhaust controls at Subaru-Isuzu were part of the BACT demonstration.

5. If the arguments presented by Davidson Exterior do not constitute a "unique and convincing" basis for rejection of controls, what would EPA consider to be valid criteria for rejection of the controls?

Three criteria which should be asked when reviewing permits in which more stringent levels of control have been rejected as BACT are discussed below:

- i) If another similar source has adopted certain emission controls, why can't this applicant? Where similar units have adopted a particular level of emission control or control technology, the applicant should justify on technical, environmental, or economic ground why they cannot also adopt that particular control system or otherwise meet that level of control. This analysis should focus on the differences (if any) between the two sources (e.g., differences in raw material costs or control costs).

- 3 -

- ii) Why is the economic impact of a level of control unreasonable? Where a permit applicant claims that emission control costs are unreasonable, the burden of showing why the cost are unreasonable is on the applicant. Some possible parameters for judging the reasonableness of a control level could be the percent of the total cost of a construction or modification project, cost effectiveness (\$ per ton), or percent cost increase per unit of product. Again, other similar sources that have adopted a particular level of control may provide a useful benchmark against which to compare the claimed economic impact of emission controls. However, control cost data and cost effectiveness calculations likely do not, standing alone, provide a convincing argument against adopting a potential BACT level. For example, simply stating that it is infeasible to meet a particular cost per ton of pollutant controlled is not adequate; the reason must be explicitly explained to EPA, the permitting agency, and the public. The applicant should look at this cost in terms of typical control cost for other sources of this pollutant. The costs of control for similar sources is addressed in #i above.
- iii) Based on the reviewer's experience in reviewing control cost estimates and cost effectiveness calculations for a particular pollutant and source category, do the cost data provided by the applicant seem credible? In other words, are the cost estimates within the range of costs you would expect to see for that particular type of source or pollutant? If a cost or cost effectiveness estimate strikes you as being too high, you should ask the applicant to explain why their emission control costs would be higher than those documented for a similar source.
6. Would Headquarter's support a §167 order, issued by Region IV, if it is determined that Davidson Exterior has not installed or proposed to install BACT?

Consistent with the July 15, 1988 guidance on procedures to follow when EPA finds a Deficient New Source Permit, a deficient BACT analysis is cause for expeditious (within 30 days of permit receipt) issuance of a §167 order in SIP-approved programs. However, the ultimate decision whether to proceed with enforcement action in this or any other case depends, in large part, upon all the specifics of the particular cases. These include, among others:

- 1) The time and manner in which EPA has informed the applicant and the permitting authority of alleged defects in the permit, and of the consequences of a failure to correct those defects.
- 2) The amount of time between permit issuance and the commencement of enforcement action.
- 3) Whether the applicant has entered into construction contracts, begun actual construction, or otherwise acted in reliance on the State-issued permit.
- 4) Plus, for SIP approved States, the content of the State regulations and relevant Federal Register notices.

I apologize for the delay in providing this response. If you have any questions, please contact Gary McCutchen in AQMD (FTS-629-5592) regarding responses #1 & 5, Dave Salman in ESD (FTS-629-5417) regarding responses #2-4, and Sally Farrell of my staff (FTS-382-2875) regarding response #6.

cc: Wayne Aronson, Region IV
Mark Armentrout, Region IV
Gary McCutchen, AQMD
Sam Duletsky, AQMD
Jim Berry, ESD
Dave Salman, ESD
Judy Katz, OECM
NSR Contacts, Region I-X
Greg Foote, OGC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

4APT-APB

FEB 13 1989

Mr. N. Ogden Gerald, Chief
Air Quality Section
Division of Environmental Management
North Carolina Department of Natural
Resources and Community Development
Post Office Box 27687
Raleigh, North Carolina 27611

Re: Craven County Wood-Energy Project (PSD-NC-121)

Dear Mr. Gerald:

We have reviewed your January 27, 1989, letter containing the final determination and final permit for the construction of the Craven County Wood-Energy project. Although our concerns were adequately addressed regarding the inclusion of specific test methods in the permit, we are presently unable to concur with the best available control technology (BACT) determination for nitrogen oxides (NO_x) emissions until verification of the economic data is presented regarding the add-on NO_x controls, as outlined below.

Subsequent to our January 11, 1989, meeting with yourself and representatives from Craven County's consulting firm, we have been in contact with EPA Headquarters concerning the economic feasibility of the Craven County project, if thermal deNO_x were employed; specifically the discounted cash flow portion of the economic analysis presented by the applicant at the meeting. According to EPA Headquarters, the cash flow methodology and analytical framework used in the economic analysis was appropriate; however, a sensitivity analysis on the revenue and fuel cost assumptions together with interest rate and leverage factors resulted in findings counter to those in the applicant's analysis (see enclosure 1). Craven County contends that the proposed project would be viable even though the applicant's economic analysis shows: (1) declining revenues with rising fuel costs over time, notwithstanding thermal deNO_x controls and (2) escalating woodwaste costs, even though prices for residual wood in the Southwest U.S. have been relatively stable in the past.

We request that the applicant provide additional justification for the following assumptions concerning the key variables which either make or break the project:

- a. The revenue stream over the project life, particularly the assumed rates for the years 200 through 2005.
- b. The escalation rate for woodwaste prices (i.e., 1990 price of \$11.00 per ton for woodwaste rises to \$21.00 per ton in 2005).
- c. The depreciation schedule assumed for the analysis (i.e., write-off of equipment in five years).
- d. The inconsistent cost of capital for base plant (7.5%) and thermal deNO_x (11.5%).

Note: Also see 8.32
and 8.33

8.35
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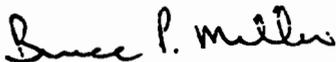
The applicant may wish to contact the following entities for obtaining the necessary information:

- a. North Carolina Utilities Commission, Electric Division for renegotiation of utility rates schedules (e.g., CSP-6c). Phone (919) 733-2267.
- b. Phillip Badger (TVA), Southeast Biomass Program, Mussel Shoals, Alabama for information on costs and availability for woodwastes. Phone (205) 386-3086.
- c. Robert Brooks (TVA), Norris, Tennessee. Project manager for a computer model of availability and costs for forest resources for the Southeast. Phone (615) 632-1513.
- d. Fred Allen, Georgia Forestry Commission, Macon, Georgia. Phone (912) 744-3357.
- e. The 1986 IRS (or later years) Tax Code for depreciation schedules.

In conclusion, we anticipate that once this additional information is presented we will be in a position to concur on the final permit and determination. Please respond to the issues set forth in this letter by February 28, 1989.

If you have any questions concerning this letter, please call me or Wayne Aronson of my staff at (404) 347-2864.

Sincerely yours,



Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

Enclosure

cc: Mr. Frank L. Bunyard
ASB, AQMD, MD-12
RTP, NC 27711

Mr. Allen C. Basala, Chief
Economic Analysis Section
ASB, AQMD, MD-12
RTP, NC 27711

Mr. Bruce C. Bley, President
Craven Wood-Energy Project
Power Projects, Inc.
1000 Prospect Hill Road
Winsor, Connecticut 06095



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

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Dane

19 MAY 1989

MEMORANDUM

SUBJECT: Technical Document on Control of Nitrogen Oxides From
Municipal Waste Combustors

FROM: Jack R. Farmer, Director
Emission Standards Division, OAQPS (MD-15)

TO: Air Management Division Directors
Regions I, III, V, and IX

Air and Waste Management Division Director
Region II

Air, Pesticides, and Toxics Management Division
Directors, Regions IV and VI

Air and Toxics Division Directors
Regions VII, VIII, and X

As you know, OAQPS is currently developing air emissions standards for municipal waste combustors (MWC's) under Section 111 of the Clean Air Act (CAA). As part of this effort, the technical aspects of the control of nitrogen oxides (NO_x) emissions from MWC's are being evaluated. The purpose of this memorandum is to transmit OAQPS's evaluation, contained in the attached technical report, for use by the Regions in considering NO_x requirements for the permitting of new MWC's.

Selective non-catalytic reduction (SNCR) is currently being applied at three facilities in California in the form of the Exxon Thermal De-NO_x process. As you are aware, the Administrator remanded on November 10, 1988, a Prevention of Significant Deterioration (PSD) permit issued by the New Jersey Department of Environmental Protection (NJDEP) for the Pennsauken County, New Jersey, Resource Recovery Facility. The remand was based on a determination that the best available control technology (BACT) analysis for the control of NO_x emissions under the "top-down" approach was inadequate. The NJDEP reconsidered its previous determination and reissued the permit with a more stringent emission limitation for NO_x based on the use of the Thermal De-NO_x process. Furthermore, several States, including the NESCAUM States and California, consider SNCR to be BACT for MWC's.

The attached technical report documents the currently available knowledge on NO_x emissions and control of these emissions for MWC's. It presents the available data on uncontrolled NO_x emissions from MWC's, and information on alternative techniques that have been applied (both within and outside the United States) or could potentially be applied to MWC's to achieve NO_x control. Detailed information is presented for the Exxon Thermal De-NO_x system, including emission control performance data, procedures for calculating capital and annualized costs, potential operating problems such as ammonia emissions and the generation of a visible detached plume, and the possible interference of this process with the control of mercury emissions as achieved by spray dryer/particulate matter control systems. Also, the estimated costs of applying Thermal De-NO_x to several model MWC facilities representative of new MWC's are presented.

The transmittal of this report should not be considered as issuance of operational guidance on control requirements for NO_x emissions from MWC's under PSD provisions of the Act. As additional information becomes available on SNCR, and the Exxon Thermal De-NO_x process in particular, we will evaluate it to gain a better understanding of any site-specific factors that may affect the cost and effectiveness of NO_x controls for MWC's.

If you have any questions concerning the technical report, please call Al Vervaert at FTS 629-5602 or (919) 541-5602.

Attachment

cc: R. Brenner (ANR-443)
J. Calcagni (MD-15)
D. Clay (ANR-443)
A. Eckert (LE-132A)
G. Emison (MD-10)
W. Laxton (MD-14)
S. Lowrance (WH-562)
S. Meiburg (MD-11)
R. Morgenstern (PM-221)
J. O'Connor (MD-10)
F. Princiotta (MD-60)
W. Rosenberg (ANR-443)
J. Seitz (EN-341)

bcc: R. Ajax (MD-13)
R. Campbell (MD-10)
J. Chamberlain (PM-220)
A. Cristofaro (PM-221)
J. Crowder (MD-13)
J. DeMocker (ANR-443)
K. Durkee (MD-13)
G. Foote (LE-132A)
C. Gregg (WH-556)
M. Johnston (MD-13)
R. Kellam (MD-13)
J. Kilgroe (MD-65)
E. Lillis (MD-15)
G. McCutchen (MD-15)
D. Porter (MD-13)
A. Vervaert (MD-13)
B. Weddle (WH-563)
J. Weigold (MD-13)
J. Wiltse (ANR-443)
C. Winer (LE-132W)

OAQPS:ESD:ISB:MGJOHNSTON:mhinson:FTS:629-5604:
DISC:JOHNSTON:B:5/18/89

technology" (BACT) requirements for emissions of nitrogen oxides (NO_x) and for emissions of "trace [sic] metals and toxic pollutants such as dioxins and furans." ^{2/} Petition at 2. In making a BACT determination for NO_x, Petitioners claim that "thermal de-NO_x," not combustion controls, is BACT. For the other pollutants, Petitioners allege that Ecology did not give adequate consideration to "fuel cleaning and separation" and did not consider economic, environmental, and other costs associated with the incineration of "recyclable materials." Id. at 2-3.

Ecology responds by arguing that the NO_x issue is now moot because the City has subsequently agreed to modify the facility to incorporate NO_x controls employing thermal de-NO_x or an equivalent technology. With respect to fuel cleaning and separation, Ecology argues that these practices need more study -- to gather information about costs and impacts -- before Ecology would be able to determine whether they represent a better emissions

^{2/} It is not clear what Petitioners mean by trace metals; however, I assume they are referring to small quantities of "heavy metals" such as lead and mercury. Cf. notes 8 and 28.

Petitioners assert three other grounds for review: (1) emission levels for PM₁₀ should be set in accordance with a LAER standard, not BACT; (2) the assessment of the impact of CO emissions on nearby areas is inadequate; and (3) Ecology erred in not setting emission levels for dioxins, furans, and chloroform. There is no merit to these allegations. As noted by Region X in its response to the Petition, BACT, not LAER, is the correct standard to be applied to PM₁₀; Ecology correctly followed EPA guidance and concluded that there would be no adverse effect on nearby CO non-attainment areas; and EPA has no authority under the Clean Air Act to prescribe emission limitations for unregulated pollutants (cf. note 8, infra) such as dioxins, furans, and chloroform. See EPA Response at 8.

control method than the controls currently proposed for the facility. ^{3/} Spokane likewise argues that fuel cleaning and separation are not BACT, and it points out that these and other similar practices have undergone thorough evaluation in connection with Spokane's overall waste management strategy, which calls for recycling, waste reduction, the proposed "waste-to-energy facility," and one or more new regional landfills designated for non-recyclable and residual wastes only.

Under the rules governing this proceeding, there is no appeal as of right from the permit decision. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulation states, "this power of review should be only sparingly exercised," and "most permit conditions should be finally determined at the Regional [State] level * * * ." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on Petitioners. In this case I have determined that Petitioners have met their burden with respect to the NO_x issue but not with respect to heavy metals and toxic pollutants.

^{3/} Ecology Fact Sheet at 3 (December 7, 1988).

Discussion

Before addressing the issues presented by the appeal, I believe it would be worthwhile to state first what the case is not about. It is not about the desirability of recycling for municipalities planning to build solid waste incinerators. I consider recycling in its various manifestations, including off-site (curbside) separation of newspapers, bottles, and aluminum containers, and on-site mechanical separation processes, as an essential part of intelligent planning for the solid waste disposal predicament that more and more of our Nation's cities are facing. ^{4/} Nor is this case about the desirability of recycling for Spokane in particular. The Spokane waste-to-energy project ^{5/} calls for extensive recycling, including a centralized, curbside recycling program to be implemented by January 30, 1991. The City's plans also include three drop-off centers in different locations in the Spokane area. The centers will contain facilities for citizens to leave recyclable materials, which are designated initially as newspaper, high grade paper,

^{4/} See generally U.S. Environmental Protection Agency, Office of Solid Waste, "The Solid Waste Dilemma: An Agenda for Action" at 1 (February 1989) (Final Report of the Municipal Solid Waste Task Force) ("[M]ore than one third of the nation's landfills will be full within the next few years and many cities are unable to find enough acceptable sites for new landfills or new combustors").

^{5/} According to the Final [State] Environmental Impact Statement (FEIS) for the project, steam generated in the boilers will be used by a condensing turbine to generate electricity. The power output of the turbine will be approximately 22,000 kilowatts. FEIS at 14.

corrugated paper, aluminum, three colors of sorted glass, scrap metals, and tin cans. ^{6/} In addition, a "reusables" area for miscellaneous items -- small appliances, baby furniture, books, toys, etc. -- is also planned. According to EPA Region X, Spokane expects to obtain a recycling level of 31% by the year 2008. EPA Response at 6.

Recycling is indeed an issue in this case, but in a significantly narrower context than just described. The focus here is on whether Ecology erred in its BACT determination by not giving in-depth consideration to "fuel cleaning and separation" in combination with the conventional, state-of-the-art pollution control equipment already required by the Spokane permit, for control of heavy metal and toxic pollutant emissions. ^{7/} In other words, if fuel cleaning and separation in this particular technological configuration would allow Ecology to set emission

^{6/} Spokane's Response to Petition for Review, Attachment 5 (Grant Amendment No. 1 -- Amended Project Description, Conditions B, C, and D).

^{7/} Traditionally, EPA has not required a PSD applicant to change the fundamental scope of its project. See Pennsauken Resource Recovery Facility, PSD Appeal No. 88-8 at 11 (EPA November 10, 1988) (Order Denying Review) (BACT permit conditions "are not intended to redefine the source"). Therefore, to give Petitioners the benefit of the doubt, I will not construe their petition as advocating a redefinition of the Spokane project by proposing fuel cleaning and separation as a substitute for conventional, state-of-the-art pollution control technology. Rather, I will assume Petitioners are advocating the addition of fuel cleaning and separation to the controls already proposed for the facility.

levels for regulated air pollutants ^{8/} that are demonstrably lower than the levels achievable using the proposed control equipment, then Ecology would have erred in its BACT determination by not analyzing fuel cleaning and separation sufficiently. ^{9/} The second major issue presented by the appeal, unrelated to the

^{8/} Petitioners do not identify the specific regulated air pollutants that supposedly do not meet BACT requirements. This omission contributes to the serious lack of specificity in the petition, discussed elsewhere in the text of this decision, for not all pollutants are regulated pollutants, whereas only regulated pollutants are subject to BACT. Similarly, not all heavy metals and toxic pollutants -- i.e., the ones of specific concern to Petitioners -- are regulated pollutants, and thus not all of them are subject to BACT. The list of regulated pollutants include some heavy metals but not toxic pollutants such as dioxins and furans. The regulated pollutants include: arsenic, asbestos, benzene, beryllium, carbon monoxide, fluorides, hydrocarbons, hydrogen sulfide, lead, mercury, nitrogen oxides, ozone, particulate matter, radionuclides, radon-222, reduced sulfur compounds, sulfur dioxide, sulfuric acid mist, total reduced sulfur, vinyl chloride and volatile organic compounds. See 40 CFR §52.21(b)(23) (prevention of significant deterioration of air quality); 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

^{9/} The focus of a BACT determination is not always on regulated pollutants. In some circumstances, an alternative technology for controlling a regulated pollutant may be deemed BACT in preference to another technology, even though application of the former does not result in lower emission levels than the latter. This circumstance occurs, for example, whenever an analysis of the overall environmental impacts of the two technologies demonstrates that one will have lower adverse impacts than the other. We are not confronted with this issue in this case because, as explained in the text, Petitioners have not established, as a threshold matter, that fuel cleaning and separation, when used in combination with conventional, state-of-the-art pollution control equipment, are "available" control technologies for control of regulated pollutants. Unless this advocated additional control technology is available for the primary purpose of controlling emissions of regulated pollutants, the permit issuer is not required to include that control technology in the BACT analysis or consider, as a secondary matter, the effect of that technology on unregulated pollutants or its other collateral environmental impacts.

recycling issue, is whether Ecology also erred in its BACT determination by not requiring thermal de-NO_x for control of NO_x emissions. Resolution of these issues necessarily begins with an examination of the process of making the BACT selection from among competing technologies.

The statutory phrase "best available control technology" or BACT, as it is customarily abbreviated, refers to a technological standard that applies to facilities subject to PSD requirements. It is defined in section 169(3) of the Clean Air Act ^{10/} as an "emission limitation" ^{11/} reflecting the "maximum degree of

^{10/} The complete text of the BACT definition states:

The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 7411 [new source standards] or 7412 [hazardous pollutant standards] of this title.

^{11/} The term "emission limitation" is defined in section 302(k) of the Clean Air Act as follows:

Sec. 302. When used in this Act --

* * *

(k) The terms "emission limitation" and "emission standard" mean a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or

(continued...)

reduction" of "each pollutant subject to regulation under the Act," which the permitting authority determines is achievable after "taking into account energy, environmental, and economic impacts and other costs." 42 USCA §7479(3). Achievement of an emission limitation may be secured "through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant." *Id.*

Recent EPA guidance describes the process of selecting BACT for individual facilities. The process is based on a recognition that the statutory definition of BACT imposes a responsibility on the permit applicant to identify the particular "available" technology that will produce the maximum degree of reduction of each regulated pollutant to be emitted from the proposed facility. If the applicant wishes to use some less effective control technology, the applicant must "demonstrat[e] that significant technical defects, or substantial local economic, energy, or environmental factors or other costs warrant a control technology less efficient than [the most stringent available technology]."

^{11/} (...continued)

maintenance of a source to assure continuous emission reduction.

42 U.S.C. §7602(k). The regulatory definition of BACT provides that, to the extent technological or economic limitations in measurement methodologies would render an emissions standard infeasible, the Administrator may instead prescribe a design, equipment, work practice, operational standard, or combination thereof. See, e.g., 40 CFR §52.21(b)(12).

Honolulu Resource Recovery Facility, PSD Appeal No. 86-8, at 7 (EPA June 22, 1987) (remand of decision respecting SO₂ controls for a municipal waste incinerator). In guidance issued by EPA's Assistant Administrator for Air and Radiation on December 1, 1987, ^{12/} the process of selecting BACT -- known as the "top-down" approach to BACT analysis -- is described as follows:

The first step in this approach is to determine, for the emission source in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental or economic objections. Thus, the "top-down" approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available. It also differs from other processes in that it requires the applicant to analyze a control technology only if the applicant opposes that level of control; the other processes required a full analysis of all possible types and levels of control above the baseline case. ^{13/}

^{12/} Memorandum from Craig Potter, Assistant Administrator, to Regional Administrators (Regions I-X) (Dec. 1, 1987). See also Memorandum from Gerald Emison, Director, EPA Office of Air Quality Planning and Standards (OAQPS) to EPA Regional Air Office Directors (June 26, 1987), enclosing "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors."

^{13/} Memorandum from Craig Potter, Assistant Administrator, to Regional Administrators (Regions I-X), at 4 (Dec. 1, 1987). The "baseline case" and its relationship to the BACT selection process appears in an EPA guidance manual issued in October 1980. See EPA (Office of Air Quality, Planning, and Standards), Prevention of Significant Deterioration Workshop Manual, at II-B-1 et seq., EPA-450/2-80-081 (October 1980). The selection process as outlined in the guidance manual was not inconsistent with the dictates of the statute; however, in practice, the process developed into what could be described as the "bottom up" approach, in which the permit applicant could select virtually
(continued...)

Applying the top-down approach to Spokane, the issue is whether the alternative controls advocated by the Petitioners -- thermal de-NO_x for NO_x emissions, and fuel cleaning and separation for heavy metal and toxic pollutant emissions -- represent the most effective or "top" technologies for control of regulated pollutants, or whether they represent some lesser level of control. If they represent the former, the BACT analysis performed by Spokane and approved by Ecology should have contained (but did not) an in-depth discussion of each alternative control technology to justify rejecting it as BACT. If, on the other hand, Petitioners' alternatives do not represent the top technologies, no detailed discussion of them is required in the BACT analysis, unless there is evidence to show that the alternatives are available for the primary purpose of controlling regulated pollutants and, despite not being the top technology, they are nevertheless BACT after giving appropriate weight to their collateral environmental (or energy) impacts. ^{14/} Absent such

^{13/} (...continued)

whatever technology it deemed desirable from a business or utilitarian perspective -- the so-called "baseline case" -- and then, in a formidable challenge to the applicant's powers of objectivity, the applicant was expected to present a full and fair analysis of alternative technologies, including potentially more effective technologies. This approach presented too many opportunities for abuse, since it provided little or no incentive for the applicant to select the most effective technology, particularly when the most effective technology -- as is often the case -- was also the most expensive technology.

^{14/} See, e.g., note 9. If the applicant and the permitting authority agree that the top technology for control of regulated pollutants should be selected as BACT, economic impacts that in
(continued...)

evidence, no detailed discussion of the alternatives is required since the analysis would only satisfy academic concerns and would have no effect on the outcome of the permit determination. Any failure on the part of the permit issuer to consider such a technology would amount to harmless error, at most.

Did Ecology miscategorize either of the two types of technology when it rejected them and concluded that neither required additional analysis? This question is now moot for the thermal de-NO_x issue; Spokane's subsequent decision to install an appropriate NO_x emission control system employing either thermal de-NO_x or an equivalent technology effectively decides the issue. All that remains to be done now is for Ecology to set numerical emission limitations for the NO_x emissions using the agreed-to technology, and to prescribe monitoring requirements and operating restrictions as deemed necessary or appropriate. ^{15/}

The question is not as easily answered in the case of fuel cleaning and separation. To answer it, we first need to ascertain the permit issuer's responsibilities whenever deficiencies in a proposed permit determination are alleged. For instance, do the rules require the permit issuer to conduct a full-scale BACT

^{14/} (...continued)

theory could justify selection of less effective technologies are presumably not at issue.

^{15/} Ecology and Spokane will want to consider the optimization provisions discussed in the recent permit decision for the Pennsauken waste-to-energy facility in New Jersey. See Pennsauken Resource Recovery Facility, PSD Permit No. 88-8 (EPA April 20, 1989) (Order Denying Review).

analysis of each alternative proposed by a commenter, regardless of the proposal's merit, or is it permissible for the permit issuer to tailor its response in proportion to the substantive merits of the proposal? In other words, if the comment is clearly without merit or is vague and lacks sufficient support, can the permit issuer dismiss the comment summarily or must it prove the comment's lack of substance by, for example, requiring the permit applicant to submit studies, tests, and comparisons demonstrating that the commenter's proposed alternative technology is unworkable or otherwise unsuitable?

The applicable rules and case law fortunately adopt a rule of reason in answer to these questions, and thus do not require the permit issuer to respond in detail to all comments irrespective of their merit. Specifically, the permit issuer need only "describe and respond to all significant comments on the draft permit." 40 CFR §124.17(a)(2) (emphasis added). The permit issuer's response can be in proportion to the substantive merit of the comments.

[T]he "dialogue" between administrative agencies and the public "is a two-way street." Home Box Office, 567 F.2d at 35. Just as "the opportunity to comment is meaningless unless the agency responds to significant points raised by the public," id. at 35-36 (footnote omitted), so too is the agency's opportunity to respond to those comments meaningless unless the interested party clearly states its position. See Wisconsin Electric Power Co. v. Costle, 715 F.2d 323, 326 (7th Cir. 1983) ("the rules of administrative law apply across the board, to agencies and interested parties alike").

Northside Sanitary Landfill, Inc. v. Lee M. Thomas, 849 F.2d

1516, 1520 (D.C. Cir. 1988) (interpreting the phrase "significant

comments" in the rulemaking provisions of the Administrative Procedure Act). The Supreme Court has also held that a permit issuer may adopt a threshold test for determining how it responds to a comment or proposal. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 551-555, 55 L.Ed. 2d 460, 98 S.Ct. 1197, 1215-1217 (1978). The petitioners in Vermont Yankee had accused the Atomic Energy Commission of not giving adequate consideration to "energy conservation" as an alternative to licensing the construction of a nuclear power plant. The Commission held that it would only consider energy alternatives that were reasonably available, would curtail demand to the point where the power plant would not be necessary, and were susceptible of a reasonable degree of proof. The Commission concluded that petitioners had not met this threshold test because, inter alia, they had failed to "take into account that energy conservation is a novel and evolving concept." Vermont Yankee 98 S.Ct. at 1207. The Commission added that in view of "this emergent stage of energy conservation principles," it is incumbent on the petitioners to state "clear and reasonably specific energy conservation contentions." Id. The Court of Appeals held that the Commission's threshold test was arbitrary and capricious, but the Supreme Court overturned the appellate court, holding that the Commission's decision had to be judged in light of the information then available to it. Significantly, the Supreme Court noted that the petitioners' responsibility to present its position and contentions effectively was especially heavy when the Commission is

being asked to "embark upon an exploration of uncharted territory, as was the question of energy conservation in the late 1960's and early 1970's." Id. 98 S.Ct. at 1216.

In the case of the instant petition, as in Vermont Yankee, historical perspective is an essential ingredient of any threshold test, for fuel cleaning and separation are also new and evolving concepts insofar as air pollution control at municipal waste incinerators is concerned. Although arguably much is known about recycling in terms of how and what to recycle to achieve waste reduction, no hard data are presently available to judge whether supplementing conventional, state-of-the-art pollution control equipment such as baghouses and scrubbers with fuel cleaning and separation would cause reductions or increases of regulated pollutant emissions. According to an EPA Municipal Waste Task Force Report just released in February 1989, information on reducing emissions from municipal waste incinerators through elimination of specific materials from the combustor -- for example, through separation and recycling -- is not well known: "[D]ata are currently inadequate to determine precisely the effect on air emissions and ash of eliminating specific materials from the waste stream prior to combustion." ^{16/}

This current paucity of knowledge is illustrated by the petition for review. Petitioners are unable to point to a single study or instance in which the addition of fuel cleaning and

^{16/} "The Solid Waste Dilemma: An Agenda for Action," supra note 4, at 63.

separation results in any emissions reductions over those obtained by the use of the highly effective conventional equipment and operating practices already required by the Spokane permit. Petitioners cite a study done by National Recovery Technologies, Inc. (NRT) for the proposition that removal of aluminum, steel, glass, and dirt from municipal waste will result in "a 30 to 75 percent reduction of air emissions"; ^{17/} however, an examination of this study fails to support Petitioners' statement, at least not in the manner intended by Petitioners. The study actually shows that these reductions represent comparisons of emissions from the separate burning of treated (cleaned) and untreated wastes, respectively, "prior to emissions control equipment and are not direct air releases." NRT Study at 4 (emphasis added). In other words, the study does not show that there would be a reduction in pollutant emissions had conventional pollution control devices been in operation. This omission is significant, because it is impossible to conclude from the study whether emissions would have increased, decreased, or stayed the same if conventional equipment had been in operation, ^{18/} for it is well

^{17/} Petition at 3.

^{18/} I disagree with Region X, which takes the position, Response at 6 (undated), that the results of the study "imply" that recycling, in combination with the current combustion and post-combustion controls proposed, would constitute the most effective method of reducing heavy metal emissions. Any such implication at this time is premature and speculative; the data warrant, at most, further investigation in the form of additional studies. Hence, it was not clear error for Ecology to not accept this implication. For much the same reasons, I attach no special weight to Ecology's "assumption," pointed out by Petitioners,
(continued...)

known that the conventional, state-of-the-art equipment required by the Spokane permit is highly effective in reducing emissions of heavy metals and most other pollutants, as well as reducing the specific pollutants for which the equipment is designed to control -- principally SO₂ and particulate matter. ^{19/}

Petitioners also make reference to a BACT analysis performed by EPA Region IX, San Francisco, California, for a municipal waste incinerator to be built in San Marcos, California. This BACT analysis included source separation as a control option. ^{20/} Region IX concluded, however, that BACT for the incinerator was a lime slurry spray dryer system (dry scrubber) with a baghouse for the control of sulfur dioxide (SO₂), acid gas, and particulate emissions. Region IX specifically found that source separation provides poor control of heavy metals and fair control of dioxins

^{18/} (...continued)

that removing heavy metals from the fuel before combustion would reduce their emissions.

^{19/} See, e.g., Memorandum, dated June 27, 1987, from Gerald Emison, Director, EPA Office of Air Quality Planning and Standards (OAQPS) to EPA Regional Air Office Directors, enclosing "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors" ("EPA today also draws upon the technical data referenced below, and its experience in issuing, reviewing, and enforcing PSD permits for [municipal waste combustors] MWCs. Recent emission test data have demonstrated that particulate matter (PM), SO₂, and other air pollutants (including [toxic] organics, heavy metals, and acid gases) can be controlled effectively by acid gas scrubbing devices (dry scrubbers) equipped with efficient particulate collectors" -- page 4).

^{20/} Letter from Jean M. Mischel, attorney for Petitioners, to Jay Willenberg, Air Program, Washington Department of Ecology, dated November 2, 1988 (commenting on Ecology's preliminary approval of the permit).

and furans. According to the Region, the lime slurry spray dryer, in contrast, provides excellent control of both heavy metals and dioxins and furans. ^{21/} In short, Region IX's consideration and rejection of source separation in this one instance obviously furnishes no basis for saying Ecology erred by not including it in the Spokane BACT analysis.

The absence of studies or actual operating results is especially fatal under the Clean Air Act, for the statutory definition of BACT requires a technology to be "available" for it to be considered as BACT. ^{22/}

The permit applicant's burden of showing that a more stringent technology is not BACT obviously does not come into existence unless the so-called "more stringent" technology is available. If the technology is not available, the permit applicant is under no duty to consider it in the BACT analysis.

Pennsauken Resource Recovery Facility, PSD Appeal No. 88-8, at 7 (EPA November 10, 1988) (Remand Order). A technology is obviously not available in any meaningful sense if knowledge about its effect on emissions, in the particular configuration in which it would be employed, is so incomplete as to be unusable. Moreover, given the Clean Air Act's emphasis on granting or denying com-

^{21/} Id. (enclosure).

^{22/} As with the NRT study, the Region IX BACT analysis does not explore what levels of emission reductions might be achieved by using source separation and conventional pollution control equipment in combination with each other. The reason it was not done, I suspect, can be attributed to the same lack of essential data that is also apparent in this case.

pleted PSD permit applications within one year of filing, ^{23/} it would be unreasonable to read the term "available" as imposing a duty on the permit applicant to conduct time-consuming original research by generating new data for the purpose of discovering whether a potential, but unproven, technology might possibly prove successful. ^{24/} Perhaps more importantly, without the requisite knowledge about the technology's effects on emissions, the technology also cannot be regarded as the "best" technology. Therefore, I conclude that Petitioners have not shown that fuel cleaning and separation, in combination with conventional, state-of-the-art pollution control equipment, constitute available technologies for purposes of the BACT determination.

^{23/} The one year limitation appears in section 165(c) of the Clean Air Act:

Any completed permit application under section 7410 of this title for a major emitting facility in any area to which this part applies shall be granted or denied not later than one year after the date of filing of such completed application.

42 USCA §7475(c). The limitation is "directive in nature" not jurisdictional. *Hancock County v. EPA*, No. 83-3108, slip op. (6th Cir. Aug. 14, 1984), 22 Env't. Rep. Cas. 1714, 1719 (BNA).

^{24/} This does not imply that a technology need have a proven application for the source category under consideration before it can be deemed "available." Technology transfer from one source category to another is appropriate for BACT purposes. Thus, a technology that is in actual use for controlling a regulated pollutant in one source category -- and thus is clearly available -- may be required for control of that same pollutant in another source category, provided sufficient data can be readily generated to establish transferability. However, that issue is not presented in this case. Here, there are no known facilities using the advocated technology (fuel cleaning and separation in combination with conventional, state-of-the-art pollution equipment) for control of regulated pollutants.

Apart from the absence of studies or operating results to support the petition, the petition is also flawed in at least one other serious respect. Specifically, given the embryonic state of our knowledge about recycling in the present context, Petitioners also have a responsibility to satisfy a reasonable threshold of clarity and precision in their demands of the permit issuer. They have not done so in this case. For example, Petitioners never state exactly what they mean by fuel cleaning and separation. The omission is problematic because there is no uniform definition of fuel cleaning and separation, and Petitioners have not sought to clarify their intentions by supplying their own definition. Both terms in the context of the petition can be interpreted as referring simply to removal (separation) of objects such as car batteries, tires, glass bottles, and large metal appliances, so-called white goods, from the waste fuel before incineration. In fact, Petitioners identify "removal of aluminum, steel, glass, and dirt" as examples of separation possibilities. Petition at 3. However, Petitioners later expand their concept of separation to encompass use of refuse-derived fuel (RDF), which they refer to as an example of "mechanical"

separation. ^{25/} Petitioners also use the term "source separation" in apparent reference to curbside separation of waste by homeowners, but without specifying how the waste should be separated. ^{26/} Because of the uncertainty and confusion in their terminology, it is difficult to determine precisely what Petitioners are alleging Ecology failed to consider in its BACT analysis. ^{27/} The possibilities appear limitless. Under these circumstances, it is unreasonable to expect the permit issuer or the permit applicant to sort through all the possibilities in the hope of identifying some feasible practice that might satisfy Petitioners' expecta-

^{25/} Significantly, however, RDF facilities are usually associated with a different combustor design and feed mechanism than the designs employed in mass-burn incinerators such as the one proposed for Spokane. As noted previously, EPA has not required PSD applicants to redefine the fundamental scope of their projects. See note 7, *supra*. For example, an applicant proposing to build a coal-fired boiler has not been ordered to build a gas-fired turbine although the latter is inherently less polluting.

^{26/} Although the Clean Air Act easily contemplates object removal by the permittee as a potential control technology ("fuel cleaning and treatment"), it is not at all clear that the permit issuer can require curbside separation by homeowners as a condition of a PSD permit, and that issue is not decided here. Moreover, even where the requested condition is phrased as a limitation on the kinds of waste to be accepted by the permittee, if the requested limitations are extensive the proposal might border on an improper request to redefine the source, i.e., to alter the fundamental scope of the project. See note 25, *supra*.

^{27/} I note that Spokane, Ecology, and EPA Region X, in their responses to the petition, cope with the imprecision by glossing over it and providing, in effect, their own definitions of what they think Petitioners meant. No such powers of clairvoyancy should be necessary to respond appropriately to a petition.

tions. I therefore conclude that the ill-defined scope of the petition alone is grounds for its dismissal. ^{28/}

Conclusion

Petitioners have not made an adequate case for reviewing the permit on the "fuel cleaning and separation" issue. As discussed, the petition fails to demonstrate that Ecology committed clear error in not requiring the permit applicant to develop more information on these practices. I say this because Petitioners are requesting Ecology to venture into territory that is not well charted, where the possible recycling and separation strategies that Spokane could adopt are virtually limitless and the results are unknown and not presently predictable. Therefore, it is not enough for Petitioners to say that benefits can be derived from these practices when our knowledge about them in the specific context of air pollutant emissions from municipal waste incineration is in the formative stages. To have warranted in-depth

^{28/} See also note 8 *supra*. The vagueness resulting from lack of definition cannot be dismissed as harmless error. For example, EPA's failure to define "recycling" in Clean Water Act regulations that established separate requirements for discharges of wastewater from crushed stone mining operations, depending upon whether the operator recycled the mine's wastewaters, prompted a reviewing court to express doubts about the validity of the regulations:

The fact that the regulations do not define recycling may well make them void for vagueness under our decision in duPont, at p. 1033, where we set aside an EPA regulation because we were "not sure what it means in the context in which it is used."

National Crushed Stone Ass'n v. E.P.A., 601 F.2d 111, 120 (4th Cir. 1979) (remanding the regulations on other grounds).

consideration in the BACT analysis, Petitioners should have established as a threshold matter that these practices are "available" to the applicant, e.g., that there are sufficient data indicating (but not necessarily proving) that their additional control technologies, in conjunction with the conventional, state-of-the-art controls considered in the Spokane BACT analysis, will lead to a demonstrable reduction in emissions of regulated pollutants or will otherwise represent BACT.^{29/} They have not done so in this instance. Petitioners have not pointed to a single facility anywhere (or even a study) that satisfies these threshold requirements. Therefore, this aspect of the petition is dismissed.

It is clear that more and more communities will be using recycling in conjunction with incineration to address their municipal waste problems. As more information becomes available from these communities, it may overcome the deficiencies in the petition presented in this case, and if so, it may determine the potential of recycling practices for controlling regulated pollutant emissions under the PSD provisions of the Clean Air Act. The Agency expects future permit applicants to consider this information as it becomes available and to assess its potential for inclusion in their analyses of BACT. The rate at which this information becomes available is also likely to increase rapidly in the near future. In late January 1989, EPA

^{29/} Cf. note 9, supra.

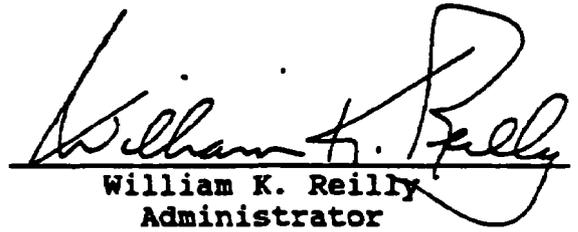
established a new Office of Pollution Prevention, which will include the study and development of environmentally sound recycling practices as part of its mission. 54 Fed. Reg. 3845 (January 26, 1989). In addition, the Agency's February 1989 Municipal Waste Task Force Report describes the many recent efforts to develop information and to effect positive changes in the way we deal with the problems of increasing waste generation and decreasing waste management capacity. Currently, however, not enough technical data are available to determine the air quality benefits of requiring fuel cleaning and source separation in combination with state-of-the-art air pollution equipment.

As a final matter, I am also dismissing as moot the petition insofar as it concerns the NO_x emission limitation and thermal de-NO_x technology. I am doing this not because the petition lacks merit but because Spokane has agreed to install the requisite technology and to have the permit revised to reflect this change in the facility. Accordingly, I am remanding the permit to Ecology to revise the permit along these lines. Following reissuance of the revised permit, Petitioners shall be given the opportunity, in accordance with 40 CFR §124.19, to appeal any determination Ecology makes with respect to the revised NO_x

limitation. Any such appeal shall be strictly limited to the scope of the revisions in the NO_x limitation.

So ordered. ^{30/}

Dated: JUN 9 1989


William K. Reilly
Administrator

^{30/} All pending requests to submit further comments or responses are denied.

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying Review, PSD appeal No. 88-12, were mailed to the following by First class mail, postage prepaid.

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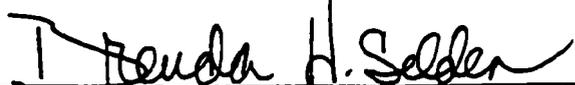
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Dated: JUN -9 1989


Brenda H. Selden, Secretary
to the Chief Judicial Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JUN 15 1989

Mr. John Daniel
Assistant Executive Director
Department of Air Pollution Control
Commonwealth of Virginia
P.O. Box 10089
Richmond, Virginia 23240

Dear John:

This is in response to your letter of May 12, 1989, in which you asked at what time the State of Virginia could finalize a best available control technology (BACT) determination for a new emission source that will be collecting site-specific meteorological data until April 1990 for the air quality modeling analysis required under 40 CFR 51.21(m). You stated that the air quality modeling analysis must be performed before the permit application can be considered complete, and specifically asked whether the State may "lock in" BACT for the source (a) now, approximately 10 months before the meteorological data are available for the modeling analysis, (b) in December for modeling purposes, or (c) at some other time. You added that your preliminary determination of BACT for this source is the same as for three other virtually identical emission sources for which you already have issued permits to the applicant.

Based on the situation you have described, there are two interpretations of the question you have asked. The first is that the applicant wants a BACT decision that is somehow "locked in" (i.e., unchangeable) at some point during (or before) the permit review process. Such a procedure would be unlawful. In the BACT selection process, the applicant analyzes BACT alternatives and recommends one of the alternatives in the application. The reviewing agency then makes a preliminary BACT determination and presents this and other preliminary determinations to the public for comment. The reviewing agency, based on public comment and any new information regarding either the alternatives evaluated in the PSD application or recent developments in control techniques that were not addressed in the application, then selects BACT as it prepares the final permit. Even then, as you know, the BACT decision is not "locked in." If the source requests a permit extension under 40 CFR 52.21(r)(2), EPA's current policy is to re-evaluate the BACT decision based on the technologies that are available at the time of the extension request.

The above summary of the review process for BACT is intended to emphasize the open nature of the BACT determination, even with a complete application. In light of the Clean Air Act's emphasis on careful evaluation and informed public participation, a permitting authority can not lawfully agree on BACT with an applicant before the application is complete.

The second interpretation of this situation is that the applicant simply would like to know your tentative preliminary determination of BACT as soon as possible. There is nothing wrong with sharing this information at any time you feel is appropriate. It is obviously useful for an applicant to know the minimum level of control you would seriously consider to be BACT based on your experience and expertise, so long as you make the applicant understand that you are not held to that level as a "locked in" decision. Of course, a good preliminary BACT determination made for the source is more likely to remain as the permitted BACT.

The lack of a "locked in" BACT should not affect the applicant's ability to conduct a modeling analysis. Modeling should be done by the applicant based on the level of control recommended by the applicant. If a more stringent level of control is selected as BACT, the applicant's modeling results can nearly always be adjusted by applying the ratio of selected vs. modeled emissions. Therefore, a "locked in" BACT isn't needed for modeling.

I am also somewhat concerned about BACT determinations you indicate have already been made. You did not specify what BACT was, but with different fuel mixes, I would have anticipated the probability of different limits on the units. Also, did the BACT review consider whether a spreader stoker was the best way (from an air pollution prevention point of view) to fire coal for co-generation and whether some other type of coal-fired unit would be better?

Another point worth mentioning is the area of technology transfer. We have heard that some applicants are attempting to define gas streams and source types far more narrowly than common sense would dictate in an effort to avoid certain controls. For example, an applicant might say that NO_x controls have been applied to a 30 and 70 MW coal boiler, but not to a 45 MW coal boiler; that the control technology has been applied to pulverized and fluidized bed units, but not to spreader stokers; or that the technology has never been applied to the particular mix of, say, wood and coal planned for that unit. Such arguments should be closely scrutinized and the applicant should explain fully not only what is different about the gas stream (if the control technology being analyzed is an add-on control), but also why that difference precludes transfer of that control technology to the proposed source. The burden of proof should be relatively high in order to prevent circumvention of reasonable technology transfer by the selection of some slightly different unit.

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I hope that this response has been helpful in answering your question. Please contact Sam Duletsky [(919) 541-0873] or me [(919) 541-5592] if you wish to discuss this further.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary McCutchen". The signature is fluid and cursive, with a prominent initial "G" and a long horizontal stroke extending to the right.

Gary McCutchen, Chief
New Source Review Section

cc: Bernie Iurlinski, Region III

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of)	
Hibbing Taconite Company,)	
Petitioner)	PSD APPEAL NO. 87-3
)	

ORDER ON PETITION FOR REVIEW

In a petition dated July 30, 1987, U.S. EPA Region V seeks review of a Prevention of Significant Deterioration (PSD) permit determination that authorizes the Hibbing Taconite Company (Hibbing) to modify its furnaces to burn petroleum coke as a fuel. A final decision to issue the permit was made on July 2, 1987, by the Minnesota Pollution Control Agency (MPCA), pursuant to a delegation of authority from Region V. ^{1/} MPCA's action in issuing the permit is subject to the review provisions of 40 CFR §124.19 because the permit is deemed to be an EPA-issued permit under EPA rules. 40 CFR §124.41; 45 Fed. Reg. 33,413 (May 19, 1980).

In its petition for review, Region V raises seven issues: (1) whether Hibbing's analysis of Best Available Control Technology (BACT) for sulfur dioxide (SO₂) is erroneous; (2) whether

^{1/} The PSD program was delegated to the State of Minnesota on October 15, 1980, under the authority of 40 CFR §52.21(u). See Letter from John McGuire, Regional Administrator, EPA Region V, to Terry Hoffman, Executive Director, MPCA (October 15, 1980).

Hibbing failed to perform a collateral impacts analysis on unregulated pollutants as required by North County Resource Recovery Associates, PSD Appeal No. 85-2 (June 3, 1986); (3) whether the permit violates section 165 of the Clean Air Act (CAA or Act) by allowing Hibbing to modify its facility and operate for nine months without a prescribed emission limit for SO₂; (4) whether the permit limit of 0.024 grains per dry standard cubic foot (gr/dscf) represents BACT for particulate matter (PM); (5) whether Hibbing improperly excluded its property from the ambient air quality modeling; (6) whether analysis of alternative control technologies is required for carbon monoxide (CO) emissions and whether the permit must contain operating requirements for combustion of CO; and (7) whether Hibbing improperly relied on existing data from distant monitors to meet the preconstruction monitoring requirements under 40 CFR §52.21(m)(1). ^{2/}

For the reasons set forth below and pursuant to 40 CFR §124.19, review of issues (2), (6), and (7) is denied. Issues (1), (3), (4), and (5) are remanded to MPCA to conduct additional BACT analyses and to determine the portion of the Hibbing pro-

^{2/} Both Hibbing and MPCA have filed responses to the Region's Petition for Review. See Comments of Hibbing Taconite Company on the EPA Region V Petition for Review of Minnesota Permit No. 541-87-OT-1 (PSD Appeal No. 87-3) (December 30, 1987); Minnesota Pollution Control Agency, Division of Air Quality, Response to U.S. EPA Region V's Petition for Review of Permit No. 541-87-OT-1 Issued to Hibbing Taconite Co. (September 28, 1987). Hibbing's attorney sent a letter dated January 5, 1988, concerning a curtailment of natural gas to the Hibbing plant. For purposes of deciding the issues on appeal, there is no need to consider the matters raised in that letter.

perty (if any) that should be excluded from the ambient air determination, consistent with this opinion.

Background

Hibbing's plant crushes taconite ore, concentrates the iron in the resulting powder, and forms it into pellets for shipment to a primary steel plant. The taconite plant equipment includes ore crushers, concentrating process lines, and pelletizing furnaces. The plant currently uses venturi rod scrubbers as a pollution control technology. Until recently the furnaces burned only natural gas and fuel oil. Now Hibbing plans to switch to petroleum coke as a fuel, thus requiring a physical modification of the plant. The modification will bring Hibbing under the purview of the CAA's PSD requirements for the first time. ^{3/}

Hibbing has submitted a PSD applicability analysis that shows the proposed modification is subject to PSD requirements for emissions of SO₂, CO, and PM. ^{4/}

^{3/} The Hibbing facility was constructed between 1973 and 1977. The PSD requirements of the CAA apply only to facilities on which construction was commenced after August 7, 1977. 42 U.S.C. §7475.

^{4/} Before an existing major emitting facility located in an area that is meeting the National Ambient Air Quality Standards (NAAQS) can undertake a major modification, i.e., one which would result in a significant net emissions increase of a regulated pollutant, the owner must obtain a PSD permit. 40 CFR §52.21(b)(2)(i). Hibbing is located in an area designated as being in attainment of the NAAQS for SO₂, CO, and TSP -- all regulated pollutants. 40 CFR §81.324. Hibbing's analysis shows that there would be a significant net emissions increase for each of these pollutants.

Discussion

Administrative review of PSD permit decisions is not usually granted unless the permit decision is clearly erroneous or involves an exercise of discretion or policy that is important and therefore should be reviewed by the Administrator as a discretionary matter. 40 CFR §124.19. "This power of review should be only sparingly exercised * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The regulations envision that disputed permit conditions will be resolved for the most part at the regional level. Id. The burden of demonstrating that review should be granted is therefore on the petitioner.

Issue (1): BACT for SO₂

The CAA makes permit issuance contingent on a showing that the proposed facility will employ the Best Available Control Technology (BACT) for each regulated pollutant emitted from it in significant amounts. 42 U.S.C. §7475. Section 169(3) of the CAA defines BACT as an "emission limitation" reflecting the "maximum degree of reduction" that is "achievable" on a "case-by-case basis, taking into account energy, environmental, and economic impacts and other costs." 42 U.S.C. §7479(3). This case-by-case approach provides a mechanism for determining and applying the appropriate technology in each situation.

The Region argues that the BACT analysis for SO₂ is erroneous because Hibbing failed to use the burning of natural gas as

its "base" case; ^{5/} it did not factor in the cost savings from the fuel switch; it did not justify rejecting the burning of natural gas as a viable control strategy; and it did not present an engineering analysis demonstrating how the proposed 1.2 lbs/MMBTU limitation for SO₂ emissions would be achieved or explaining why this limitation represents BACT. ^{6/} According to the Region, the first two arguments present the following question: "When economic problems face a facility, to what degree must that facility use cost savings to minimize environmental degradation if the facility switches to a more polluting fuel that reduces operating costs?" ^{7/} Because PSD guidance for BACT does not directly address this issue, the Region asserts that it is appropriate for review by the Administrator.

Neither the PSD regulations nor the PSD guidance differentiate between BACT analyses for plant modifications and BACT analyses for the construction of new plants. Nevertheless, the Region contends that, because Hibbing has been able to continue

^{5/} Use of the base case in performing a BACT analysis is described in the EPA Prevention of Significant Deterioration Workshop Manual at I-B-7 (October 1980). For a definition of the base case, see text infra at 6-7. Cf. note 10 infra.

^{6/} The Region also argues that Hibbing failed to consider other technologies commonly used to control SO₂ gas streams. Although this argument may have been true with regard to the original BACT analysis, Hibbing remedied this deficiency with its supplemental BACT analysis and its 9/24/87 BACT support study, conducted by Black and Veatch. See Letter from Charles B. Hoffman to David Beil, MPCA Staff Engineer (June 17, 1987); MPCA Response at 9-11 and Attachment 1.

^{7/} See Response of U.S. EPA, Region V, to Comments of Hibbing Taconite Company at 4 (March 14, 1988).

to operate burning natural gas, it must use natural gas as the base case. I disagree. Hibbing's use of the coke burning plant with existing pollution controls as the base case clearly complied with the criteria for choosing a base case in EPA's guidance document. EPA's Prevention of Significant Deterioration Workshop Manual (October 1980) defines the base case as:

[T]he control strategy that, in the absence of BACT decisionmaking, would normally have been applied. The choice of the base case may be dictated by other existing regulations and/or by company practice standards or choices, if they provide a greater degree of emission reduction than that required by existing regulations (such as new source performance standards, national emission standards for hazardous air pollutants, etc.).

Id. at p. I-B-7. The base case chosen here meets the requirements of Minnesota's state permitting regulations,^{8/} and thus is consistent with this definition. Moreover, Hibbing's choice of the base case is consistent with the practices of other taconite plants in Minnesota.^{9/} Nothing in the definition requires the

^{8/} Minnesota taconite plants operate under permits specifying the SO₂ emission limits based on Minnesota Rules part 7005.2770. These limits are 2.0 lbs/MMBTU when burning a liquid fuel and 4.0 lbs/MMBTU when burning a solid fuel. See MPCA Response at 7. The limit in the base case chosen by Hibbing is 4.0 lbs/MMBTU when burning petroleum coke. But see note 15 infra.

^{9/} Of the three taconite plants in Minnesota that are equipped and permitted to burn a combination of solid fuel, fuel oil and natural gas in the pellet production process, two plants produce a substantial portion of their production using a solid fuel. See MPCA Response at 6. Hibbing is the first taconite plant in the United States to become subject to PSD review either for original construction or for modification. Id. at 7.

base case to be the unmodified plant. ^{10/} The Region has not shown any compelling reason why a permit applicant seeking to modify an existing plant should be subject to a different set of criteria for choosing a base case than a new permit applicant.

Furthermore, I disagree with the Region's argument that Hibbing failed to take into account the cost savings from the fuel switch. An important purpose of any BACT analysis is to provide a comparison of the costs associated with each alternative control technology. This comparison necessarily takes into account the cost-savings associated with less expensive control technologies, as well as the increased costs associated with the more expensive alternatives. Once a proper base case is chosen and alternatives are compared, no additional cost savings analysis is necessary. The Region has not met its burden of showing that the BACT analysis was clearly erroneous or otherwise warrants review with respect to the first two issues. Thus, review is denied on this aspect of the SO₂ BACT issue.

The Region's third argument is that Hibbing failed to justify its rejection of burning natural gas as a viable control

^{10/} Recognizing the need for a more consistent BACT process, EPA recently began developing specific guidelines on the use of the "top-down" approach, which requires an applicant to justify why it cannot use the most effective pollutant control available. See Memorandum from J. Craig Potter, Assistant Administrator for Air and Radiation, to EPA Regional Administrator's (December 1, 1987). The top-down approach, however, was not applicable here because the permit determination was made prior to the issuance of this memorandum. See In the Matter of Pennsauken County, New Jersey Resource Recovery Facility, PSD Appeal No. 88-8 at 6-7 (November 10, 1988).

strategy. I agree. Hibbing contends that although natural gas was once a financially viable alternative, due to the depressed economic situation in the steel industry, natural gas is now too costly. Nevertheless, Hibbing has been able to continue to operate using natural gas. In my view, Hibbing's ability to continue to operate using natural gas creates a presumption that natural gas is a financially achievable alternative. Of course this presumption can be rebutted, but to do so, Hibbing must provide a detailed consideration of objective economic data. Mere generalizations about the economic woes of the steel industry are not enough. Hibbing's BACT analysis does not contain the level of detail and analysis necessary to overcome the presumption that the natural gas alternative is economically achievable. The BACT analysis shows the cost of burning natural gas is \$1310/ton of SO₂ removed, however, there is no serious discussion of cost effectiveness. Greater efforts must be made by the applicant to show that the natural gas alternative is not economically feasible. This might be done, for example, by comparing the costs of burning natural gas with the costs associated with SO₂ controls used in other similar types of facilities that have gone through PSD review. ^{11/} Thus, on remand, MPCA must ensure that the BACT analysis contains a more detailed economic justification for rejecting the natural gas alternative.

^{11/} In its petition, the Region states that a control cost of \$1300 per ton is within the cost range found for BACT determinations, and therefore, is reasonable.

Although the parties have not raised it, one argument that could be made is that the Region, by requiring the burning of natural gas to be an alternative to be considered in the BACT analysis, is seeking to "redefine the source." Traditionally, EPA has not required a PSD applicant to redefine the fundamental scope of its project.^{12/} However, this argument has not been made, and in any event, the argument has no merit in this case.

EPA regulations define major stationary sources by their product or purpose (e.g., "steel mill," "municipal incinerator," "taconite ore processing plant," etc.), not by fuel choice.^{13/} Here, Hibbing will continue to manufacture the same product (i.e., taconite pellets) regardless of whether it burns natural gas or petroleum coke. Likewise, the PSD guidelines state that in choosing alternatives to be considered in a BACT analysis, the

^{12/} See In the Matter of Pennsauken County, New Jersey Resource Recovery Facility, PSD Appeal No. 88-8 at 11 (November 10, 1988) (BACT permit conditions "are not intended to redefine the source"). Several important distinctions, however, can be drawn between Pennsauken and the facts here. In Pennsauken, the petitioner was urging EPA to reject the proposed source (a municipal waste combustor) in favor of using existing power plants to co-fire a mixture of 20% refuse derived fuel and 80% coal. In other words, the petitioner was seeking to substitute power plants (having as a fundamental purpose the generation of electricity) for a municipal waste combustor (having as a fundamental purpose the disposal of municipal waste). Moreover, the petitioner was not merely seeking to "condition" the permit; instead, it was urging EPA, in effect, to deny the permit for construction of the proposed source in favor of using existing power plants. The Hibbing situation, however, is quite distinct. Here, the petitioner (the Region) is merely urging the continued burning of natural gas at the same source -- an alternative that will not require any fundamental change to Hibbing's product, purpose, or equipment.

^{13/} See 40 CFR 52.21(b)(1).

applicant must look to what types of pollution controls other facilities in the industry are using. The record here indicates that there are other taconite plants that burn natural gas, or a combination of natural gas and other fuels. Thus, it is reasonable for Hibbing to consider natural gas as an alternative in its BACT analysis. Moreover, because Hibbing is already equipped to burn natural gas, this alternative would not require a fundamental change to the facility.

The Region's last argument with respect to the BACT analysis for SO₂ is that Hibbing failed to present an engineering analysis demonstrating how the 1.2 lbs/MMBTU limitation for SO₂ emissions would be achieved or explaining why this level represents BACT. I agree. Although BACT is defined as an "emission limitation," it is also, as its name implies, keyed to a specific control technology. In a previous PSD permit decision involving the issue of whether EPA has the authority to prescribe technological process and production requirements, the Administrator stated:

PSD permits and BACT determinations are tailor-made for each pollutant emitting facility. Consequently, the "case-by-case" evaluation of economic costs and energy and environmental impacts that has to be performed as part of a BACT determination is inextricably tied to a specific set of assumptions regarding the type of pollution control technology that will be in place at each facility. Any change in the control technology would require a reevaluation of those impacts and costs, which, in turn, might necessitate a change in the emission level (lower or higher than the previous one). Therefore, unless the type of control technology that will be used to achieve a particular emission limitation is identified and adhered to by the Applicant, the BACT determination is meaningless. Accordingly, an emission limitation in a PSD permit cannot be established without also relating it to the

specific type of control technology that will be used to achieve the limitation. ^{14/}

Moreover, EPA regulations require PSD permit applicants to submit "a detailed description as to what system of continuous emission reduction is planned . . . , emission estimates, and any other information necessary to determine that best available control technology would be applied." 40 CFR §52.21(n)(1)(iii) (emphasis added).

Here, the record before me fails to clearly identify the control technology that represents BACT and to explain how MPCA arrived at the 1.2 lbs/MMBTU ^{15/} figure or whether Hibbing will be

^{14/} In the Matter of CertainTeed Corp., PSD Appeal No. 81-2 at 5-6 (December 21, 1982) (footnote omitted).

^{15/} The entire process by which the emission limitation of 1.2 lbs/MMBTU was chosen is confusing. In its initial BACT analysis, Hibbing proposed burning petroleum coke as BACT, using its existing control technology (venturi rod scrubbers). See Letter from Charles B. Hoffman to David Beil, MPCA Staff Engineer (May 20, 1987). In a technical document based on Hibbing's BACT analysis, MPCA concurred with Hibbing. See Request for Authorization to Issue Air Emission Facility Permit No. 54k-87-OT-1 for a Taconite Ore Processing Plant and Air Pollution Control Equipment to Hibbing Taconite Company, MPCA, Division of Air Quality, Regulatory Compliance Section at 4-5 (June 23, 1987). However, MPCA did not specify an emission limitation for SO₂ in that document. In the draft permit subject to public notice, MPCA set the BACT emission limit for SO₂ at 2.0 lbs/MMBTU. Subsequently, in response to EPA comments on the permit, MPCA issued the permit with an emission limitation of 1.2 lbs/MMBTU for SO₂. In its brief, MPCA summarily stated that the 1.2 lbs/MMBTU limit "is economically justified." The Black & Veatch support study, which was completed after MPCA issued the permit with the 1.2 limit, also found the existing technology and petroleum coke to be BACT. Based on this study MPCA determined that 1.8 lbs/MMBTU was BACT. The Black & Veatch study indicates that the only control technology that would lower emissions to 1.2 lbs/MMBTU is the addition of a wet limestone scrubber. However, MPCA never determined that wet limestone scrubbers represent BACT.

able to meet the limit using the existing control technology. ^{16/} MPCA's failure to require Hibbing to provide a detailed description of the control technology that represents BACT, including data quantifying its removal efficiency, is clear legal error. Accordingly, on remand, MPCA must ensure that the record identifies the control technology that represents BACT and MPCA must propose an emission limit based on the BACT analysis. If MPCA determines that 1.2 lbs/MMBTU is BACT, the record must specify the control technology upon which the limitation is based and show that such technology will enable Hibbing to meet the 1.2 lbs/MMBTU limit.

Issue (2): Unregulated Pollutants

Region V argues that MPCA's permit review is deficient because there was no consideration of unregulated pollutants as required by North County Resource Recovery Associates, PSD Appeal No. 85-2 (June 3, 1986). In response, MPCA incorrectly argues that North County only applies to PSD permit proceedings for municipal waste combustors. North County interprets an express statutory requirement applicable to all PSD permits, and thus requires the permitting authority to take into account the control technology's impact on unregulated pollutants in every permit proceeding. However, MPCA also responds that it did require Hibbing to analyze petroleum coke for unregulated trace

^{16/} Hibbing contends that it "cannot meet the 1.2 lb. limit in any financially viable way." See Hibbing's Comments (December 30, 1987).

elements of concern. ^{17/} In its response, Region V did not dispute the adequacy of the trace element analysis. Thus, the Region has not met its burden of showing that Hibbing's analysis of unregulated pollutants is clearly erroneous or otherwise warrants review.

Issue (3): CAA's requirement for prescribed emission limits

Region V argues that MPCA erred in issuing a PSD permit that does not prescribe an emission limitation for SO₂ for the first nine months of operation under the permit. The permit must set forth emission limitations for each regulated pollutant that the facility will emit in significant amounts. Section 165(a)(1), 42 U.S.C. §7475(a)(1). Although Hibbing's permit establishes a 1.2 lbs/MMBTU emission limitation for SO₂, Part V.D. of the permit allows Hibbing to operate its facility for nine months after modification while it designs a plan to achieve and comply with this limit. If after nine months Hibbing cannot achieve the 1.2 lbs/MMBTU limit, it must submit an application for a revised emission limit. As a result, the permit has no emission limit prescribed for SO₂ for at least the first nine months.

Last year in another PSD permit decision (involving the threshold question of whether the Administrator should review the permit), the Administrator stated:

[T]he permit contains a provision allowing a reopening of the BACT determination after construction of the

^{17/} Hibbing analyzed a large number of trace elements in its Applicability Analysis. See MPCA Response at 18-19 and Attachment 6 (September 28, 1987).

facility has commenced. This provision appears to contravene §165(a)(1) of the Clean Air Act (CAA), which forbids construction of a facility before the emission limitations in the permit have been established. (CAA §169(3) defines BACT as an "emission limitation."^{18/})

Similarly, in the instant case, Part V.D. of the permit contravenes section 165(a)(1) of the CAA. Thus, Region V has made a showing of clear error and, on remand, MPCA must ensure that the permit contains an emission limitation for SO₂, based on BACT, for the entire life of the permit.

Issue (4): BACT for (PM)

Region V contends that MPCA erred in setting 0.024 gr/dscf as BACT for PM because the technical document supporting the permit states that the existing scrubbers used by Hibbing "have consistently shown an outlet dust loading of 0.01 gr/dscf when tested by EPA Methods 1-5."^{19/} Nowhere in this document is the 0.024 gr/dscf limit mentioned.

MPCA's response to the Region is that many BACT and Lowest Achievable Emission Rate (LAER) determinations have been made in the range of 0.02 to 0.05 gr/dscf. Since 0.024 is at the low end of this range, MPCA considered it acceptable. MPCA's argument is unresponsive to the information contained in the technical doc-

^{18/} In the Matter of Virginia Power (Chesterfield Generating Station), PSD Appeal No. 88-2 at 2-3 (February 1, 1988) (footnote omitted).

^{19/} See Request for Authorization to Issue Air Emission Facility Permit No. 541-87-OT-1 for a Taconite Ore Processing Plant and Air Pollution Control Equipment to Hibbing Taconite Company, Minnesota Pollution Control Agency, Division of Air Quality, Regulatory Compliance Section at 5 (June 23, 1987).

ument and it ignores the site-specific nature of BACT determinations. The argument that many BACT and LAER determinations have been made in the range of 0.02 to 0.05 gr/dscf should not, by itself, be used to justify a less stringent PM limit than is otherwise achievable, taking into account the necessary energy, economic, and environmental impacts. ^{20/} Therefore, on remand, MPCA must provide a detailed justification for not adopting the 0.01 gr/dscf limitation if another less stringent limitation is chosen.

Issue 4: Ambient Air

The Region argues that Hibbing improperly excluded approximately 14,000 acres of its property from ambient air quality monitoring. An EPA screening analysis conducted with receptors located inside the excluded area indicates that the PM and SO₂ PSD increments and the SO₂ NAAQS will be exceeded. ^{21/} To obtain

^{20/} As MPCA pointed out in its response, EPA guidelines on BACT state that the analysis of alternative strategies is not required in a BACT analysis if the applicant demonstrates that the chosen base case provides the highest degree of emission reduction available. Thus, MPCA may use the 0.01 gr/dscf limit in the permit without considering alternatives if it can show, as it represented in its technical document, that 0.01 gr/dscf represents the highest degree of emission reduction available. See *id.* MPCA also cites EPA's BACT guidelines, which state that the analysis should only be as extensive as the quantity of pollutants emitted and the ambient air impact. MPCA is correct that, under this guideline, it need not necessarily expand the scope of control technology alternatives beyond those previously considered. Nevertheless, MPCA must still explain its reasons for rejecting the 0.01 gr/dscf limit.

^{21/} Furthermore, the analysis suggests PM concentrations in this area may exceed the de minimis level of 10 µg/m³, thus triggering the requirement for pre-construction monitoring data for TSP.

a PSD permit, an applicant must demonstrate that emission increases from the proposed source or modification will not exceed primary or secondary NAAQS or PSD increments. ^{22/}

In ambient air quality monitoring, mathematical models are used to predict pollutant concentrations at specific locations. To obtain a permit, the models need show only that the NAAQS and PSD increments will not be exceeded in the "ambient air." ^{23/} The rules define ambient air as "that portion of the atmosphere, external to buildings, to which the general public has access." 40 CFR §50.1(e). Thus, emissions that exceed the NAAQS or PSD increments on company property to which the public does not have access are not an impediment to permit issuance. EPA policy has allowed exclusion if public access is barred by fence or other physical barrier. ^{24/} A Memorandum of Law issued by the EPA Office of General Counsel interprets the definition of "ambient" in section 50.1(e) as follows:

That definition, in our view, limits the standards' applicability to the atmosphere outside the fence line, since "access" is the ability to enter. In other words, areas of private property to which the owner or

^{22/} See 40 CFR §52.21(c) (increases in pollutant concentrations over baseline limited to specific PSD increments); id. §52.21(d) (no pollutant concentration shall exceed the primary or secondary NAAQS); see also 40 CFR §52.21(k)(2) (the applicant must demonstrate the proposed source or modification will not cause or contribute to air pollution in violation of any PSD increment or NAAQS).

^{23/} Both the PSD increments and the NAAQS only apply in areas meeting the definition of ambient air. See 42 U.S.C. §§7409 & 7470-7473.

^{24/} See, e.g., Letter from Douglas M. Costle, EPA Administrator, to Senator Jennings Randolph (December 19, 1980).

lessee has not restricted access by physical means such as a fence, wall, or other barrier can be trespassed upon by members of the community at large. Such persons, whether they are knowing or innocent trespassers, will be exposed to and breathe the air above the property. ^{25/}

MPCA argues that it inspected the area and found that effective physical barriers preclude public access. ^{26/} In support of this argument, MPCA has submitted photographs that show access roads blocked by gates and other physical barriers. Hibbing correctly argues that the test for ambient air exclusion does not require a continuous fence around the perimeter of the property. Other types of physical barriers can effectively preclude access. However, based on photographs submitted by EPA, there appears to be at least three, ^{27/} possibly four, ^{28/} locations where physical

^{25/} Memorandum from Michael A. James, EPA Air Quality and Radiation Division, to Jack R. Farmer, EPA Plans Management Branch (September 28, 1972) (citation omitted) (emphasis added).

^{26/} MPCA cites a Federal Register notice in which EPA found the operator of the Kennecott smelter in Magma, Utah had effectively precluded public access from its property by a series of no trespassing signs, rugged terrain, and security patrols. See 50 Fed. Reg. 7057 (February 20, 1985). As Region V points out in its response, however, the two situations are not analogous. The Kennecott property was extremely rugged and mountainous. Thus, the physical terrain itself helped to create an effective barrier. Id. Hibbing's property, as described by Hibbing itself, consists of "flat lowland with occasional rolling hills." See Hibbing's Comments at 16. Furthermore, Kennecott apparently did not involve the same type of rights of way as does the Hibbing property.

^{27/} The three locations not having any apparent physical barriers are the main plant entrance, the rail line into the plant, and the power line into the plant.

^{28/} It is difficult to ascertain whether the berm around the tailings pond is an effective physical barrier from the photographs submitted.

barriers, natural or otherwise, do not exist along the perimeter of the 14,000 acres. I am remanding this issue to MPCA to reconsider whether public access is effectively precluded at the four locations in question. If MPCA does not find effective barriers to public access at the four identified (or any other) locations, MPCA must impose requirements in the permit that would force Hibbing to erect appropriate barriers or to take other measures that would effectively preclude public access. Alternatively, MPCA may identify a different portion (presumably smaller) of Hibbing's property, from which access is effectively barred.^{29/} The factual issue of the exact area to which public access is precluded may be ripe for a negotiated settlement.

Issue 6: BACT for CO

Region V argues that the BACT analysis for CO is erroneous because it did not contain an analysis of alternative controls and did not include any operational requirements for combustion of CO. I disagree. The Region acknowledges that alternative controls for CO are limited to combustion with excess air and temperature control. Nevertheless, the Region argues that the BACT analysis must include consideration of alternative combinations of these two variables. Both Hibbing and MPCA have pro-

^{29/} Region V has indicated that there may be a smaller area that would properly be excluded from the ambient air.

vided reasons why the chosen combination of temperature and excess air was the only acceptable one. ^{30/}

The Region also asserts, without citation, that once the combination of temperature and excess air that represents BACT is established, it should be specified in the permit. Neither the CAA nor EPA regulations absolutely require the permit to specify operational requirements in addition to a numerical emission limitation. ^{31/} Both the CAA and EPA regulations define BACT as an "emission limitation." ^{32/} Hibbing's permit contains this required emission limitation and therefore omission of operational requirements was not clear error. ^{33/} Nevertheless, Hibbing must adhere to the control technology identified as representing BACT in its BACT analysis. ^{34/} Review is denied on this issue.

^{30/} To produce a high strength abrasion resistant taconite pellet, the pellets must be heated to, and maintained at, a temperature of 2450° F. The amount of excess air that can be used is limited by the need to achieve a high enough temperature in the combustion gases to raise the temperature of the pellet to the required level. Although increasing the temperature would result in a reduction of CO emissions, it would also result in pellets of unacceptable quality. Thus, the chosen combination of temperature and excess air appears to be the only acceptable combination. The Region has not shown that Hibbing's justification of this combination is clearly erroneous.

^{31/} Furthermore, MPCA represents that combustion control is automatic and not dependent on operator attention.

^{32/} 42 U.S.C. §7479(3); 40 CFR §52.21(b)(12).

^{33/} Moreover, there is nothing in the record to indicate that specifying the combination of temperature and excess air is essential to monitor compliance with the emission limitation.

^{34/} See In the Matter of CertainTeed Corp., PSD Appeal No. 81-2 at 5 (December 21, 1982).

Issue 7: Preconstruction Monitoring

Region V argues that the data used by Hibbing do not meet the preconstruction monitoring requirements of 40 CFR §52.21(m) and EPA's Guidelines on Ambient Monitoring.^{35/} Section 52.21(m)(1)(iii) of the rules requires applicants to submit continuous air quality monitoring data to determine if emissions of a pollutant would cause or contribute to a violation of a NAAQS or an increment. The data must be gathered over a period of at least a year and must represent at least the year preceding receipt of the application. EPA allows substitution of existing representative air quality data in lieu of having the source generate its own preconstruction monitoring data, provided these data meet the criteria in the "Ambient Monitoring Guidelines for Prevention of Significant Deterioration" (July, 1980).^{36/}

The guidelines require existing monitoring data to be representative of areas of (1) maximum existing pollutant concentrations, (2) maximum concentration increases from the proposed source or modification, and (3) maximum combined impact from existing and proposed sources. If there are no existing monitors in such areas the guidelines allow monitors located elsewhere to be used on a case-by-case basis. The guidelines provide examples of cases in which it would be appropriate to use

^{35/} Based on Hibbing's modeling results, preconstruction monitoring data is required only for SO₂. However, in light of the remand on the ambient air issue, preconstruction monitoring may also be required for PM. See supra note 17 & accompanying text.

^{36/} See 45 Fed. Reg. 52676 (August 7, 1980).

existing monitors that are located outside the three areas listed above. Id. at 6-8. In one example, the proposed source is in an area that is generally free from the impact of other point sources. Id. at 6. The guideline states that representative data may be obtained from a "regional" site, a site that is characteristic of air quality across a broad region. Id. The use of regional sites should be limited to relatively remote areas and should not be used in areas of multisource emissions or areas of complex terrain. Id.

Hibbing maintains that it properly used representative data from a monitoring site that fits the description in this example. Both Hibbing and the monitoring site are located in an area that is generally flat, sparsely populated, and contains one plant (the Clay Boswell plant) that accounts for 70% to 81% of the total SO₂ emissions. Hibbing contends that because this monitoring site is closer to the Clay Boswell plant than is the Hibbing property, it probably has higher pollutant concentrations than the Hibbing property. Nevertheless, the Region asserts that it is "not convinced that Hibbing qualifies for the use of regional monitoring data." The Region maintains that there are eleven SO sources within 65 kilometers of Hibbing, and thus it is a "multisource" area. The Region also contends that because the Clay Boswell plant has two very tall stacks, it is not expected to cause high ground-level concentrations, and thus the monitoring data may not reflect pollutant levels as high as those in the area closer to the Hibbing plant.

In my view, the Region has not met its burden of showing that MPCA committed clear legal error in interpreting or applying example number one of the guidelines. The guidelines are very broad and leave much to the discretion of the permitting authority. Moreover, the examples provided in the guidelines are not intended to be an exhaustive listing of every conceivable situation in which the use of representative data is appropriate. ^{37/} The Region is not able to point to any specific misinterpretation or misapplication of the guidelines. The mere existence of some other sources in the area and the Clay Boswell plant's tall stacks, without more, is not sufficient to show that MPCA's characterization of the area as non-multisource was clearly erroneous.

Moreover, the Region has not shown that MPCA committed a factual error in evaluating the conditions in the vicinity of the

^{37/} The guidelines state "some examples are included to demonstrate overall intent." Ambient Monitoring Guidelines for Prevention of Significant Deterioration at 6 (July, 1980). The Region also argues that the guidelines require existing representative data to be collected in the three year period preceding the permit application. Hibbing used data from 1980-1983, which clearly was not within three years of the 1987 permit application. The guidelines merely state, however, that "generally" preconstruction data must have been collected within three years prior to the date of permit application. Here, it appears that it would be impossible to do this because MPCA had already permitted Hibbing to do a test burn of petroleum coke during 1985 and 1986. See *Citizens Against the Refinery's Effects, Inc. v. United State Environmental Protection Agency*, 643 F.2d 178, 181 (4th Cir. 1981) (PSD permit applicant may properly use one year of weather data in its air dispersion model instead of the five years recommended by EPA guidelines because the guidelines were only recommendations and only one year of data was locally obtainable and compatible with the model used).

Hibbing site and monitoring site. Region V has not contested Hibbing's factual assertions that the Clay Boswell plant accounts for the majority of SO₂ emissions in the area or that the other plants in the area account for very small percentages (no source accounting for more than 3.6%) of overall emissions. In sum, far from demonstrating that MPCA committed clear error by allowing Hibbing to use the regional data, Region V has shown nothing more than it is "not convinced" that Hibbing's use of the regional monitoring data was appropriate. ^{38/} Review is denied on this issue.

Conclusion

The deficiencies in the BACT analysis leave two courses of action open at this juncture of the proceedings. One is to grant review of the permit and enter into the briefing phase contemplated by 40 CFR §124.19(c). However, the deficiencies in the record cannot be rectified through the submission of briefs, and any ensuing decision would likely conclude that the permit should be denied (because of the deficiencies) or that it should be remanded to the permit-issuing authority to allow the applicant to supplement the BACT analysis. Considerations of time favor remanding the permit in the first instance. Therefore, rather than receiving additional briefs on appeal, I am remanding the case to MPCA to: include in the permit an emission limitation for

^{38/} Moreover, MPCA has included in the permit a requirement that Hibbing design, install, and operate an ambient air monitoring system for SO₂.

SO₂ based on BACT, for the life of the permit; to provide a detailed economic analysis sufficient to justify rejection of the natural gas alternative; to identify the control technology that the SO₂ limitation is based on and demonstrate that such technology will enable Hibbing to meet the prescribed permit limitation; and to either set the BACT limitation for PM at 0.01 gr/dscf or explain why it rejected this limitation. On remand, MPCA must also determine whether public access is effectively precluded from the four locations identified in this order, and if not, MPCA must either impose conditions in the permit that would require Hibbing to erect appropriate barriers at these locations or identify a smaller area of its property from which public access is effectively precluded.

MPCA's determination on remand will be subject to review under 40 CFR §124.19, ^{39/} and appeal of its decision on remand

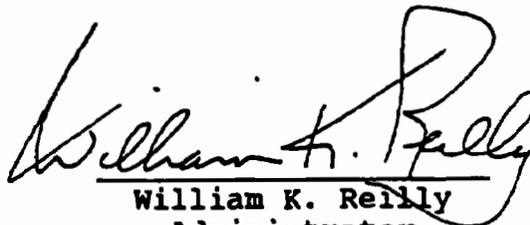
^{39/} The Region maintains that MPCA should be required to obtain the Region's concurrence on the permit before issuing the permit. I find no basis for this argument. Regarding the procedures for issuance of PSD permits, the delegation agreement between EPA and MPCA requires MPCA only to forward preliminary determinations to grant or deny a PSD permit to EPA for comment and to send copies of its final action on PSD permits to EPA. In contrast, In the Matter of Honolulu Resource Recovery Facility, PSD Appeal No. 86-8 (June 22, 1987), the delegation agreement required EPA Region IX and the Hawaii Department of Health (HDOH) concurrence on BACT determinations on the first five permits issued by HDOH.

Nevertheless, MPCA and the Region should communicate during the course of PSD permit proceedings and attempt to reach a consensus on matters of disagreement. Moreover, as previously noted, MPCA's action in issuing the permit is subject to review provisions of 40 CFR §124.19 because the permit is deemed to be an EPA-issued permit under EPA rules. 40 CFR §124.41; 45 Fed. Reg. 33,413 (May 19, 1980).

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will be required to exhaust administrative remedies under section
124.19(f)(1)(iii).

So Ordered.



William K. Reilly
Administrator

Dated: JUL 19 1989

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order on Petition for Review in the matter of Hibbing Taconite Company, PSD Appeal No. 87-3, were sent by First Class Mail to the following persons:

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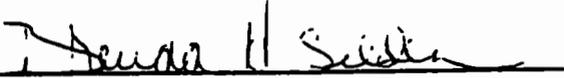
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Brenda H. Selden, Secretary
to the Chief Judicial Officer

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:)	
)	
Huntington Mass-Burn Incinerator)	PSD Appeal No. 89-2
Applicant)	
)	

ORDER DENYING REVIEW

By letter dated July 9, 1989, Citizens for a Livable Environment and Recycling, Inc. requested review of an amended Prevention of Significant Deterioration (PSD) permit that authorizes construction of a mass-burn municipal waste incinerator for the Town of Huntington, New York. The New York State Department of Environmental Conservation (DEC) issued the amended permit on June 9, 1989, pursuant to a delegation of authority from EPA Region II, New York, New York. Because of the delegation, DEC's permit determination is subject to the review provisions of 40 CFR §124.19, and any permit it issues will be an EPA-issued permit for purposes of federal law. 40 CFR §124.41; 45 Fed. Reg. 33,413 (May 19, 1980).

Petitioner objects to the issuance of the permit because it believes the permit is deficient in several respects. Petitioner claims, inter alia, that the permit will allow the facility to emit excessive quantities of NO_x; that it fails to require the facility to use the best available control technology (BACT) for control of NO_x emissions; and that the BACT analysis is deficient

because it does not contain a comparative analysis of recycling and mass-burn incineration.

Under the rules governing this proceeding, there is no appeal as of right from the permit determination. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Regional [state] level * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioner. Petitioner has not met its burden.

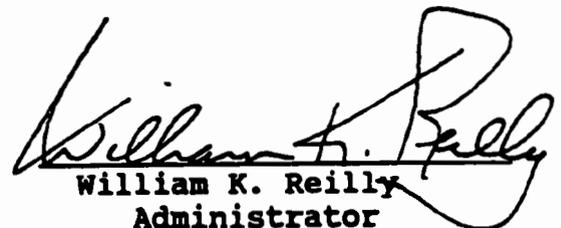
Petitioner's claims with respect to NO_x emissions are groundless and are based on a misunderstanding of the applicable legal requirements. In claiming that predicted emissions of NO_x (565 tons per year, according to petitioner) will exceed federal requirements, petitioner has confused the actual requirements (for which there are no specific tonnage limitations) with a "de minimis" emissions rate -- 40 tons per year -- which determines whether a facility's NO_x emissions are "significant" and therefore subject to BACT and other PSD requirements. See 40 CFR §§52.21(b)(23)(i) and 52.21(j)(2). Because the facility's predicted NO_x emissions will exceed that threshold rate, a BACT analysis was performed for the proposed facility, with DEC

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determining BACT to be "selective noncatalytic reduction." DEC's BACT determination is reflected in the permit, and petitioner has not shown it to be erroneous in any respect. With respect to recycling, Petitioner's assertions that the BACT analysis is deficient are unconvincing because petitioner has not shown, as it must, that recycling is an "available" technology, which -- in combination with emission control equipment already proposed for the facility -- will demonstrably reduce emissions of regulated pollutants such as NO_x or will otherwise represent BACT. Without such a showing, the petition fails to establish grounds for including recycling in the BACT analysis. See Spokane Regional Waste-to-Energy Project, PSD Appeal No. 88-12 at 22 (EPA June 9, 1989). Accordingly, review of DEC's permit determination is denied.

So ordered.

Dated: AUG 2 1989


William K. Reilly
Administrator

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying Review, PSD Appeal No. 89-2, were mailed to the following in the manner indicated.

**First Class Mail
Postage Prepaid:**

**William J. Muszynski
Acting Regional Administrator
U.S. EPA, Region II
26 Federal Plaza
New York, NY 10278**

**Steve Riva
U.S. EPA, Region II
26 Federal Plaza
New York, NY 10278**

**Conrad Simon, Director
Air & Waste Management Division
U.S. EPA, Region II
26 Federal Plaza
New York, NY 10278**

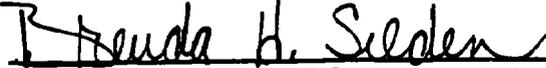
**David DeRidder
Deputy Regional Permit Admin.
Newark State Department of
Environmental Conservation
Building 40 - SUNY
Stony Brook, NY 11794**

**Dorothy Gibson, President
CLEAR
21 Platt Place,
Huntington, NY 11743-3527**

**Gordon Gibson, Executive Director
CLEAR
21 Platt Place,
Huntington, NY 11743-3527**

**Mike Levin
Nixon, Hargrave, Devans & Doyle
1 Thomas Circle, NW
Suite 800
Washington, DC 20005**

Dated: AUG -2 1989


Brenda H. Selden, Secretary
to the Chief Judicial Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Davis

8.41

SEP 11 1989

Mr. Christopher J. Daggett
Commissioner
State of New Jersey
Department of Environmental Protection
CN 402
Trenton, New Jersey 08625-0402

Dear Mr. Daggett:

This is in response to your August 15, 1989 letter to Administrator William Reilly regarding the use of urea injection in place of ammonia injection for the control of nitrogen oxides (NO_x) from municipal waste combustors (MWC's). You wish to know if the Environmental Protection Agency (EPA) would accept urea injection as either innovative control technology or best available control technology (BACT) for NO_x control from MWC's. Also, you ask if EPA would approve of its use at the proposed Passaic Resource Recovery Facility (PRRF) and how such approval would likely affect the current administrative review process for NO_x control from the source.

In recent BACT determinations for MWC's, EPA has accepted ammonia injection as the best and the most appropriate control technology for NO_x control. Consequently, ammonia injection, or a comparable technology in terms of emissions reduction and other impacts, would currently qualify as BACT. Therefore, at the present time, if it were adequately shown in an application for a MWC that urea injection would be comparable to (or better than) ammonia injection in terms of performance and impacts, urea injection could be determined to represent BACT. It is important to note, however, that in the future a more stringent level of control could, of course, supplant ammonia injection as the "top" control level.

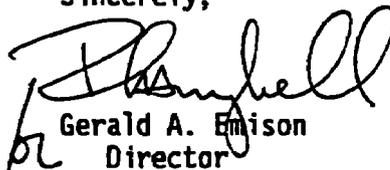
The prevention of significant deterioration (PSD) regulations, in addition to establishing specific provisions for BACT and modeling requirements, set out criteria for determining whether a proposed control technology is innovative. For PSD purposes, "innovative control technology" is defined at 40 CFR 52.21(b)(19) as "any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving a greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts." Our initial review of the limited data available to us indicates that there have been over 20 field demonstrations of urea injection worldwide on a range of combustor and fuel types (including two MWC facilities). Although it has not been applied commercially to a MWC facility in the United States, urea injection has been applied commercially to a MWC facility in Basel, Switzerland, and a carbon monoxide (CO) boiler in California. Preliminary indications are that its commercial application at a

MWC may provide for comparable (or greater) NO_x control at a lower cost. As to urea injection being considered innovative technology, EPA cannot, however, rule on the issue until presented with source-specific information and written justification from the applicant and State addressing 1) why urea injection should be considered as not having been adequately demonstrated in practice, 2) how the technology fulfills the other innovative technology criteria [as defined at 40 CFR 52.21(b)(19)], and 3) how it will be applied to the source.

As you are aware, the PSD permit for PRRF is currently before the Administrator as a result of his decision to review the State's BACT determination respecting NO_x emissions. Moreover, a petition challenging the same determination (and others) was also received from Beth Israel Hospital and United Passaic Organization. Although a decision by the State to amend the permit for the purpose of revising the BACT determination to require either ammonia or urea injection (assuming they are comparable) would probably moot the NO_x issue, the amendment itself would be subject to applicable public participation procedures, including appeal procedures under 40 CFR 124.19. Therefore, the permit could not become effective until those procedures have been satisfied.

I have asked Region II to take the lead and work with you in evaluating any information the State or applicant may wish to present for the purpose of demonstrating urea injection as BACT or innovative control technology, either at PRRF or another MWC facility. If you have any further questions in regard to this matter, please contact Conrad Simon, Director, Air and Waste Management Division, Region II, at (212) 264-2301.

Sincerely,



Gerald A. Emison
Director

Office of Air Quality Planning
and Standards

cc: Conrad Simon
Frank E. Ferruggia
Robert J. Burcin
Ronald L. McCallum

to July 29, 1989, and Ecology held a public meeting during that same period, on July 19, 1989. Although public interest in the permit was evident, Ecology nevertheless decided not to convene an official public hearing because it found there was little expression of interest in the specific issue raised by the remand. Thereafter, Ecology prepared a response to the public comments and issued its revised final permit determination on September 1, 1989. The instant appeals followed.

Under the rules governing this proceeding, there is no appeal as of right from the permit decision. 40 CFR §124.19(a). Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulation states, "this power of review should be only sparingly exercised" and "most permit conditions should be finally determined at the Regional [State] level * * * ." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on petitioners. Petitioners have not met their burden in this instance.

Petition by Council for Land Care and Planning and Citizens for Clean Air

These petitioners assert that Ecology erred (i) by not holding a public hearing, (ii) by not preparing a supplemental environmental impact statement under state law, and (iii) by setting the NO_x emission limitation too high. The first alleged error has no merit because the decision to hold a public hearing (which is more formal than the "public meeting" held by Ecology) is largely discretionary. ^{1/} Under 40 CFR 124.12(a) the permit issuer is directed to hold a public hearing whenever the permit issuer finds that there is a "significant degree of public interest in a draft permit." Ecology elected not to hold a public hearing in this instance because the scope of the permit revision was narrow and it found no significant public interest in the revised NO_x limitation. Under the circumstances, no clear

^{1/} 40 CFR §124.12 specifies the criteria for a public hearing, which include giving prior notice in accordance with §124.10, allowing written and oral comment from any person, and making a tape recording or transcript of the proceedings. Although the specifics are not set forth in the record of this appeal, the "public meeting" Ecology held during the public comment period evidently did not meet one or more of these requirements.

error is apparent from Ecology's decision not to hold a public hearing.

The second alleged error is also without merit insofar as federal law is concerned. Questions relating solely to whether or not Ecology has satisfied a state requirement (respecting preparation of a state supplemental environmental impact statement) are beyond the purview of this proceeding under 40 CFR 124.19, the purpose of which is to determine Ecology's compliance with the federal Clean Air Act and applicable regulations.

The third alleged error is also not a sufficient reason to grant review. In sole support of this allegation, petitioners state that the NO_x limitation was based on current projections for the incinerator's solid waste stream, but that implementation of a more vigorous waste reduction and recycling program would decrease the size of the waste stream and thus automatically reduce NO_x emissions. Petition at 5. In other words, petitioners are again raising the recycling issue. That issue was rejected, however, as a subject for review for the reasons stated in the June 9 Remand Order, which remanded the permit to Ecology for the sole purpose of revising the permit's NO_x limitation based on use of thermal de-NO_x or an equivalent technology. The scope of review of the instant permit determination is therefore restricted by the Remand Order and does not include waste separation and recycling for control of NO_x emissions. As stated in the Remand Order:

All that remains to be done now is for Ecology to set numerical emission limitations for the NO_x emissions using the agreed-to technology [thermal de-NO_x or equivalent], and to prescribe monitoring requirements and operating restrictions as deemed necessary or appropriate.

Remand Order at 11 (footnote omitted).

Accordingly, I am remanding the permit to Ecology to revise the permit along these lines. Following reissuance of the revised permit, Petitioners shall be given the opportunity, in accordance with 40 CFR §124.19, to appeal any determination Ecology makes with respect to the revised NO_x limitation. Any such appeal shall be strictly limited to the scope of the revisions in the NO_x limitation.

Remand Order at 23-24 (emphasis added).

Petitioners nevertheless contend that waste separation and recycling should fit within the proper ambit of this appeal since

^{2/} Ecology held two public hearings before issuing its December 13, 1988 permit determination.

implementation of these practices would have the effect of reducing NO_x emissions. Petition at 5, n.2. I disagree. When the Remand Order is read in its entirety, it is clear that the decision to remand the permit for revision of the NO_x limitation was premised on recognition of thermal de-NO_x or an equivalent technology as the "best available control technology" (BACT) for NO_x emissions from this proposed facility. There was no intent to reopen the waste separation and recycling issue that had just been addressed at length for this specific permit. Therefore, since petitioners' grounds for reviewing the NO_x limitation would only reopen that issue, the petition for review must be denied in the interest of repose. Further consideration of the recycling issue is beyond the scope of the instant permit determination. ^{3/}

^{3/} On November 30, 1989, I approved a proposal under Section 111(b) of the Clean Air Act to issue standards of performance that contain, among other things, a materials separation requirement and a NO_x emission limit for new municipal waste combustors. In broad outline, the proposal will require municipal waste combustors to separate for recovery (i.e., for "recycling") 25% of the municipal solid waste by weight. The eligible wastes are paper and paperboard; ferrous metals; nonferrous metals; glass; plastics; and yard waste (up to 10% credit allowed). In addition, there will be a prohibition on incinerating lead-acid vehicle batteries and a program to remove household batteries. The NO_x limit will be set at 120 to 200 ppmv (@ 7 percent oxygen) for large plants based on selective noncatalytic reduction techniques such as thermal de-NO_x and urea injection. If adopted in final form, the proposal will be applicable to new municipal waste combustors that "commence construction" within the meaning of 40 CFR §60.2 following publication of the proposal in the Federal Register. The proposal appears at 54 Fed. Reg. 52251 (December 20, 1989).

On November 30, 1989, I also approved proposed emission guidelines and compliance schedules under section 111(d) of the Act for existing municipal waste combustors. These guidelines, which will initiate state action to develop regulations controlling emissions from existing facilities, contain the same source separation provisions as the regulations proposed under section 111(b), except that the dates for compliance are farther in the future. The existing source guidelines are applicable to facilities that have "commenced construction" prior to the date of Federal Register publication. The proposed guidelines appear at 54 Fed. Reg. 52209 (December 20, 1989).

(continued...)

Kilian Petition

On October 2, 1989, Lisa J. Kilian of Spokane, Washington, filed a one-page letter, stating that she was appealing this agency's decision to issue a PSD permit for the Spokane incinerator in accordance with 40 CFR §124.19. ^{4/} Her appeal did not,

^{3/}(...continued)

In the section 111(b) proposal, EPA outlined the reasons why that proposal is consistent with the Remand Order in this case and the decision in Huntington Mass-Burn Incinerator, PSD Appeal No. 89-2 (August 2, 1989). I reaffirm those reasons today in declining to revisit the recycling issue. Of particular importance are the facts that much of the relevant data underlying the proposal was not contained in the record of this case, and that EPA had not made even tentative judgments regarding such data until the time of the proposal. Moreover, it is also important to emphasize that the section 111(b) proposal represents only the provisional views of the Agency regarding the current body of knowledge regarding municipal waste combustor emissions, and EPA is continuing to gather new data. The public will now have an opportunity to present comments on EPA's proposal, and the Agency will make a final decision only at the conclusion of that rulemaking. Thus, EPA's proposals under section 111 do not call into question the propriety of the earlier Remand Order in this case, which was a decision based on a record created several months prior to EPA's recent proposals. Also, should EPA ultimately promulgate its proposed regulations and guidelines under sections 111(b) and (d), the Spokane (and Huntington) facilities will eventually be required to comply with those applicable source separation and recycling requirements in addition to PSD permit requirements. For that reason, as well as in the interest of repose, I find that it would be inappropriate at this very late stage to hold the Spokane permit hostage to a potentially lengthy reconsideration process on top of the delays that have been incurred to date by revisiting the recycling issue in light of new information not contained in the record of this case.

^{4/} Except to recite that the appeal is being filed pursuant to 40 CFR Part 124, petitioner Kilian does not make even a token effort to demonstrate compliance with the requirements for perfecting an appeal. The rules provide that "any person who filed comments on th[e] draft permit * * * may petition the Administrator to review any condition of the permit decision," whereas those who "failed to file comments * * * on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision." 40 CFR §124.19(a). Petitioner has not demonstrated that she meets

(continued...)

however, identify the decision with any specificity. This omission is problematic because the agency has issued only one decision involving this facility -- the June 9 Remand Order -- and no administrative review of that decision is available under 40 CFR Part 124. If any appeal were to lie from that decision, it would be to the federal court of appeals, 42 USCA §7607(b), but not until the PSD permit for the incinerator became final, 40 CFR §124.19(f). It seems more likely that the decision petitioner is appealing is Ecology's September 2, 1989 revised permit determination. That decision, as stated previously, was issued in response to this agency's earlier decision and is appealable under 40 CFR §124.19 -- but, as provided in the earlier decision, only to the extent the appeal has a direct bearing on Ecology's NO_x determination.

It is readily apparent from the letter's brevity and lack of detail that petitioner has not satisfied any of the criteria for having Ecology's permit determination reviewed. Petitioner briefly expressed concern about emissions that will result from use of thermal de-NO_x technology at the incinerator, and about the state environmental impact statement that purportedly does not address these concerns; however, petitioner does not allege once that issuance of a permit calling for use of this technology will in any way render Ecology's PSD permit determination invalid or deficient under federal law. Accordingly, the petition for review must be denied. ^{5/}

Honican Petition

Joan Honican of Pullman, Washington, filed a letter, dated September 27, 1989 (received September 28, 1989), which says that it is a "formal appeal of your recent decision." (Emphasis added.) As noted above, however, no administrative review of this agency's June 9, 1989 decision is available. To the extent the letter can be construed as referring to Ecology's September 2, 1989 decision, the appeal must still be denied because it falls outside the scope of review prescribed by the earlier decision; and to the extent the letter's few comments about Ecology's NO_x determination might be deemed within the scope of review, they are made in passing and do not persuade me that review is just-

^{4/}(...continued)

any of these requirements for standing to file a petition or that they are otherwise inapplicable to her appeal.

^{5/} By letter dated November 28, 1989, Petitioner has sought, without permission, to expand or substantially modify her original petition. This communication is not eligible for consideration because of the 30-day limitation for filing petitions for review. See 40 CFR §124.19(a).

fied. (The comments do not specify whether they are in reference to the original or the revised Ecology NO_x determination.)

Conclusion

Accordingly, I am denying petitioners' appeals. The Regional Administrator or his delegatee shall publish notice of this final action in the Federal Register in accordance with 40 CFR §124.19(f)(2).

So ordered. ^{6/}

Dated: JAN 2 1990



 William K. Reilly & Henry Hubicht
 ACTING Administrator

^{6/} The Air Transport Association of America (ATA) submitted a letter dated September 29, 1989 (received October 2, 1989), stating its opposition to issuance of the permit until completion of an environmental analysis. The ATA letter discussed matters that arguably fall within the proper scope of review -- for example, referring to the effects of NO_x control technology on aircraft safety and operations near the airport -- but ATA made no showing that it had standing to appeal on these grounds, nor did it specifically state that it was seeking review of the permit. Moreover, ATA ties its comments to an alleged need for a revision to a state environmental impact statement and thus does not raise any legitimate issue of federal law. I conclude therefore that the ATA letter does not meet the burden of persuasion necessary to warrant review of Ecology's permit determination. Furthermore, I note that because the incinerator will be located on airport property, the Federal Aviation Administration and the airport authorities have jurisdiction to address safety related issues stemming from the incinerator's operation.

Several letters from Spokane residents who opposed construction of the incinerator were received after the time for filing appeals under 40 CFR §124.19 had expired. These letters are not eligible for consideration because of the 30-day limitation on filing appeals.

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying Review of Revised Permit Determination, PSD appeal No. 89-4, were mailed to the following by First class mail, postage prepaid.

Laurie Sillers Halvorson
Assistant Attorney General
Ecology Division -- M/S PV-11
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Highways Licenses Building
Olympia, WA 98504-8711

Jay Willenberg
Wash. State Dep't. of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

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Craig Trueblood
Preston, Thorgrimson, Ellis &
Holman
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Spokane, WA 99201

David M. Bricklin
Jean Mischel
Bricklin & Gendler
Fourth & Pike Building
1424 Fourth Avenue, Suite 1015
Seattle, WA 98101

David Birks
Spokane Regional Waste-to-
Energy Project
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Spokane, WA 99201

Gary O'Neal
Air and Toxics Division
U.S. EPA, Region X
1200 Sixth Avenue
Seattle, WA 98101

Deborah Hilsman
Office of Regional Counsel
U.S. EPA, Region X
1200 Sixth Avenue
Seattle, WA 98101

Lisa J. Kilian
E. 13327 Blossey
Spokane, WA 99216

John E. McNamara
Director
Air Transport Assn. of
America
3333 Quebec Street
Penthouse G
Denver, CO 80207

Joan Honican
NW 333 True St.
Pullman, WA 99163

Dated: JAN - 3 1990


Brenda H. Selden, Secretary
to the Chief Judicial Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Larry Minut
Dance 8.43

JAN 11 1990

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: BACT/LAER Determination Cut-off Date

FROM: John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Air Management Division Directors
Regions III and IX

Air and Waste Management Division Director
Region II

Air, Pesticides and Toxics Management Division
Directors
Regions I, IV, and VI

Air and Radiation Division Director
Region V

Air and Toxics Division Directors
Regions VII, VIII, and X

The purpose of this memorandum is to affirm our present policy on the BACT/LAER determination cutoff date as stated in a February 24, 1989 memorandum on the subject. The BACT/LAER determination for a major new source is not set until the final permit is issued. We are affirming this policy after reviewing the Regional responses to the June 19, 1989 memorandum in which we agreed to revisit our BACT/LAER determination policy and asked the Regions to comment on an issue paper prepared by the Michigan Department of Natural Resources. The issue paper questioned the soundness of our present policy and suggested alternative BACT/LAER cutoff dates that would be earlier than the issuance of the final permit.

Contrary to the assertions made in the issue paper, the Regions indicated that BACT/LAER technology changes were not causing delays during the permitting process. The Regions

emphasized that it is the responsibility of the source to investigate all available and pending control technologies for consideration as BACT or LAER. Hence, if the source has done a thorough investigation, a change in the permit conditions between the proposed and final permit should have been anticipated by the source.

In addition, the Regions felt that establishing a cutoff date at any time prior to the public comment period would limit public participation and the ability of the public to affect changes in the proposed permit. Furthermore, the present policy encourages the source to commence construction as soon as possible and complete such construction within a reasonable time. Establishing a cutoff date prior to the issuance of a final permit would enable a source to maintain a BACT/LAER determination for an extended period of time until the permit is issued; thus, avoiding more stringent controls.

After considering the above information, we have decided to affirm our present policy on the BACT/LAER determination cutoff date. If you have any questions on this matter, please contact Scott Throwe or my staff at FTS 382-2811.

cc: Gary McCutchen, NSR Section

8.44 DATE: February 16, 1990
SUBJECT: Typical PSD Submittal Outline
FROM: Wallace N. Davis, Executive Director, Virginia Dept. of Air
Pollution Control
TO: William C. Campbell, III, Cogentrix, Inc.
DISCUSSION: The letter provides target emission guidelines for coal-fired
facilities, and includes a typical outline for a PSD submittal.
CR: 10.48 [Hard Copy]

Reserved

6,

**BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

In the Matter of:)

World Color Press)

Applicant)

IEPA ID Nos. PSD-1988-IL-1, 2, & 3)

PSD Appeal No. 88-4

DESIGNATION OF ISSUES

By order dated May 5, 1988, and pursuant to 40 CFR §124.19(b), notice was given of the Agency's decision to review several prevention of significant deterioration (PSD) permit determinations made by the Illinois Environmental Protection Agency (IEPA) for World Color Press. These permit determinations would authorize World Color Press to construct six heatset web offset printing presses at three locations in Illinois. The Agency's notice observed that the best available control technology (BACT) ^{1/} determinations for these permits appeared to

^{1/} The complete text of the statutory definition of BACT states:

The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "best available control technology" result in emissions of any pollutants which will exceed the

(continued...)

be flawed. No issues for review were designated in the May 5th order; instead, a separate request for information was made informally, to aid in deciding what course of action to follow in exercising the Agency's review authority under 40 CFR §124.19(b).^{2/} I am now formally designating the issues to be briefed on review of IEPA's permit determinations.

Although IEPA concluded that World Color Press had met all applicable requirements of the federal PSD regulations (as well as applicable State requirements), it appears that IEPA determined, incorrectly, that an alleged absence of significant photochemical reactivity of the facilities' VOC emissions was an "environmental impact" that would justify less stringent emission limitations, particularly in view of the added monetary costs associated with more stringent control technologies. I rejected similar reasoning in a subsequent case, Columbia Gulf Transmission Company, PSD Appeal No. 88-11 (June 21, 1989), where I held that negligible impacts of NO_x emissions on ambient air quality did not, by themselves, justify using less than the most

^{1/}(...continued)

emissions allowed by any applicable standard established pursuant to section 7411 [new source standards] or 7412 [hazardous pollutant standards] of this title.

42 U.S.C. §7479(3).

^{2/} See letter dated February 7, 1989, from the Agency's Chief Judicial Officer to the Director, Illinois Environmental Protection Agency (IEPA); Response of IEPA, dated March 23, 1989; Response of World Color Press, dated April 14, 1989.

effective control technology available. As explained in the decision:

BACT is defined in the Clean Air Act as an "emission limitation" set by the permit issuer, based on the "maximum degree of reduction" that can be achieved for each regulated pollutant, on a case by case basis, after "taking into account energy, environmental, and economic impacts and other costs." 42 U.S.C. §7479(3). The latter clause is in the BACT definition to temper the stringency of the technology requirements whenever one or more of the specified "collateral" impacts -- energy, environmental, or economic -- renders use of the most effective technology inappropriate. As explained by Senator Edmund S. Muskie, the principal architect of the Clean Air Act amendments of 1977:

One objection which has been raised to requiring the use of the best available pollution control technology is that a technology demonstrated to be applicable in one area of the country is not applicable at a new facility in another area because of difference [sic] in feedstock material, plant configuration or other reasons. For this and other reasons, the committee voted to permit emission limits based on best available technology on a case-by-case judgment at the State level. This flexibility should allow such differences to be accommodated and still maximize the use of improved technology.

Senate Debate on S.252 (June 8, 1977), reprinted in 3 Senate Committee on Environment And Public Works, A Legislative History of the Clean Air Act Amendments of 1977 at 729 (Comm. Print August 1978) (Congressional Research Service, Serial No. 95-16). In other words, the collateral impacts clause operates primarily as a safety valve whenever unusual circumstances specific to the facility make it appropriate to use less than the most effective technology. The permit applicant must install the most effective technology if it fails to demonstrate to the satisfaction of the permit issuer that such unusual circumstances exist.

Id. at 4-6 (footnotes omitted).

The permit issuer in Columbia Gulf was the Kentucky Department of Air Quality, which had determined that the modelled negligible impact of the proposed facility on air quality was an environmental impact that could be factored into the BACT

analysis to justify using less than the most effective technology to control NO_x emissions. The Department reasoned that the negligible benefits to ambient air quality were outweighed by the additional economic costs associated with NO_x control, estimated at \$2,121.00 for each additional ton of NO_x removed. This argument was rejected as being without merit:

It gives no effect to the primary purpose of the collateral impacts clause, which, as the legislative history indicates, is to focus on local impacts that constrain the source from using the most effective technology. For example, if the most effective technology would impose exceptional demands on local water resources, so that use of the technology would have adverse impacts on the environment, then, under those circumstances, the applicant would have a sound basis for foregoing use of the most effective technology in favor of some less water-intensive technology. This would be a "water resources" equivalent of a "feedstock" or "plant configuration" constraint referred to by Senator Muskie.

In the present case, the Department and the applicant have not demonstrated the existence of any environmental impacts that would constrain or even remotely circumscribe the applicant's ability to use the most effective technology. The negligible air quality impact of the proposed NO_x emissions is clearly not a constraint on implementing the most effective technology. Because it is not a constraint, the modelled impact of the proposed facility's NO_x emissions on air quality should not be considered for purposes of making the BACT determination.

Id. at 7-8 (footnotes omitted).

It was further explained in Columbia Gulf that the structure of the Clean Air Act supports the foregoing interpretation. Specifically, the PSD provisions of the Act make regulatory distinctions between air quality impact analyses and technology analyses, and a permit applicant must satisfy the requirements of both categories to obtain a permit.

Section 165(a)(3) of the Act, 42 USC §7475(a)(3), addresses the direct impact of regulated pollutants on ambient air

quality by requiring an applicant for a PSD permit to demonstrate that the proposed facility will not cause or contribute to a violation of national ambient air quality standards or PSD increments, whereas section 165(a)(4) of the Act, 42 USC §7475(a)(4), is concerned exclusively with BACT, which is principally a technology-forcing measure that is intended to foster rapid adoption of improvements in control technology. Both of these provisions of the Clean Air Act must be satisfied by an applicant seeking a PSD permit, and compliance with one provision does not relieve or lessen an applicant's burden of complying fully with the other. Thus, even though Columbia Gulf's NO_x emissions will not cause a violation of ambient air quality standards in contravention of section 165(a)(3) of the Act, it must still satisfy the BACT technology requirements imposed by section 165(a)(4).

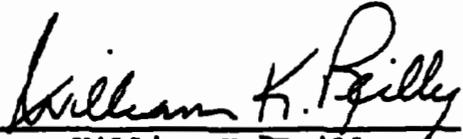
Id. at 8-9 (footnote omitted).

In the present instance, it appears that World Color Press and IEPA are attempting to justify the use of less than the most effective technology for control of VOC emissions by employing the same faulty reasoning that the permit applicant and the permit issuer used in Columbia Gulf. Accordingly, in setting this case for briefing, World Color Press and IEPA shall address the issue raised by the Columbia Gulf decision, and shall show cause why the permit determination should not be remanded to IEPA for revision of the BACT determination in accordance with Columbia Gulf. World Color Press and IEPA shall file their briefs within thirty (30) days of the date of this order.

As directed by 40 CFR §124.10, IEPA shall give public notice of the May 5th order and of the instant notice, making provision for the submission of comments (or briefs) by the public within

thirty (30) days of publication of notice. ^{3/} See Notice of Decision to Review Permits at 3 (May 5, 1988); also 40 CFR §§124.19(c) and 124.10(a)(1)(iv).

So ordered.


William K. Reilly
Administrator

Dated: JUN 7 1990

^{3/} IEPA made its determination pursuant to a delegation of authority from the U.S. Environmental Protection Agency, Region V, Chicago, Illinois. Because of the delegation, IEPA's authority to issue PSD permits is subject to the review provisions of the applicable EPA regulations, 40 CFR §124.19 (1989), and any permit it issues will be an EPA-issued permit for purposes of federal law. 40 CFR §124.41; 45 Fed. Reg. 33413 (May 19, 1980).

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Designation of Issues in the matter of World Color Press, PSD Appeal No. 88-4, were sent by First Class Mail to the following persons:

Dr. Richard J. Carlson, Director
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, IL 62706

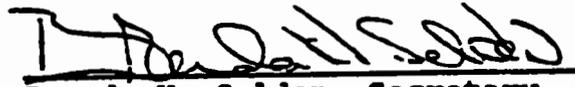
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William Rogers
World Color Press
P.O. Box 1248
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David Kee, Director
Air & Radiation Division
U.S. EPA, Region V
230 South Dearborn Street
Chicago, IL 60604

Valdas V. Adamkus
Regional Administrator
U.S. EPA, Region V
230 South Dearborn Street
Chicago, IL 60604

J. Bennett Clark
Gallop, Johnson & Neuman
Interco Corporate Tower-
101 South Hanley
St. Louis, Missouri 63105


Brenda H. Selden, Secretary
to the Chief Judicial Officer

Dated: June 8, 1990

*Copies to NSRS, EL, KB, Scott McAtcher.
Thorne 7/1/90 ASL E 8.47*

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:)	
Columbia Gulf Transmission Company)	PSD Appeal No. 88-11
ID No. 105-0640-0021)	
Applicant)	

ORDER ON MOTION FOR STAY

Before me is a motion filed by the permit applicant, Columbia Gulf Transmission Company, and the permit issuer, the State of Kentucky, which are jointly requesting a stay of the proceedings on EPA Region IV's appeal from the State's permit determination. ^{1/} If a stay is granted, the applicant intends to supplement the state administrative record with new factual information which the applicant believes will confirm the wisdom of the State's original permit determination. The information concerns site-specific costs relevant to the State's determination of "best available control technology" (BACT) for the proposed facility. This information was not in the administrative record of the original BACT analysis of the

^{1/} Currently, an order granting review of the State's permit determination has been issued. Columbia Gulf Transmission Company, PSD Appeal No. 88-11 (Order dated June 21, 1989). The order specifies that the briefing period will commence upon the State's publication of the Agency's decision granting review of the State's permit determination. The State has yet to give the required notice that triggers commencement of the briefing period.

facility, a fact which prompted EPA Region IV to file its appeal of the permit determination alleging, inter alia, that evidence of these costs would be needed to support the State's BACT determination. In their motion, the State and the permit applicant express the belief that staying the proceedings would be the most expeditious means of disposing of this case; they claim that a remand, for example, would not be desirable because it might trigger an entirely new and, presumably, time-consuming public review and comment period under 40 CFR §124.19. The proposed stay mechanism, on the other hand, would circumvent this process, but only if the State determines, after evaluating the new information, that the original permit determination was correct (and therefore does not require change). The stay, as proposed, would restrict opportunity to comment on the new information to the Region, which was the only commenter on the original permit determination. The movants reason that there is no logical basis for soliciting comment from the public since it previously had the opportunity -- but did not exercise it -- to comment on precisely the same permit conditions. (The movants appear to concede the necessity, however, of soliciting comment from a broader audience if the State's review produces a substantially revised permit.)

In opposing the motion, the Region makes several arguments. First, it argues that the administrative record is already closed and the applicant should not now be permitted to submit information it should have submitted 1½ years ago when Kentucky

was in the process of developing the draft permit determination.

According to the Region,

[t]he Applicant has failed to explain its failure to provide this information on a timely basis. Applicant's allegation that Kentucky did not require such information, even if accurate, is no justification for this omission, especially in light of the timely comments from Petitioner [Region IV] that a detailed, source-specific analysis was required. Applicant responded to the Region's comments by a letter dated August 12, 1988, but still failed to provide the necessary information. Consequently, at this late date such information should not be included in the record put before the Administrator for review.

Region's Response at 2.

This argument is not cause for denial of the motion. It is true the regulations contemplate a permit decision being made on the basis of the administrative record as it exists at the close of the comment period on the draft permit, see, e.g., 40 CFR §124.18(b)(1); and it is also true the permit applicant's additional information may have been in existence or readily available on or before that date (thus seeming to eliminate most legitimate excuses for not submitting the information earlier). Nevertheless, it does not appear to me that the regulations are inflexible in this respect, ^{2/} or that any prejudice would result from granting the motion (the Region, for example, does not claim

^{2/} It is well settled that an administrative agency must follow procedures set forth in its own regulations. E.g., *United States ex rel Accardi v. Shaughnessy*, 347 U.S. 260, 74 S.Ct. 499 (1954); *Service v. Dulles*, 354 U.S. 363, 77 S. Ct. 1152 (1959). Of course, if no prejudice results or if some greater interest is served, an exception to this requirement may be permitted. *Taylor v. Maryland School for the Blind*, 409 F. Supp. 148 (D.Md. 1976), aff'd 542 F.2d 1169 (4th Cir. 1976); see *American Farm Lines v. Black Ball Freight Service*, 397 U.S. 532, 539, 90 S.Ct. 1288, 1292, 25 L.Ed.2d 547, 553 (1970).

it will suffer any). Insofar as the possibility of prejudice to the public is concerned, it will not incur any because, under the movants' proposal, the public is given the right to comment if the permit is subsequently revised; and, if it is not revised, further public participation would be unnecessary since, as the movants correctly point out, the public has already had an opportunity to comment on the terms of the unrevised permit. ^{2/}

In my opinion, if the State is willing to reopen the record to accept and review additional information, it should be the one to decide the matter in the absence of any prejudice to third parties. The purpose of closing the record to receipt of additional evidence is presumably to bring order to the decision-making process, enabling permit issuers such as the State to

^{2/} The Region is guilty of overgeneralizing when it asserts that "no information should be reviewed by the Administrator which has not first been made available to the public for review and comment." Region Response to Motion at 3. The ultimate purpose of public comment is to determine whether the conditions of the permit should be changed. See, e.g., 40 CFR §124.13 (duty to raise issues pertaining to whether the "any condition of a draft permit is inappropriate"); 40 CFR §124.14 (reopened public comment period allows comments to be filed on "conditions" of the draft permit that are inappropriate); 40 CFR §124.19 (appeals are for review of permit "conditions"). Nothing in the statute, e.g., Clean Air Act §165(a)(2), 42 U.S.C.A. §7465(a)(2), or the regulations, e.g., 40 CFR §52.21(q), can reasonably be read as mandating solicitation of public comment on information qua information. Therefore, if, as is possible under the movants' proposal, the new information might not prompt any alteration of the permit conditions, no legitimate purpose would be served by soliciting public comment on the new information. The general public has already had an opportunity to comment on the permit's conditions. Further solicitation of public comment under these circumstances would be redundant. It suffices that the Region, as the sole petitioner contesting the terms and conditions of the permit, will have an opportunity to comment on the information.

manage their dockets efficiently and to bring finality to permit proceedings. In this manner, the permit issuer can avoid potentially endless rounds of delays and reconsideration of matters previously decided. Thus, so long as the permit issuer is willing to countenance the disruptions attendant to reopening the record, there is no apparent reason why the record has to be kept closed. I conclude therefore that this matter is principally one for the State to decide.

In opposing the motion, the Region also suggests that it should have the opportunity to submit new information on the appropriate level of control currently representing BACT for the applicant's turbine. The Region explains that in reviewing the PSD permit application, it tolled its assessment of available control technologies for BACT at the time the public comment period closed.^{4/} It therefore argues that if the record is subsequently reopened to admit new information supplied by the applicant, then the State must also "consider anew" what technology represents BACT. Region Response at 4. I agree, although "consider anew" perhaps exaggerates the State's obligation (better to say: the State will have to update its BACT

^{4/} As explained in a previous decision,

Absent unusual delay between the close of the public comment period and the date of permit issuance, or the presence of other extraordinary circumstances, the close of the public comment period can be used as the reference by which the adequacy of the administrative record is judged.

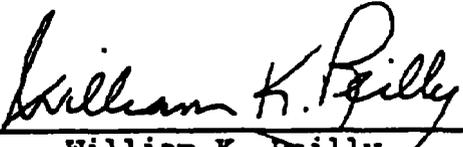
determination after giving full consideration to the information submitted by both the applicant and the Region). The need to base the permit determination on current information is fundamental to any determination of "best available control technology," for old technologies are constantly being replaced by newer and more advanced ones; and in the absence of overriding considerations -- for example, those bearing on the orderly administration of the permit program -- information on the latest available technologies should ordinarily receive consideration.^{5/} Therefore, whenever the original permit application is being updated at the behest of the permit applicant, it is only fair that the applicant's new information be balanced with other contemporaneous information relevant to the BACT determination.

Accordingly, the parties' motion is granted, with the proviso that the State shall not only give the Region an opportunity to comment on the applicant's new information, but shall also permit the Region to submit additional information of its own to ensure that the BACT determination is fully

^{5/} Appropriate allowances for delays inherent in issuing a permit are nevertheless necessary since, for example, there will always be some measure of delay between the close of the administrative record and the time when the final permit is actually issued. To this end, the Agency ordinarily considers the close of the public comment period on the draft permit as tolling the time for consideration of new technologies. See note 4 supra.

contemporaneous with the State's updating of the permit determination.

So ordered.



William K. Reilly
Administrator

Dated: JUL 3 1990

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order on Motion for Stay in the matter of Columbia Gulf Transmission Company, PSD Appeal No. 88-11, were sent by First Class Mail to the following persons:

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Air Programs Branch
U. S. EPA, Region IV
345 Courtland Street, NE
Atlanta, GA 30365

Dated: JUL - 9 1990



Brenda H. Selden, Secretary
to the Chief Judicial Officer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCYREGION IV

In the matter of:)
)
 LAKE COUNTY WASTE TO ENERGY FACILITY)
) Order
 OKAHUMPKA, FLORIDA)
 PROCEEDINGS UNDER)
 SECTION 167 OF THE CLEAN)
 AIR ACT, AS AMENDED, 42 U.S.C. §7477)

ADMINISTRATIVE ORDER

This Administrative Order is issued this date by the Regional Administrator, Region IV, United States Environmental Protection Agency (EPA), pursuant to Section 167 of the Clean Air Act (the Act), 42 U.S.C. §7477.

FINDING OF FACT

1. The NRG/Recovery Group, Inc., proposes to construct and operate a Lake County Waste to Energy Facility (Lake County) in Okahumpka, Lake County, Florida. The Lake County facility will consist of two mass burn incinerators which will each incinerate approximately 250 tons per day of municipal solid waste. These incinerators will be fueled with a combination of municipal solid waste and wood chips. These incinerators will emit particulate matter, sulfur dioxide (SO₂), nitrogen oxides, carbon monoxide, volatile organic compounds, lead, beryllium, fluoride, sulfuric acid mist, mercury, dioxins,

dibenzofurans, and hydrogen chloride. All of the above-mentioned pollutants are regulated by the Act except dioxins, dibenzofurans, and hydrogen chloride.

2. The area of construction of the Lake County Waste to Energy Facility is located in an attainment area for all pollutants regulated by the Act. [40 Code of Federal Regulations (C.F.R.) §81.310] The facility is considered a major stationary source because its potential emissions (which are subject to regulations under the Act) are above the Prevention of Significant Deterioration (PSD) of Air Quality threshold level. Consequently, this facility is regulated under the PSD rules and regulations.

3. On March 11, 1986, the NRG/Recovery Group applied to the Florida Department of Environmental Regulation (DER) for a PSD permit to construct and operate two 250 tons per day municipal solid waste energy recovery units at its Lake County facility located on Jim Rogers Road in Okahumpka, Florida, pursuant to the Florida State Implementation Plan (SIP) [Florida Administrative Code (F.A.C.) Rule 17-2.500 et seq.].

4. On May 20, 1986, in response to said PSD application, the Florida DER issued a Preliminary Determination which contained, in the State's judgment, the Best Available Control Technology (BACT) for the proposed incinerators. The BACT Determination contained emission limits for all applicable pollutants regulated by the Act and contemplated that a baghouse (to control particulates) in combination

with a scrubber (to control acid gases) constituted BACT.

5. On July 2, 1986, EPA notified the Florida DER that the SO₂ emission limit contained in the Florida DER BACT Determination may not adequately reflect BACT (i.e., proposed SO₂ emission limit not sufficiently stringent) and that the BACT Determination should also consider the effect of controlling SO₂ on unregulated pollutants such as hydrogen chloride and dioxin. Furthermore, EPA informed DER that it was EPA policy that the control of nonregulated air pollutants may be considered in imposing a more stringent BACT limit on regulated pollutants, if there is a reduction in the nonregulated air pollutants which can be directly attributed to the control device selected for the abatement of the regulated pollutants.

6. On August 15, 1986, DER issued a second PSD Preliminary Determination with a modified BACT Determination. The modified BACT Determination no longer contained the requirement for acid gas controls, but only required that the applicant leave space for the acid gas control equipment in the event there would be a future state rule change for resource recovery facilities. Removal of the requirement to employ acid gas control meant the modified BACT Determination could not adequately address EPA's concern about a more stringent SO₂ emission limit.

7. On September 19, 1986, EPA notified DER that EPA was not persuaded by Lake County's contention that municipal solid waste incineration with acid gas control is not

economically feasible.

8. On September 24, 1986, the Florida DER issued its Final Determination and PSD permit to the NRG/Recovery Group for the proposed Lake County facility. The Final Determination and State PSD permit did not require the installation of acid gas control.

9. On October 23, 1986, EPA notified the Florida DER that EPA did not concur with DER's Final Determination regarding the issue of BACT. EPA recommended that the Final Determination and the Florida DER permit be reissued with a BACT Determination which reflects state-of-the-art technology (acid gas control and more stringent emission limitations for particulate matter and SO₂).

10. On January 30, 1987, EPA-Region IV prepared an independent BACT analysis, which varied from DER's Final Determination, in that it contained more stringent emission limitations for particulate matter and SO₂ (achieved through the use of high efficiency particulate emission and acid gas controls).

11. On February 11, 1987, EPA notified Florida DER that the DER PSD permit issued to the NRG/Recovery Group for the Lake County facility on September 24, 1986, was deficient and that EPA may initiate appropriate enforcement action against the Lake County facility to prevent or delay the construction of the facility.

12. On February 11, 1987, EPA notified the NRG/Recovery

-5-

Group that the Florida DER PSD permit was deficient and that unless the DER PSD permit was modified to reflect what EPA considers BACT, EPA may initiate appropriate enforcement action to prevent or delay the construction of the facility.

CONCLUSIONS OF LAW

1. The Administrator of the EPA pursuant to his authority under Section 109 of the Act, 42 U.S.C. §7409, promulgated National Primary and Secondary Ambient Air Quality Standards (NAAQS) for certain criteria pollutants, including total suspended particulate matter, sulfur oxides (SO₂), nitrogen oxides, carbon monoxide, ozone, and lead. (40 C.F.R. §§50.4 - 50.12)

2. Pursuant to Section 110 of the Act, 42 U.S.C. §7410, the Administrator of EPA, in 45 Federal Register 52676 (August 7, 1980), promulgated amended regulations for PSD in areas where the existing air quality is better than said ambient standards and incorporated said regulations into the various implementation plans of each state. The relevant regulations are codified at 40 C.F.R. §51.24.

3. The Florida SIP contains federally approved PSD regulations, based on the above-referenced PSD regulations, for such attainment or "clean air" areas. (F.A.C. Rule 17-2.500)

4. The area of construction for the Lake County Waste to Energy facility is an attainment area for NAAQS for all pollutants. (40 C.F.R. §81.310)

5. NRG/Recovery Group is the owner and operator of the major emitting resource recovery facility in Lake County, Florida, and proposes to construct at that site pursuant to the PSD permit issued to the Lake County Waste to Energy facility by Florida DER on September 24, 1986.

6. EPA finds the Florida DER PSD permit issued to the Lake County Waste to Energy facility to be deficient in that it fails to require the installation of acid gas control. The Florida DER PSD permit also fails to require more stringent emission limitations for particulate matter and SO₂. These deficiencies invalidate the State-issued PSD permit.

7. The construction of the Lake County Waste to Energy facility pursuant to an invalid permit will violate Section 165(a) of the Act, 42 U.S.C. §7475(a), and 40 C.F.R. §51.24. Consequently, the issuance of this order, pursuant to Section 167 of the Act, 42 U.S.C. §7477, is required to prevent such construction.

8. The authority of the Administrator of EPA pursuant to §113(a) of the Act, 42 U.S.C. §7413(a), to make findings of violation of the Florida SIP, to issue notices of violation and to confer with the alleged violator has been delegated, first, to the Regional Administrator [earlier delegation consolidated to Delegations Manual, No. 7-6 (July 25, 1984)] and second, to the Director, Air, Pesticides, and Toxics Management Division, Region IV [earlier delegation consolidated to

- 7 -

in Region IV Delegation Manual, No. 4-2 (March 15, 1985)].

9. The authority of the Administrator of EPA to issue orders pursuant to Section 167 of the Act, 42 U.S.C. §7477, was delegated to the Regional Administrator [earlier delegation consolidated to Delegations Manual, No. 7-38 (July 25, 1984)]. The Regional Administrator, Region IV, has also consulted with the Associate Enforcement Counsel for Air and the Director of the Stationary Source Compliance Division pursuant to delegation requirement.

ORDER

Consequently, based upon investigation and analysis of all relevant facts, including any good faith efforts to comply, and pursuant to Section 167 of the Clean Air Act, 42 U.S.C. §7477, the NRG/Recovery Group, Inc. (Lake County Waste to Energy facility), is hereby ORDERED:

1. effective immediately upon receipt of this Order, not to commence any on-site construction activity of a permanent nature on its two 250 tons per day municipal solid waste energy recovery units, including, but not limited to, installation of building supports and foundations, paving, laying of underground pipe, construction of permanent storage structures and activities of a similar nature.
2. not to commence any on-site construction activity until it has received a Prevention of Significant Deterioration (PSD) permit and Final Determination that incorporates all

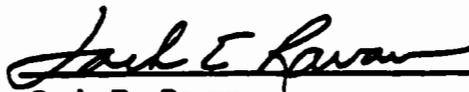
the requirements for PSD pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. §7470 et. seq., the regulations promulgated thereunder at 40 C.F.R. §51.24 and/or the regulations of the federally enforceable Florida State Implementation Plan, Rule 17-2.500 of the Florida Administrative Code, and Chapter 403 of the Florida Statutes including EPA's Best Available Control Technology analysis, dated January 30, 1987 (which addresses acid gas control and more stringent emission limitations for sulfur dioxide and particulate matter), and;

3. to submit, no later than ten (10) days after receipt of this Order, certification that the prohibition in paragraph one (1) of this Order has been observed and will continue to be observed until the permit referenced in paragraph two (2) of this Order has been issued. Such certification shall be submitted to:

Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division
United States Environmental
Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365
(404) 347-3043

JUN - 3 1987

Date



Jack E. Ravan
Regional Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JUL 24 1987

MEMORANDUM

SUBJECT: Calculating Amortized Capital Costs
 FROM: *for Joe Sablinski* Robert D. Bauman, Chief
Standards Implementation Branch, CPDD (MD-15)
 TO: Stephen H. Rothblatt, Chief
Air and Radiation Branch, Region V (5AR-26)

This is in response to your April 21, 1987, memorandum requesting clarification regarding the appropriate criteria to be used in calculating the amortized capital costs of control options in the selection of best available control technology (BACT). The 1980 "Prevention of Significant Deterioration Workshop Manual" states that U.S. Internal Revenue Service (IRS) criteria should be used to determine equipment life expectancy. However, EPA, in developing new source performance standards (NSPS), uses economic assumptions based on "useful economic life." You wish to know which set of criteria to use in the BACT economic analysis.

The EPA still relies on IRS criteria, but there are now several different IRS equipment life estimation systems and several EPA equipment life information sources based on IRS data, so it is more difficult now to know what information to use. Our policy is that unless the source can offer compelling data to the contrary, the useful life of a control option should be selected from one of the following:

- ° For process-related controls, use:
 - the NSPS/national emission standard for hazardous air pollutants (NESHAP) Background Information Document (if a source is subject to an NSPS or NESHAP), or
 - the IRS Class Life Asset Depreciation Range (CLADR) system guideline with a mid-point estimate (if no NSPS/NESHAP applies).
- ° For "add-on" controls, use the Economic Analysis Branch Control Cost Manual, which is based on CLADR data.

Regarding the appropriate annual interest ("discount") rate to use in these analyses, the Office of Management and Budget (OMB) guidelines recommend 10 percent for regulatory impact analyses. Because all NSPS are submitted to OMB for review, we have typically used 10 percent in our

analyses. However, this value represents a very high rate of return because it is a "real" discount rate (i.e., it does not incorporate inflation). The OMB has assembled a task force which is now studying this matter and will likely recommend a substantially lower value to be used in future EPA risk assessment analyses; we plan to use the lower value when and if it is adopted.

The two attachments provide additional information on the economic life criteria discussed above. I hope this memorandum clarifies the BACT guidance in this area. If you have any questions about it, please feel free to contact me at FTS 629-5629 or David Solomon at FTS 629-5375.

2 Attachments

cc: NSR Contacts

Background Information on Capital Cost Criteria

When the 1980 "Prevention of Significant Deterioration Workshop Manual" stated that the U.S. Internal Revenue Service (IRS) criteria should be used to determine equipment life standards, it was referring to the IRS "Class Life Asset Depreciation Range" (CLADR) system which provides a range of depreciation periods for each class of assets. Although the CLADR system was repealed for tax purposes for property placed in service after 1980, these guidelines still provide estimates of low, medium, and high useful lives for depreciable assets used in a wide range of business, industrial, and other activities. The CLADR should not be confused with the current IRS rules for the Accelerated Cost Recovery System (ACRS). The ACRS is not recommended for equipment life expectancy because it uses "recovery periods" which, for many types of equipment, are considerably less than actual useful equipment life.

In our opinion, the "useful economic life" criterion using CLADR data is the most realistic one to use when estimating the amortized capital ("capital recovery") costs for control options, be they "add-on" or process-related controls. The only exception should be if documentation, proving that the equipment life is shorter, is provided. The CLADR provides a range of estimates; we recommend using the mid-point CLADR life to obtain the best estimate of "useful economic life."

Under CLADR, "useful economic life" may vary not only with the type of equipment but also with where and how that equipment is being used. Consider a gas turbine installed in an industrial facility for purposes of generating (or cogenerating) electricity for consumption on site. If the total rated capacity for electrical production/distribution at the site were greater than 500 kilowatts (kW), the turbine would fall under "Asset Guideline Class (AGC)" 00.4: "Industrial Steam and Electric Generation and/or Distribution Systems." The "asset depreciation range" for this class provides a lower limit of 17.5 years, a mid-point of 22 years, and an upper limit of 26.5 years. However, if this turbine is installed at, say, a plant producing breakfast food and the electrical production/distribution capacity at this facility is less than 500 kW, the lives to use would be 13.5 (low), 17 (mid-point), and 20.5 years (high) (AGC 20.1, "Manufacture of Grain and Mill Products"). A complete listing of the CLADR values can be found in IRS Publication 534.

Ideally, all control options should be amortized using useful lives that are not only representative but standardized. The IRS CLADR meets both requirements in this respect, as do the background information documents (BID) written to support the setting of new source performance standards and national emission standards for hazardous air pollutants. A BID's cost and economic analyses contain useful life data for the source category subject to the standard. These life data have been based, in turn, on information obtained from the industry (e.g., via section 114 letters), control equipment vendors, and other reliable sources.

It may prove difficult in some cases to determine useful life of add-on control equipment in the IRS listings. Accordingly, EPA has tabulated low, midpoint, and high economic lives for eight commonly used add-on control devices (see attachment). These data were taken from Capital and Operating Costs of Selected Air Pollution Control Systems (EPA 450/5-80-002, December 1978). This report, now retitled the Economic Analysis Branch Control Cost Manual (Third Edition), is being revised; for a copy, contact Bill Vatauk at (FTS) 629-5309.

Attachment

TABLE 3.6 GUIDELINES FOR PARTS AND EQUIPMENT LIFE*

<u>MATERIALS AND PARTS LIFE</u>	<u>LOW (Years)</u>	<u>AVERAGE (Years)</u>	<u>HIGH (Years)</u>
Filter bags	.3	1.5	5
Adsorbents	2	5	8
Catalyst	2	5	8
Refractories	1	5	10
 <u>EQUIPMENT LIFE</u>			
Electrostatic Precipitators	5	20	40
Venturi Scrubbers	5	10	20
Fabric Filters	5	20	40
Thermal Incinerators	5	10	20
Catalytic Incinerators	5	10	20
Adsorbers	5	10	20
Absorbers	5	10	20
Refrigeration	5	10	20
Flares	5	15	20

★

Based on discussions with manufacturers and operators with corroborating data from refs. 19, 20, 37, 38, 40, 78 and 82.

Source: Capital and Operating Costs of Selected Air Pollution Control Systems (EPA 450/5-80-002, December 1978).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

DATE: DEC 31 1987

SUBJECT: Request for Administrator to Initiate Review of
PSD Permit for Camden County Resource Recovery FacilityFROM: Christopher J. Daggett
Regional AdministratorTO: Lee M. Thomas
Administrator

I am requesting that, pursuant to 40 C.F.R. 124.19, you review the PSD portion of the air pollution permit issued to Camden County Energy Recovery Associates for construction of the Camden County Resource Recovery Facility in Camden, New Jersey (CCRRF). The failure of the New Jersey State Department of Environmental Protection (DEP) to include an emission limit for PM₁₀ in the permit, to address BACT adequately for PM₁₀ and to provide for public comment on PM₁₀ as a PSD affected pollutant are grounds for reviewing the DEP's actions in issuing the permit and for staying the effectiveness of the permit until all PSD requirements have been met. As explained below, if you agree that review of this permit is appropriate, you will have to notify the permittee by January 11, 1988, that you are initiating review of the PSD portion of the permit.

This permit was issued under various authorities including EPA's PSD permit authority, 40 C.F.R. 52.21, which is delegated to DEP. Due to the promulgation of the new NAAQS for PM₁₀ on July 1, 1987, the emissions of particulate matter from the CCRRF became subject to the PSD rules. Particulate matter was not previously subject to PSD because the area was classified as nonattainment for the now withdrawn NAAQS for total suspended particulate (TSP). My staff has concluded that the permit and the permit review procedures do not adequately address PM₁₀ under the applicable PSD regulations.

DEP was aware several months before it issued the permit that the new PM₁₀ NAAQS for particulate matter would require PSD review. Nevertheless, the permit does not include an emission limitation for particulate matter expressed as PM₁₀ emissions from the facility. Also, the analysis of the control technology fails to demonstrate that the system selected would provide the best degree of emission control currently available for PM₁₀ particulates. Finally, there is a procedural problem with the permit as well. DEP did not provide notice and an opportunity for the public to comment on the PM₁₀ aspect of the permit, contrary to the regulatory requirements and the express advice of Region II.

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The Delegation of PSD Authority to DEP

EPA Region II delegated PSD new source review authority to DEP pursuant to 40 C.F.R. 52.21(u). The PSD permitting authority delegated to the DEP is not restricted in any way. The delegation is general in nature and includes all PSD requirements as they are from time to time revised by rulemaking.

Applicability of PM₁₀ Requirements to CCRRF Permit

The application for the CCRRF air pollution control permit was submitted on April 30, 1986. The DEP required the application to be augmented until the application was considered complete and the DEP noticed the permits for public comment on April 28, 1987. A public hearing was held on May 28, 1987, in Camden, New Jersey, and the public comment period ended on June 12, 1987.

PSD requirements are applicable to this permit for particulate matter because it is not in the class of permits and permit applications that are covered by the grandfathering exemptions of the PM₁₀ promulgation. No PSD application addressing particulate matter was submitted for the CCRRF before July 31, 1987. At the time of the notice period, the facility was required to undergo preconstruction review under the SIP for TSP because the area was nonattainment (secondary) for TSP but Federal and State permits were not issued until December 7, 1987. Only sources with PSD applications for particulate matter or with all Federal and State preconstruction approvals or permits before July 31, 1987, are exempt from PSD review for PM₁₀. See, 40 C.F.R. 52.21(c)(4)(ix) and (x) (52 Fed. Reg. 24714, July 1, 1987).

We reminded the DEP, both orally and in writing, of the need to satisfy the PSD requirements at 40 C.F.R. 52.21 for sources of particulate matter as a result of the PM₁₀ promulgation. The DEP was informed that the CCRRF was not grandfathered and required additional PSD review to account for PM₁₀.

BACT Emission Limit Necessary for PM₁₀

The permit has no emission limitation for PM₁₀. BACT is, by definition, an emissions limitation rather than merely specified types of equipment. 40 C.F.R. 52.21(b)(12). (The only exception is when there are technological or economic limitations on the application of measurement methodology.) Clearly the grandfathering provisions were meant to limit the class of major new sources for which the particulate emission limit is expressed

as TSP under the Clean Air Act. Without an express limit on PM₁₀ as a permit condition, we are concerned that there will be no sufficiently stringent, enforceable limit on particulate matter for this facility.

Even if the difference between the actual rate of particulate matter emissions smaller than 10 microns in size occurring as a result of the TSP limit now in the permit and the PM₁₀ limit that should be in the permit proves to be small or nonexistent, failing to correct this permit will leave a muddled and uncertain basis for future enforcement. EPA regulations clearly require that particulate matter emissions be addressed under the PSD regulations for this permit and that an emission limit be expressed in terms of PM₁₀. Region II is concerned that a TSP emission limit in an instance where PM₁₀ was the PSD regulated pollutant may be unenforceable especially in light of EPA's conclusion that the NAAQS which triggers PSD for particulate matter in the case of CCRRF's permit is the new PM₁₀ NAAQS. See, 52 Fed. Reg. 24694.

The State BACT Analysis

The DEP'S Hearing Officer found that there is no predictable difference between a baghouse and an electrostatic precipitator (ESP) with respect to PM₁₀ collection efficiency and, therefore, concluded that the ESP determined adequate for TSP is also adequate as BACT for PM₁₀. Region II considers the BACT analysis by which the DEP reached its conclusion to be unacceptably thin in its review of available data. The only analysis which appears to be available is in a report submitted by letter from the permittee dated November 16, 1987, responding to a November 2, 1987, request from DEP.

Our review of the BACT analysis shows that it is incomplete and an inadequate basis for making necessary technical judgments. Some questions are so fundamental that we cannot make meaningful technical comments. For example:

1. What are the sources of the engineering and economic data?
2. Why is there no comparison of the particulate size and garbage characteristics at the cited facilities and what is anticipated at CCRRF?
3. What were the test methods employed in obtaining the emissions data from the cited facilities?
4. Why were three United States facilities referenced but not considered in the analysis?

5. Was the removal efficiency data based on a system comparable to CCRRF's which includes a dry scrubber before the electrostatic precipitator or baghouse?

These are just some of the questions that we have and which we would normally review with a PSD permit applicant before public comments are solicited. With the date of the submission being November 16, 1987, and the permit issuance date being December 7, 1987, we do not believe that any meaningful questioning of the permittee's analysis was done by the DEP. The mere three weeks between the submission of the report and permit issuance did not allow the Region a meaningful opportunity to resolve EPA concerns.

Public Comment on PM₁₀ PSD Review

In early November, 1987, DEP informed Region II that it had completed the necessary PSD analysis for PM₁₀ but needed to issue the permit with little or no time for a public comment period with respect to PM₁₀ because of an impending financing deadline. On the basis of DEP assurances that PM₁₀ had been adequately addressed, Region II staff suggested to DEP staff that DEP might be able to justify a shortened public comment period, but emphasized that an opportunity for public comment to review the PM₁₀ analysis was necessary. (EPA's OGC and OAQPS orally concurred with Region II's position.) DEP acknowledged the need for public comment and agreed to follow appropriate, but shortened, procedures. Region II received a copy of and began to review the permittee's November 16, 1987, submission. With no notice for public comment and no further notice to EPA, DEP issued the air permits to CCRRF along with SPDES and solid waste permits on December 7, 1987.

Region II's advice with respect to the comment period assumed adequate treatment of PM₁₀ under PSD requirements. Having subsequently reviewed the BACT analysis and the permit itself, we now believe that these do not meet the requirements of PSD and any reason to allow less than 30 days for public comment on the PM₁₀ analysis would be unjustified.

Recommendation

I am asking that you initiate review of the CCRRF permit with respect to compliance with PSD review procedures applicable to PM₁₀. Specifically, the review should address:

1. The failure to include BACT expressed as a PM₁₀ emission limit in the permit.

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2. The adequacy of the review of available technology in establishing BACT.

3. The failure to provide for public comment regarding the PM₁₀ limitations.

A December 1, 1987, memorandum from Craig Potter, Assistant Administrator for Air and Radiation, calls for regional offices to monitor state compliance with preconstruction reviews to prevent instances such as this. We have done so in this case but were not consulted by the DEP when it decided to reject EPA's direction and issue the permit. We expect that the DEP and the permittee will correct this action rather than go through the entire review process but the issuance of the permit leaves us with no choice but to seek to commence review to prevent the action taken by DEP from becoming final action.

We are prepared to continue working with the DEP to act on the permit expeditiously should the DEP and the permittee agree to remedy the deficiencies discussed above. We have also explained to the DEP that, if appropriate, Region II could request a stay of EPA's permit review proceedings in the interim. In this regard, the DEP has contacted Region II and is exploring ways to take valid legal action on their own which would eliminate the need for you to act on this request for review by January 11. If the DEP should take such action, we will notify you immediately. I request that you alert me before you issue an order under §124.19(c).

Procedures and Time Limitations

We are concerned that review procedures be initiated within the time period allowed by the regulations, 40 C.F.R. Part 124, so that we are not foreclosed from raising these important issues. Under §124.19(a), if this is construed as a petition for review, the petition must be filed within 30 days of service of the notice by the DEP of its final permit decision and the Administrator must issue an order granting the review within a reasonable time. §124.19(c). If for any reason you determine that §124.19(a) is not the proper procedure, we would request you to initiate review on your own initiative under §124.19(b), which appears to require you to act within the initial 30 days.

Based on the issuance of the permit on December 7, 1987, we calculate that the 30 day period from the issuance of the permit will end on January 11, 1988. Pursuant to §124.20(a), the time began to run on the day after permit issuance. Since service of the DEP notice was by mail, we have added three days to the prescribed time in accordance with §124.20(d). The thirty-third day after December 7, 1987, is January 9, 1988, which is a Saturday, and §124.20(c) provides that the time period is extended to the next working day which is Monday, January 11, 1988. If this is construed as a review on your

own initiative, notice must be given by this date and we recommend that notice granting review in either case be provided by January 11, 1988.

The regional office filed comments on the draft permit within the DEP's public comment period. See, Hearing Officer's Report, December 7, 1987, Appendix B. We construe the definition of person in §124.41 to include an EPA regional office. Therefore the Region, as a person who filed comments, is a proper party to file a petition for review under §124.19(a).

By whichever means review is initiated, the review procedure is intended to prevent raising facts or issues on appeal that were not raised in the public comment period. See, 45 Fed. Reg. 33411, Col. 3 (May 19, 1980). Section 124.19(a) requires a statement that the issues being raised for review were raised during the comment period to the extent required by Part 124. A person's obligation is to "raise all reasonably ascertainable issues and submit all reasonably available arguments . . . by the close of the public comment period." §124.13. The issues raised herein were not required to be raised earlier since these issues could not have been known at the time the comment period closed on June 12, 1987. Indeed, we had advised the DEP that a public comment period should be provided so that public comments could be received on the PM₁₀ permit decision.

Notice of the initiation of the review procedures should be sent to:

Mr. Robert Donahue
President
Camden County Energy Recovery Associates
110 South Orange Avenue
Livingston, New Jersey 07039

Mr. Richard T. Dewling
Commissioner
New Jersey State Department of
Environmental Protection
401 East State Street
CN-027
Trenton, New Jersey 08625

Mr. Gary Pierce
Chief
Bureau of Engineering and
Regulatory Development
Division of Environmental Quality
New Jersey State Department of
Environmental Protection
401 East State Street
CN-027
Trenton, New Jersey 08625

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Enclosed are copies of the following documents upon which this request is based:

1. PERMIT TO CONSTRUCT, INSTALL, OR ALTER
CONTROL APPARATUS OR EQUIPMENT AND TEMPORARY
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT
AND PREVENTION OF SIGNIFICANT DETERIORATION PERMIT
December 7, 1987
2. HEARING OFFICER'S REPORT FOR THE
APPLICATION BY CAMDEN COUNTY ENERGY RECOVERY ASSOCIATES
TO CONSTRUCT AND OPERATE
A SOLID WASTE RESOURCE RECOVERY FACILITY
December 7, 1987
3. Letter from Robert F. Donahue, President, Camden
County Energy Recovery Associates to Jorge H.
Berkowitz, New Jersey State Department of Environmental
Protection, Subject: Camden County Resource Recovery
Facility PM₁₀ BACT Analysis, with enclosure
November 16, 1987

Enclosures (3)

cc: Thomas L. Adams, LE-133
Francis S. Blake, LE-130
J. Craig Potter, ANR-443
Ronald L. McCallum, A-101

9. PSD

Class I Areas

10. PSD

Permits/Permit Processing/Public

0.30 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 3.28; 14.

10.31 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee M. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction
of a resource recovery facility because no emission limit was
included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and
no public comment on PM₁₀ occurred. The NJ DEP issued the permit
December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1,
1987.
CR: 8.24 [Hard Copy]; 11.9

10.32 DATE: March 31, 1988
SUBJECT: Transmittal of OAQPS Interim Control Policy Statement
FROM: John S. Sietz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
TO: Regions I-X Division Directors
DISCUSSION: The memo provides final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. During the interim period, interim controls that may be more effective in reducing emissions may be installed, if no delay results in installation of the final control equipment.
CR: 8.25 [Hard Copy]; 11.10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 15 1988

MEMORANDUM

SUBJECT: Procedures for EPA to Address Deficient New Source Permits Under the Clean Air Act

FROM: Michael S. Alushin *David Rulli for M Alushin*
Associate Enforcement Counsel for Air
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director *Richard Biondi for*
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Addressees

INTRODUCTION

This memorandum transmits the final guidance for your use in addressing deficient new source permits. After we distributed the draft guidance for comment on December 16, 1987, several Regional Offices took action on deficient new source permits. The events surrounding those permit actions, as well as your thoughtful comments on the draft guidance, have shaped the final policy.

RESPONSE TO COMMENTS

We have incorporated most of your comments into the final guidance. As you requested, we have included examples of forms showing a request for permit review under 40 C.F.R. §124.19, a §167 order, and a §113(a)(5) finding of violation.

Some commenters suggested that we include a section on actions that can be taken, not against the source, but against the state issuing the deficient permit. We agree that this topic should be included in the guidance because it surfaces repeatedly in individual cases. Therefore, we have added a section on possible actions against states for issuing deficient permits. We have also clarified the guidance to indicate that EPA should send a state written comments at both the draft and final permit stage when a state is issuing what EPA considers a deficient permit.

Some reviewers requested further elaboration of when to use alternative enforcement responses. We have indicated relevant considerations in determining which action to take. One commenter pointed out that the guidance did not define what was meant by a "deficient permit." This involves a determination that requires the exercise of judgment. However, we have tried to list most of the criteria that will support a finding of deficiency. We realize, however, that we may not have anticipated every deficiency that may present itself to every Regional Office in the future.

Concern was expressed over the requirement to respond to a deficient permit within thirty days. We realize that this is an ambitious objective, but it is a legal requirement for permit review under 40 C.F.R §124, and greatly enhances EPA's equitable position in challenges under §167 and §113(a)(5). It will be easier to meet this deadline if Regional Offices have routine procedures in place for prompt receipt of all permits from their states and for thorough review of permits as they are received.

A few commenters wanted the guidance expanded to apply to "netting" actions and "synthetic minor" sources. We agree that guidance in this area would be useful, but the topic is too broad to be folded into the same document as the guidance on deficient permits. We have begun work to address appropriate enforcement action for improper "synthetic minors" in the context of the Federal Register notice announcing the program for federally enforceable state operating permits. If you think that separate enforcement guidance is needed on this subject, please let us know.

Finally, a few reviewers questioned the guidance regarding EPA directly-issued permits. We agree that, in all cases where we find a deficiency, it is preferable to change the permit by modifying its terms. If the source is amenable, we should do so. However, if EPA cannot get the source to accept new permit conditions, our only options are review under §124.19(b), revocation of the permit, and/or enforcement action. A §124.19(b) review must be taken within 30 days after the permit was issued. The

regulations are unclear on EPA's authority to revoke PSD permits. In an enforcement action to force a source, involuntarily, to accept a permit change when the source has not requested the change or made any modification to its facility or operations, EPA must always keep in mind the litigation practicalities and equities. These make enforcing against a permit we have issued when we are not basing our action on any new information a difficult proposition.

CONCLUSION

We hope that this guidance will help EPA Regions act to challenge deficient new source permits. Many of the practices advocated in this document may be litigated in pending or future cases. We will amend the guidance as necessary in light of judicial developments. If you have any questions, please contact attorney Judith Katz at FTS 382-2843.

Attachment

Addressees:

Regional Counsels
Regions I-X

Regional Counsel Air Branch Chiefs
Regionx I-X

Air and Waste Management Division Director
Region II

Air Management Division Directors
Regions I, III, and IX

Air and Radiation Division Director
Region V

Air, Pesticides, and Toxics Management Division Directors
Regions IV and VI

Air and Toxics Division Directors
Regions VII, VIII, and X

PSD Contacts
Regions I-X

Alan Eckert
Associate General Counsel

Greg. Foote, OGC

Gary McCutchen
NPPB, AQMD (MD-15)

Ron McCallum
Chief Judicial Officer
EPA

David Buente, Chief
Environmental Enforcement Section
DOJ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 15 1988

MEMORANDUM

SUBJECT: Procedures for EPA to Address Deficient New Source Permits Under the Clean Air Act

FROM: Michael S. Alushin *David Ralli for M Alushin*
Associate Enforcement Counsel for Air
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director *Richard Bondi for*
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Addressees

I. Introduction

This guidance applies to permits issued for major new sources and major modifications under both the prevention of significant deterioration (PSD) program and the nonattainment new source review (NSR) program. It contains three sets of procedures -- one for permits issued pursuant to EPA-approved state programs (NSR permits and PSD permits in more than half the states) one for permits issued by states pursuant to delegations of authority from EPA, and one for instances where EPA issues the permit directly. An appendix of model forms appears at the end.

The need for this guidance has become increasingly evident in the last two years. Before then, EPA had attempted only once, in 1981, to enforce against sources constructing or operating with new source permits the Agency determined to be deficient. In 1986, EPA litigated Greater Detroit Recovery Facility v. Adamkus et al. No. 86-CU-72910-DT (October 21, 1986). In that case, EPA wanted to enforce against a major stationary source constructing with a PSD permit issued by Michigan under a delegation agreement with EPA. The Agency had first determined that the best available control technology (BACT) determination for SO₂ in the permit was inadequate. Before EPA started formal enforcement action, the source filed suit against the Agency,

arguing that EPA had no authority to "second guess" the BACT determination and that, in any event, we should be equitably foreclosed from challenging the permit because we had remained silent during the two years since we had failed to comment on the permit. The court agreed and granted the source's motion for summary judgment.

The Detroit case was an example of the need for prompt and thorough EPA review of and written comments on new source permits. Our ability to influence the terms of a permit, both informally and through legal procedures, diminishes markedly the longer EPA waits after a permit is issued before objecting to a specific term. This is due both to legal constraints, that is, tight time limits for comments provided in the regulations, and to equitable considerations that make courts less likely to require new sources to accept more stringent permit conditions the farther planning and construction have progressed. Accordingly, as a prerequisite to successful enforcement action, it is imperative that EPA review all major source permit packages on a timely basis and provide detailed comments on deficiencies. If EPA does not obtain adequate consideration of those comments, it is also important for EPA to protect air quality by prompt and consistent enforcement action against sources whose permits are found lacking.

Because PSD permits are issued on a case-by-case basis, taking into consideration individual source factors, permitting decisions involve the exercise of judgment. However, although not an exhaustive list, any one of the following factors will normally be sufficient for EPA to find a permit "deficient" and consider enforcement action:

1. BACT determination not using the "top-down" approach.
2. BACT determination not based on a reasoned analysis.
3. No consideration of unregulated toxic pollutants in BACT determination.
4. Public notice problems - no public notice & comment period or deficiencies in the public notice.
5. Inadequate air quality modeling demonstrations.
6. Inadequate air quality analysis or impact analysis.
7. Unenforceable permit conditions.
8. For sources that impact Class I areas, inadequate notification of Federal Land Manager or inadequate consideration of impacts on air quality related values of Class I areas.

In NSR permitting, each of the following factors, while not necessarily an exhaustive list, are grounds for a deficient permit:

1. Incorrect LAER determination, i.e., failure to be at least as stringent as the most stringent level achieved in practice or required under any SIP or federally enforceable permit.
2. No finding of state-wide compliance.
3. No emissions offsets or incorrect offsets.
4. Public notice problems - no public notice and comment or deficiencies in public notice.
5. Unenforceable permit conditions.

II. Timing of EPA Response

A. Comment

Although EPA should know about every permit, at least by the time it is published as a proposal, the Agency sometimes does not learn about a permit during its development prior to the time the final permit is issued. If we do become aware of the permit and have objections to any of its terms, we should comment during the developmental stage before the permit becomes final.

State agencies should send copies of all draft permit public notice packages and all final permits to EPA immediately upon issuance. (The requirements for contents of public notice packages are set forth at 40 C.F.R. §51.166(q)(2)(iii).) The Regional Office should review all draft permit public notice packages and final permits during the 30 day comment periods provided for in the federal regulations. It should write detailed comments whenever Agency staff does not agree with the terms of a draft or final permit. To make sure they get permits in time for review, Regional Offices should consider requiring states with approved new source programs, through Section 105 Grant Conditions, to notify them of the receipt of all major new source permit applications. They should also require states to send them copies of their draft permits at the beginning of the public comment period.

Final permits should be required to be sent to EPA immediately upon issuance. (Note that the requirement for Regions to review draft and final permits is contained in guidance issued by Craig Potter on December 1, 1987.) Regions should carefully check their agreements with delegated states. These agreements require

states to send draft permits to EPA during the comment period. In addition, 40 C.F.R. §52.21(u)(2)(ii) requires delegated agencies to send a copy of any public comment notice to the appropriate regional office. Pursuant to 40 C.F.R. §124.15, a final permit does not become effective until 30 days after issuance, unless there are no comments received during the comment period, in which case it becomes effective immediately. Regions should make sure that delegated states know about permit appeal procedures at 40 C.F.R. §124 and, if necessary, issue advisory memoranda notifying them that EPA will use these procedures if the Agency determines a permit is deficient.

B. Formal Enforcement Action

If the permit was issued under a delegated program, it is important to initiate formal review or appeal within 30 days after the final permit is issued. (This response is set forth in Section IV below. The 30 day period is required by the regulations at 40 C.F.R. §124.19). When enforcing against permits issued under state programs, the same legal requirement to initiate enforcement within 30 days does not exist, but it is still extremely important to act expeditiously.

III. Enforcement Against the Source v. Enforcement Against the State

If a state has demonstrated a pattern of repeatedly issuing deficient permits, EPA may consider revoking the delegation for a delegated state or acting under Section 113(a)(2) of the Act to assume federal enforcement for an approved state. It is not appropriate to issue a §167 order to a state. Revocations of delegated authority as to individual permits and revocations of actual permits are theoretically possible, but they are unnecessary where EPA can act under Part 124 (i.e. within 30 days of issuance). Revocation may be appropriate where Part 124 appeals are unavailable, but likely will be subject to legal challenge.

IV. Procedures to Follow When Enforcing Against Deficient Permits in Delegated Programs

A. If possible, the following actions before construction commences:

1. Take action under 40 C.F.R. §124.19(a) or (b) within 30 days of the date the final permit was issued to review deficient provisions of the permit.

- a. §124.19(a) is an appeal, which may be taken by any person who commented during the public comment period.

b. §124.19(b) is a review of the terms of the permit by the Administrator under his own initiative. Regional Offices informally request the Administrator to take this action. They need not have commented during the public comment period. The Administrator has demonstrated a preference for using §124.19(b) over §124.19(a). In the four instances thus far when he was given the choice of acting under (a) or (b), he chose (b). However, the Administrator may not have sufficient time to act within 30 days in every situation in the future.

2. In the majority of situations, it is more appropriate for the Agency to act as one body to initiate review under §124.19(b). In some instances, however, the third party role for a Regional Office, through 40 C.F.R. §124.19(a) may be preferable. Regions should pick (a) or (b). However, if both provisions are legally available, they should request, in the alternative, that the Administrator act under the provision other than the one chosen by the Region should he deem it more appropriate. In particular, if a Region requests the Administrator to act under §124.19(b), it should ask that its memorandum be considered as a petition for review under §124.19(a) should review under §124.19(b) not be granted within 30 days. This is to protect the Regions' right to appeal a permit if the Administrator does not have sufficient time to act. Therefore, all memoranda requesting review should be written to withstand public scrutiny if considered as petitions under §124.19(a).
3. If the 30 day period for appeal has run and strong equities in favor of enforcement exist, issue a §167 order and be prepared to file a civil action to prohibit commencement of construction until the source secures a valid permit. (See Section IV B(2)) below.

B. For sources where construction has already commenced:

1. If the permit was issued less than 30 days previously take action under 40 CFR §124.19.
2. If the permit was issued more than 30 days previously, issue a §167 order requiring immediate cessation of construction until a valid permit is obtained. This

step should only be taken if extremely strong equities in favor of enforcement exist. Regions should be keeping state and source informed of all informal efforts to change permit terms before the §167 order is issued. §167 orders may be used both for sources which have and have not commenced construction. However, because the §124.19 administrative appeal and review process is available in delegated programs, it is greatly preferred for challenging deficient permits in states where it can be used.

3. If EPA determines that penalties are appropriate, issue a NOV under Section 113(a)(1) of the Act for commencement of construction of a major source or major modification without a valid permit. This is necessary because §167 contains no penalty authority. Note that strong equities for enforcement must exist before taking this step. EPA can issue both a §167 order requiring immediate injunctive relief and a NOV if we decide that both are appropriate.
4. Follow up with judicial action under §167 and §113(b)(2) if construction continues without a new permit.

C. Note that the appeal provisions of 40 C.F.R. §124.19 apply to all delegated PSD programs even if §124.19 is not specifically referenced in the delegation.

V. Procedures to Follow When Enforcing Against Permits in EPA-Approved State Programs (All NSR and More Than Half of the PSD Programs)

- A. Issue §113(a)(5) order (for NSR) or 167 order (for PSD) as expeditiously as possible, preferably within 30 days after the permit is issued, requiring the source not to commence construction, or if already started, to cease construction (on the basis that it would be constructing with an invalid permit), and to apply for a new permit. Note that EPA should issue a §167 order if it has determined that there is a reasonable chance the source will comply. Otherwise, the Region should move directly to section V.D below.
- B. From the outset of EPA's involvement, keep the source informed of all EPA's attempts to convince the permitting agency to change the permit.
- C. Issue an NOV (113(a)) as soon as construction commences if EPA determines penalties are appropriate.

- D. If source does not comply with order, follow up with judicial action under §167, §113(b)(5), or, if NOV issued, §113(b)(2). If penalties are appropriate, issue NOV and later amend complaint to add a §113 count when 30 day statutory waiting period has run after initial action is filed under §167.

VI. For EPA-issued Permits (Non-delegated)

- A. If source submitted inadequate information (e.g., misleading, not identifying all options) and EPA recently found out about it,
 - 1. If within 30 days of permit issuance, request review by the Administrator under 40 C.F.R. §124.19(b).
 - 2. If permit has been issued for more than 30 days, issue §167 or §113(a)(5) order preventing start-up or, if appropriate, immediate cessation of construction.
 - 3. Issue NOV if construction has commenced and EPA determines penalties to be appropriate.
 - 4. If necessary, request additional information from source; if source cooperates, issue new permit.
 - 5. Consider taking judicial action if appropriate.

EPA recognizes the distinction between permits based on faulty and correct information only for EPA directly-issued permits. This distinction is necessary for EPA permits due to equitable considerations.

- B. If source submitted adequate information and EPA issued faulty permit, we should attempt to get source to agree to necessary changes and accept modification of its permit. However, if source will not agree, only available options are revoking the permit and enforcing. Consolidated permit regulations are unclear about EPA's authority to revoke PSD permits. Because of this and the equitable problems associated with enforcing against our own permits, unless new information about health effects or other significant findings is available, we may choose to accept the permit. If faulty permit produces unacceptable environmental risk, act under 40 C.F.R. §124.19, if possible. If action under 40 C.F.R. §124.19 not possible, first revoke permit and then act as set forth in Section IV.

Addressees:

**Regional Counsels
Regions I-X**

**Regional Counsel Air Contacts
Regions I-X**

**Air and Waste Management Division Director
Region II**

**Air Management Division Directors
Regions I, III, and IX**

**Air and Radiation Division Director
Region V**

**Air, Pesticides, and Toxics Management Division Directors
Regions IV and VI**

**Air and Toxics Division Directors
Regions VII, VIII, and X**

**PSD Contacts
Regions I-X**

**Alan Eckert
Associate General Counsel**

Greg Foote, OGC

**Gary McCutchen
NPPB, AQMD (MD-15)**

**Ron McCallum
Chief Judicial Officer**

**Bob Van Heuvelen
Environmental Enforcement Section
Department of Justice**

**David Buente, Chief
Environmental Enforcement Section
Department of Justice**

Appendix

1. **Request for Review under 40 C.F.R. §124.19**
2. **§167 Order**
3. **§113(a)(5) finding of violation and accompanying §113(a)(1) Notice of violation**

10.34 DATE: July 28, 1988
SUBJECT: Supplemental Guidance on Implementing the North County Prevention of Significant Deterioration (PSD) Remand
FROM: John Calcagni, Director
Air Quality Management Division (MD-15)
TO: Addressees (Regional Air Division Directors)
DISCUSSION: The memo discusses 2 issues that have arisen from the Administrators remand decision in the North County PSD permit appeal, and that are beyond the scope of the September 22, 1987, document providing initial guidance on the subject.

- (1) Although BACT is determined case-by-case, the permitting authority must consider the full range of pollution control options available and choose the most effective means of limiting emissions, unless shown compelling reasons of economic or energy impracticality.
- (2) Emission of noncriteria pollutants should be evaluated carefully, including consultation with the sources listed. Where a municipal waste combustor is involved, DAQPS has provided rather detailed guidance on methods to factor air toxics considerations into the BACT decision.
- (3) In the public notice, the level of detail and identification of specific toxic substances should be consistent with the concern posed by the air toxics.

CR: 8.27 [Hard Copy]

10.35 DATE: November 14, 1988
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Columbia Gulf Transmission Company, Clementsville Compressor
Station, Kentucky
FROM: Greer C. Tidwell, Regional Administrator
TO: Lee M. Thomas, Administrator
DISCUSSION: Review is requested of the permit issued by KY DER for a natural-
gas-fired turbine, because dry controls do not constitute BACT for
NO_x for the source.
CR: 8.29 [Hard Copy]

unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Regional level * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioners. Petitioners have not satisfied that burden in this instance.

Petitioners have raised twelve different objections to the issuance of the permit, which can be grouped into three major categories. First, petitioners contend the South Coast Air Quality Management District of California (the "District") and the Riverside County Waste Management Director (the "Director") should receive notifications from the facility and have the same rights of access and inspection as the EPA, and the District's new source rules should specifically apply to the project. Second, petitioners contend Region IX failed to analyze unregulated pollutants properly and did not consider the environmental problems of odor and vector control. Third, petitioners complain that certain conditions are vague or inadequate and should be clarified.

These objections do not persuade me to review the permit. The first category fails to recognize the District's and the Director's lack of jurisdiction over the facility under the PSD

program. It is located on Indian land and therefore jurisdiction resides with the appropriate federal agencies and the tribe, not with the state and local agencies. Region IX has indicated; however, that it is likely at some point in the future to designate the District to act as EPA's representative in this matter. In the meantime, EPA is the exclusive permitting, inspecting, and enforcing authority for the Colmac facility with respect to Clean Air Act issues.

The second category of objections must fail because the record shows that emissions of unregulated pollutants from the facility were considered in accordance with applicable EPA policy and legal interpretations, as set forth in North County Resource Recovery Associates, PSD Appeal No. 85-2 (June 3, 1986). Nothing further was required of the permit applicant under federal law. EPA concluded that the emission controls proposed as best available control technology (BACT) for the Colmac facility (baghouse with teflon laminated bags, limestone injection, ammonia injection, and a circulating fluidized bed combustor with a minimum temperature of 1,600 F and with a residence time of 3 to 5 seconds) would be among the most effective for reducing toxic air emissions.^{2/} As to odor and vector concerns expressed by the

^{2/} Petitioners have submitted a critique of Colmac's health risk assessment to support their contention that the permit determination does not comply with the North County decision, supra. See Petition (Exhibit H); Emily D.P. Nelson, "Health Risk Assessment for Colmac Biomass-Fueled Power Plant, Cabazon Indian Reservation, Riverside County, California" (Sept. 4, 1988). (Colmac had submitted the assessment as part of an environmental impact statement for non-EPA related aspects of the project. The
(continued...)

petitioners, they were given appropriate consideration under the circumstances, for EPA looked at other biomass power plants in operation in California, but none demonstrated any such problems. The fuel to be used is baled straw and wood chips; the facility will not burn garbage or other food sources. Petitioners have not established that their concerns are anything other than speculative, which is not a sufficient basis to justify exercise of the review powers under the applicable regulations.

The third category of objections concerns allegedly vague or inadequate matters requiring clarification. The Region has addressed these concerns by, for example, stating that it interprets the provision for a "wind enclosed" fuel hog as meaning "completely enclosed"; that it believes the requirement for watering of the fuel storage pile during 12 mph+ winds is sufficient to control any dust problems that might arise; and

2/ (...continued)

project required federal approvals from the Bureau of Indian Affairs of the United States Department of the Interior.) Petitioners assert that the assessment is deficient in certain respects and therefore does not satisfy the dictates of the North County decision. However, the critique does not address the critical issue posed by the North County decision, namely, do the environmental impacts of unregulated pollutants call for an adjustment of the BACT determination for the regulated pollutants. In other words, will the environmental impacts of the unregulated pollutants affect the choice of control technology designated as BACT, necessitating a more stringent emission limitation on the regulated pollutants. Petitioners have not shown or alleged by their critique that any such alteration is necessary or appropriate. EPA Region IX, as stated above, has concluded that the technology proposed as BACT is among the most effective in controlling the unregulated pollutants. Accordingly, no alteration of the emission limitation on the regulated pollutants is required.

that the expression of the NOx emission limit in terms of pounds per hour (lb/hr) and parts per million (ppm) provides ample protection for the environment, thereby obviating any need to express the limit in other terms. In conclusion, none of the objections in this last category raises any concerns about the validity of the Region's permit determination.

For the reasons stated above, it is my conclusion that review of Region IX's permit determination is not warranted. The Region factored in all necessary requirements of federal law and EPA does not have the authority to impose state or local requirements in the permit in the absence of the permit applicant's consent. I note in this latter respect that the applicant in a number of instances has agreed to inclusion of provisions in the permit that reach well beyond the bare minimum requirements of the PSD provisions of the Clean Air Act. These additional requirements include, for example, provisions for offsets of all emissions in accordance with ARB/CAPCOA ^{3/} procedures; and measurement of non-regulated pollutants such as polycyclic organic matter, dioxins and furans, and metals. The fact that some or all of these additional undertakings may fall short of petitioners' expectations under state law is legally irrelevant to the federally issued permit. Therefore, the petition for review is denied. In accordance with 40 CFR 124.19(f)(2), the

^{3/} ARB/CAPCOA is a joint reference to the "California Air Resources Board" and the "California Air Pollution Control Officers Association."

Regional Administrator or his delegatee shall publish notice of this final action in the Federal Register.

So ordered.

A handwritten signature in cursive script, appearing to read "Lee M. Thomas", written over a horizontal line.

Lee M. Thomas
Administrator

Dated: December 12, 1988

10.37 DATE: January 4, 1989
SUBJECT: Valero Hydrocarbons BACT Analyses
FROM: Anthony P. Wayne, Chief, TX/NM Enforcement Section
TO: Lawrence E. Pewitt, PE, Director, Permits Division,
Texas Air Control Board
DISCUSSION: (1) Valero Hydrocarbons should reevaluate its study of feasible
BACT alternatives for its proposed natural gas processing
plant, particularly with respect to the technical, cost, and
economic issues mentioned.
(2) The memo discusses the steps Valero must take to keep their
PSD permit active, because they are coming up on the one-year
date by which EPA must make a decision.
CR: 8.31 [Hard Copy]

10.38 DATE: January 27, 1989
SUBJECT: Discounted Cash Flow (DCF) Analysis for Craven County Project New Source Review
FROM: Frank L. Bunyard, Economic Analysis Section, ASB, AQMD
TO: Allen C. Basala, Chief, Economic Analysis Section, ASB, AQMD
DISCUSSION: The EPA Economic Analysis Section reviewed a discounted cash flow analysis describing feasibility of thermal de-NO_x as BACT. This memo states reasons EPA is not convinced on infeasibility and recommends the PSD applicant be asked to provide more substantive justification for key assumptions. Memos 10.39 and 10.40 are closely related to this one.
CR: 8.32 [Hard Copy]

10.39 DATE: January 27, 1989
SUBJECT: Review of Craven County Wood Energy Project
FROM: Allen C. Basala, Chief, Economic Analysis Section, ASB
TO: Bruce P. Miller, Chief, Air Programs Branch, Region IV
DISCUSSION: This memo provides notification to Region IV that a discounted cash flow analysis provided by a PSD applicant was not found to be convincing of the infeasibility of thermal de-NO_x controls. Memos 10.38 and 10.40 are closely related.
CR: 8.33 [Hard Copy]

10.40 DATE: February 13, 1989
SUBJECT: BACT Determination for Craven County Wood Energy Project
FROM: Bruce P. Miller, Chief
Air Programs Branch; Air, Pesticides and Toxics
Management Division
TO: N. Ogden Gerald, Chief Air Quality Section
NC Department of Natural Resources and Community Development
DISCUSSION: PSD permit applicant must provide additional verification as
described of economic data presented regarding thermal de-NO_x as
BACT for NO_x emissions. The memo references economic evaluations
in Economic Analysis Section Documents 10.38 and 10.39.
CR: 8.35 [Hard Copy]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C. 20460

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Hunt

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OFFICE OF
ENFORCEMENT AND
COMPLIANCE MONITORING

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MEMORANDUM

SUBJECT: Opinion in Frank J. Kelley, Michigan Natural Resources Commission, Michigan Air Pollution Control Commission, and David F. Hales v. Albar Industries, C.A. No. 88-CV-40302-FL, E.D. Michigan, February 7, 1989

FROM: *Terrell E. Hunt*
Terrell E. Hunt
Associate Enforcement Counsel
Air Enforcement Division

TO: Edward E. Reich
Acting Assistant Administrator
for Enforcement and Compliance Monitoring

Don R. Clay
Acting Assistant Administrator
for Air and Radiation

On February 7, 1989, the U.S. District Court for the Eastern District of Michigan issued a decision upholding the right of a State to bring suit in Federal court as a citizen under the Clean Air Act.

The State of Michigan recently filed suit against Albar Industries under Section 304 of the Clean Air Act (the citizen suit provision) in U.S. District Court, alleging that Albar had violated certain new source permitting requirements contained in the federal new source regulations and the Michigan State Implementation Plan. Albar challenged Michigan's standing to sue under Section 304. The court upheld Michigan's right to maintain the action, stating that "the inquiry should end with the plain language of the statute." Opinion at page 2.

The court was persuaded, as well, by the decision in Hancock v. Train, 426 U.S. 167, 196, 48 L. Ed. 555, 575 (1976). The Supreme Court found, in Hancock, that states have standing to sue under Section 304. The Albar court noted that, in drafting the Clean Air Act Amendments of 1977, Congress chose to let the effect of Hancock stand by not altering 304 and 302(e) to preclude state access to federal courts.

Albar's motion to strike Michigan's request for civil penalties was also denied on the ground that while the Clean Air Act does not authorize penalties under Section 304, the state can collect them under the authority of the state statute.

A copy of the decision is attached below.

Attachment

cc: Gerald Emison, Director
Office of Air Quality Planning and Standards

Alan W. Eckert
Associate General Counsel
Air and Radiation Division

John S. Seitz, Director
Stationary Source Compliance Division

Air Branch Chiefs/Team Leaders
Offices of Regional Counsel
Regions I-X

Air Compliance Branch Chiefs
Air Divisions
Regions I-X

UNITED STATES DISTRICT COURT
 EASTERN DISTRICT OF MICHIGAN
 SOUTHERN DIVISION - FLINT

U.S. DISTRICT COURT
 EASTERN DISTRICT OF MICHIGAN
 SOUTHERN DIVISION
 OCT 27 11 17 AM '88

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OFFICE OF REGIONAL COUNCIL
 U.S. EPA, REGION 4

FRANK J. KELLEY, Attorney General
 of the State of Michigan; and
 FRANK J. KELLEY, ex rel, MICHIGAN
 NATURAL RESOURCES COMMISSION,
 MICHIGAN AIR POLLUTION CONTROL
 COMMISSION, and DAVID F. HALES,
 Director of the Michigan Department
 of Natural Resources,

Plaintiffs,

v.

CIVIL ACTION
 NO: 88-CV-40302-FL

ALBAR INDUSTRIES, INC.,

Defendant.

MEMORANDUM OPINION AND ORDER

Before the Court is defendant's Motion to Dismiss, October 25, 1988. This motion is DENIED; plaintiffs have standing to sue. The motion is also DENIED as to civil penalties, subject to the condition herein specified.

I. STANDING

This is an action brought by the State of Michigan pursuant to § 304 of the Clean Air Act, 42 U.S.C. § 7604, against Albar Industries, a spray painting concern, for enforcement of air pollution standards. At issue is whether the state may sue under the "citizen suits" provision of the Act, which permits commencement of

civil actions by any "person." Id. "Person" is defined in the Act as including a state. § 302, 42 U.S.C. § 7602(e).

The Court is persuaded by plaintiffs' argument that the inquiry should end with the plain language of the statute. The United States Supreme Court rejected a similar argument against state use of § 304 in Hancock v. Train, 426 U.S. 167, 196, 48 L.Ed.2d 555, 575 (1976). The Court wrote that the "only means provided by the Act" for the states to enforce § 118 of the Act against federal facilities was via a §§ 304 and 302(e) "citizen suit."

Congress overruled the substance of the Hancock decision the following year by enacting an amendment to § 118, which required the states to sue federal installations for air quality violations by means of state enforcement actions. Defendant here argues that the § 118 amendment should now be interpreted to mean that Congress intended to remove citizen suits as a whole from state access. This Court rejects that argument. First, Hancock presented Congress with the state standing issue. Apparently in response, rather than altering §§ 304 and 302(e) to preclude the states federal access, Congress amended § 118 only and left the other provisions undisturbed. It is traditional that when a court interprets a statute and the statute is subsequently amended in a way that does not invalidate the court's reasoning, it is implicit that the Legislature has accepted that reasoning. Here, because the United States Supreme Court found in Hancock that the states have standing under the citizen suit provision, coupled with Congress's subsequent declining to change the statute's plain language that includes states as litigating "persons," the Court concludes that this lawsuit

is authorized. See also Alabama ex rel. Graddick, 648 F.Supp. 1208, 1210 (M.D. Ala. 1986); New York v. Thomas, 613 F.Supp. 1473 (D.C. D.C. 1985).

Defendant's other arguments to the contrary are unconvincing. Defendant urges that ambiguity exists, sufficient to justify judicial interpretation of the otherwise plain language of the statute, by pointing to a provision requiring that prior to instituting suit, a citizen plaintiff must notify the federal Environmental Protection Agency (EPA), the violator, and the state. Defendant argues from this that a reading of "person" to include a state would render this provision nonsensical: it would require a state to notify itself. Although perhaps not a model of statutory draftsmanship, this is not necessarily as illogical a situation as defendant would have it. First, the notice provision would still require a state plaintiff to inform the violator and the EPA. Second, as plaintiff argues, the suing agency might need to notify other agencies within the state entity that also have an interest in the litigation. Neither of these is an exercise in nonsense.

Moreover, as a practical matter, defendant has failed to convince this Court that the states, as primary enforcers of the Clean Air Act but aided by federal monies and leadership, 42 U.S.C. §§ 7401(a)(3) and (4), should not be permitted to retain the choice between the state or the federal forums. Defendant's policy argument--that the federal courts should not be burdened with this litigation--is unpersuasive. Therefore, it is hereby found that the state of Michigan has standing in federal court to sue a private

corporation under the citizen suit provision of the Clean Air Act. The Court will, accordingly, exercise its pendent jurisdiction to decide plaintiff's state claims arising out of the same operative core of facts.

II. CIVIL PENALTIES

Defendant has moved to strike plaintiffs' request for civil penalties on the ground that the statute does not authorize such recovery to citizen suit plaintiffs. The Court agrees insofar as the federal statute is concerned, but will permit penalty claims under the state statute if such are provided for.

In a citizen suit brought under § 304, the plain language of the statute empowers a court only to order compliance with the emission standards or limitations sought to be enforced. § 304, 42 U.S.C. § 7604(a). The statute reads in pertinent part, "[t]he district courts shall have jurisdiction . . . to enforce . . . an emission standard or limitation, or such an order [issued by the EPA Administrator or the state], or to order the Administrator to perform such act or duty, as the case may be." As another district court has stated, "neither the plain language nor the legislative history of Section 304 can support the broad construction [--that federal courts can transplant state monetary penalties into the federal statute--] which plaintiff seeks to have placed thereon." Illinois v. Commonwealth Edison Co., 490 F.Supp. 1145, 1150-51 (N.D. Ill. 1980); see also California v. Department of the Navy, 431 F.Supp. 1271, 1293 (N.D. Cal. 1977). Thus, there is no federal statutory authority for the granting of civil penalties.

CERTIFICATION OF SERVICE

UNITED STATES OF AMERICA)
) SS CASE NO: 88-40302
EASTERN DISTRICT OF MICHIGAN)

I, the undersigned, hereby certify that I have on the
7th day of February , 198⁹ , mailed a copy of the
Memorandum Opinion and Order in the foregoing
cause, pursuant to Rule 77(d), Fed.R.Civ.P., to the following
persons at the addresses given:

Stewart H. Freeman
Assistant Attorney General
Environmental Protection Division
720 Law Building
525 West Ottawa
Lansing, MI 48913

Joseph M. Polito, Esq.
William A. Wichers, II, Esq.
Mark R. Werder, Esq.
Robert A. Hykan, Esq.
2290 First National Bldg.
Detroit, MI 48226



Colette J. Lehoux, Secretary to
Stewart A. Newblatt
United States District Judge

10.42 DATE: June 9, 1989
SUBJECT: Order Denying Review of PSD Permit for Spokane Regional Waste-to-Energy Project
FROM: William K. Reilly, Administrator, EPA
TO: Citizens for Clean Air and Council for Land Care and Planning
DISCUSSION: Petitioners requested review of PSD permit because BACT for NO_x, which should be thermal de-NO_x, was not required, and because fuel cleaning and separation, and recycling, were not adequately considered as emission reduction techniques. Spokane agreed to install thermal de-NO_x before this opinion was written, so the court dismissed that petition. The Administrator stated that petitioners did not make an adequate case for reviewing the permit on the other issues.
CR: 8.37 [Hard Copy]

10.43 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others

DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.

1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
2. Unregulated pollutants (Denied)
3. Prescribed emission limits for entire life of the permit (Remanded)
4. BACT for PM (Remanded)
5. Ambient Air and Public access (Remanded)
6. BACT for CO (Denied)
7. Preconstruction monitoring (Denied)

CR: 8.39 [Hard Copy]; 7.8; 11.13

10.44 DATE: August 2, 1989
SUBJECT: Administrative Order Denying Review of an Amended PSD Permit for a
Mass-Burn Municipal Waste Incinerator for Huntington, NY
FROM: William K. Reilly, Administrator, U.S. EPA
TO: Citizens for a Livable Environment and Recycling
DISCUSSION: The order states that the amended permit does require the facility
to use BACT, and the BACT analysis is not deficient. Petitioner
confused "de minimis" emissions limits with limitations for NO_x
CR: 8.40 [Hard Copy]

10.45 DATE: October 17, 1989
SUBJECT: Ambient Air
FROM: Robert D. Bauman, Chief
SO₂/Particulate Matter Programs Branch (MD-15)
TO: Gerald Fontenot, Chief
Air Programs Branch, Region VI (6T-A)
DISCUSSION: This memo responds to the August 24, 1989, memo from Hathaway to Calcagni [6.27].
(a) PSD modeling by a permit applicant can discount the contribution of a background source to the predicted concentration as described.
(b) Where a proposed source has a significant impact on any increment violation, the permit should not be approved unless the increment violation is corrected prior to operation of the proposed source. (See also July 15, 1988, memo from OAQPS to Region 6 [6.23]).
CR: 6.29 [Hard Copy]

10.46 DATE: January 2, 1990
SUBJECT: Order Denying Review of Revised Permit Determination for Spokane
Regional Waste to Energy Project
FROM: F. Henry Hubicht, Acting Administrator, EPA
TO: Lisa J.Kilian, Joan Honican, Citizens for Clean Air, and the
Council for Land Care and Planning
DISCUSSION: This order denies the appeals filed against the revised permit for
the Spokane Regional Waste to Energy Project. The Washington
State Department of Ecology did not act inappropriately in not
holding a public hearing. Questions relating to State
requirements are beyond the purview of this proceeding. The
recycling issue is again rejected as a subject for review for the
same reasons as stated in the June 9, 1989, remand [8.37].
CR: 8.42 [Hard Copy]; 11.14

10.47 DATE: January 4, 1990
SUBJECT: Remand order concerning the denial of the PSD application of Bio Energy Corporation, West Hopkinton, NH
FROM: William K. Reilly, Administrator, EPA
TO: Timothy Williamson, Office of Regional Counsel, US EPA, Region I, William Dell Orfano, President, Bio Energy Corporation, and others
DISCUSSION: All matters regarding the PSD Permit Denial Decision dated November 15, 1989, concerning Bio Energy's PSD application for its wood-fired power plant are remanded to Region I so that further comments and technical information may be received to supplement the administrative record.
CR: 11.15 [Hard Copy]



BTO-033-90

WALLACE E. REED, CHAIRMAN
CHARLOTTESVILLE

TIMOTHY E. BARROW,
VICE CHAIRMAN
VIRGINIA BEACH

SAM C. BROWN, JR.
VIRGINIA BEACH

RICHARD L. COOK
RICHMOND

MANUEL DEESE
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COMMONWEALTH of VIRGINIA

Department of Air Pollution Control

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(804) 786-2378

FAX # (804) 225-3933

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WALLACE N. DAVIS
EXECUTIVE DIRECTOR

February 16, 1990

Handwritten notes:
Coul
Copies to
- Bhw C
- Gary M
- David S
- Row Campbell
Coul 3/14

Mr. William C. Campbell, III
Cogentrix, Inc.
9405 Arrowpoint Boulevard
Charlotte, NC 28217

Dear Mr. Campbell:

We know that you are anxious to expedite the processing of your PSD permit for a power-generation facility. We, too, are committed to that goal, but we must work together to achieve it.

In order to enhance the process, we have developed target emission guidelines which we believe are both technically and economically feasible for coal-fired facilities. Each applicant must do a complete PSD review and thorough study and documentation of "top-down" Best Available Control Technology. This should include starting with the most stringent control option. The technical and economic feasibility of that option should be carefully reviewed and documented. If you believe that such a control option is inappropriate for your facility, then select the next "best" control option and repeat the technical and economic feasibility analysis. This process should continue until a control option cannot be discarded on technical or economic feasibility issues. BACT is a case-by-case determination and it remains the responsibility of the applicant to demonstrate the appropriate option for his facility.

A copy of a typical outline for a PSD submittal is enclosed for your information and use.

GUIDELINE LIMITS FOR COAL-FIRED UNITS

Total Suspended Particulates (TSP)	0.020 lbs/million btu
PM-10	0.018 lbs/million btu
SO ₂	0.16 lbs/million btu
Minimum SO ₂ Scrubber efficiency	92%
NO _x	0.3 lbs/million btu
CO	0.20 lbs/million btu
VOC	0.03 lbs/million btu

If you have any questions or comments on any of the above, please contact John M. Daniel, Jr. (804) 786-3248 or Pam Faggert. (804) 786-5481.

Sincerely,



Wallace N. Davis
Executive Director

cc: Asst. Executive Director - Technical Operations
Director, Div. of Technical Evaluation
Regional Directors
Director, Div. of Computer Services

jd-033

BTO-026-90

**TYPICAL OUTLINE
for
PSD PERMIT APPLICATION**

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- J. Meteorological Data Base for Modeling**
- K. Mixing Height Computation Methodology**
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

APR. 25 1990

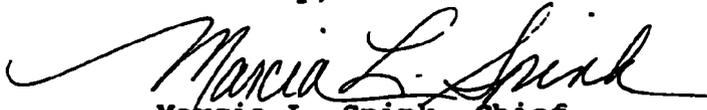
Mr. John M. Daniel, Jr., P.E.
Assistant Executive Director
Department of Air Pollution Control
Room 801
Ninth Street Office Building
Richmond, VA 23240

Dear Mr. Daniel: 

The purpose of this letter is to respond to your letters, dated February 6, 1990 and February 9, 1990, regarding the issuance of prevention of significant deterioration (PSD) permits in attainment areas where violations have been modeled. The enclosed attachment outlines the procedures that must be followed when issuing PSD permits in these areas.

If you have any questions, please do not hesitate to call me at (215) 597-9075.

Sincerely,



Marcia L. Spink, Chief
Air Programs Branch

Enclosure

cc: Wallace Davis, Executive Director
Virginia Department of Air Pollution Control
Richmond, VA

James Sydnor
Assistant Executive Director
Virginia Department of Air Pollution Control
Richmond, VA

Attachment

A. PROCEDURES FOR ISSUING PSD PERMITS TO SOURCES WITH NO SIGNIFICANT IMPACTS IN AREAS WITH MODELED VIOLATION(S) FROM EXISTING SOURCES

The source seeking the PSD permit may be permitted, constructed, and allowed to operate at its permitted, enforceable allowable emission rate because at that emission rate, the source has no significant impact. Although the State "owes" EPA a revision to its SIP to correct the modeled violation(s) from the existing source(s), that SIP revision and the issuance of the PSD permit are independent events. (Note: The existing sources are to be modeled in accordance with Table 9-1 of EPA's Guideline for Air Quality Models. Nothing in the WEPCO v. EPA case changes this requirement).

B. PROCEDURES FOR ISSUING PSD PERMITS TO SOURCES WITH SIGNIFICANT IMPACTS IN AREAS WITH MODELED VIOLATIONS FROM EXISTING SOURCES AND FOR PROCESSING THE ASSOCIATED SIP REVISIONS

1. The source seeking the PSD permit may accept permit conditions such that it, in and of itself, no longer has a significant impact.

OR

2a. Reductions or mitigating measures must be identified at existing sources such that modeling the PSD source and these existing sources indicates no significant impact(s).

2b. This identification of the reductions at existing sources and the modeling demonstrating no significant impact(s) must be done prior to and as part of the preliminary determination on the PSD application to afford the opportunity for public comment.

2c. The reductions or mitigating measures necessary at the existing sources must be made federally enforceable. Until and unless the State has an approved SIP operating permit program, the only means available for making the reductions at the existing sources federally enforceable is through source-specific SIP revisions. The State must formally commit to submit the necessary SIP revision(s) to EPA at the time it issues the preliminary determination.

- 2d. Those SIP revisions must be adopted by the State and approved by EPA prior to the time the PSD source commences operation. The State must follow all of the procedures for submittal of a SIP revision including public notice and hearing. The State could simultaneously offer public notice and hearing on the preliminary determination of the PSD permit and on the SIP revisions for the existing sources. The public notice must be explicit and a public hearing must be held because there are SIP revisions involved. (Public participation for PSD permits usually requires only the opportunity for public hearings.)
- 2e. The PSD permit must contain the following conditions:
- 1) Until and unless the (STATE) has imposed the necessary restrictions on (EXISTING SOURCE NAMES) to reflect the Scenario modeled as part of this permit review demonstrating no significant impact and those restrictions have been approved by the United States Environmental Protection Agency for incorporation into the approved SIP, the (PSD SOURCE NAME) may not commence operation except as conditioned below:
 - 2) (Here conditions should be imposed on the source seeking the PSD permit such that it, in and of itself, would have no significant impact.)

NOTE: In the past, PM and SO₂ SIP revisions setting new SIP allowable emissions have required technical support consisting of full attainment demonstrations. In general, EPA expects that the SIP revisions submitted demonstrate no significant impact will also demonstrate no violations of NAAQS. However, there may be isolated cases where two rounds of SIP revisions occur. The first SIP revision would enforce the reductions necessary at existing sources to demonstrate no significant impact (when modeled with a source seeking a PSD permit). Where this SIP revision does not demonstrate protection of the NAAQS (i.e., the elimination of all predicted violations), the State still "owes" EPA a SIP revision to correct the modeled violations of the NAAQS and may have to once again redefine the allowable emissions at one or more of the same sources affected in the previous SIP revision. The commitment must also be made at the time the State issues its preliminary determination to issue the PSD permit.

6/1/90 Copies to NSRS, EL
Denno 10.50

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:
Hadson Power 12 -- Altavista
Applicant
DAPC Registration No. 30859

PSD Appeal Nos. 90-2,
90-3, 90-4, & 90-5

ORDER DENYING REVIEW

Larry Hendricks (Appeal No. 90-2), Herbert Bolin (Appeal No. 90-3), Lena C. Frazier (Appeal No. 90-4), and Roy E. St. John, Jr. (Appeal No. 90-5) filed separate requests for review of a Prevention of Significant Deterioration (PSD) permit that authorizes construction of a steam electricity cogenerating facility at Altavista, Virginia. The Virginia Department of Air Pollution Control (DAPC) issued the permit to the applicant, Hadson Power 12, on February 21, 1990, pursuant to a delegation of authority from EPA Region III, Philadelphia, Pennsylvania. Because of the delegation, DAPC's permit determination is subject to the review provisions of 40 CFR §124.19, and any permit it issues will be an EPA-issued permit for purposes of federal law. 40 CFR §124.41; 45 Fed. Reg. 33,413 (May 19, 1980).

DAPC responded to the petitions on May 25, 1990, arguing in each instance that the grounds for review alleged in the petitions did not meet the threshold for review established by the rules governing this proceeding. DAPC also noted that in

numerous instances the issues raised by two of the petitioners (Bolin and St. John) had not been raised at the public hearing or during the public comment period and, therefore, were not eligible for consideration on appeal. DAPC is correct on both counts:

First, a petition must contain a statement demonstrating "that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations * * *." 40 CFR §124.19(a). The latter, in turn, require participants in the permit proceedings to "raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period * * *." 40 CFR §124.13. Collectively, the purpose of these regulations is to ensure that all matters are first raised with the permit issuer. In this manner, the permit issuer can make timely and appropriate adjustments to the permit determination, or, if no adjustments are made, the permit issuer can include an explanation of why none are necessary. As explained in the preamble to the regulations, "[t]he later stages [of the permit proceedings] are appellate in nature and new issues should not be raised on appeal." 45 Fed. Reg. 33411 (discussing §124.13). None of the petitions contains the requisite statement under 40 CFR §124.19(a), and many of the issues raised by two of the petitioners, as DAPC correctly alleges, had not in fact been raised with the permit issuer in a timely manner. Those issues

3

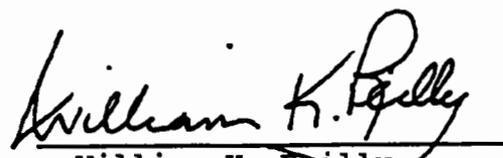
(identified in DAPC's response to the petitions) are therefore ineligible for review on appeal.

Second, as to the few issues that satisfy the foregoing requirements, DAPC is correct in asserting that they do not meet the threshold for review. Under the rules, there is no appeal as of right from the permit determination. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly exercised," and "most permit conditions should be finally determined at the Regional [state] level * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioner. Upon consideration of the petitions, and for the reasons stated in DAPC's response, I conclude that none of the petitioners has met his or her burden, respectively, of showing that the permit should be reviewed.

Accordingly, for the reasons stated above, review of DAPC's permit determination is denied.

So ordered.

Dated: JUL 3 0 1990


William K. Reilly
Administrator

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying Review, PSD Appeal Nos. 90-2, 90-3, 90-4, and 90-5, were mailed to the following in the manner indicated.

First Class Mail
Postage Prepaid:

Wallace N. Davis
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Regional Counsel
U.S. EPA - Region III
841 Chestnut Street
Philadelphia, PA 19107

Herbert J. Bolin
1614 Avondale Dr
Altavista, VA 24517

Larry Hendricks
1114, 8th St.
Altavista, VA 24517

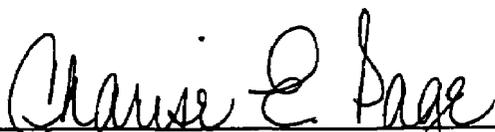
Lena C. Frazier
1117 7th St.
Altavista, VA 24517

Roy E. St. John, Jr.
Rt. 3 Box 400
Hurt, Va 24563

Douglas G. White
Assistant Regional Counsel
U.S. EPA - Region III
841 Chestnut Building
Philadelphia, PA 19107

Dated:

JUL 31 1990


for Brenda H. Selden, Secretary
to the Chief Judicial Officer

10.51 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.

CR: 2.27 [Hard Copy]; 3.29; 14.9

10.52 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee M. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction
of a resource recovery facility because no emission limit was
included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and
no public comment on PM₁₀ occurred. The NJ DEP issued the permit
December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1,
1987.
CR: 8.50 [Hard Copy]; 11.18

11. PSD

Permit Changes/Extensions/Expiration

11.9 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee W. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction
of a resource recovery facility because no emission limit was
included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and
no public comment on PM₁₀ occurred. The NJ DEP issued the permit
December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1,
1987.
CR: 8.24 [Hard Copy]; 10.31

11.10 DATE: March 31, 1988
SUBJECT: Transmittal of OAQPS Interim Control Policy Statement
FROM: John S. Sietz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
TO: Regions I-X Division Directors
DISCUSSION: The memo provides final Interim Control Policy for developing compliance schedules that require replacement or upgrading of existing air pollution control equipment. During the interim period, interim controls that may be more effective in reducing emissions may be installed, if no delay results in installation of the final control equipment.
CR: 8.24 [Hard Copy]; 10.32

11.11

11.11 DATE: April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 8.26 [Hard Copy]; 15.5; 28.5

11.12
7/23/88

TRANSMITTAL NOTICE: 2-88

September 8, 1988

MEMORANDUM

SUBJECT: EPA Region IX Policy on PSD Permit Extensions

FROM: *Wayne A. Blackard*
Wayne A. Blackard, Chief
New Source Section

TO: Region IX States and Districts
NSR/PSD Permitting Contacts

Attached for your information is a copy of a guidance document prepared by my staff addressing EPA Region IX's policy on PSD permit extensions. The purpose of this document is to clarify the criteria EPA examines prior to extending the 18-month commencement of construction deadline found in 40 CFR 52.21 (r)(2). At the heart of these requirements are assurances of current BACT determinations and continued public participation when permits are extended. Our hope is that this policy will enhance agreement among permitting agencies in implementing PSD regulations.

We hope you will find this document helpful. If you have any questions, please contact me at (415) 974-8249.

EPA REGION IX POLICY

ON

PSD PERMIT EXTENSIONS

The following is EPA Region IX's policy regarding Prevention of Significant Deterioration (PSD) permit extensions. This policy clarifies the subject of extensions of the 18-month commencement of construction deadline found in 40 CFR 52.21 (r)(2).

The intent of this policy is to grant a permit extension of the 18-month deadline to any good faith application, provided the following requirements are met. If these requirements are not met or if the extension request is denied, the permit will become invalid after its expiration date. The applicant, however, may choose to file a project application for consideration as a new permit. In general, the import of this policy is to ensure that the proposed permit meets the current EPA requirements, and that the public is kept apprised of the proposed action (i.e. through the 30-day public comment period).

I. ADMINISTRATIVE REQUIREMENTS

(1) Submittal

An extension request must be submitted and received by EPA-Region IX prior to the expiration date of the permit.

(2) Justification

The extension request must include an acceptable justification why the commencement of construction did not commence as scheduled. The request must also include a revised construction schedule which assures that construction will be initiated during the extension period and that construction will be continuous.

(3) Certification

The extension request must be signed by a responsible representative of the company proposing the project.

II. TECHNICAL REQUIREMENTS

(1) BACT Analysis

A BACT reanalysis is required in all permit extension requests, as in an application for a new PSD

permit. It should also be noted that, according to a recent EPA policy, any new BACT determination being prescribed for any regulated pollutant must also consider the impact of the proposed BACT on the emissions of unregulated or toxic pollutants.

(2) Additional PSD Review Requirement

A reanalysis of the PSD increment consumption and air quality impacts is required. Interim source growth in the area may have occurred and caused significant degradation of air quality. Therefore, the review agency is responsible for ensuring that the source requesting an extension would not cause or contribute to a PSD increment or NAAQS exceedances.

(3) New PSD Regulations or Requirements

It is not the intent of this policy to exempt projects from meeting new requirements. Therefore, all new or interim PSD requirements will be applied as in an application for a new PSD permit.

III. PROCEDURAL ISSUES

(1) Duration of Extensions

Due to concerns of growth rights and public participation, EPA may limit an extension to 12 months, or less, from the initial date the permit was to expire. This allows for an extension, if necessary, while ensuring that impacted States, Districts and the public have control of their own air resources and growth rights and that state-of-the-art BACT will be employed.

(2) Public Comment

EPA will require the same public comment procedure for extension requests as for permit modifications including a 30-day public comment period. Requests for public hearings and petitions for permit appeals shall follow the applicable procedures of 40 CFR Part 124.

(3) Extensions of Later Units of Phased Multi-Unit Projects

Determinations for phased multi-unit projects are very complex involving the independence or dependence of a project and often different construction dates. Therefore, please consult with EPA regarding any questions addressing phased construction projects.

EPA Staff Contact:

Peter Fickenscher (415) 974-8226 (FTS 454-8226)

Section Chief:

Wayne Blackard (415) 974-8249 (FTS 454-8249)

11.13 DATE: July 19, 1989
SUBJECT: Order on Petition for Review, Hibbing Taconite Co.
FROM: William K. Reilly, Administrator, EPA
TO: David Kee, Director Air and Radiation Services Division, Region V,
Gerald L. Willet, Commissioner, Minn. Pollution Control Agency,
and Others

DISCUSSION: This document remands to the Minnesota Pollution Control Agency review of four issues raised by EPA Region V in a petition for review of PSD permit authorizing Hibbing Taconite Company to modify its furnaces to burn petroleum coke as a fuel. Review of three issues raised by EPA was denied as described below.

1. Bact for SO₂ - discussion of fuel chosen for "base case" in analyzing BACT for SO₂, cost comparison in BACT analyses, appropriate justification of fuel choice in defining viable control strategy, and the need for a detailed description and engineering analysis of the planned emissions reduction system. (Remanded)
2. Unregulated pollutants (Denied)
3. Prescribed emission limits for entire life of the permit (Remanded)
4. BACT for PM (Remanded)
5. Ambient Air and Public access (Remanded)
6. BACT for CO (Denied)
7. Preconstruction monitoring (Denied)

CR: 8.39 [Hard Copy]; 7.8; 10.43

11.14 DATE: January 2, 1990
SUBJECT: Order Denying Review of Revised Permit Determination for Spokane
Regional Waste to Energy Project
FROM: F. Henry Hubicht, Acting Administrator, EPA
TO: Lisa J.Kilian, Joan Honican, Citizens for Clean Air, and the
Council for Land Care and Planning
DISCUSSION: This order denies the appeals filed against the revised permit for
the Spokane Regional Waste to Energy Project. The Washington
State Department of Ecology did not act inappropriately in not
holding a public hearing. Questions relating to State
requirements are beyond the purview of this proceeding. The
recycling issue is again rejected as a subject for review for the
same reasons as stated in the June 9, 1989, remand (8.38).
CR: 8.42 [Hard Copy]; 10.46

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:)

Bio Energy Corporation)
West Hopkinton, NH)

PSD Appeal No. 89-6

PSD File No. 041-121-NH07)

REMAND ORDER

Upon the joint request of the Regional Administrator of Region I of the U.S. Environmental Protection Agency and Bio Energy Corporation, and pursuant to 40 CFR §124.19, all matters regarding the PSD Permit Denial Decision dated November 15, 1989, concerning Bio Energy's PSD application for its wood-fired power plant located in West Hopkinton, New Hampshire, are remanded to the Regional Administrator of Region I so that further comments and technical information may be received to supplement the administrative record.

All further action by the Administrator with respect to Bio Energy's PSD appeal is stayed until Region I notifies the Administrator that the Region has reached a final determination in response to the remand.

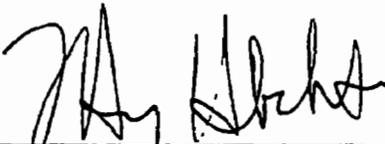
Pursuant to this remand, Bio Energy will be allowed to submit further information requested by the Region to supplement the administrative record, and the Region will be allowed to reopen the comment period and to consider revising its permit determination.

This remand to the Regional Administrator shall be without prejudice to Bio Energy's rights under its Petition for Review by the Administrator, and to the Regional Administrator's findings in the final determination dated November 15, 1989, to the extent the supplemental administrative record on remand does not address or modify those findings.

Region I's determination on remand will be subject to review under 40 CFR §124.19, and appeal of its decision on remand will be required to exhaust administrative remedies under 40 CFR §124.19(f).

So ordered.

Dated: 1-4-90



William K. Reilly
Administrator
Acting

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Remand Order in the matter of Bio Energy Corporation, PSD Appeal No. 89-6 were mailed to the following persons in the manner indicated:

**First Class Mail
Postage prepaid:**

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Boston, MA 02203

Donald L. Anglehart
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Boston, MA 02111

William Dell Orfano, President
Bio Energy Corporation
Route 127
Rural Route 2
Box 85
West Hopkinton, NH 03229

Dated: January 8, 1990

Andrea C. Taylor
for Brenda H. Selden, Secretary
to the Chief Judicial Officer

11.16 DATE: June 7, 1990
SUBJECT: Designation of Issues for Review of Illinois EPA's Permit
Determinations Regarding World Color Press
FROM: William K. Reilly, Administrator, EPA
TO: Richard J. Carlson, Director, Illinois EPA
DISCUSSION: This paper designates the issues to be briefed in the review of
World Color Press PSD permit determinations made by the Illinois
EPA. World Color Press and IEPA must reexamine their reasoning in
stating, incorrectly, that an alleged absence of significant
photochemical reactivity of the facilities' VOC emissions was an
"environmental impact" that would justify less stringent
limitations.
CR: 8.46 [Hard Copy]

11.17 DATE: July 9, 1990
SUBJECT: Order on Motion for Stay on Appeal of Permits for Columbia Gulf
Transmission Company
FROM: William K. Reilly, Administrator, EPA
TO: William C. Eddins, Director, Division for Air Quality,
Commonwealth of Kentucky
Susan Midgett, Director, Air Programs Branch, USEPA, Region IV,
and others
DISCUSSION: The Administrator hereby grants a stay to the appeal by EPA Region
IV of the PSD permit granted by the State of Kentucky to Columbia
Gulf Transmission Company. The stay enables the applicant to
supplement the state administrative record with new factual
information, which the applicant believes will confirm the wisdom
of the State's original permit determination. Further, the Region
may submit additional information to ensure that the BACT
determination is fully contemporaneous. If the permit is
subsequently revised, the public will be given the right to
comment.
CR: 8.47 [Hard Copy]

11.18 DATE: December 31, 1987
SUBJECT: Request for Administrator to Initiate Review of PSD Permit for
Camden County Resource Recovery Facility
FROM: Christopher J. Daggett
Regional Administrator
TO: Lee W. Thomas
Administrator
DISCUSSION: Region II requests review of a PSD permit issued for construction
of a resource recovery facility because no emission limit was
included for PM₁₀, BACT for PM₁₀ was not adequately addressed, and
no public comment on PM₁₀ occurred. The NJ DEP issued the permit
December 7, 1987; new NAAQS for PM₁₀ were promulgated on July 1,
1987.
CR: 8.50 [Hard Copy]; 10.52

12. PSD

Relation to Nonattainment Program

12.13 DATE: July 5, 1988
SUBJECT: Air Quality Analysis for Prevention of Significant Deterioration (PSD)
FROM: Gerald E. Emison, Director
Office of Air Quality Planning Standards (MD-10)
TO: Thomas J. Maslany, Director
Air Management Division (3AM00)
DISCUSSION: The memo relays a policy decision on the approach to use to interpret dispersion modeling results to determine whether a source will cause or contribute to a violation of NAAQS or PSD increment. Under this approach, air quality concentrations are projected throughout the proposed source's impact area, but do not automatically cause a source to cause or contribute to a violation. Instead, where a modeled violation is predicted, further analysis is done to determine whether the impact is significant at the point and time of the modeled violation.
CR: 6.22 [Hard Copy]

12.14 DATE: December 28, 1988
SUBJECT: Emission Offset Exemptions for Resource Recovery Facilities
FROM: Gerald A. Emison, Director, OAQPS
TO: Conrad Simon, Director, Air and Waste Management Division, Region II
DISCUSSION: States that have offset exemptions for RRF's in their SIP's should initiate SIP revisions that would remove the exemptions. EPA will no longer approve SIP's containing offset exemptions for RRF's unless they contain an approved growth allowance. Appendix S is no obstacle to deletion of the exemptions, because it has been largely superceded.
CR: 25.13 [Hard Copy]; 28.6

12.15 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix S has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 13.10; 15.8; 25.15; 28.9

12.16 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards
CR: 25.15 [Hard Copy]; 13.11; 15.9; 28.10

12.17

12.17 DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have
Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department
of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD
permits in areas with modeled violation(s) both to sources with no
significant impacts and to sources with significant impacts. In
the latter case, procedures for processing the associated SIP
revisions are also discussed.
CR: 10.49 [Hard Copy]; 6.31; 15.11

13. PSD

Temporary Source/Portable Source/ Other Exemptions

13.9 DATE: August 31, 1988
SUBJECT: Whether Facilities That Use Glass Fibers Are Considered "Glass
Fiber Processing Plants"
FROM: Dennis Crumpler, New Source Review Section
Noncriteria Pollutant Programs Branch
TO: Michael A. Stawarz, NY DEC Region 5
DISCUSSION: Facilities that use glass fibers to manufacture other products,
such as fiberglass-reinforced composites, were not intended to be
included in the "glass fiber processing" category. "Glass fiber
processing" was intended to include only those facilities engaged
in making glass fiber.
CR: 3.31 [Hard Copy]

13.10 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix S has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 12.15; 15.8; 25.15; 28.9

13.11

13.11 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in abeyance pending further EPA action on the current SIP call. This is, in part, because the merits of the petitions are closely linked with EPA's outstanding call for revisions to the NY SIP to correct the State's failure to meet ozone and CO air quality standards
CR: 25.15 [Hard Copy]; 12.16; 15.9; 28.10

14. PSD

Allowable Constructive Activities Prior to Permit Issuance

14.9 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 3.28; 10.30

14.9 DATE: December 23, 1987
SUBJECT: Opinion in U.S. v. Louisiana-Pacific Corporation, D. Colo.,
Interpreting Certain PSD Regulations
FROM: Thomas L. Adams, Jr.
Assistant Administrator for Enforcement and Compliance Monitoring
TO: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)
DISCUSSION: This memo summarizes the October 30, 1987, opinion by Judge Arraj
of the US District Court in Colorado regarding summary judgement
and legal matters involved in the case of U.S. vs. Louisiana-
Pacific Corporation (LPC). Judge Arraj denied motions for summary
judgement, finding that a trial was needed to resolve questions of
fact. Two legal issues are discussed. First, EPA can not sue LPC
for the NOV of major modification rules, because the major source,
upon which the major modification must be based, did not exist for
more than 30 days after the NOV was issued (as required by Section
113(b)(2) of the Clean Air Act). EPA's second NOV to LPC for
construction of a major stationary source must be heard at the
trial. Second, state permit limitations can not be a defense for
a source if they were not in effect when an alleged violation
commenced. Further, restrictions on actual, [annual] emissions,
alone, are not appropriate as a consideration in determining a
source's potential to emit.
CR: 2.27 [Hard Copy]; 3.29; 10.51

15. PSD
SIP Processing



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

NOV 18

OFFICE OF
GENERAL COUNSEL

MEMORANDUM

SUBJECT: Approval of Local Implementation Plans

FROM: Howard J. Hoffman *Howard J. Hoffman*
Attorney

THRU: Peter H. Wyckoff *Peter H. Wyckoff*
Assistant General Counsel

Alan W. Eckert *Alan W. Eckert*
Associate General Counsel

TO: Bruce P. Miller
Chief, Air Programs Branch

Jewell Harper
Chief, Air and Toxics Law Branch

This memorandum contains our views on the four legal questions concerning local implementation plans contained in your memorandum dated June 18, 1987. I apologize for the delay in responding, but many other very pressing issues intervened.

Your questions concern local plans in three separate states, each with their own factual and state law variations. Time constraints have precluded a careful analysis of these facts and state law issues. Some uncertainty remains in my mind on such questions as (i) what precise changes would be made in the state implementation plans ("SIPs") by virtue of EPA's approval of the local plans; (ii) what authority does each state actually have to enforce local regulations (or the state equivalent); and (iii) what leverage could EPA bring to compel state or local officials to do better. Accordingly, this memorandum will discuss in a broad manner the questions you have raised, and will not focus on any particular state law provisions or actual factual circumstances. Also, the memorandum does not necessarily reflect the views of other headquarters offices. As you know, OAQPS, in particular, may have strong doubts about the wisdom of approving some of the local NSR regulations.

Question 1: You asked whether the following basic position is legally correct:

Providing that each local regulation is equal to the corresponding EPA-approved State regulation, EPA may approve the local regulations as merely a transfer of enforcement authority, rather than as a substantive revision to the SIP. Thus, the regulations would not have to be accompanied by new attainment demonstrations, SIP narratives, and other provisions of Part 51 applicable to SIP revisions.

We think this position is legally defensible, assuming that the record shows that the net effect of the approval would be to strengthen the enforceability of the regulatory regime as a whole, as your memorandum suggests it would.

First, EPA could argue that section 110(a) implicitly authorizes the approval of a rearrangement in the SIP whenever its net effect would be to improve the SIP in relation to the requirements of section 110(a), regardless of whether the SIP after the change would fully satisfy those requirements. This argument finds support in several judicial decisions: Michigan v. Thomas, 805 F.2d 176 (6th Cir. 1986); National Steel Corp. v. Gorsuch, 700 F.2d 314 (6th Cir. 1983); Public Service Co. v. EPA, 682 F.2d 626 (7th Cir.), cert denied 459 U.S. 1127 (1982). In any event, the Agency has embraced the argument firmly in the Final Emissions Trading Policy Statement, 51 Fed. Reg. 43838 (December 4, 1986).

The recent opinion of the Ninth Circuit in Abramowitz v. EPA, No. 84-7642 (9th Cir., Nov. 3, 1987) (petition for rehearing pending), however, casts some doubt on the strength of this argument. The opinion suggests that EPA must reject an individual SIP revision if the SIP after the revision would not fully satisfy the requirements of sections 110 and 172. See pages 14-15 of the attached copy of the opinion. See also Connecticut Fund for the Environment v. EPA, 672 F.2d 998, 1011 (2d Cir. 1982), cert. denied sub nom., Manchester Environmental Coalition v. EPA, 459 U.S. 1035 (1982). EPA is asking the Ninth Circuit to clarify or reconsider its opinion. In any event, its decision would have only persuasive, not binding, significance for your situations.

Second, EPA could argue that the prior attainment demonstration, in the case of a SIP that currently enjoys full approval, is adequate support for approval of a SIP revision that would strengthen the SIP, at least in the absence of any conclusive evidence in the agency's possession to the contrary. This is also an argument embraced by the Final Emissions Trading Policy. We gather, however, that it may not be applicable to many of your situations.

-3-

While the position you seek is defensible, it should be accompanied by express statements that EPA, in approving the local measures in question, is not intending to determine the adequacy of the SIP as a whole or of the measure in relation to applicable NSR or RACT requirements in the Act.

Question 2: You asked whether the following basic position is legally correct:

The local regulations cannot be treated as separable from the SIP which the State submits and implements, but must be considered as part of it. Thus, the regulations must be submitted by the State to EPA along with a request that they be made a part of the SIP.

EPA may take the position that this statement is legally correct. Section 110(a)(1) states: "Each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator [an implementation plan]." (Emphasis added).^{1/} Similarly, EPA regulations state: "Plans shall be adopted by the State and submitted to the Administrator by the Governor as follows: [setting out timing requirements, etc.]" 40 CFR §51.5(a) (emphasis added). Section 110(a)(3)(A), which concerns SIP revisions, is generally to the same effect, although it does not explicitly identify who should submit the SIP:

The Administrator shall approve any revision of an implementation plan . . . if he determines that it meets the requirements of paragraph (2) and has been adopted by the State after reasonable notice and public hearings."

(Emphasis added.)

Because 40 CFR 51.5(a) indicates by its terms that SIPs must be submitted by the Governor, it is a short and logical step to conclude that SIP revisions, too, must be submitted by the Governor. This conclusion is consistent with the spirit of section 110(a)(3)(A), which tracks the SIP requirements for SIP revisions.

^{1/} Similarly, section 107(a) states:

Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State (Emphasis added.)

Moreover, the provisions cited above do not by their terms allow the Governor to delegate this authority to a political subdivision of the State. For this reason, EPA may take the position that no such delegation is at least at present permissible. Not allowing such delegation is also consistent with the proposition, discussed below, that Congress and EPA have sought to keep the state accountable for SIPs.

On the other hand, the provisions cited above do not expressly disallow delegation, and the concerns about consistency with other state laws that you expressed could be addressed by requiring any delegate to make a demonstration sufficient to allay the concerns. Furthermore, we have not researched EPA's actual practice over the years. It may be that EPA has countenanced delegation in the past. Has it done so for instance, in connection with submittals from the relevant agency for Jefferson County, Kentucky?

Question 3: You asked whether the following basic position is legally correct:

Since State law requires that local regulations be equal to or more stringent than corresponding state regulations, the State must certify to EPA that each regulation has been reviewed by the State and found to meet this requirement.

We agree that EPA may take the position that each state is required to make this certification. Although we have no judgment as to whether this certification is necessary as a matter of state law, it can be required as part of the state's burden of demonstrating that the local regulations are authorized and enforceable and will not jeopardize attainment or maintenance of the NAAQS.

Question 4: You asked whether the following basic position is legally correct:

Irrespective of any transfer of authority to local agencies, the State must retain overall authority and responsibility for developing and implementing the SIP. Thus, the State must have the ability to enforce either the local regulations or identical state regulations if the local fails to enforce.

EPA may take the position that this statement is legally correct. Several provisions of the Clean Air Act provide direct support for this statement. Section 110(a)(2)(F) states that one of the requirements for approval of a SIP (or SIP revision) is that -- "it provides (i) necessary assurances that the State will have adequate personnel, funding, and authority to carry out such implementation plan". (Emphasis added.) Section 113(a)(2) provides:

Whenever, on the basis of information available to him, the Administrator finds that violations of an applicable implementation plan are so widespread that such violations appear to result from a failure of the State in which the plan applies to enforce the plan effectively, he shall so notify the State.

(Emphasis added.) These provisions do not by their terms authorize states to delegate these responsibilities to local governments.^{2/}

EPA regulations are more explicit on the responsibilities of the state. Under 40 CFR 51.11(a):

Each plan shall show that the State has legal authority to carry out the plan, including authority to . . . (2) [e]nforce applicable laws, regulations, and standards, and seek injunctive relief.

The regulations authorize the state to share this responsibility with local government, but not to delegate it away:

The State may authorize a local agency to carry out a plan, or portion thereof, within such local agency's jurisdiction: . . . Provided, That such authorization shall not relieve the State of responsibility under the Act for carrying out such plan, or portion thereof.

(Emphasis added.)

I hope this discussion has been helpful. Please let me know if you have any questions.

cc: Rich Biondi
Tom Helms
Nancy Mayer
Gary McCutcheon
John Silvasi
David Soloman
ORC Air Team Leaders,
Regions I-III, V-X

^{2/} Indeed, other Clean Air Act provisions may be read to suggest that Congress sought to limit the role of political subdivisions of states to (1) promulgating regulations stricter than Clean Air Act requirements, if they so chose; and (ii) consulting with the states. See section 116 (Clean Air Act requirements preclude states or political subdivisions thereof from adopting stricter controls than provided under the Act); section 121 (requiring the state, in carrying out various Clean Air Act requirements, to "provide a satisfactory process of consultation with general purpose local governments").

15.5 DATE: April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 8.26 [Hard Copy]; 11.11; 28.5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Office of Air Quality Planning and Standards
 Research Triangle Park, North Carolina 27711

MAY 17 1988

MEMORANDUM

SUBJECT: Application of the Interim Policy for Stack Height
 Regulatory Actions

FROM: *[Signature]*
 John Calcagni, Director
 Air Quality Management Division (MD-15)

TO: Chief, Air Branch
 Regions I-X

On April 22, 1988, J. Craig Potter, Assistant Administrator for Air and Radiation, issued a memorandum entitled, "Interim Policy on Stack Height Regulatory Actions" (Attachment A). The memorandum requests that the Regional Offices review with their States all regulatory actions involving dispersion credits and determine the appropriate action consistent with the policy. The purpose of today's memorandum is to provide guidance in carrying out the interim policy.

In general, actions taken at this time to approve or disapprove statewide stack height rules which are affected by the remand must include the qualification that they are subject to review and modification on completion of EPA's response to the court decision. Permits issued under the prevention of significant deterioration or new source review programs should also contain caveat language for sources which may be affected by the remand. Attachment B contains example boilerplate language to be inserted into permits and regulatory packages. Note that States must commit to including the caveat before EPA will take final action on packages affecting permitting authority. Those actions not involving the remanded provisions may proceed as usual.

In contrast to our policy regarding the processing of stack height rules, our policy for source-specific State implementation plan (SIP) revisions is to avoid proceeding with actions which may need to be retracted later. You are advised to consult with my staff and the Office of General Counsel staff prior to submitting such rulemaking packages. Affected sources must be deleted from negative declaration packages prepared under the 1985 stack height regulations before EPA can proceed with action on them.

My staff has applied the policy when reviewing packages currently in Headquarters (Attachment C). While proposals to approve (or disapprove) State rules will remain on the Headquarters clock, the Regional Offices are requested to review these packages and provide appropriate boilerplate as soon as possible. Negative declaration packages and final actions on State rules are being returned to the Regional Office clock as more substantial revisions and commitments may be required. The redesignation packages currently in Headquarters which contain sources affected by the remand are being placed on formal hold.

If you have any questions regarding the April 22 policy, today's guidance, or disposition of the SIP's, please contact Janet Metsa (FTS 629-5313) or Doug Grano (FTS 629-0870).

Attachments

cc: R. Bauman
R. Campbell
C. Carter
G. McCutchen
J. Pearson
J. Sableski

bcc: B. Armstrong
P. Embrey
G. Foote
E. Ginsburg
D. Grano
✓ N. Mayer
J. Metsa
S. Reinders
R. Roos-Collins
SO₂-SIP Contacts
Stack Height Contacts, Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Da 15.7

FEB 15 1989

MEMORANDUM

SUBJECT: Guidance on Early Delegation of Authority for the Nitrogen Dioxide (NO₂) Increments Program

FROM: *GA* Gerald A. Emison, Director *Emison*
Office of Air Quality Planning and Standards

TO: Louis F. Gitto, Director
Air Management Division, Region I

This is in response to your memorandum of December 23, 1988 to Don Clay, in which you requested guidance on the procedures to be followed in advancing the effective date of 40 CFR Part 52 for the NO₂ prevention of significant deterioration (PSD) increments to enable States seeking delegation of authority to implement the NO₂ increments prior to November 17, 1990. Specifically, you requested guidance on two questions:

1. How do States with delegated authority initiate the process of advancing the general effective date of 40 CFR 52.21?
2. What are the appropriate Environmental Protection Agency (EPA) rulemaking procedures for carrying out a State's request?

As you noted in your memorandum, the preamble to the NO₂ increments regulation promulgated on October 17, 1988, gave delegated States the opportunity to request authority to implement the requirements of the NO₂ increments regulation as early as the effective date of the 40 CFR 51.166 regulation (October 17, 1989). Otherwise, the NO₂ increment requirements do not become effective in delegated States until 25 months after promulgation (November 17, 1990).

The Office of General Counsel (OGC) and the Office of Air Quality Planning and Standards (OAQPS) have jointly developed the procedures outlined herein for advancing the date at which delegated States can assume responsibility for implementing the NO₂ increment requirements. This explanation should answer your specific questions regarding the procedures to use.

In answer to your first question, a State desiring delegation of the NO₂ increment provisions of the revised 40 CFR Part 52 PSD program must submit an amended PSD delegation agreement to its Region for review and approval. The form of this proposed amendment may follow that of the PSD delegation agreement now in force. It should contain an explanation of how the State plans to meet the new NO₂ increment requirements. In particular, it must demonstrate that the State has adequate legal authority under State law to accept the delegation. Also, the amended delegation agreement must address how increment consumed since the February 8, 1988 baseline date will be determined and possible exceedances corrected, and how increment consumption in the future will be tracked. In addition, in accordance with the discussion in the preamble to the final rule (53 FR 40659), the amended delegation agreement or an accompanying document must contain a stipulation by the appropriate State official that the State does not intend to submit the necessary Part 51 SIP revisions within 21 months of the promulgation of the NO₂ increment regulations. Such a stipulation would not, however, prevent the State from later changing its mind and submitting Part 51 revisions within the allotted time.

Some States may not be able to demonstrate adequate legal authority under State law to accept delegation. For example, a State may be prohibited from adopting any rule more stringent than EPA's, and this could be interpreted by the State to preclude accepting delegation of EPA rules which, although they have been promulgated, are not yet in effect. There is no mechanism available to EPA to enable such States to adopt the NO₂ increments prior to EPA's effective date.

As to the second question, when an acceptable application for early delegation has been received from a State, the Region should place a direct-final notice in the Federal Register, unless it anticipates adverse public comment. Although Headquarters' review of NO₂ PSD SIP revisions is not required, we would be willing (and OGC would like) to review at least the first of these notices. The notice should explain that the effective date of 40 CFR Part 52 is being advanced for that State as provided for in EPA's promulgation of the NO₂ increments regulation. An accompanying revision to the Part 52 subpart for the State in question should provide that: "The provisions of section 52.21 (b) through (w), including revisions promulgated on October 17, 1988, at 53 FR 40671, are hereby incorporated and made a part of the applicable State plan for the State of _____."

Regardless of whether a State desires delegation of the NO₂ increment regulations prior to (or on) the general effective date of the revised 40 CFR 52.21, the Region should use that opportunity to review the current delegation and revise it, as appropriate, to ensure consistency with EPA policies.

If you have any questions about the guidance provided in this memorandum, please contact Eric Noble at FTS 629-5362, Gary McCutchen at FTS 629-5592, or Greg Foote at FTS 382-7625.

cc: D. Clay
E. Claussen
G. Foote
E. Lillis
G. McCutchen
E. Noble
Air Division Director, Regions II-X

15.8 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources, NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove the offset exemption for resource recovery facilities. When NY NSR rules were approved in 1980, the Agency had not promulgated any Part 51 regulations giving requirements for approval of NSR programs, and thus, was guided by Appendix S in its approval. Appendix 5 has now been largely superseded by 40 CFR 51.165(a) establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 12.15; 13.10; 28.9

15.9 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for
Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles
S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in
abeyance pending further EPA action on the current SIP call. This
is, in part, because the merits of the petitions are closely
linked with EPA's outstanding call for revisions to the NY SIP to
correct the State's failure to meet ozone and CO air quality
standards
CR: 25.15 [Hard Copy]; 12.16; 13.11; 28.10

15.10 DATE: August 24, 1989
SUBJECT: Guidance on Implementing the Nitrogen Dioxide (NO₂) Prevention of Significant Deterioration (PSD) Increments
FROM: John Calcagni, Director, Air Quality Management Division (MD-15)
TO: William B. Hathaway, Director, Air, Pesticides and Toxics Division, Region VI
DISCUSSION: The memo discusses general and specific aspects of the NO₂ PSD increment regulation. States should require NO₂ increment consumption analysis as soon as possible to help to avoid a situation where a proposed new source would violate NO₂ increment before the State's NO₂ increments regulations are in effect.
CR: 6.27 [Hard Copy]

15.11 DATE: April 25, 1990
SUBJECT: Issuance of PSD Permits in Attainment Areas where Violations Have
Been Modeled
FROM: Marcia L. Spink, Chief, Air Programs Branch
TO: John M. Daniel, Jr., Asst. Executive Director, Virginia Department
of Air Pollution Control
DISCUSSION: The attachment to this letter provides procedures for issuing PSD
permits in areas with modeled violation(s) both to sources with no
significant impacts and to sources with significant impacts. In
the latter case, procedures for processing the associated SIP
revisions are also discussed.
CR: 10.49 [Hard Copy]; 6.31; 12.17

21. NAA

Transition/Grandfathering

22. NAA

Potential to Emit/ Limitations on Capacity to Emit

22.7 DATE: June 13, 1989
SUBJECT: Guidance on Limiting Potential to Emit New Source Permitting
FROM: Terrell E. Hunt
Associate Enforcement Counsel
Air Enforcement Division
Office of Enforcement and Compliance Monitoring
TO: Addressees
DISCUSSION: This 22-page memo contains final guidance on conditions in construction permits that can legally limit a source's potential to emit to minor or de minimus levels. The memo includes sections of the Louisiana Pacific rulings. Types of limitations that are Federally enforceable, and, therefore, legitimate restrictions on potential to emit, are discussed, including restrictions on production rates, operating hours, control device limitations, and averaging periods for determining emission rates and control efficiencies. Characteristics of "sham" permits are identified and enforcement is discussed. The memo includes sections of the Louisiana-Pacific rulings as a basis for policy and includes several examples to illustrate the principles.
CR: 2.31 [Hard Copy]; 4.41

23. NAA

Definition/Classification of Source

UNITED STATE ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN REGARDING:)	
)	
Indiana Department of Environmental Management)	FINDING OF VIOLATION
St. Joseph County Health Department)	EPA-5-86-A-50
Air Pollution, Permit to Operate)	
Dated February 6, 1986, to)	
A.M. General Coporation)	
)	
A PROCEEDING PURSUANT TO)	
SECTION 113(a)(5) OF THE)	
CLEAN AIR ACT, AS AMENDED)	
(42 U.S.C. Section 7413 (a)))	

INTRODUCTION

On February 6, 1986, the St. Joseph County Health Department, as duly authorized delegate of the State of Indiana, issued a permit to operate several air pollution sources operated by AM General Corporation located at 13200 McKinley, Mishawaka, Indiana.

FINDING OF VIOLATION

For reasons set forth below, the Administrator finds that the permit to operate, issued by the St. Joseph County Health Department on February 6, 1986, to AM General Corporation, (AMG) failed to comply with the requirements of Indiana Air Pollution Control Regulation APC-19 Section 4 and 8 that the St. Joseph County Health Department, as duly authorized delegate of the State of Indiana, did not act in compliance with those requirements.

The permit to operate issued by St. Joseph County Health Department on February 6, 1986, to AM General Corporation increased the Volatile Organic Compounds (VOC) emissions from 197.3 tons per year to 377.0 tons per year. This VOC emission increase of 179.7 tons per year allowed to AMG, subjects the facility to Regulation APC-19.

Regulation APC-19 Section 4 b(4) requires any person proposing the construction, modification or reconstruction of a major facility which will impact on the air quality of a nonattainment area or which will be located in a nonattainment area, shall comply with the requirement of Section 8 of this regulation, as applicable.

Regulation APC-19 Section 8 requires the same person to demonstrate along with other requirements:

- (1) Increased emissions of the pollutant are to be offset and are equal to 90 percent or less of the offsetting emissions.
- (2) Application of emissions limitation devices or techniques such that the Lowest Achievable Emission Rate (LAER) for the pollutant will be achieved.

This document serves as notification that the Administrator, by duly delegated authority, has made a finding under Section 113(a)(5) of the Clean Air Act, as amended, 42 U.S.C 67413(a)(5), and is served on both the State of Indiana and its delegate, the St. Joseph County Health Department, as well as AM General Corporation to provide an opportunity to confer with the Administrator prior to initiation of a civil action pursuant to Section 113(b)(5). By offering the opportunity for such a conference or participating in one, the Administrator does not waive his right to commence a civil action immediately under Section 113(b).

Date: 11/19/88


David Kee, Director
Air Management Division

REGION V

In the Matter of:)	
)	
AM GENERAL CORPORATION)	NOTICE OF VIOLATION
MISHAWAKA, INDIANA)	EPA-5-86-A-49
)	
Proceedings Pursuant to)	
Section 113(a)(1) of the)	
Clean Air Act, as amended)	
[42 U.S.C. Section 7413(a)(1)])	

STATUTORY AUTHORITY

This Notice of Violation is issued pursuant to Section 113(a)(1) of the Clean Air Act, as amended, [42 U.S.C. Section 7413(a)(1)]; hereafter referred to as the "Act".

FINDINGS OF VIOLATION

The Administrator of the United States Environmental Protection Agency (U.S. EPA), by authority duly delegated to the undersigned, finds:

1. Indiana Air Pollution Control Board (IAPCB) Regulation APC-19 dealing with Permits, PSD, Emission Offsets, is part of the applicable implementation plan for the State of Indiana approved by U.S. EPA on February 16, 1982, at 47 Federal Register 6621 and establish operating and construction permit requirements pertaining to AM General Corporation's facility located at 13200 McKinley Highway, Mishawaka, Indiana.

2. As indicated more specifically below:

AM General Corporation (AMG) operates a miscellaneous metal part coating facility in Mishawaka, Indiana which is in violation of IAPCB regulation APC-19 as given below:

(a) On February 6, 1986 AM General Corporation was issued a permit to operate, by St. Joseph County Health Department. This permit to operate allows AMG, to increase its volatile organic compounds (VOC) emissions from 197.3 tons per year to 377 tons per year. This VOC emission increase of 179.7 tons per year allowed to AMG subject the facility to IAPCB regulation APC-19.

(b) This permit to operate issued to AMG, failed to comply with the requirements of IAPCB regulation APC-19, Section 4 and 4.11:

- (i) the applicant did not apply emission limitation devices or techniques such that the Lowest Achievable Emission Rate (LAER) for VOC was not achieved.
- (ii) the increased VOC emissions were not offset by a reduction in VOC emission by existing facilities.

NOTICE OF VIOLATION

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Indiana and the AM General Corporation, that the facility described above is in violation of the applicable implementation plan as set forth in the Finding of Violation.

DATE JUN 19 1986



David Kee, Director
Air Management Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

23.23

DATE: OCT 24 1980

SUBJECT: Definition of "Installation" in Nonattainment Regulations

FROM: Walter C. Barber, Director *Walter C. Barber*
Office of Air Quality Planning and StandardsTO: Director, Air and Hazardous Materials Division
Regions I-X

The definition of source in the regulations pertaining to review of major new sources and modifications in nonattainment areas is focused at two levels: the entire plant and an installation within the plant. The term installation refers to "an identifiable piece of process equipment". (See August 7, 1980 Federal Register, p. 52742 and 52744.) I and my staff have responded orally to questions over the past year or so on how to interpret the term "installation", especially in cases where an NSPS applies to a source category. Our guidance has been that where an NSPS exists or is under development, the "affected facility" definition is usually the most appropriate definition of "installation". This memo restates that guidance in writing.

If an NSPS identifies an "affected facility", the reviewing agency should consider such an affected facility as an installation for the purpose of new source review applicability determinations. For example, an installation at a power plant would be any electric utility steam generating unit.

Where a portion of a plant is not specifically defined as an affected facility, either because an NSPS is silent or there is no NSPS for the source category, the reviewer should still refer to the NSPS approach for guidance as to how small a portion of a plant the term installation should apply to. To illustrate, in October 1979 EPA proposed an NSPS for auto surface coating operations which defined the affected facilities as the prime coat, surface coat, and top coat lines. Spray booths, flash-off areas and ovens within these lines are not defined as affected facilities by the proposal. Therefore, such line elements should not be considered installations; in this case, an installation is one of the three lines noted above.

This position is not new; it has been the basis for decisions for more than a year. It is being presented here for clarification and to avoid inconsistency in the new source review process. If your staff has any questions on this subject in the future, please contact our New Source Review Office (FTS 629-5291).

cc: Director, Enforcement Division, Regions I-X

E. Reich
P. Wyckoff
L. Hegman
R. Biondi
D. RhoadsD. Hawkins
S. Kuhrtz
E. Tuerk
M. Trutna
D. Goodwin

cc: S. Rothblatt/J. Paisie/R. VanMarsbergen/G. Gulezian/M. Ryan/DKee-1m/

10-28-80

Reserved



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 6 1987

MEMORANDUM

SUBJECT: Emissions from Landfills

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)

TO: David P. Howekamp, Director
Air Management Division, Region IX

This is in response to your September 1, 1987, memorandum requesting clarification regarding how landfill emissions should be considered for the purpose of determining nonattainment new source review (NSR) applicability under 40 CFR 51.18.

As you are aware, a landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tons per year applicable major source cutoff for the pollutant for which the area is nonattainment. Fugitive emissions are defined in 40 CFR (j)(1)(ix) as ". . . those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." Landfill emissions that could reasonably be collected and vented are therefore not considered fugitive emissions and must be included in calculating a source's potential to emit.

For various reasons (e.g., odor and public health concerns, local regulatory requirements, economic incentives), many landfills are constructed with gas collection systems. Collected landfill gas may be flared, vented to the atmosphere, or processed into useful energy end products such as high-Btu gas, steam, or electricity. In these cases, for either an existing or proposed landfill, it is clear that the collected landfill gas does not qualify as fugitive emissions and must be included in the source's potential to emit when calculating NSR applicability.

The preamble to the 1980 NSR regulations characterizes nonfugitive emissions as ". . . those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings." Although there are some exceptions, it is our understanding that landfills are not ordinarily constructed with gas collection systems. Therefore, emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions and are not included in the NSR applicability determination. This does not mean that the applicant's decision on whether to collect emissions is the deciding factor; in fact, the reviewing authority makes the decision on which emissions would ordinarily be collected and which therefore are not considered fugitive emissions.

It should be noted that NSR applicability is pollutant specific. Therefore, where the landfill gas is flared or otherwise combusted or processed before release to the atmosphere, it is the pollutant released which counts toward NSR applicability. As an example, landfill gas is composed mostly of volatile organic compounds, but when this gas is burned in a flare, it is the type and quantity of pollutants in the exhaust gas (e.g., nitrogen oxides and carbon monoxide) that are used in the NSR applicability determination.

If you have any questions regarding this matter, please contact Gary McCutchen, Chief, New Source Review Section, at FTS 629-5592.

cc: Chief, Air Branch
Regions I-X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION IX
 215 Fremont Street
 San Francisco, Ca. 94105

*Copy for Jerry, Ken,
 Jack Famer*

Good question!

MEMORANDUM

DATE:

SUBJECT: Control of Emissions from Landfills

FROM: David P. Howekamp, Director
 Air Division

TO: Gerald Emison, Director
 Office of Air Quality Planning and Standards (MD-10)

On May 28, 1987, Region IX received an inquiry from Mr. Russ Baggerly regarding a proposed landfill in Ventura County, California (copy enclosed). Mr Baggerly's concern, from an air quality point of view, is over significant fugitive emissions of reactive organic compounds from the site itself, and ROC and NO_x from associated mobile sources and possible IC engines.

Our proposed response (enclosed) delineates the exclusion of fugitive emissions from NSR regulations. The critical question then becomes, what is the meaning of the definition of fugitive emissions stated in 40 CFR 51.18? As defined they are: "those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening." If emissions from a landfill could feasibly be collected and passed through a gas recovery system, what criteria would be needed to then call it a reasonable option? Is it possible that such a landfill could be required to collect these emissions? This has not been done in the past. Please send us a written response providing guidance on this issue.

Enclosures

cc: G. McCutchen, RTP

*Type for
 response —
 Target 2 weeks
 Pls coordinate w/
 Famer*

Note.

*Famer
 in his letter
 in the
 it
 Thanks — Jan
 9/4*

~~Policy?~~
~~ARCO comparison?~~
~~Can we discuss?~~
W 6/3/87
Wayne
~~RARETT~~ Directed

22 May 1987

Mr. David P. Howekamp
Director - Air Management Division
United States Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

AIR DIVISION
U.S. EPA, REGION 9

MAY 28 1987

RECEIVED

Dear Mr. Howekamp:

An interesting problem is about to surface here in Ventura County in regards to a possible major source. That source is a canyon landfill site currently in the process for environmental review through the Resource Management Agency of Ventura County.

Previous environmental review concerning this site was documented in the County Solid Waste Management Plan (CoSWMP). It was this document that originally divulged the fact that the Weldon Canyon landfill site, based upon the projected wastestream, would have the potential of emitting more than 100 TPY of ROC. Further study reveals that even after gas recovery mitigation the site will produce more than 100 TPY. This would of course make the project a Major Stationary Source according to 40 CFR Ch.1 §51.18 et seq..

The specific problems are these; 1. the district has never issued a permit for a landfill site as an area source. They have issued permits for the IC engines used for electrical generation on other sites for NOx, but landfill site fugitive emissions have never been permitted. 2. The incremental indirect emissions from mobile sources associated with this project may or may not be included in the total number of emissions attributed to this project. 3. The total emissions from the landfill site should be the NOx and ROC emissions from mobile, IC engine and all other sources added to the primary source that are the fugitive emissions from the site itself.

What I would like to know is how EPA views landfill sites, and the procedure for permitting such a source. Are all the emissions associated with the site accumulated into one figure for calculating the offsets required; e.g. incremental indirect (mobile) emissions, sludge drying ponds, leachate retention ponds, gas recovery wells, electrical generating engines, and the fugitive emissions from the landfill site itself. The possibility of emissions from all mitigation measures employed at the site should be included.

Thank you for your time and consideration concerning this item of some concern to the people of the Ojai Valley Airshed.

Respectfully,



Russ Baggerly
119 S. Poli Avenue
Meiners Oaks, CA 93023

505 1 24 - 0707

16 NOV 1987

IN REPLY A-3-1
REFER TO: USA 2-5

Mr. Russ Baggerly
119 S. Poli Ave.
Meiners Oaks, Ca. 93023

13 NOV 1987

Dear Mr. Baggerly,

Thank you for your May 22, 1984 inquiry to David P. Howekamp regarding environmental review of air emissions from a landfill site in Ventura County. The issues you raised in your letter regarding landfill emissions are not unique to Ventura Co. A landfill can be a significant source of emissions, and could be considered to be a stationary source.

A landfill would be subject to New Source Review (NSR), if its potential to emit, excluding fugitive emissions, exceeds the applicable major source cut-off. Fugitive emissions as defined in 40 CFR 51.18 (j)(1)(ix) are "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." The preamble to the 1980 NSR regulations characterizes nonfugitive emissions as "...those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings." Nationwide, landfills are not ordinarily constructed with gas collection systems. Therefore, emissions from existing or proposed landfills without gas collection systems are considered fugitive emissions and are not considered in federal NSR applicability determinations. We have discussed this issue with our Headquarters Office and a copy of their response is attached for your information.

Landfill emissions that are collected would not qualify as fugitive emissions and could cause the landfill to be subject to NSR. If this is the case then it would be the actual pollutants emitted through the recovery system that would be subject to regulation. For example, if the gas is flared, the typical pollutants would be NO_x and CO rather than VOCs.

District regulations may be more, but not less stringent than federal. In California, some local districts such as the Bay Area Air Quality Management District consider gas recovery systems to be the norm. In that District there are about twenty landfills that have been or are being permitted with gas collection systems. In the South Coast Air Quality Management District under its rule 1150.1, all new landfills must include a gas recovery system. Existing landfills must have collection systems by January 1, 1989.

As a point of clarification, 40 CFR 51.18 sets forth

Federal requirements for the State or District to develop a State Implementation Plan for stationary sources. Please note that in the case of theeldon Canyon landfill, the applicable NSP regulations of the Ventura County Air Pollution Control District (APCD) would apply, (not 40 CFR 51.18). Therefore, the APCD should be contacted to make this determination.

As you probably know, the emissions from this site should be included in the 1987 Air Quality Management Plan for Ventura County. The Plan is being drafted partly in response to the fact that Ventura County has been named as one of the four post 1987 non-attainment areas in California for ozone. It is the responsibility of the Ventura County APCD to consider all measures that would reduce emissions of pollutants that contribute to the post 87 non-attainment status. Certainly the POC emissions from this facility, if they are of the magnitude stated in your letter, would exacerbate the ozone problem in Ventura. The District has at its discretion, the power to propose emission controls, offsets, or other requirements beyond those required by current federal regulations, as part of its plan to achieve attainment of the National Ambient Air Quality Standards.

If you have further questions regarding this matter, please contact Janet Stromberg of the New Source Section at (415) 974-8219.

Sincerely,

Original Signed by:
Wayne Blackard

Wayne A. Blackard, Chief
New Source Section

Enclosure

cc: CAPP, Attn: Ray Menebroker
Ventura County APCD, Attn: P. Baldwin

bc: ✓ OAOPS, Attn: Gary McCutchen

23.27 DATE: June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point
Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, Region VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 3.30 [Hard Copy]; 5.23; 24.13

23.28 DATE: June 10, 1988
SUBJECT: May 25, 1988 conference call
FROM: Monica Smyth
Assistant Regional Counsel
TO: File, CPC Argo
DISCUSSION: An increase or decrease in actual emissions is creditable in the netting equation only if EPA has not relied on it in issuing a major source permit under the PSD or Non-Attainment regulations. Minor source permits and specific emission increases that might be permitted through such minor source permits must be included in the netting equation, as long as those increases occur during the contemporaneous time period.
CR: 4.36 [Hard Copy]; 25.11

23.29 DATE: September 9, 1988
SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPC) Port Washington Life Extension Project
FROM: Don R. Clay, Acting Assistant Administrator for Air and Radiation (ANR-443)
TO: David A. Kee, Director
Air and Radiation Division, Region V
DISCUSSION: Although not an official applicability determination, this memo provided the preliminary opinion, based on the information collected up to the date of issue, that PSD and NSPS would apply to a "life extension" project at Port Washington Power Plant. Each element of PSD applicability via major modification and NSPS applicability were discussed in the context of information provided. This project involves restoring the physical and operational capabilities of each unit to its original capacity and extending the useful life of the units well beyond the planned retirement dates that would otherwise apply. This work appears to be non-routine, and, thus, to constitute a "physical change"; a significant net emissions increase would occur as a result of the work.
CR: 4.37 [Hard Copy]

23.30 DATE: January 12, 1989
SUBJECT: Guidance on Several Issues Related to Determining Applicability
of New Major Source Regulations in Granting Construction Permits
FROM: Edward J. Lillis, Chief
Noncriteria Pollution Programs Branch
Air Quality Management Division
TO: Michael J. Hayes, Manager
Division of Air Pollution Control, Illinois EPA
DISCUSSION: Memo provides guidance on several issues related to determining
applicability of major source regulations in granting construction
permits to modified sources.
(1) A reviewing agency must base determination of whether a
source is "major" on "major" source definitions in the
Federal Register.
(2) Whether the emissions increase related to a modification is
significant is determined before any netting calculation is
done. If it is, netting calculations are then performed to
determine whether the "net emissions increase" associated
with that modification is significant.
(3) Contemporaneous emissions increases and decreases are
discussed, as well as other factors affecting whether they
are "creditable".
(4) An example of a netting calculation is shown. Emissions
increases or decreases used in issuing a previous major
source permit cannot be creditable to a subsequent increase.
CR: 3.33 [Hard Copy]; 4.40

23.31 DATE: February 6, 1990
SUBJECT: Determination of Lowest Achievable Emission Rate for Coors
Container Corporation, Canline CX3
FROM: Douglas M. Skie, Chief, Air Programs Branch, Region VIII
TO: Brad Beckham, Director, Air Pollution Control Division, CO Dept.
of Health
DISCUSSION: Because LAER is determined for each modified emissions unit, each
emissions unit at Coors Canline CXB that has an increase in
emissions due to the major modification must have an independent
LAER determination. These LAER determinations must be based on a
comparison of emissions from other similar operations on a
normalized basis.
CR: 26.12 [Hard Copy]

24. NAA

Geographic/Pollutant Applicability

Reserved

Reserved

24.11 DATE: October 6, 1987
FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)
SUBJECT: Emissions from Landfills
TO: David P. Howekamp, Director, Air Management Division, Region IX
DISCUSSION: Memo written in response to documents 23.23 and 23.24. A landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tpy applicable major source cutoff for the pollutant for which the area is nonattainment. Landfill emissions that could reasonably be collected and vented are not considered fugitive emissions and must be included in calculating a sources potential to emit. Where landfill gas is combusted or processed before release, the pollutant released counts toward NSR applicability.
CR: 23.25 [Hard Copy]

24.12 DATE: November 10, 1987
SUBJECT: Air Emissions from a Landfill
FROM: Wayne A. Blackard, Chief, New Source Section
TO: Russ Baggerly, Meiners Oaks, CA
DISCUSSION: Emissions from existing or proposed landfills without gas collection systems are considered fugitive emissions and are not subject to NSR. Landfill emissions that are collected would not qualify as fugitive and could cause the landfill to be subject to NSR.
CR: 23.26 [Hard Copy]

24.13 DATE: June 9, 1988
SUBJECT: Emissions from Rocket Firing at Test Stands; Fugitive or Point
Source Emissions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
TO: John Dale
Air Programs Branch, Region VIII
DISCUSSION: Emissions from rocket nozzles are point sources.
CR: 3.30 [Hard Copy]; 5.23; 23.27

25. NAA

Offsets

25.11 DATE: June 19, 1986
SUBJECT: Finding of Violation in Issuance of Permit to Operate to AM
General Corporation, Indiana
FROM: David Kee, Director, Air Management Division, Region V
TO: State of Indiana, St. Joseph County Health Department, AM General
Corporation
DISCUSSION: A permit to operate given to a metal part coating facility is in
violation of applicable Federal and State regulations. In
particular, applicant did not apply LAER, and increased VOC
emissions were not offset by a reduction in VOC emission by
existing facilities.
CR: 23.22 [Hard Copy]; 26.3

25.12 DATE: June 10, 1988
SUBJECT: May 25, 1988 conference call
FROM: Monica Smyth
Assistant Regional Counsel
TO: File, CPC Argo
DISCUSSION: An increase or decrease in actual emissions is creditable in the netting equation only if EPA has not relied on it in issuing a major source permit under the PSD or Non-Attainment regulations. Minor source permits and specific emission increases that might be permitted through such minor source permits must be included in the netting equation, as long as those increases occur during the contemporaneous time period.
CR: 4.36 [Hard Copy]; 23.28



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Office of Air Quality Planning and Standards
 Research Triangle Park, North Carolina 27711

DEC 28 1988

MEMORANDUM

SUBJECT: Emission Offset Exemptions for Resource Recovery Facilities (RRF's)

FROM: Gerald A. Emison, Director 
 Office of Air Quality Planning and Standards (MD-15)

TO: Conrad Simon, Director
 Air and Waste Management Division, Region II

You have asked for guidance regarding the provision in Section IV(B)(i) of the Emission Offset Interpretative Ruling, 40 CFR 51, Appendix S, that exempts RRF's from the general requirement that major new sources and modifications locating in designated nonattainment areas obtain emission offsets. Your request stems from the offset exemptions for RRF's contained in the New York and New Jersey State implementation plans (SIP's). Both States cite the following reasons as the basis for their reluctance to delete these exemptions from their SIP's:

1. Their SIP offset requirements were originally crafted using Appendix S as a guide;
2. The Environmental Protection Agency (EPA) approved the relevant SIP measures, including the exemptions for RRF's; and
3. Section IV(B)(i) of Appendix S still provides for this exemption.

As discussed below, Appendix S has been largely superseded, and EPA will no longer approve SIP's containing offset exemptions for RRF's unless they contain an approved growth allowance. Thus, you may advise these States that Appendix S is no obstacle to deletion of the exemptions in question.

At the time these new source review (NSR) programs were submitted, EPA had not promulgated its Part 51 regulations setting forth the requirements for approval of State NSR programs under Part D of the Clean Air Act. Those regulations, originally designated as 40 CFR 51.18(j) and presently codified at 51.165, were promulgated on August 7, 1980 (45 FR 52676, 52687, 52743). Rather, EPA was guided by the Offset Ruling in Appendix S to 40 CFR Part 51 [see 44 FR 3282 (January 16, 1979)]. Section IV(B)(i) of the Offset Ruling does contain provisions

for exempting RRF's from the offset requirement under certain conditions. However, the Offset Ruling has been largely superseded by the Part 51 regulations.

The Offset Ruling governs permitting of major sources in newly designated nonattainment areas that are subject to Part D requirements, while the affected State makes necessary revisions to its NSR rules [see 44 FR 20372, 20379 n.36 (1979)]. In addition, EPA still utilizes the Offset Ruling for guidance purposes in certain respects. Nevertheless, as a matter of policy, EPA no longer adheres to the RRF's offset exemption in the Offset Ruling. Thus, EPA will not approve a proposed SIP revision which contains such an exemption without an approved growth allowance.

Accordingly, you may inform these States that they should proceed at this time to initiate SIP revisions that would remove the offset exemptions.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

DATE: SEP 27 1988

CT: Application and Validity of the Emission Offset Interpretative Ruling (Appendix S)

FROM: Conrad Simon, Director
Air and Waste Management Division (2AWM)

TO: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)

*Julia -
Send to Calcagni
prepare reply
for Jerry
Target
2 wks
Hawk
R
10/7*

The purpose of this memorandum is to make you aware of a recurring problem we are facing in Region II regarding the application and validity of the Emission Offset Interpretative Ruling, contained at 40 CFR 51, Appendix S. The presence of Appendix S in Part 51 has generated confusion about the Environmental Protection Agency's (EPA's) requirements and has become a major barrier to our efforts to make our states' new source review regulations consistent with Federal requirements.

In 1980 and 1981, EPA approved New York and New Jersey's new source review regulations which impose emission offset requirements on major stationary sources of air pollution. However, both New York's Part 231 and New Jersey's Subchapter 18 exempt resource recovery facilities from those requirements. We understand that this is true of as many as twenty-two other states' new source review regulations.

Earlier this year, we undertook an effort to eliminate the differences between New York and New Jersey's new source review nonattainment rules and the federal new source review requirements. We have found workable solutions to most of these problems. However, New York and New Jersey expressed strong reservations about removing the offset exemption for resource recovery facilities from their regulations. Both states have correctly indicated that their offset requirements were originally crafted using Appendix S as a guide and that EPA subsequently approved these regulations. We have responded on several occasions, based on the advice of Office of Air Quality and Planning Standards staff, that Appendix S has largely been superceded by the Part 51 regulations and is applicable in only very limited circumstances. Further, we have indicated that offset exemptions are only valid when accompanied by an approved growth allowance. Our states, however, remain unconvinced and cite Section IV.B.1 of Appendix S in EPA new source review regulations as their justification for retaining the offset exemption for resource recovery facilities. Frankly, we have concluded based on our own review and a review by the Regional Counsel's office that the state's interpretation is plausible.

In light of this confusion with the interpretation of EPA's emission offset requirements and the obvious friction that this ambiguity creates in working with our states, we are requesting that the Emission Offset Interpretative Ruling, contained at 40 CFR 51, Appendix S, be removed from EPA regulations. At the very least, that portion that contains the exemption from the emission offset requirements needs to be removed, or a clear policy memorandum needs to be issued which clarifies and provides a legal basis for the Agency's present requirements. Lacking this, I am not optimistic that this issue can be resolved.

cc: G. Mc Cutchen, OAQPS

ENCLOSURE C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II
26 FEDERAL PLAZA
NEW YORK NEW YORK 10278

MAR 17 1989

Thomas M. Allen, P.E.
Acting Director
Division of Air Resources
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233

Dear Mr. Allen:

This is in reference to our prior correspondence regarding the offset exemption for resource recovery facilities in Part 231 of the New York SIP.

As you know, several parties have petitioned EPA to call upon New York, pursuant to section 110(a)(2)(H) of the Act, to revise its SIP to remove the emissions offset exemption. EPA has now responded by holding the petition in abeyance (See Letter, William J. Muszynski, Acting Regional Administrator, to Eric A. Goldstein and Charles S. Warren, March 17, 1989). As explained in that letter, one of the reasons for withholding final action at this time is to give New York a further opportunity to voluntarily revise its SIP. I ask again that you do so.

In the past, you have expressed reluctance to remove this exemption on the ground that it is allowed by section IV.B.i of Appendix S to 40 CFR Part 51. I must disagree. As discussed in the letter to Goldstein and Warren, EPA was guided by Appendix S when it approved New York's new source review (NSR) rules in 1980, because at that time the Agency had not promulgated any Part 51 regulations setting forth requirements for approval of NSR programs under Part D of the Act. Shortly after EPA approval of the New York rules, however, EPA promulgated 40 CFR 51.18(j), now designated as 51.165(a) establishing the current requirements for NSR programs. Unlike Appendix S, the Part 51 regulations do not provide for offset exemptions for resource recovery facilities. Appendix S thus has been largely superseded. It remains in place because it still applies in some narrow categories of permitting circumstances (primarily, in newly designated nonattainment areas subject to Part D). However, the Agency no longer adheres to the offset exemption in Appendix S, and will not approve a SIP revision which contains such an exemption.

Your timely attention to this matter would be much appreciated.

Sincerely,

Conrad Simon, Director
Air and Waste Management Division

Enclosure

cc: Edward Davis
Division of Air Resources
New York State Department of
Environmental Conservation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II
26 FEDERAL PLAZA
NEW YORK NEW YORK 10278

MAR 10 1978

Eric A. Goldstein, Esquire
Natural Resources Defense Council, Inc.
122 East 42nd Street, 45th Floor
New York, New York 10168

Charles S. Warren, Esquire
Berle, Kass and Case
45 Rockefeller Center
New York, New York 10111

Gentlemen:

This is in further response to your petition regarding the emissions offset exemption for resource recovery facilities in Part 231 of the New York State Implementation Plan (SIP). You asked the Environmental Protection Agency (EPA) to call for revisions to the New York SIP to eliminate this exemption. For the reasons discussed below, EPA is not taking final action on your petition at this time. Rather, because the merits of your petition are closely linked with EPA's outstanding call for revisions to the New York SIP to correct the State's failure to meet ozone and carbon monoxide air quality standards, and for other reasons, the petition will be held in abeyance pending further action on the current SIP call.

I. THE SIP CALL PROCESS

Section 110(a)(2)(H) of the Clean Air Act establishes a process whereby states are to revise their SIPs "whenever the Administrator finds on the basis of information available to him that the plan is substantially inadequate to achieve the national ambient air quality standard [NAAQS] ... or to otherwise comply with any additional requirements established under the Clean Air Act Amendments of 1977." It is clear from this provision and the overall statutory scheme that whether the Administrator should make a finding of "substantial inadequacy," and hence, call for corrective SIP revisions by the state, is a matter within the Administrator's discretion. This discretion extends to both the finding of substantial inadequacy and the content of the corrective measures that the Administrator may require of the state in response to the SIP call.

II. THE NEW SOURCE REVIEW OFFSET REQUIREMENT AND PART D SIP ADEQUACY

The new source review (NSR) provisions, Part D of the Clean Air Act and the current EPA regulations at 40 C.F.R. 51.165, contain numerous requirements applicable generally to major new stationary sources of air pollution and major modifications locating in an area designated as nonattainment for a particular pollutant under section 107 of the Act. As you point out in your petition, section 172(b)(6) provides that new major sources and major modifications must obtain a permit in accordance with section 173. The state must determine, as a condition for granting that permit, that the new source has obtained offsetting emissions reductions from other sources such that operation of the source will represent "reasonable further progress" toward attainment of the NAAQS (see section 173(1)(A)), or that emissions from the new source will not exceed a growth allowance for the pollutant that the state has established under section 172(b) (see section 173(1)(B)). 40 C.F.R. 51.165(a)(2) directs states to adopt a NSR program meeting the requirements of sections 172(b)(6) and 173. The EPA regulations in 40 C.F.R. 51.165 do not specifically allow nor prohibit exemptions from the offset provision.

Although the above provisions establish the general requirements of new source review under Part D, neither the Act nor EPA's regulations are self-executing. Rather, the specific NSR requirements that must be met in a given state are those contained in the regulations set forth in the state's NSR program as it has been approved by EPA as part of the SIP. Thus, the New York SIP, at 6 N.Y.C.R.R. Part 231.6, imposes emissions offset requirements on major sources generally. However, Part 231.9(c)(1) exempts resource recovery facilities from that requirement. EPA approved New York's offset rules, and the resource recovery exemption, as part of the State's SIP on May 21, 1980 (45 Fed. Reg. 33981). No party sought judicial review of EPA's approval during the 60-day period provided in section 307(b)(1) of the Act.

At the time EPA approved New York's NSR program, the Agency had not promulgated any Part 51 regulations setting forth the requirements for approval of state NSR programs under Part D. Those regulations, originally designated as 40 C.F.R. 51.18(j) and presently codified at 51.165, were not promulgated until August 7, 1980 (45 Fed. Regs. 52676, 52687, 52743). Rather, in reviewing the New York program, EPA was guided by the Emission Offset Interpretative Ruling appearing in Appendix S to 40 C.F.R. Part 51. See 44 Fed. Reg. 3282 (Jan. 16, 1979). Section IV.B.i

of the Offset Ruling contains provisions for exempting resource recovery facilities from the offset requirement under certain conditions.

Although the Offset Ruling has been largely superseded by the Part 51 regulations, EPA still utilizes it for guidance purposes in certain respects¹. Nevertheless, at least as a matter of policy, EPA no longer adheres to the resource recovery facility offset exemption in the Offset Ruling. Thus, as explained in a March 14, 1988 letter from Conrad Simon, Director, Air and Waste Management Division, Region II, to Harry H. Hovey, Jr., P.E., Director, Division of Air Resources, New York State Department of Environmental Conservation (Enclosure A), EPA will not approve a proposed SIP revision which contains such an exemption.

III. THE ADEQUACY OF NEW YORK'S NSR PROGRAM AND THE NEED FOR A SIP CALL

As noted above, whether and when the Administrator makes a finding of SIP inadequacy is a matter within his discretion under the scheme of the Clean Air Act. Beyond the statutory framework, this discretion is vitally important as a practical matter to enable EPA to discharge its many duties under the Act. Thus, in addressing potential SIP discrepancies, it is necessary to determine the severity of the matter at issue, establish its priority in relation to other pressing business, consider the range of available curative options, and evaluate the effects of a given course of action on other matters. Only then can the Agency decide whether a particular matter rises to the level of a substantial inadequacy justifying a call for SIP revision under section 110(a)(2)(H).

In light of the above, EPA has considered the following factors to be important in evaluating your petition.

A. EPA's Informal Attempts to Resolve the Matter.

EPA is currently attempting to resolve the issues raised in your petition through informal means.

¹The Offset Ruling applies only in narrow circumstances. For example, it governs permitting of major sources in newly designated nonattainment areas that are subject to Part D requirements while the affected state makes necessary revisions to its new source review rules. See 44 Fed. Regs. 20372, 20379 n. 36 (1979).

EPA has requested New York to amend its NSR program to eliminate several differences between Part 231 and the federal NSR requirements. See the March 14, 1988 letter from EPA Region II to New York (Enclosure A). The letter asks, as part of New York's fiscal year 1988 grant workplan, that the State address several issues, including the emission offset for resource recovery facilities. This effort at informal resolution is ongoing, as indicated by the State's response to the March 14 letter. See letter, Harry H. Hovey, Jr., P.E., to Conrad Simon, April 4, 1988 (Enclosure B).

In addition, EPA has recently written the state to explain that 40 C.F.R. 51.165, and not the Offset Ruling, presently governs the approvability of NSR rules. Hence, the letter explains, the Offset Ruling is not an obstacle to the removal of the offset exemption from the New York SIP. See letter, Conrad Simon to Thomas M. Allen, P.E., Acting Director, Division of Air Resources, New York State Department of Environmental Conservation, March 17, 1989 (Enclosure C).

B. Determining the Impact of the Exemption on the Adequacy of the New York SIP.

In determining whether the offset exemption renders the New York SIP substantially inadequate to achieve the NAAQS or meet the NSR requirements of Part D, it is appropriate to evaluate the environmental impact of the offset exemption in question. This impact is relevant because it is apparent from the statute that the primary purpose of the NSR requirements as a whole, and the offset provision in particular, is as a planning tool to insure that new source growth is consistent with reasonable further progress toward attainment of the NAAQS. It follows that to the extent an offset exemption has no significant bearing on a state's ability to attain the NAAQS, it is unlikely, standing alone, to be considered a substantial inadequacy in the NSR portion of the SIP. In light of other current Clean Air Act requirements and prospective additional measures (discussed below) EPA doubts that it could establish at this time that the resource recovery offset exemption presents a substantial environmental problem that by itself creates a substantial inadequacy in the New York SIP.

1. The Affected Pollutants.

With respect to offsets from resource recovery facilities in New York, the pollutants relevant to your petition are carbon monoxide and particulate matter (i.e., total suspended particulates, or TSP). These are the only criteria pollutants potentially affected by offset provisions, because they are the only pollutants subject to Part D requirements for which the State has designated nonattainment areas and which typically are

emitted in major amounts (greater than 100 tons per year) by resource recovery facilities. See 40 C.F.R. 81.333.²

Regarding carbon monoxide, as discussed below, EPA plans to consider, in conjunction with the second phase of New York's response to the outstanding SIP call for ozone and carbon monoxide, whether formal action on New York's offset exemption is necessary to address a substantial SIP inadequacy. With respect to particulate matter, the prevention of significant deterioration (PSD) program should preclude a substantial SIP inadequacy.

2. New York Is Currently Experiencing No Violations of the New PM-10 Standards for Particulate Matter. In Addition, EPA Requires Offsetting of Particulate Emissions Under the PSD Provisions of Part C of the Act, and May Soon Eliminate the Part D Requirements for Particulates Altogether.

EPA is in the midst of a transition to a revised set of regulatory standards for particulate matter. When this transition is complete, the Part D requirements will be eliminated. In the meantime, new sources must offset their particulate emissions under the Act's PSD requirements so as to not cause or contribute to a NAAQS violation. In addition, there are currently no violations of the revised standards in New York. Accordingly, the offset exemption in the New York SIP apparently does not present a substantial SIP inadequacy as to particulates.

On July 1, 1987, EPA replaced TSP as the NAAQS indicator for particulate matter pollution. See 52 Fed. Reg. 24635. Under the revised NAAQS, EPA employs a new indicator, termed "PM-10," that includes only those particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers. (It should be noted that the vast majority of particulate emissions of resource recovery facilities are 10 micrometers or less in diameter.) In the implementing regulations which accompanied the revised particulate matter standards, EPA provided that the requirements

²Using the example of the Brooklyn Navy Yard project cited in your petition at p.1 n.1, resource recovery facilities typically also emit major amounts of sulfur dioxide and nitrogen oxides. However, New York has no designated nonattainment area for those pollutants. While there are designated ozone nonattainment areas in the State, resource recovery facilities (e.g., the Brooklyn Navy Yard project) generally do not emit volatile organic compounds in major amounts.

of a state's preexisting TSP SIP, including new source review requirements under Part D of the Act, generally will remain in place until EPA approves a PM-10 SIP for the state. See 52 Fed. Regs. 24672, 24679. New York submitted a PM-10 SIP to EPA for approval on May 31, 1988. The state's PM-10 SIP is currently undergoing review in Region II, and likely will be submitted to EPA headquarters for approval in January 1989. Upon approval of New York's PM-10 SIP, the Part D requirements governing particulates, including the TSP offset provisions, will be eliminated.

During this transition period, the PSD provisions of Part C of the Clean Air Act independently require that major new sources, including resource recovery facilities, obtain emissions offsets essentially similar to those you assert are required under Part D. Under section 165(a)(3), major new sources subject to PSD must not "cause or contribute to" a NAAQS violation. This requirement is set forth in EPA's PSD regulations. See 40 C.F.R. 51.166(k) (requirements for state PSD plans); 40 C.F.R. 52.21(u) (federal PSD regulations). New York does not have an approved PSD rule. Hence, EPA has delegated to New York the authority to issue PSD permits in the state pursuant to 52.21(u). See 52.1689. Under 52.21(k), a major new source that would locate in an area within New York that is lacking an approved PM-10 plan and is experiencing PM-10 violations must obtain sufficient offsetting emissions reductions at other facilities so as to provide a net air quality benefit and thereby help remedy the nonattainment problem. In an area within New York that is lacking an approved PM-10 plan but is without current PM-10 violations, a new source that would cause a violation of the PM-10 standards must provide offsets that compensate on a one-for-one basis for its adverse air quality impacts, and thereby prevent the NAAQS violation. See 52 Fed. Reg. 24684 n. 14, 24686-87, 24699.³

Monitoring data has not disclosed any violations of the PM-10 standards in New York during the last three years. Thus, at the present time, major new resource recovery facilities in New York would need to offset their ambient impacts on a one-for-one basis if necessary, to prevent a violation of the new particulate matter standards. Because particulate emissions of resource

³In addition, as a condition for approval of its PM-10 SIP, New York must adopt an emissions offset program meeting the requirements of 40 C.F.R. 51.165(b) and section 110(a)(2)(D) of the Act. That program must be at least as stringent as the PSD offset program described above.

recovery facilities are predominantly PM-10 emissions, the PM-10 offsets required by PSD would provide virtually the same amount of reductions in particulate emissions as would be provided by TSP offsets under a Part D offset requirement.

In sum, as to major new sources of particulate emissions, the offset provisions of Part D are largely vestigial, and upon completion of the transition to PM-10, will disappear altogether. That transition is underway in New York. In the meantime, in order to comply with applicable PSD requirements, major new particulate sources, including resource recovery facilities, must still offset their ambient impact if they would cause or contribute to a NAAQS violation. No monitored violations of the revised PM-10 standards are extant at present. If any should arise, then a new resource recovery facility would have to obtain sufficient offsets so as to provide a net air quality benefit.

Under these circumstances, it does not appear that the Part D offset exemption for resource recovery facilities in the New York SIP presents a substantial inadequacy as to particulate matter within the meaning of section 110(a)(2)(H).

C. The Importance of New York's Outstanding Part D SIP Call.

EPA is considering whether to take action to remove the resource recovery facility offset exemption from the New York SIP in conjunction with EPA's current ozone and carbon monoxide SIP call to the State. Thus, as there is an outstanding SIP call that may result in a requirement that New York provide the relief you are seeking, it would be premature at this time to make a separate SIP call as requested in your petition.

On May 26, 1988, EPA Regional Administrator Christopher J. Daggett notified New York Governor Mario M. Cuomo that the New York SIP is substantially inadequate to achieve the NAAQS for ozone and carbon monoxide in certain areas. See Enclosure D. That SIP call was one of several issued at the same time to numerous states, in accordance with EPA's emerging post-1987 ozone-carbon monoxide nonattainment policy. See 53 Fed. Reg. 20722, June 6, 1988; 52 Fed. Reg. 45044, November 24, 1987. The May 26 letter asked that New York respond to the SIP call in two phases. The first phase calls for certain corrective measures to be taken in the near future. The second phase will be triggered by EPA's issuance of a final post-1987 nonattainment policy, and will set forth additional requirements.

EPA is currently moving toward a final post-1987 policy and the consequent announcement of phase two corrective measures that New York must take in response to the outstanding SIP call. In formulating the phase two requirements for New York, EPA will specifically consider what action New York should be required

to take regarding the offset exemption for resource recovery facilities in its SIP. At this time, however, EPA has not determined what specific additional measures will be necessary to enable New York to attain the (ozone and) carbon monoxide NAAQS in an expeditious manner. Thus, it would be premature to decide now whether New York must remove the offset exemption for resource recovery facilities.

III. CONCLUSION

From the foregoing, it is clear that EPA must consider many factors in deciding how to respond to your petition. The petition highlights a potential deficiency in the New York SIP that is of particular concern to you. The Agency agrees that this is an important matter. However, EPA's range of concerns is much broader, encompassing not only the entire NSR program, but the Act's Part D requirements as a whole.

The offset requirements of the PSD program for PM-10 under Part C of the Act should prevent a substantial SIP inadequacy as to particulate emissions during the transition away from Part D requirements affecting major new sources of particulates. Regarding carbon monoxide, EPA is presently considering what additional phase two corrective measures New York must adopt in response to the current SIP call. Those deliberations will include consideration of the offset exemption in question. Although EPA's forthcoming phase two requirements may include the relief you seek, it would be premature to take separate action on your petition now. In light of this ongoing process, your petition will be held in abeyance at this time. EPA anticipates that it will take dispositive action on the petition following a final decision on the phase two corrective measures for the outstanding New York SIP call.

Sincerely,


 William J. Muszynski
 Acting Regional Administrator

Enclosures

cc: Thomas C. Jorling, Commissioner
 New York State Department of
 Environmental Conservation

Thomas M. Allen, P.E., Acting Director
 Division of Air Resources, NYSDEC

bcc: J. Calcagni, OAQPS
G. McCutchen, OAQPS
D. Crumpler, OAQPS ✓
G. Foote, OGC
C. Simon, 2AWM
R. Werner, 2AWM-AP
D. DiMarcello, 2AWM-AP
D. Stone, 2ORC-AIR

25.16 DATE: June 19, 1986
SUBJECT: Finding of Violation in Issuance of Permit to Operate to AM
General Corporation, Indiana
FROM: David Kee, Director, Air Management Division, Region V
TO: State of Indiana, St. Joseph County Health Department, AM General
Corporation
DISCUSSION: A permit to operate given to a metal part coating facility is in
violation of applicable Federal and State regulations. In
particular, applicant did not apply LAER, and increased VOC
emissions were not offset by a reduction in VOC emission by
existing facilities.
CR: 23.22 [Hard Copy]; 26.13

26. NAA

LAER



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

25.4

APR 25 1988

MEMORANDUM

SUBJECT: LAER Emission Limits for Automobile and Light-Duty Truck
Topcoat Operations

FROM: Jack R. Farmer, Director
Emission Standards Division (MD-13)

A handwritten signature in black ink, appearing to read "Jack R. Farmer", written over the typed name in the "FROM" field.

TO: See Below

At the March Air Directors' meeting in Seattle, Washington, some questions were raised concerning the Agency's current position regarding Lowest Achievable Emission Rate (LAER) emission limits for automobile and light-duty truck topcoat operations. This memorandum describes our position on this issue.

The LAER emission limit for automobile and light-duty truck topcoat operations should be at least as stringent as 12.26 pounds of volatile organic compound (VOC) per gallon of solids deposited with compliance on a daily basis using actual measured transfer efficiency values. This limit should apply regardless of the material of construction (substrate) of the vehicles being coated (e.g. metal, plastic or combination.)

The basis for citing this emission limit as LAER is the permit (see attachment) for Subaru/Isuzu in Lafayette, Indiana. The permit for Toyota in Georgetown, Kentucky, may also be used to support this limit.

When the industry has argued for less stringent emission limits because of the type of coating or the type of substrate planned, we have maintained that "painting cars is painting cars," and these factors do not justify less stringent emission limits. We have taken this position because technology and manufacturing processes constantly change and evolve; the manufacturer is responsible for ensuring that any new process meets environmental as well as product requirements.

The procedure which we feel is most appropriate for determining compliance with this LAER limit is the protocol which we have been developing in conjunction with the Motor Vehicle Manufacturers Association (MVMA). We met with the MVMA on March 22, 1988, to discuss the draft

protocol. We are making some changes in the protocol based upon the discussion at this meeting. We expect to have the final protocol ready soon. If you have an immediate need to provide a compliance procedure for a topcoat LAER determination, please contact Dave Salman at FTS-629-5417.

Attachment

Addressees:

Irwin Dickstein, Reg VIII
Louis Gitto, Reg I
William Hathaway, Reg VI
David Howekamp, Reg IX
David Kee, Reg V
Thomas Maslany, Reg III
Gary O'Neal, Reg X
Conrad Simon, Reg II
Winston Smith, Reg IV
William Spratlin, Reg VII

cc: Mike Alushin, LE-134A
John Calcagni, MD-15
Jerry Emison, MD-10
Joan LaRock, A-101
John Seitz, EN-341

bcc:

Wayne Aronson, Reg IV
Tom Helms, MD-15
Lars Johnson/Brent Marable, Reg V
Paul Kahn, Reg II
Vishnu Katari, EN-341
Floyd Ledbetter, Reg IV
Nancy Mayer, MD-15
Gary McCutchen, MD-15
Mindy Moore/Lee Hanley, Reg VIII
Bob O'Meara/Tom Elter, Reg I
Bill Repsher, LE-134A
Steve Rosenthal, Region V
Cynthia Stahl, Reg III
David Sullivan/Willie Kelly, Reg VI
Jean Thompson, Reg III
Mary Tietjen, Reg VII
Tim Williamson, Reg I
Bill Wruble/Dennis Beauregard, Reg IX

CONSTRUCTION PERMIT

Control No. 000547

OFFICE OF AIR MANAGEMENT

Page 1 of 12



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

105 South Meridian Street

Indianapolis, Indiana 46223

Subaru-Isuzu Automotive Incorporated, Indiana Plant

Intersection of State Road 38

and

Interstate 65

near Lafayette, Indiana

RECEIVED

JUL 08 1987

Permit Branch
Topon V

is hereby authorized to construct

a new automobile and light duty truck assembly plant at the above location southeast of Lafayette, Indiana, consisting of a stamping shop, body shop, paint shop, and trim and final assembly shop. Emission of air pollutants will occur primarily from metal working operations, surface coating operations and combustion of natural gas.

This permit is issued under provisions of Rule 325 IAC 2-1.1, with findings and conditions listed on the attached pages.

Identification No. PSD (79) 1651

Date Issued July 30, 1987

Expiration Date N/A

Issued by Nancy A. Malley
Commissioner



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

August 29, 1988

MEMORANDUM

SUBJECT: Transfer of Technology in Determining Lowest Achievable Emission Rate (LAER)

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: David Kee, Director
Air and Radiation Division, Region V

This is in response to your memorandum of August 9, 1988, requesting guidance on the transfer of control technology between source categories for the purpose of determining LAER for a source. This issue was raised by the Michigan Department of Natural Resources in proposing that the control achieved by incineration of oven and spray booth emissions from a truck parts surface coating line (which is considered to be miscellaneous metals) should also be achievable by an automobile surface coating line. You stated that the policy set forth in the January 16, 1979 Federal Register (page 3280) would appear to support this position; however, the sentence at the end of the citation, "Comments on this interpretation and whether it is appropriate to revise the regulatory definition are solicited," suggests that the Environmental Protection Agency might have changed its policy since that time.

This is to reaffirm the policy stated in the January 16, 1979 Federal Register. Our quick investigation of the regulatory history since the publication of that policy indicates that no comments were ever received on that issue. Consequently, the policy has never been revisited. Furthermore, we interpret the last sentence you cited to mean that we would consider whether to redefine LAER to clearly reflect policy, not that we would change the policy on transfer of control technology.

There are two types of potentially transferable control technologies: 1) gas stream controls, and 2) process controls and modifications. For the first type of transfer, we consider the class or category of sources to include any sources that produce similar gas streams that could be controlled by the same or similar technology. The process that generates a volatile organic compound (VOC) laden gas stream, for example, is immaterial. What matters is whether the gas stream characteristics, such as composition and

VOC concentration, are sufficiently similar to a stream from which incineration technology, for example, may be transferred. The same would be true for the control of particulate matter or sulfur dioxide in a gas stream using control devices such as baghouses or scrubbers.

For the second type of transfer, process similarity governs the decision. For example, coating compositions and application technology probably do not vary substantially across the entire class of motor vehicle coating sources. A source within that category would, therefore, have to clearly demonstrate the unique process characteristics that preclude it from using otherwise transferable LAER technology used by a similar but not necessarily identical source. We would be more cautious, however, before grouping more disparate operations, such as coating semiconductor circuit boards, in the same class as coating motor vehicles.

Based on your memorandum, Michigan's application of the technology transfer policy is based on treatment of the first type (i.e., control of the gas stream). Consequently, we agree with their position and your support of it. Incineration of spray booth emissions is a transferable technology in a LAER determination. Whether it is actually selected as LAER depends, of course, on the actual gas stream characteristics. Requiring the same level of control, based on process-related factors such as coating formulation and coating transfer efficiency, would be a more subjective call but is not the focus of your question.

In a follow-up telephone conversation with Gary McCutchen on August 24, 1988, your staff requested our policy on LAER determinations for individual emissions units versus the entire facility. Our policy is that LAER is primarily an emissions unit determination. Each emissions unit must achieve the lowest possible emissions rate. Once LAER has been decided for each emissions unit, the reviewer should then assess LAER for the entire building, structure, facility, or source. If some more effective LAER exists by controlling the entire facility (e.g., the entire building exhaust instead of units within the building), then the "facility-wide" LAER should be considered. However, there are three hurdles to determining "facility-wide" LAER. The first is that an overall limit on multiple units is difficult if not impossible to enforce. The second is that a "facility-wide" LAER is often a combination of emissions unit and facility control, so sources seldom explore this option. The third is that most "facility-wide" LAER approaches proposed by sources are actually bubbles. They do not really represent the sum of the LAER's for the respective units, as explained at the beginning of this paragraph. As you know, LAER cannot be bubbled.

Finally, your staff also asked whether LAER can be considered individually for each aspect of control of a source. Specifically, they wanted to know if LAER for surface coating can be considered first for the composition of the coating, then for the transfer efficiency, and finally for the exhaust gas stream. The answer is yes, although reviewers must be aware that one decision affects the others. For example, a requirement for low VOC paint may result

-3-

in gas stream VOC concentrations so low that incineration of the gas stream is not considered feasible in terms of LAER. However, it is acceptable to consider composition from one source, application technology (transfer efficiency) from another source, and incineration from a third source when performing a LAER determination, as long as each of those sources meets the control technology transfer criteria discussed above.

If you have further questions regarding transfer of technology in LAER determinations, please contact Gary McCutchen at FTS 629-5592.



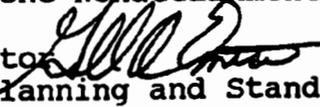
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

26.6

DEC 1 1988

MEMORANDUM

SUBJECT: RACT Requirements in Ozone Nonattainment Areas

FROM: Gerald A. Emison, Director 
Office of Air Quality Planning and Standards (MD-10)

TO: William A. Spratlin, Director
Air and Toxics Division, Region VII

This is in response to your memorandum of October 12, 1988 concerning reasonably available control technology (RACT) requirements for automobile assembly plants in ozone nonattainment areas.

We agree that automobile assembly plants in ozone nonattainment areas should have volatile organic compound emission requirements that are at least as stringent as RACT.¹ As described below, the requirements for new source performance standards (NSPS) or lowest available emission rate (LAER) (as determined at the time of permit issuance) for two plants in the St. Louis area may not be as stringent as RACT. Therefore, the St. Louis State implementation plan should contain RACT requirements for these plants.

There are important differences in the format and compliance demonstration methodology for automobile coating RACT and NSPS. Topcoat and surfacer RACT require daily averaging and actual transfer efficiency, while the NSPS allows monthly averaging and table transfer efficiency values. These differences may result in RACT being more stringent than NSPS. The OAQPS recommends that the June 1988 protocol be used as the basis for determining compliance with the RACT limit.

The Ford Hazelwood plant is subject to NSPS and RACT. The State has proposed to delete the RACT requirements for Ford Hazelwood on the basis that the NSPS is more stringent. This claim is not correct. Therefore, the RACT requirements for Ford Hazelwood should not be deleted, rather they should be maintained

¹For this discussion, RACT for topcoat means an appropriate emission limit for which compliance is demonstrated on a daily basis using the June 1988 protocol. For surfacer, the RACT requirement should also specify daily compliance and actual transfer efficiency.

and the June 1988 protocol adopted as the compliance determination procedure.

The GM Wentzville plant was permitted as a new source in the early 1980's. This source is subject to NSPS and LAER, which was set equal to NSPS for topcoat and surfacer. Since the St. Louis RACT requirements for automobile coating were source specific and the GM Wentzville plant did not exist when the RACT requirements were first adopted, there are currently no RACT requirements for this plant. The NSPS and LAER requirements for this plant may not be as stringent as RACT. Therefore, RACT requirements should be adopted for GM Wentzville.

Thank you for bringing this situation to our attention. Questions concerning this matter should be addressed to Bill Polglase (629-5246) or Dave Salman (629-5417).

cc: J. Calcagni
R. Campbell
T. Helms
J. Berry
D. Salman
G. McCutchen
D. Crumpler
B. Polglase
J. Silvasi
Director, Air Management Div., Regions I, III, V, IX
Director, Air and Waste Management Division, Region II
Director, Air, Pesticides, and Toxics Division, Regions IV, VI
Director, Air and Toxics Division, Regions VII, VIII, X
Chief, Air Branch, Regions I-X
Chief, Air Compliance Branch, Regions IV, V
Chief, Air Enforcement Branch, Region III
Chief, Air Operations Branch, Region IX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20480

RECEIVED

FEB 28 1989

FEB 24 1989

OFFICE OF
AIR AND RADIATION

Air & Radiation Branch
U.S. EPA Region V

MEMORANDUM

SUBJECT: Cut-off Date for Determining LAER in Major New Source Permitting

FROM: John Seitz, Director
Stationary Source Compliance Division
Office of Air Quality, Planning and Standards

TO: David Kee, Director
Air and Radiation Division
Region V

This memorandum responds to a February 22, 1989 telephone request by Bill McDowell of your staff for a written answer to the following question:

When a permitting agency is issuing a new source review permit involving a LAER determination, must that LAER determination reflect the most stringent LAER construction permit which has been issued anywhere in the country in the time period up to and including the public comment period on the permit currently under consideration?

The answer to your question is yes. The conditions in a new source permit are not set until the final permit is issued. The final permit is not issued until after a draft permit has been published, there has been a public comment period, and the permitting agency has had an opportunity to consider any new information that may have come to light during the comment period. If the permitting agency cannot consider new information it learns during the comment period, including recent technological advances, the comment period does not serve its intended purpose.

Since a new source may not legally begin to construct until after it has received a final permit, a source is not put to an equitable disadvantage by having the permit conditions change between the proposed and final permit.

If you have any questions about this matter, do not hesitate to call me, or to refer to Judy Katz of OECM (382-2843) or Sally Farrell of my staff (382-2875).

Note. Also see 26.10 + 26.11



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

23 FEB 1989

MEMORANDUM

SUBJECT: Guidance on Determining Lowest Achievable
Emission Rate (LAER)

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: David Kee, Director
Air & Radiation Division, Region V

This is in response to your memorandum of January 6, 1989, requesting additional information on determining LAER. The following responses are in the same order and format as the questions in your letter.

1. Economic Feasibility of LAER

Traditionally, little weight has been given to economics in LAER determinations, and this continues to be the case. The extract in your memorandum from the record of the House and Senate discussion of the Clean Air Act (Act) contains the sentence:

"If the cost of a given control strategy is so great that a new major source could not be built or operated, then such a control would not be achievable and could not be required by the Administrator."

We interpret this statement in the record to be used in a generic sense. That is, that no new plants could be built in that industry if emission limits were based on levels achievable only with the subject control technology. However, if some other plant in the same (or comparable) industry uses that control technology, then such use constitutes de facto evidence that the economic cost to the industry of that technology control is not prohibitive. Thus, for a new source in that same industry, LAER costs should be considered only to the degree that they reflect unusual circumstances which, in some manner, differentiate the cost of control for that source from the costs of control for the rest of that industry. These unusual circumstances should be thoroughly analyzed to ensure that they really do represent compelling reasons for not requiring a level of control that similar sources are using. Therefore, when discussing costs, applicants should compare the cost of control for the proposed source to the costs for source(s) already using that level of control.

a. You asked whether LAER for a coating operation would necessarily require add-on controls if low solvent coatings are used which produce volatile organic compound (VOC) concentrations of 20-100 ppm, and also whether LAER for a boiler would be both low sulfur coal and scrubbing.

Your questions pose hypothetical issues of whether sources which have selected fuels or process materials with inherently low emissions should be forced to utilize add-on controls as well. It is difficult and potentially misleading to respond to such hypothetical situations, since certain factors not presented may alter the response (source type, pollutant, emission rate, economics, etc). Nevertheless, the following generalizations can be made.

Sources are required to meet LAER as defined in the Act, which is essentially a waste gas stream limit. For a coating operation, this may mean low (or no) VOC solvent coatings, high transfer efficiencies, an add-on control device on the gas stream, or some combination of these. Of course, use of either of the first two will affect gas stream concentrations, which in turn can influence decisions on whether additional control is needed to meet the intent of LAER requirements. A LAER requirement for low sulfur coal would depend, at least in part, on whether such fuel was available and in use in the nonattainment area in question. A final determination depends on the specific case.

b. You ask whether permit applicants can put air pollution control costs "on the margin," even though many other variables could affect project viability, and whether States and Regions have the expertise needed to adequately evaluate a claim of economic non-viability.

It is true that many permit applicants present the cost of emissions controls as marginal costs and argue that they cannot afford such controls. However, these issues were addressed in the April 22, 1987 memorandum on determining best available control technology (BACT).¹ Since costs play less of a role in LAER than in BACT determinations, we believe the issues are adequately addressed in that memorandum, so we will not repeat them here.

2. Achievability of Existing State Implementation Plan (SIP) Limitations

The most stringent emissions limitation contained in a SIP for a class or category of source must be considered LAER, unless a) a more stringent emissions limitation has been achieved in practice, or b) the SIP limitation is demonstrated by the owner or operator of the proposed source to be unachievable [Act, section 171(3)].

¹ Huntsville Incinerator - Determining BACT, from Gary McCutchen, CPDD, to Bruce Miller, Region IV, dated April 22, 1987. [See section 8.15 of the New Source Review Prevention of Significant Deterioration and Nonattainment Area Guidance Notebook.]

There is, of course, a range of certainty in such a definition. The greatest certainty for a proposed LAER limit exists when that limit is actually being achieved by a source. However, a SIP limit, even if it has not yet been applied to a source, should be considered initially to be the product of careful investigation and, therefore, achievable. A SIP limit's credibility diminishes if a) no sources exist to which it applies; b) it is generally acknowledged that sources are unable to comply with the limit, and the State is in the process of changing the limit; or c) the State has relaxed the original SIP limit. Case-by-case evaluations need to be made in these situations to determine the SIP limit's credibility.

The same logic applies to SIP limits to which sources are subject but with which they are not in compliance. Noncompliance by a source with a SIP limit, even if it is the only source subject to that specific limit, does not automatically constitute a demonstration that that limit is unachievable. The specific reasons for noncompliance must be determined, and the ability of the source to comply assessed. However, such noncompliance may prove to be an indication of nonachievability, so the achievability of such a SIP limitation should be carefully studied before it is used as the basis of a LAER determination.

3. LAER and Performance Specifications

Your question about the use of company-mandated product specifications (for coatings) in determining LAER for sources of VOC is too hypothetical to address, given various site-specific factors that could exist. Each case must attempt to differentiate between product (and materials) specifications that are simply desired by an applicant (which would generally not be considered relevant) and specifications that are required (e.g., an industry standard). However, your interpretation of my August 29 memorandum is correct, in that a permit applicant would have to demonstrate that the presumptive LAER could not be met by some other combination of coatings, transfer efficiency, and add-on control.

4. If Presumptive LAER Cannot be Achieved

We generally concur with your requirement that where a presumptive SIP-based LAER is not achievable, the applicant must meet the more stringent of the two limits defined in your memorandum. However, case-by-case factors may also affect the decision.

Please contact Gary McCutchen (FTS 629-5592) if you have any questions on the information provided in this memorandum and Allen Basala (FTS 629-5622) if you need assistance in evaluating the economics of specific permit applications.

cc: A. Basala
 E. Lillis
 G. McCutchen
 E. Noble
 T. Helms
 R. Biondi
 G. Foote



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

26.9

02 MAR 1989

MEMORANDUM

SUBJECT: Reasonably Available Control Technology (RACT)
for New Automobile Assembly Plants

FROM: G. T. Helms, Chief *G.T. Helms*
Ozone/Carbon Monoxide Programs Branch (MD-15)

TO: Steve Rothblatt, Chief
Air and Radiation Branch (5AR-26)

This is in response to your memorandum of November 21, 1988, concerning the applicability of reasonably available control technology (RACT) to new or modified automobile assembly plants in ozone nonattainment areas. Your memorandum explained that about eight assembly plants in Michigan which were constructed or modified after July 1, 1979, but before the end of 1986, are not subject to the RACT regulation in the Michigan State implementation plan (SIP). These facilities are rather subject to the new source performance standards (NSPS) and in some cases lowest achievable emission rate (LAER) which was set equal to the NSPS.

As noted in Jerry Emison's December 1, 1988, response (copy attached) to a similar question from Art Spratlin in Region VII, we agree that automobile assembly plants in ozone nonattainment areas should have volatile organic compound (VOC) emission requirements that are at least as stringent as RACT.¹ The NSPS and LAER requirements for the plants you identified in Michigan may not be as stringent as RACT. Therefore, we agree with your recommendation that Michigan be directed to institute (or reinstitute) RACT requirements for these facilities. [See Section 172(b)(2)]. The State should also examine whether it would be possible in the future for an existing source which becomes subject to the NSPS through modification or reconstruction, but does not at the same time become subject to LAER, to no longer be subject to RACT. If this is a possibility, then the SIP should be amended, perhaps through adoption of a generic RACT rule for automobile coating, to ensure that all sources will at a minimum be subject to RACT.

¹For this discussion, RACT for topcoat means an appropriate emission limit for which compliance is demonstrated on a daily basis using the automobile topcoat protocol. The most recent version of the protocol was published in December 1988 as document number EPA 450/3-88-018. For surfacer, the RACT requirement should also specify daily compliance and actual transfer efficiency.

We also recommend that you again strongly urge Michigan to modify its SIP to specify the automobile topcoat protocol as the compliance determination procedure for all of the automobile topcoat RACT requirements. This is consistent with Agency guidance on automobile topcoat RACT compliance determination procedures and averaging time. The necessary changes are described in Jerry Emison's June 21, 1988, memorandum (copy attached) which transmitted the protocol to the Regional Offices. Adoption of the protocol in Michigan is particularly critical since that State has the most assembly plants.

Should you have any questions concerning this matter, please contact Bill Polglase (FTS 629-5246) or Dave Salman (FTS 629-5417).

Attachment

cc: J. Berry
 J. Calcagni
 R. Campbell
 D. Crumpler
 G. McCutchen
 R. Ossias
 B. Polglase
 S. Rosenthal
 D. Salman
 J. Silvasi
 Director, Air Management Div., Regions I, III, V, IX
 Director, Air and Waste Management Division, Region II
 Director, Air, Pesticides, and Toxics Division,
 Regions IV, VI
 Director, Air and Toxics Division, Regions VII, VIII, X
 Chief, Air Branch, Regions I, II, III, IV, VI, X
 Chief, Air Compliance Branch, Regions IV, V
 Chief, Air Enforcement Branch, Region III
 Chief, Air Operations Branch, Region IX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

26.9

O : DEC 1988

MEMORANDUM

SUBJECT: RACT Requirements in Ozone Nonattainment Areas

FROM: Gerald A. Emison, Director 
Office of Air Quality Planning and Standards (MD-10)

TO: William A. Spratlin, Director
Air and Toxics Division, Region VII

This is in response to your memorandum of October 12, 1988 concerning reasonably available control technology (RACT) requirements for automobile assembly plants in ozone nonattainment areas.

We agree that automobile assembly plants in ozone nonattainment areas should have volatile organic compound emission requirements that are at least as stringent as RACT.¹ As described below, the requirements for new source performance standards (NSPS) or lowest available emission rate (LAER) (as determined at the time of permit issuance) for two plants in the St. Louis area may not be as stringent as RACT. Therefore, the St. Louis State implementation plan should contain RACT requirements for these plants.

There are important differences in the format and compliance demonstration methodology for automobile coating RACT and NSPS. Topcoat and surfacer RACT require daily averaging and actual transfer efficiency, while the NSPS allows monthly averaging and table transfer efficiency values. These differences may result in RACT being more stringent than NSPS. The OAQPS recommends that the June 1988 protocol be used as the basis for determining compliance with the RACT limit.

The Ford Hazelwood plant is subject to NSPS and RACT. The State has proposed to delete the RACT requirements for Ford Hazelwood on the basis that the NSPS is more stringent. This claim is not correct. Therefore, the RACT requirements for Ford Hazelwood should not be deleted, rather they should be maintained

¹For this discussion, RACT for topcoat means an appropriate emission limit for which compliance is demonstrated on a daily basis using the June 1988 protocol. For surfacer, the RACT requirement should also specify daily compliance and actual transfer efficiency.

and the June 1988 protocol adopted as the compliance determination procedure.

The GM Wentzville plant was permitted as a new source in the early 1980's. This source is subject to NSPS and LAER, which was set equal to NSPS for topcoat and surfacer. Since the St. Louis RACT requirements for automobile coating were source specific and the GM Wentzville plant did not exist when the RACT requirements were first adopted, there are currently no RACT requirements for this plant. The NSPS and LAER requirements for this plant may not be as stringent as RACT. Therefore, RACT requirements should be adopted for GM Wentzville.

Thank you for bringing this situation to our attention. Questions concerning this matter should be addressed to Bill Polglase (629-5246) or Dave Salman (629-5417).

cc: J. Calcagni
R. Campbell
T. Helms
J. Berry
D. Salman
G. McCutchen
D. Crumpler
B. Polglase
J. Silvasi

Director, Air Management Div., Regions I, III, V, IX
Director, Air and Waste Management Division, Region II
Director, Air, Pesticides, and Toxics Division, Regions IV, VI
Director, Air and Toxics Division, Regions VII, VIII, X
Chief, Air Branch, Regions I-X
Chief, Air Compliance Branch, Regions IV, V
Chief, Air Enforcement Branch, Region III
Chief, Air Operations Branch, Region IX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JUN 21 1988

MEMORANDUM

SUBJECT: Transmittal of Automobile Topcoat Protocol

FROM: Gerald A. Emison, Director *GA Emison*
Office of Air Quality Planning and Standards (MD-10)

TO: Air Management Division Directors
Regions I, III, and IX
Air and Waste Management Division Director
Region II
Air, Pesticides, and Toxics Management Division Directors
Regions IV and VI
Air and Radiation Division Director
Region V
Air and Toxics Division Directors
Regions VII, VIII, and X

Attached are copies of the "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations." This protocol was referenced on page 2-22 of the May 25, 1988, guidance on VOC issues ("Issues Relating to VOC Regulation Cutpoints, Deficiencies and Deviations"). The EPA developed this protocol with the Motor Vehicle Manufacturers Association (MVMA) and its member companies, with additional input from other automobile manufacturers, coating suppliers, and State and local agencies.

The purpose of the protocol is to provide a uniform procedure for calculating daily compliance of topcoat operations when transfer efficiency is being employed as one of the emission reduction techniques permitted under the relevant ozone SIP regulation. The protocol should also be used as the compliance demonstration procedure for future topcoat BACT or LAER determinations. The protocol should be considered for use with previous BACT or LAER determinations which require daily compliance demonstrations and actual transfer efficiency values, but do not specify all the necessary test methods and procedures.

The SIP's should be revised to require owner/operator use of the protocol to demonstrate compliance with automobile and light-duty truck topcoat RACT regulations. In order to be amenable to use of the protocol, a SIP must: (1) state the topcoat emission limit in units of pounds of VOC per gallon of solids deposited, (2) require that compliance be demonstrated for each day, and (3) treat the entire topcoat operation (all topcoat spray booths, flash-off areas, and bake ovens) as a single entity. Each SIP must also include provisions for retaining records, completing calculations in a timely manner, and reporting results consistent with proper implementation of the protocol and applicable EPA policies and guidelines. The owner/operator should generally be capable of completing the emission calculations for each day in a month by the end of the following month. Proper adoption and use of the protocol should eliminate disputes about averaging, transfer efficiency and bake oven exhaust control "credits," and the VOC and volume solids content of coatings.

It may require as much as 18 to 24 months to amend existing regulations and obtain final Federal approval of the SIP revisions. Until final EPA approval of SIP revisions is obtained, the current regulations remain applicable and are to be interpreted in accordance with letters to the MVMA from Craig Potter on November 20, 1986, and from Alan Eckert on December 23, 1986. Copies of these letters are attached.

Please forward a copy of the protocol to your State air directors as an addendum to your recent follow-up letters on VOC deficiencies and deviations. We will be providing additional information and support in the near future to enable States to effectively implement the protocol. Questions about the protocol should be directed to Dave Salman at FTS 629-5417.

3 Attachments

cc: Mike Alushin (LE-134A)
John Calcagni (MD-15)
Alan Eckert (LE-132A)
Jack Farmer (MD-13)
John Seitz (EN-341)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Copied to NSRS, E... F.
Action to D Compliance 26.10 s/z

Samia

AUG 9 1989

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: LAER Determination for a Previously Constructed Source

FROM: John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Thomas J. Maslany, Director
Air Management Division
Region III

This is in response to your memorandum of November 8, 1988, requesting guidance on when LAER should be evaluated for a previously constructed source. To clarify what you stated in your November 8 memorandum, the permitting agency makes the initial LAER assessment at the time of the completed application. However, this is not to say that LAER is determined at the time of complete permit application, since evaluation of LAER continues until the final permit is issued.

With respect to sources subject to NSR but constructed without undergoing review, your second option applies. Making the initial LAER assessment should take into consideration any technologies, practices or SIP limits in effect as of the date of the complete permit. Consistent with our policy for BACT/LAER evaluation, failure of a source to comply with the permitting requirements is not a basis for grandfathering the date for determining the appropriate LAER to some date other than the date of complete application. Further, the final LAER determination is not made until the issuance of the final permit.

If you have questions, please contact Scott Thrope of my staff at FTS-382-2811.

cc: Gary McCutchen, NSR Section
Judy Katz, OECM
Greg Foote
NSR Contacts, Regions I-X

26.11 DATE: January 11, 1990
SUBJECT: BACT/LAER Determination Cut-Off Date
FROM: John Seitz, Director, Stationary Source Compliance Division, OAQPS
TO: Regional Air Directors, Regions I-X
DISCUSSION: The BACT/LAER determination for a major new source is not set until the final permit is issued. The source has the responsibility to investigate all available and pending control technologies for consideration as BACT or LAER. Establishment of a cutoff date prior to the public comment period would limit public participation. A cutoff date established prior to permit issuance could allow a source to avoid more stringent controls.
CR: 8.43 [Hard Copy]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

FEB 05 1990

Ref: 8AT-AP

Brad Beckham, Director
Air Pollution Control Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Re: Determination of Lowest Achievable Emission Rate for
Coors Container Corporation Canline CX3

Dear Brad:

At the request of Tom Tistic of your staff, we are providing the following guidance for the determination of lowest achievable emission rate (LAER) for Coors Container Corporation.

Review of the definition of LAER, as contained within 40 CFR 51.165(a)(1)(xiii), indicates that "lowest achievable emission rate" means, for any source, the more stringent rate of emissions based on the following:

- "(A) The most stringent emissions limitation which is contained in the implementation plan of any State for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
- (B) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. 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 the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance."

Note that for modified major sources, such as Coors Container Canline CX3, LAER is determined for each modified emissions unit. This requirement was reiterated in an August 29, 1988, memorandum (see Attachment 1), which states that "each emissions unit must achieve the lowest possible emission rate". The term "emissions unit" is defined in 40 CFR 51.165(a)(1)(vii) as "any part of a stationary source which emits or has the potential to emit any pollutant subject to regulation under the Act".

For beverage can coating, EPA has determined that an emissions unit consists of an individual coating operation. This determination parallels that being used for the autocoating industry, in which each coating operation (topcoat, basecoat, etc.) is treated as a separate emissions unit. The rationale for this determination is also based upon the definition of an affected facility, contained within the new source performance standard for beverage can coating, 40 CFR 60 Subpart WW. As stated in section 60.490(a), the provisions of Subpart WW apply to the following affected facilities: exterior base coating operations, overvarnish coating operations, and inside spray coating operations. (Note that a given modified can line may contain other modified emission units; however, the new source performance standard only addresses the three operations listed above.) Each coating operation is composed of an application station, a flashoff area, and a curing oven. The new source performance standard sets a unique emission limitation for each affected facility, due to the distinct nature of the three coating operations.

It is important to note that an emissions unit may consist of a single piece of equipment, such as a valve, flange, or pump, since each of these fits the definition of emissions unit specified in 40 CFR 51.165(a)(1)(vii). The October, 1980, Prevention of Significant Deterioration Workshop Manual references these and other emission units (see Attachment 2), and discusses the need to include each emissions unit in a best available control technology (BACT) analysis. Note that all emissions units involved in a major modification which have an increase in emissions of the applicable pollutant must undergo BACT analysis. Similarly, for Canline CX3, all emissions units which have an increase in emissions due to the major modification must undergo LAER analysis. Therefore, this LAER determination should be made independently for each emissions unit (or coating operation) within Coors Canline CX3 which has had an increase in VOC emissions as a result of the major modification. The emissions from each emission unit undergoing LAER analysis should be compared to those for the similar coating operation which are contained within the implementation plan of any State, to those from previously-issued LAER and BACT determinations, as well as to those contained within the applicable new source performance standard.

In addition, the LAER determination for a modified emissions unit, such as the internal coating operation at Canline CX3, should be based upon a comparison of emissions from that particular operation to emissions from other similar operations on a normalized basis. For example, it would be unfair to restrict Canline CX3 to an emission limit of x pounds of volatile organic compounds (VOCs) per hour, when the other coating line(s) which have achieved the LAER of x pounds/hr actually coat a smaller number of cans. Therefore, in order to equitably

determine LAER for an internal coating operation, VOC emissions from this operation at CX3 should be compared to VOC emissions from other beverage can internal coating operations, on the basis of pounds of VOC emitted per gallon of coating solids applied (or another similar basis). Comparing LAER on the basis of solids applied will normalize factors such as number of cans coated, can size, thickness of coating applied, etc.

Once the lowest achievable emissions limitation is determined, it should be specified in federally-enforceable permit conditions, which set limits on can production, coating VOC content and usage, capture and control efficiency of add-on controls, and other parameters as needed. These conditions will provide for the continued utilization of the control technology determined necessary to achieve LAER, even during periods of reduced operating rates. The actual emission rate of the LAER determination is then calculated, in units such as pounds of VOC per day, from the enforceable permit conditions.

The procedures discussed above have received concurrence from the appropriate EPA headquarters staff. If there are any questions or comments about this determination, please feel free to contact John Dale at (303) 293-1886, or Mindy Mohr at (303) 294-7539.

Sincerely,



Douglas M. Skie, Chief
Air Programs Branch

Attachments

cc: Tom Tistic, CDH
Dennis Crumpler, NSR Section, AQMD

26.13

26.13 DATE: June 19, 1986
SUBJECT: Finding of Violation in Issuance of Permit to Operate to AM
General Corporation, Indiana
FROM: David Kee, Director, Air Management Division, Region V
TO: State of Indiana, St. Joseph County Health Department, AM General
Corporation
DISCUSSION: A permit to operate given to a metal part coating facility is in
violation of applicable Federal and State regulations. In
particular, applicant did not apply LAER, and increased VOC
emissions were not offset by a reduction in VOC emission by
existing facilities
CR: 23.22 [Hard Copy]; 25.16

27. NAA

Statewide Compliance

27. NAA

27.5 DATE: October 28, 1988
SUBJECT: Review of De Minimis Emissions - Sanctions
FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division
TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26) Region V
DISCUSSION: De minimis net emission increases that accumulate within a contemporaneous (5 year) time frame should not be combined and would not trigger PSD review when significance levels are reached. However, de minimis increases do consume PSD increment, and, in nonattainment areas, aggregated de minimis emissions will trigger sanctions when significance levels are reached.
CR: 4.39 [Hard Copy]; 5.24

28. NAA

SIP Processing

28. NAA

28.5 DATE: April 22, 1988
SUBJECT: Interim Policy on Stack Height Regulatory Actions
FROM: J. Craig Potter, Assistant Administrator for Air and Radiation
TO: Air Division Directors, Regions I-X
DISCUSSION: A Court of Appeals ruling on January 22, 1988, remanded three portions of EPA's stack height regulations. This memo discusses the impact of these changes. Permits issued under fully approved or delegated NSR and PSD programs prior to promulgation of revised rules should provide notice that any permit is subject to review and modification if the source is later found to be affected by EPA's revised rules.
CR: 8.26 [Hard Copy]; 11.11; 15.5

28.6

28.6 DATE: December 28, 1988
SUBJECT: Emission Offset Exemptions for Resource Recovery Facilities
FROM: Gerald A. Emison, Director, OAQPS
TO: Conrad Simon, Director, Air and Waste Management Division,
Region II
DISCUSSION: States that have offset exemptions for RRF's in their SIP's should
initiate SIP revisions that would remove the exemptions. EPA will
no longer approve SIP's containing offset exemptions for RRF's
unless they contain an approved growth allowance. Appendix S is
no obstacle to deletion of the exemptions, because it has been
largely superceded.
CR: 25.13 [Hard Copy], 12.14

An official copy of this letter may be obtained from EPA Region IV

January 31, 1989

Mr. Paul J. Bontrager, Director
Bureau of Pollution Control
Metropolitan Health Department
Nashville-Davidson County
311 23rd Avenue, North
Nashville, Tennessee 37203

Dear Mr. Bontrager:

During a conversation with Tom Hansen of my staff on December 7, 1988, you raised a question regarding the use of the growth allowance contained in Part D SIPs under the Clean Air Act for areas included in the Post 1987 SIP call. This letter is in response to your question.

EPA approved control strategy demonstrations in Part D SIPs which provided for the use of a growth allowance in lieu of source-specific offsets to meet the requirements of section 173(1) of the Act. An implicit condition of EPA's approval of the growth allowance was that it could be used in lieu of source-specific offsets to satisfy the requirements of section 173(1) only so long as the SIP continued to be adequate to demonstrate attainment of the NAAQS. However, many areas for which such allowances were approved failed to attain the ozone standard by the end of 1987.

The fact of continued nonattainment of the ozone NAAQS extending beyond the statutory deadline created a conclusive presumption that the previously approved growth allowance has been depleted. Under these circumstances, the issuance of a permit allowing construction of a major new or modified source without source-specific offsets clearly would not result in reasonable further progress toward attainment, but would instead exacerbate the nonattainment problem.

As you are aware, on May 26, 1988, EPA issued a SIP call to the governor of Tennessee indicating that areas in Tennessee, including Nashville, were continuing to show violations of the standard for ozone, and, therefore, that the SIP is substantially inadequate to meet the requirements of Part D. Accordingly, since Nashville did not achieve attainment of the ozone standard by December 31, 1987, and the SIP has been declared deficient, the growth allowance built into the SIP is no longer available for use in lieu of offsets for new sources locating in nonattainment areas.

An additional question that you raised is whether banked credits from shutdown of sources can be used for offsets in nonattainment areas needing but lacking an attainment demonstration. Except for on-site replacement facilities, credits from shutdowns can be used

as offsets for new sources only if they occur on the day the application is "complete" or any subsequent day up until actual operations begin. The shutdown must also be federally enforceable.

Should you have any additional questions, please do hesitate to call Tom Hansen or Kay Prince of my staff at (404) 347-2864.

Sincerely,

Bruce P. Miller, Chief
Air Programs Branch
Air Pesticides & Toxics
Management Division

28.8 DATE: March 2, 1989
SUBJECT: Reasonably Available Control Technology (RACT) for New Automobile
Assembly Plants
FROM: G. T. Helms, Chief
Ozone/Carbon Monoxide Programs Branch (MD-15)
TO: Steve Rothblatt, Chief
Air and Radiation Branch (5AR-26)
DISCUSSION: Automobile assembly plants in ozone non-attainment areas should
have VOC emission requirements that are at least as stringent as
RACT. Where NSPS and LAER requirements are not as stringent as
RACT, RACT requirements should be instituted.
CR: 26.9 [Hard Copy]

28.9 DATE: March 17, 1989
SUBJECT: Offset Exemption for Resource Recovery Facilities in Part 231 of
the New York SIP
FROM: Conrad Simon, Director, Air and Waste Management Division
TO: Thomas M. Allen, PE, Acting Director, Division of Air Resources,
NY DEC
DISCUSSION: New York should voluntarily revise Part 231 of its SIP to remove
the offset exemption for resource recovery facilities. When NY
NSR rules were approved in 1980, the Agency had not promulgated
any Part 51 regulations giving requirements for approval of NSR
programs, and thus, was guided by Appendix S in its approval.
Appendix 5 has now been largely superseded by 40 CFR 51.165(a)
establishing the current requirements for NSR programs.
CR: 25.14 [Hard Copy]; 12.15; 13.10; 15.8

28.10 DATE: March 17, 1989
SUBJECT: Response to Petition Regarding Emissions Offset Exemption for
Resource Recovery Facilities in Part 231 of the NYSIP
FROM: William Muszynski, Acting Regional Administrator, EPA Region 11
TO: Eric Goldstein, National Resources Defense Council, Inc., Charles
S. Warren, Berle, Kass, and Case
DISCUSSION: EPA will hold petition regarding the exemption in question in
abeyance pending further EPA action on the current SIP call. This
is, in part, because the merits of the petitions are closely
linked with EPA's outstanding call for revisions to the NY SIP to
correct the State's failure to meet ozone and CO air quality
standards.
CR: 25.15 [Hard Copy]; 12.16; 13.11; 15.9