PSD Permit Application Requirements

1) BACT - Best Available Control Technology... emission limitation based on the maximum degree of reduction for each pollutant... ...taking into account energy, environmental, economic impacts and other costs which is determined to be achievable. This can be modification of the process, fuel cleaning or treatment, innovative fuel combustion techniques or types of control. The method chosen must be achievable. This analysis should be "top down" meaning that the control methods should be analyzed and the most effective achievable control technology should be chosen.

2) BAT - Best Available Technology - State requirement. Usually the employment of BACT above should be sufficient.

3) Air toxic's modeling -

4) Air quality impact analysis - if VOC net increase is greater than 100 t/y, then and ambient impact analysis will need to be done. This will include the gathering of ambient air quality data. This impact analysis must demonstrate that (1) NAAQS will be met, and (2) any applicable maximum allowable increase over the baseline concentration must be met.

5) Air quality models - Newest version of ISC models. This can be obtained from the USEPA BBS at ( ) xxx-xxxx.

6) Ambient air quality analysis (background and other sources) - Must look at any major sources which impact the area that this change would impact. Continuous air monitoring may be required for a 1 year time period prior to the submittal of the application.

7) Post construction monitoring will be needed if pre construction monitoring is needed.

8) Additional impact analysis (40 CFR 52.21(o)) -

(1) Analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the modification.

(2) provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) Visibility monitoring may be required if near Class areas (none in Ohio?).

PSD Completeness letter
FO sends 1 month after initial application receipt

[date]

[name]
[address]

Dear

This letter is to inform you that your Prevention of Significant Deterioration (PSD) application, requesting an increase in the _____ allowable emission rate for the installation *[or modification]* of your _____ , which was received at _____ on _____ , has been determined to be complete. That is, all the major required elements necessary to make a determination upon the application are present.

The requested change at your facility will result in an increased potential to emit that is above the significance level for *[pollutant]* , therefore, approval is necessary under the PSD requirements. Ohio EPA has been delegated authority by USEPA to administer the program in Ohio. Our division is required, under the federal regulations, to review and determine the completeness of an application. In addition, the Ohio Administrative Code 3745-31, now contains requirements that mirror the federal PSD requirements for attainment area permitting.

We will be continuing our review of all the required aspects of the application, including but not limited to the modeling and the BACT analysis. Ohio EPA staff may request further information or notify you of deficiencies during the review process.

Since your application has been determined to be complete, we will be forwarding a copy to USEPA-Region 5, as we do with all applications, to expedite the overall process. *[In your case, since you have requested confidentiality for some items, our legal staff will review and make their determination of confidentiality. We may request from you a "sanitized" or public viewing version of the application when this review is complete. We will plan to send the sanitized version to Region 5.]*

This determination of completeness letter does not constitute approval of the application, nor does it indicate that a permit will be issued. It does not imply that the application is approvable, only that Ohio EPA has enough information to continue the review. If you ave any questions, please contact _____ of my staff at ( ) - .

Sincerely,

[FO supervisor]

MP/

cc: Mike Hopkins, AQM&P

_____ County

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL
SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION REVIEW
FOR _____, _____ FACILITY

Public Notice is hereby given that the Staff of the Ohio Environmental Protection Agency (EPA) has recommended to the Director that the Ohio EPA issue a Permit to Install (PTI) to _____, _____, Ohio. The preliminary staff determination was issued on _____, 1992.

This draft permit proposes to allow the insta ation of a _____ having _____ _____ The maximum potential emissions from these sources will consist of the following pollutants:

Volatile Organic Compounds (VOC)	_____ TPY
Carbon Monoxide (CO)	_____ TPY
Nitrogen Oxides (NO_x)	TPY

_____

This facility is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by U.S. EPA (40 CFR 52.21) (and the New Source Performance Standards (40 CFR 60 Subpart GG))

The maximum ambient increment allowed by U.S. EPA for _____ on an annual average is ____ micrograms/m^3 (ug/m^3). As a policy, the Ohio EPA allows PSD sources to consume half the available increment. In this case it is _____ ug/m^3 for _____. This source consumes _____

ug/m^3 which is less than one-half of the available increment. Based on this analysis, the project would comply with this policy.

A preliminary staff determination (draft permit no. _____) was issued on _____, 1992. Within 30 days from the date of this notice, any interested party may submit comments or request a public hearing. Comments are to be sent to the Ohio EPA's _____ _____, Ohio _____ Requests for a public hearing should be sent to Mary Cavin, Hearing Clerk, Ohio EPA-Legal Section, 1800 WaterMark Drive, Columbus, Ohio 43215.

Further information concerning this application, which is availabl for public inspection, may be secured from the Ohio EPA at the above address during normal business hours. Telephone number: (

_____

JAN 04 1995 MIKE H

SLD

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

cc: Mary
Jim
Alan
Rynan → Hopkins

NOV 22 1994

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Robert H. Collom, Jr.
Chief, Air Protection Branch
Environmental Protection Division
Georgia Department of Natural Resources
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Dear Mr. Collom:

Your letter dated May 20, 1994, to Winston Smith was forwarded to my office to provide a response. I attempt, below to provide some answers to your questions, particularly as applied to the Wood Products Enforcement Initiative.

Regarding applicability of PSD regulations to a given modification, you correctly state that one of the first steps is to determine whether the increase(s) in potential to emit from the modification itself is greater than the listed significance levels. The contemporaneous time period is triggered only if (1) there is a significant increase(s) in emissions and (2) there is a contemporaneous decrease(s) in emissions which could be applied against the increase in emissions. If the same pollutant is involved, the source may net the increase against the decrease. If the net emissions increase (after deducting creditable decreases) is lower than the significance level for that pollutant, the source could "net out" of PSD review for that modification.

Net emissions increases include any emissions resulting from the modification. Thus, if the modification allows the facility to operate at higher production rates than pre-modification, the increase(s) in emissions associated with the increased production must also be factored in to determine whether the modification triggers PSD applicability. An early statement of EPA's policy with respect to "de-bottlenecking," as this applicability issue is called, was the July 28, 1983, memorandum from Edward Reich, Director, Stationary Source Compliance Division, OAQPS to Michael Johnston, Chief, Air Operations Section, Region X, a copy of which is enclosed for your reference. This policy may be relevant in determining potential past violations of the PSD requirements in the wood products industry.

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The second issue regarding modifications raised in your May 20 letter deals with a series of modifications, each insignificant, which, when summed together, amount to a significant increase for purposes of PSD. The most recent statement of EPA's guidance on this issue is the June 17, 1993, memorandum regarding 3M's Minnesota facility. We support your decision to follow this guidance.[1]

Your letter raised concerns about the use of AP-42 emission factors. The emission factors published in AP-42 were developed to assist federal, state, and local agencies in a variety of efforts, including regulatory development, policy development, modeling, permit writing, and compliance targeting. The objective of AP-42 is to provide a technical library of different pollution control and measuring technologies and methods used by different industry groups. As AP-42 has always stated, it does not yield accurate emissions estimates for individual sources.

Compliance tests have consistently shown the AP-42 factors to be unreliable in predicting emissions from wood products facilities; actual emission levels were significantly higher than anticipated using AP-42. It is important to note that most research used to develop AP-42 was taken from reports submitted to the Agency by wood products sources and, consequently, any underestimation of emissions based on AP-42 is, to some extent, related back to inaccurate data gathered by the industry. In this instance, the AP-42 emission factor for VOCs from plywood veneer dryers appears to underestimate VOC emissions by roughly a factor of six. Testing by the Weyerhaeuser Company confirms AP-42's underestimation of VOCs from plywood veneer dryers.

Enforcement authorities must make compliance determinations on an individual plant basis and one of the best methods of making this determination is to use actual compliance testing conducted at the facility under normal operating conditions. When a source is unsure whether it is in compliance with any air requirement a reliable course of action is to advise the facility to conduct such testing to determine compliance. With regard to determining past emissions levels of facilities where there are no historical emissions measurements, accurate emissions information can be deduced from data collected during current emissions testing and extrapolating back to the time of the modification, where possible. In performing this analysis, EPA prefers to use data from the source being analyzed or data from similar sources.

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[1] Note that this guidance does not apply to modifications affected by § 182(c)(6) of the Clean Air Act.

A final issue raised by your letter concerns whether emissions from presses built in the past will be considered fugitive. As you point out, EPA does not consider emissions from the presses at wood products facilities to be fugitive emissions. The New Source Review rules preamble states that emissions are not fugitive if a source could reasonably capture the emissions, regardless of the source's existing emission collection efforts. (45 Fed. Reg. 52,693, Aug. 7, 1980, see October 21, 1994 memorandum from John Seitz, Director, OAQPS to Air Division Directors, Regions I-X, regarding fugitive emissions, attached). As the 1980 NSR rules preamble states, a source's decision, or the general practice of the sources within that source category, to not collect emissions does not make those emissions fugitive. The emissions from presses in wood products facilities could reasonably be collected and therefore are not fugitive emissions. These emissions must be included in the total emissions of the facility for purposes of determining whether a source is major, or whether a modification is major.

The fact that similar industries (with hot presses that emit similar pollutants) were able to capture and vent such emissions through a stack creates a presumption that press emissions within the wood products industry are not fugitive. In addition, EPA believes that it would have been technically feasible to install hooding and stacks over presses in the 1970's and 1980's, and that the cost of this installation was economically feasible. As a final point, since the roof openings above presses and the dryer emission points could be considered functionally equivalent openings under the NSR regulations, it would be reasonable to conclude that emissions passing through these vents are not fugitive emissions.

I hope that this explanation is of use to you and your colleagues. Please feel free to contact me or my staff at (202) 564-2260 further regarding these and other issues.

Sincerely yours,

Kathie A. Stein, Director
Air Enforcement Division
Office of Regulatory Enforcement

Enclosures

cc: Winston A. Smith, Director
Air, Pesticides, and Toxics Management Division
EPA Region IV

Air Division Directors, Regions I-III & V-X

Branch Chiefs, Regions I-X

Contacts, Regions I-X Headquarters

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

JUL 28 1983

OFFICE OF
AIR, NOISE AND RADIATION

SUBJECT: PSD Applicability Pulp and Paper Mill

FROM: Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Michael M. Johnston, Chief
Air Operations Section - Region X

Your request dated July 6, 1983, to Mike Trutna concerning a PSD applicability issue has been forwarded to my office for response. Your request concerns a pulp and paper company that is proposing to install a bleaching plant and a larger digester. While the construction of these units does not by itself cause increased emissions, emissions from the recovery boiler as a result of this construction activity will increase above the significance levels, but remain below the maximum design permit levels. Your question, is whether this a major modification under the PSD requirements.

The PSD rules at 40 CPR 52.21 (b) (2) define major modifications as "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 subject to regulation under the Act." Net emissions increase is defined as:

> "the amount by which the sum of the following exceeds zero: Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable."

Major modifications are, therefore, determined by examining changes in actual emission levels. Actual emissions are defined as:

"the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with sub- paragraph (ii)-(iv) below

(ii) In 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 a two- 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 units actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(iii) The Administrator may presume that source specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For 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."

Since this source has been in operation for some time, subparagraph (iv) does not apply. Your memo indicates that the recovery boiler is subject to a permit limit. Ray Nye of your staff has informed my staff that this permit limit binds the recovery boiler to a level of 0.1 gr/dscf, but does not provide any discussion on the unit's operating rate. The recovery boiler has operated in the past at a rate of 450 tons/day, consistent with existing digester capacity. Although the regulations provide a presumption for the use of allowable emissions when source specific limits are established, the preamble at 45 FR 52718 (August 7, 1980 states that:

"The presumption that Federally enforceable source specific requirements correctly reflect actual operating conditions should be rejected by EPA or a State, if reliable evidence is available which shows that actual emissions differ from the level established in the SIP or permit."

Therefore, since the recovery boiler could not have operated at a level higher than that provided by the existing digester capacity, any increase in actual emissions at the recovery boiler which will result from the increased capacity provided by the larger digester must be considered for the purposes of PSD applicability.

Once it is determined whether there is a significant net emissions increase (summing the emission increases from the larger digester, new bleaching plant and the increased operation of the recovery boiler) in conjunction with any contemporaneous emission increases and decreases, the PSD requirements should be applied, including BACT and air quality analyses. The regulations at 40 CFR 52.21(j)(3) require that:

> "A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit."

Since the recovery boiler itself will not be undergoing a physical change or change in the method of operation, it will not have to apply BACT. However, all emissions increases must undergo air quality analysis and will consume applicable air quality increments.

This response has been prepared with the concurrence of OGC and CPDD. Should you have any questions concerning it, please contact Rich Biondi at 382-2831.

Edward E. Reich

cc: Mike Trutna
Peter Wyckoff
Dave Rochlin

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 10, Seattle, Washington 98101

DATE: JUL 6 1983

SUBJECT: PSD Applicability

FROM: Michael M. Johnston, Chief
Air Operations Section

TO: Mike Trutna, Chief
New Source Review Office

A pulp and paper company is in the process of transferring the mill to a new owner. The new owner is proposing to install a bleaching plant and a larger digester to accommodate market demand for bleached pulp. While the construction of these units do not by itself cause increased emissions, emission from the recovery boiler as a result of this construction activity will increase above the significant levels, but remain below the maximum design permit limits. The company contends that PSD is triggered only if the net emissions increase from the specific modifications alone exceeds the threshold levels thereby releasing the project from review.

Region 10 has interpreted the term "net emissions increase" as any significant increase in actual emissions from a physical change or change in the method of operation at a stationary source. In this case, do we look at emissions from the specific modifications themselves or do we look at the overall change in actual emissions from the entire facility? The recovery boiler throughput was limited due to the size of the digester. Although the recovery boiler can accommodate the larger digester, we feel that the physical change and change in method of operation constitutes a modification.

If you have any questions please feel free to contact me or Ray Nye of my staff at (FTS) 399-7154.

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

OFFICE O F
AIR AND RADIATION

OCT 14 1994

MEMORANDUM

SUBJECT: Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment

FROM: Mary D. Nichols
Assistant Administrator
for Air and Radiation (6101)

TO: Director, Air, Pesticides and Toxics
Management Division, Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation and Toxics Division,
Region III
Director, Air and Radiation Division,
Region V
Director, Air, Pesticides and Toxics Division
Region VI
Director, Air and Toxics Division,
Regions VII, VIII, IX, and X

I. Introduction

With this memorandum, EPA is amending one aspect of guidance issued September 4, 1992[1] and September 17, 1993[2] regarding requirements for nonattainment areas requesting redesignation to attainment. In these previous memoranda, EPA indicated that States must submit and receive full approval of any part D NSR regulations that were required by the Act to be submitted to EPA prior to or at the time of the submission of a complete redesignation request. The EPA has reconsidered that policy, however, and is establishing a new policy under which

[1]Memorandum entitled, "Procedures for Processing Requests to Redesignate Areas to Attainment," from John Ca1cagni, Director, Air Quality Management Division, to Regional Air Division Directors.

[2]Memorandum entitled, "SIP Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and CO NAAQS On or After November 15, 1992," from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, to Regional Air Division Directors.

nonattainment areas may be redesignated to attainment notwithstanding the lack of a fully-approved part D NSR program, provided the program is not relied upon for maintenance. In addition, EPA is not requiring that existing part D NSR rules be placed in the contingency portion of the maintenance plan pursuant to section 175A of the Act. As discussed below, however, EPA believes its new policy will assure that the statutory goals of part D NSR and section 175A to protect and maintain the NAAQS are achieved.

The EPA believes that this new policy is justifiable under the Agency's general authority to establish de minimis exceptions to statutory. requirements where the application of the statutory requirements would be of trivial or no value environmentally. (See Alabama Power Co.. v. Costle, 636 F.2d 323, 360-61 (D.C. Cir. 1979).]

II. Background/Clean Air Act Requirements

Section 107(d)(3)(E) of the Act requires that a State have in place a fully-approved SIP meeting all the requirements applicable to a nonattainment area under section 110 and part D of title I of the Act in order for the area to be redesignated to attainment.

In addition, section 175A requires that the area must have a fully-approved maintenance plan containing contingency provisions, as necessary, to promptly correct any violation of the applicable NAAQS that occurs after redesignation of the area. At a minimum, the contingency plan must "include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area."

The NSR requirements are contained in section 110(a)(2)(C) and in parts C and D of title I of the Act. Broadly speaking, section 110(a)(2)(C) of the Act mandates the development of a preconstruction review program to assure that the construction or modification of any stationary source is consistent with attainment of the NAAQS. The nonattainment NSR program in part D NSR and the attainment area prevention of significant deterioration (PSD) program in part C apply to major new sources and modifications of existing major sources. (Implementing regulations that set forth minimum requirements for State or local programs and Federal permitting programs have been promulgated at 40 CFR part 51 subpart I and appendix S, and 40 CFR section 52.21, respectively.)

To assure that major new or modified sources do not interfere with reasonable further progress towards attainment, nonattainment area part D NSR requires installation of control

technology representing the lowest achievable emissions rate (LAER) and emission offsets. To prevent "clean air" areas from significant degradation, the PSD program requires installation of best available control technology (BACT) and modeling to show that the new or modified source will not cause or contribute to violation of a NAAQS or a PSD air quality growth increment.

Previously, EPA interpreted these provisions together to require that any area seeking redesignation to attainment must have fully-approved part D NSR rules as part of the required fully-approved SIP. In addition, upon redesignation, the part D NSR rules were to be placed in the maintenance plan contingency provisions in accordance with section 175A of the Act unless the area needed to continue implementing part D NSR as one, element of the maintenance strategy.

III. NSR Policy and Legal Rationale

The EPA now believes that a de minimis exception to the requirement of section 107(d)(3)(E) for part D NSR is justifiable because requiring the adoption and full approval of a part D NSR program as a prerequisite to redesignation would not be of significant environmental value in certain circumstances. The EPA has reconsidered its earlier position because, once an area is redesignated to attainment, the part D NSR program may be replaced by the corollary PSD program, if it is shown through the maintenance demonstration that the area will maintain without part D NSR and because part D NSR need not become part of the contingency plan.

A. Preconstruction Review Programs in Attainment Areas

There are several provisions in the Act and in EPA's regulations that require preconstruction review of new or modified major sources in attainment areas to assess the impact of the proposed emissions increases on the applicable NAAQS. These include the PSD program which covers 100 ton per year (tpy) or 250 tpy or greater sources (depending on the source category), the preconstruction review requirements of 40 CFR 51.165(b) that cover 100 tpy or greater sources, and the Interpretive Offset Rule. As to ozone, there are some particular requirements that apply. The EPA believes these programs will ensure that major new sources and modifications are given adequate preconstruction review.

After redesignation to attainment, State PSD rules, or Federal PSD rules in a delegated program, must ensure, as required by sections 165(a)(3)(B) and 110(a)(2)(C) of the Act, that preconstruction review of new and modified major sources will prevent increases in emissions that would cause or contribute to violations of the NAAQS. [See 40 CFR 51.166(k), 40 CFR 52.21(k).]

In addition, EPA's regulations at 40 CFR 51.165(b) require that SIP's contain preconstruction review requirements that apply to new or modified 100 tpy or greater sources of a pollutant in areas designated attainment or unclassifiable for the pollutant in cases where the new or modified source would contribute to a violation of a NAAQS. This requirement provides for preconstruction review-for sources that are exempt from PSD due to PSD's higher (250 tpy) major source threshold for certain source categories.

In the absence of SIP provisions that comply with 40 CFR 51.165(b) or a part D NSR program, States would have to use the Interpretive offset Rule at 40 CFR 51 appendix S as a surrogate rule for permitting new and modified major sources in these attainment areas. (See 45 FR 31310, May 13, 1980.)

For S02, PM-10, NO_2 and CO, EPA has established levels of ambient impacts to determine whether the major new or modified source would cause or contribute to a violation. Where the source is found to cause or contribute to a violation, the source would be subject to more stringent technology and emissions mitigation requirements of appendix S or a 40 CFR 51.165(b) program.

With particular respect to ozone, because of the difficulty in modeling the impact of emissions from specific sources on ozone formation, EPA regulations [40 CFR 51.165(b)(3) and appendix S] do not fully address how emissions of ozone precursors should be treated to assure that major new or modified sources do not cause or contribute to a NAAQS violation. Nevertheless, if preconstruction monitoring or other information indicates the area is not continuing to meet the standard after redesignation to attainment, appendix S or a 40 CFR 51.165(b) program would also apply. The EPA believes that in any area that is designated or redesignated as attainment under section 107, but experiences violations of the NAAQS, these provisions (and any implementing SIP provisions) should be interpreted as requiring major new or modified sources to obtain VOC emission offsets of at least a 1:1 ratio, and as presuming [consistent with section 182(f)] that 1:1 NOx offsets are necessary .[3]

In addition, attainment (PSD) plans require that major new and modified sources apply BACT. Generally, BACT differs from LAER by enabling permitting authorities to justify, based on

[3]The EPA is in the process of revising EPA's rules for NSR and PSD, some of which will replace appendix S. However, the proposed revisions will not change the substantive permitting requirements where an attainment area is violating the ozone NAAQS.

economic, energy, and environmental impacts, the use of control technologies less effective than the most stringent available. In an area that is not meeting the NAAQS, EPA believes that due to consideration of the NAAQS violations, the state may impose a more stringent level of control than might be otherwise selected as BACT. [See Draft New Source Review Manual, page 8.54 (October 1990).]

Taken together, these preconstruction review programs can assure that major new or modified sources achieve the statutory goals of part D NSR and the maintenance provisions of section 175A.

B. Part D NSR and Contingency Provisions

Requiring the full approval of a part D NSR program would ensure that the program would become a contingency provision in the maintenance plan. As stated above, pursuant to section 175A(d) and section 107(d)(3)(E), the contingency plan must contain, at a minimum, all measures contained in the nonattainment SIP. However, EPA is interpreting the term "measure" as used in section 175A(d) so as not to include part D NSR.

The tern "measure" is not defined in section 175A(d) and Congress utilized that term differently in different provisions of the Act with respect to the PSD and part D NSR permitting programs. For example, in section 110 (a) (2) (A) , Congress required that SIP's include "enforceable emission limitations and other control measures, means, or techniques . . . as may be necessary or appropriate to meet the applicable requirements of the Act." In section 110(a)(2)(C), Congress required that SIP's include "a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D (i.e., PSD and part D NSR)." [Emphasis added.]

If the term "measures," as used in sections 110(a)(2)(A) and 110(a)(2)(C), had been intended to include PSD and part D NSR, there would have been no point to requiring that SIP's include both measures and preconstruction review under parts C and D (PSD or part D NSR). Thus, in sections 110(a)(2)(A) and (C), it is apparent that Congress distinguished the requirement for "measures" from the requirement for preconstruction review programs. On the other hand, in other provisions of the Act, such as section,161, Congress appears to have included PSD within the scope of the term "measures."

The fact that Congress used the undefined term "measure" differently in different provisions of the Act indicates that the term is susceptible to more than one interpretation and that EPA has the discretion to interpret it in a reasonable manner in the context of section 175A. Inasmuch as Congress itself has used the term in a manner that excluded PSD and part D NSR from its scope, EPA believes it is -reasonable to interpret "measure," as used in section 175A(d), not to include part D NSR. The reasonableness of this interpretation is further supported by the fact that PSD, a program that is the corollary of part D NSR for attainment areas, goes into effect in lieu of part D NSR,[4] and that, as discussed above, EPA intends to implement the PSD and other NSR programs in a way that will achieve the basic statutory goals of part D NSR. Therefore, EPA does not believe that part D NSR need be part of an area's contingency plan.

IV. Other Recquired Programs

The EPA is not changing its previously stated policy with respect to the need for States to adopt and receive full approval of other programs required by the Act prior to or at the time of the submission of a redesignation request. The existence of a corollary program for attainment areas distinguishes part D NSR from other required programs under the Act, such as enhanced inspection and maintenance and reasonably available control technology (RACT) programs, which have no corollary program. Moreover, EPA believes that those other required programs are clearly within the scope of the term "measure" as used in section 175A.

For further information regarding part D NSR requirements for areas redesignating to attainment, please contact Carla Oldham at (919) 541-3347; for general information about PSD requirements for attainment areas, contact Dennis Crumpler at (919) 541-0871.

cc: Air Branch Chief,- Regions I-X

[4]EPA is not suggesting that NSR and PSD are equivalent, but merely that they are the same type of program.

Inside EPA's
Clean Air Report
An exclusive biweekly report on the Clean Air Act and U.S. air policy

Special Report — July 15, 1994

NSR Rule

New Mexy Jm

In an effort to streamline scope of program . . .

AGENCY RELEASES FIRST DRAFT OF NEW SOURCE REVIEW REGULATIONS

EPA released a draft new source review (NSR) rule July 13 to subcommittee members charged with streamlining the agency's lengthy permit and review process for new emission sources. In the draft, agency officials attempt to simplify the scope of the new source review program by outlining a special applicability test geared at sources wishing to net out of NSR. Excerpts from the draft rule appear below.

The NSR reform process has been the subject of a two-year consensus building effort by industry, environmentalists, state officials and EPA. Subcommittee members will meet July 19-20 to discuss the rule.

In the draft rule, EPA describes two methods by which a facility can gain exemption from major NSR. The first category encompasses units that have recently been subject to a strict review for emissions controls, such as those that meet the best available control technology/lowest achievable emission rate (BACT/LAER) criteria.

In the second category, the draft rule offers a special applicability test for units that have state-of-the-art emissions controls but have not been subject to NSR permitting. The special test is geared toward units that need to minimize emissions in order to "net out" of new source review. Netting is the process by which a company designs or modifies a unit so a change in operations yields no net increase in emissions. This process can allow some units to avoid NSR entirely.

The special applicability test would use a maximum hourly emissions test similar to the New Source Performance Standard (NSPS) test outlined in the Clean Air Act. But the rule indicates that some major concerns with the special applicability test remain unresolved.

Under this test, changes that do not increase the unit's hourly potential emissions would not be considered a physical or operational change and would not trigger major new source review, according to the rule. However, the question remains as to what criteria distinguishes a poorly controlled unit from a well-controlled one, according to the draft. If the agency's criteria allows the exemption of a broad range of units, it could transform the existing applicability system into one based solely on potential emissions, according to the draft. The agency is seeking public comment on this issue.

The draft rule also includes a new applicability approach for major modifications based on plantwide applicability limits (PALs). PALs offer companies the flexibility to increase and decrease emissions within a plant in exchange for a cap on overall emissions. Excerpts from the PAL approach begin on page six.

Excerpts from EPA's Draft NSR Applicability Proposal

III. Applicability of the New Source Review Program

The issue of NSR applicability proved to be one of the most difficult and divisive issues for the CAAAC's NSR Reform Subcommittee. While the issue was considered by a subgroup of the Subcommittee for several months and debated by the full Subcommittee during several sessions, consensus proved elusive. As a result, no formal recommendations were proffered to the CAAAC or EPA on this issue. Still the discussions provided EPA with a better understanding of the concerns of all sides and revealed a few areas of potential agreement. There were also common elements in many of the competing proposals circulated by members of the Subcommittee. Thus, while there was no CAAAC resolution of the issues, the following package of applicability measures builds upon the Subcommittee's deliberations.

Many Subcommittee participants focused on the complexity and inclusiveness of EPA's current applicability test as it applies to modifications at existing emissions units. Most applicability proposals put forward by Subcommittee members attempted to address this area of the applicability issue. As explained in more detail in the following sections, EPA is today proposing several changes to its applicability regulations to address these concerns.

First, EPA is proposing a less inclusive and simplified modification test for emissions units that have recently undergone a BACT or LAER review under Federal NSR or a similar technology review under a State minor NSR program. This proposed revision recognizes the reduced environmental risk from these units and provides further incentives for sources to meet the current requirements of these Federal or State technology programs. (See Section III(B).)

Also EPA is today proposing to clarify that where the physical or operational change at a plant does not involve an emissions unit, NSR will generally not apply, so long as all permit limitations remain in effect and unchanged. (See Section III(C).) In addition, EPA today proposes to change the baseline for determining if a physical or operational change will result in a significant emissions increase and thereby trigger major NSR. Specifically, EPA proposes to allow sources to

consecutiv [illegible] "[illegible]" pre-change em[illegible] levels. [illegible] revision would reduce the impact that the current applicability approach has on cyclical industries, a problem recognized by many Subcommittee members. (See Section III(D).)

The Subcommittee was also interested in EPA's formalizing in its NSR regulations its policies on pollution control projects and source wide caps (dubbed "Plantwide Applicability Limits" or PALS). Both of these revisions, included in today's proposal, would allow States to approve these items where they meet specified criteria. (See Section III(E) for pollution control projects; III(F) for PALS.)

Industry representatives have also requested clarification of the existing "routine repair" exclusion from physical or operational change. Section III(G) of this Preamble discusses a proposed definition of "routine maintenance, repair and replacement."

Two other proposed actions are discussed in today's notice. First, EPA is proposing for comment an applicability approach which EPA committed to consider and take final action on in accordance with the Exhibit B settlement of the CMA lawsuit described above. (See Section III(H).)

In addition, EPA is seeking comment on what actions it should take with regard to its current applicability rules for modifications at electric utility steam generating units adopted as part of the "WEPCO" rule (57 FR 32314). Specifically, three options for the "actual-to-future actual" methodology are discussed: (1) retaining the methodology for utilities only; (2) expanding it to all source categories; and (3) eliminating the methodology. In conjunction with the first two options, EPA also seeks comment on whether the "demand growth" exclusion or other provisions of the existing rule should be changed. (See Section III(I).)

A. Background

1. Current Provisions

As previously discussed, the major NSR provisions of part C (PSD) and part D (nonattainment requirements) of title I of the Act apply to both the construction of new major sources and the major modification of existing major sources. For new, "greenfield" sources, applicability is a fairly straightforward proposition. The Clean Air Act, as implemented by EPA's regulations, sets applicability thresholds for nonattainment areas (annual emissions above 100 tons per year or smaller, depending on the severity classification of the nonattainment area) and for PSD areas (100 or 250 tons per year, depending on the source type). A new source with a "potential to emit" in excess of the applicable threshold amount triggers NSR.[1]

The determination of what should be classified as a modification subject to major NSR presents more difficult issues. The modification provisions of the NSR programs in parts C and D are based on the broad definition of modification in section 111(a)(4) of the Act: The term "modification" 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." That section contemplates a two-step test for determining whether activities at an existing major facility constitute a major modification subject to new source requirements. In the first step, the reviewing authority determines whether a physical or operational change will occur. If so, then the permitting authority proceeds in the second step to determine whether the physical or operational change will result in an emissions increase over baseline levels.

The reference to "any physical change . . . or change in the method of operation" in section 111(a)(4) of the Act could -- read literally -- encompass the most mundane activities at an industrial facility (even the repair or replacement of a single leaky pipe, or an insignificant chan[illegible] [illegible] altered). However, EPA has reco[illegible]nized that C[illegible] [illegible] activity at a source subject to the [illegible] requirement under parts C and D. As a result, EPA has adopted several exclusions from the "physical or operational change" component of the definition. For instance, EPA has specifically recognized that routine maintenance, repair and replacement, and changes in hours of operation or in the production rate are not by themselves considered a physical change or change in the method of operation within the definition of major modification [see current rules at 40 CFR 52.21(b)(2)(iii), 52.24(f)(5)(iii), 51.165(a)(1)(v)(C)(1), and 51.166(b)(2)(iii)].

The EPA has likewise limited the reach of the second step of the statutory definition of modification by excluding all changes that do not result in emissions increases above "significance" levels for the pollutant(s) in question [see, e.g., 40 CFR 51.165(a)(1)(x)]. Taken together, these regulatory limitations restrict the application of the NSR program in parts C and D to only "major modifications" at existing major stationary sources [see, e.g., 40 CFR 51.165(a)(1)(V)].

One key attribute of the NSR program in Parts C and D is that sources typically "net" modifications out of review by coupling proposed emissions increases at the source with contemporaneous emissions reductions. The landmark decision in Alabama Power Co. v. Costle, 636 F.2d 323 (D.C. Cir. 1979), endorsed use of this "plantwide bubble" concept in the PSD program. The court reasoned that since the principal purpose of the PSD program was to prevent deterioration in air quality, a PSD permit was unnecessary so long as new construction at an existing plant did not increase overall emissions to the environment. Thus, under EPA regulations promulgated in 1980 following Alabama Power (which are for the most part still in place today), source owners are given free rein to modify or even completely replace or add emissions units without obtaining a PSD permit so long as "actual emissions" do not increase over baseline levels at the plant as a whole. In 1984, EPA regulations expanding the use of the plantwide bubble to the nonattainment area new source review program under Title I, Part D of the Act was upheld in Chevron, U.S.A., Inc. v. NRDC, 467 U.S. 837 (1984).

As discussed in the general background section, applicability of the part C and D NSR provisions must be determined in advance of construction and is pollutant-specific. In cases involving existing sources, this requires a pollutant-by-pollutant determination of the emissions change, if any, that will result from the physical or operational change. The EPA's 1980 regulations implementing the PSD and nonattainment NSR programs thus inquire whether the proposed change constitutes a "major modification," i.e., a nonexcluded physical change or change in the method of operation "that would result in a significant net contemporaneous emissions increase of any pollutant subject to regulation under the Act." [See, e.g., 40 CFR 52.21(b)(2)(i)]. A "net emissions increase" is defined as the increase in "actual emissions" from the particular physical or operational change, taking into account the use of emissions control technology and restrictions on hours of operation or rates of production where such controls and restrictions are federally enforceable, together with any other contemporaneous increases or decreases in actual emissions [see, e.g., 40 CFR 52.21(b)(3)(i)].[2] In order to trigger major NSR, the net emissions increase must exceed specified "significance" levels when compared to a pre-modification "baseline" [see, e.g., 40 CFR 52.21(b)(2)(i) and 40 CFR 52.21(b)(23)].

The EPA's existing regulations define baseline emissions as "the average rate, in tons per year, 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" (see, e.g., current rules at 40 CFR [illegible]). The Administrator "shall" allow use of a different [illegible] period

[illegible] 2 years [illegible] preceding [illegible] which the baseline [see 56 FR 52670, 52705, 52717]. However, in some cases it has allowed use of an earlier period.

With respect to modifications at existing sources, a prediction of whether the physical or operational change will result in a significant net increase in the source's actual emissions following the modification is thus necessary. In part this involves a straightforward and readily predictable engineering judgment -- how much air pollution the modified source could emit on an instantaneous basis under the planned production processes and pollution controls. It also necessarily involves a prediction of utilization rates -- how much of the source's full production capabilities as modified will be used per hour, and how many hours per year the source will be operated.

The regulations provide that when an emissions unit "has not begun normal operations," actual emissions equal the "potential to emit of the unit." [See, e.g., 40 CFR 52.21(b)(21)(iv).] The EPA and States interpret this provision as creating an initial presumption that because the changed unit "has not begun normal operations" following the change, it will operate at its full capacity year round, i.e., at its full potential to emit. The owner or operator is free to rebut this presumption by agreeing to not increase its level of actual emissions over pre-modification levels through the use of some combination of federally enforceable operational restrictions and pollution controls. The effect of this methodology is to place on the owner or operator the burden of assuring that actual emissions will not increase above baseline levels following the physical or operational change.

2. Litigation over the Actual-to-Potential Test

Industry has long been concerned that most physical or operational changes will initially register as emissions increases under the actual-to-potential test because most sources are operated at less than full capacity on an annual basis. As a result, a change at the source that does not affect instantaneous emissions rates shows up as a presumed emissions increase because the pre-modification actual utilization is less than post-modification utilization, which is presumed to reflect full capacity at all times. Hence, there is a widespread need to accept federally enforceable limits on post-modification emissions or operations to overcome the presumption of increased emissions in order to avoid NSR.[3] As a legal matter, industry argues that EPA's presumption should not apply in every case -- that is, EPA cannot properly presume that every nonroutine or otherwise nonexcluded change to an existing emissions units will result in that unit being utilized differently. They contend that the fact that a unit is "modified" should not necessarily mean that it has not "begun normal operations" following the change.

Two cases have addressed EPA's application of the actual-to-potential test, and specifically, the interpretation of the phrase "begun normal operations." In Puerto Rican Cement Co. v. EPA, 889 F.2d 292 (1st Cir. 1989), the court upheld EPA's application of the actual-to-potential methodology in a case involving renovations to a cement plant. The court specifically upheld EPA's interpretation that the words "emissions unit that has not begun normal operations" includes modified units as well as new units, citing a passage from the preamble that, in the court's view, made it clear that EPA intended to apply the actual-to-potential test to a "new or modified unit." 889 F.2d at 298 (45 FR 52676, 52677) (emphasis added by court).

The actual-to-potential test was also at the heart of a legal challenge brought by Wisconsin Electric Power Co. (WEPCO). See Wisconsin Electric Power Co. v. Reilly, 893 F.2d 901 (7th Cir. 1990). WEPCO proposed extensive life extension renovations [illegible] or.

[illegible] arguing that [illegible] as projections, would increase reliability and decrease operating costs, thus likely leading to increased utilization and, hence, increased actual emissions. The EPA contended that these units -- as modified -- had not "begun normal operations" and EPA would have to rely on the units' post-change potential emissions to determine if the change would result in an emissions increase.

However, the Seventh Circuit disagreed with EPA's interpretation that "normal operations" had not begun. The court instead coined the phrase "like-kind replacement" to describe the type of renovations occurring at the WEPCO plant, where steam drums and other major components were replaced by equipment of similar design and function. 893 F.2d at 917. The court said that where the renovations were "like-kind replacements," EPA could not reasonably interpret its regulations to say that such a unit was so different that it has not begun normal operations.

Following the remand in the WEPCO case, EPA employed an "actual-to-future-actual" test for the WEPCO facility comparing WEPCO's emissions during the baseline period to estimated future actual emissions drawn from utilization projections available in the record.

3. The WEPCO Rulemaking

In 1992, EPA promulgated revisions to its applicability regulations creating special rules for physical and operational changes at electric utility steam generating units [see 57 FR 32314].[4] In this rule, commonly referred to as the "WEPCO Rule," EPA adopted an actual-to-future-actual methodology for all utility changes except the construction of a new electric generating unit or the replacement or reconstruction of an existing emissions unit. Under this methodology, a utility compares its actual annual emissions before the change with its projected annual emissions after the change to determine if a physical or operational change would result in a significant increase in emissions. The EPA is today seeking comment on the future of this methodology as is described in more detail in section III(I).

The EPA also made changes to the baseline portion of the actual-to-future-actual methodology. The EPA retained the existing regulatory language, but adopted a presumption that utilities may use as baseline emissions the actual emissions from any two consecutive years within the prior five years. This presumption would be superseded by the baseline changes proposed by EPA in section III(D).[5]

B. A "Clean Unit" Applicability Test

1. Introduction

The EPA is today proposing a new applicability test for changes to existing emissions units that already have state-of-the-art controls. In general, this new "clean unit" applicability test will allow States to assess proposed changes to an existing emissions unit based on the unit's permitted emissions rate (for units already subject to major NSR BACT or LAER) or based on its hourly potential emissions (for units which have not undergone major NSR review but which still meet BACT or LAER equivalent standards). Where the proposed change will increase the unit's emissions rate over the unit's allowable limit or hourly maximum, whichever applies, the source may still avoid NSR by netting the proposed increase under the existing rules. This proposed change would both simplify the applicability test for qualifying units and increase a source's flexibility in making changes at these units.

As discussed above, EPA typically applies an actual-to-potential test to determine whether a proposed change will result in an emissions increase at the source. However, EPA's current regulations [illegible] the permitting authority may assume that "source-specific allowable emissions for the unit are equivalent to

the actual emissions of the unit" [see current rules at 40 CFR 52.21(b)(21)(iii)]. If this presumption is made and not rebutted by contrary information, the permitting authority would calculate whether there has been an emissions increase by comparing the unit's allowable emissions before the change to its potential emissions (including all allowable limits on emissions) after the change. In practice, EPA has limited this provision to those situations where a source may be emitting at higher rates than the allowable limit, or where insufficient data or measurement techniques exist to accurately quantify actual emissions levels. Where the actual emissions data are available and show that the actual emissions differ from the allowables, the presumption is overcome and actual emissions should be used (45 FR 52705, 52718).

During the Applicability Subgroup's discussions, several proposals were put forward which sought to expand when allowable emissions could be used. One industry proposal called for an "allowable to allowable" test to be applied to all "previously reviewed" sources. A compromise applicability package also included a proposal to use allowables for applicability in limited situations, such as a source that has already purchased offsets to cover its allowable limit. Another compromise proposal sought to apply an new source performance standard (NSPS) hourly "potential-to-potential" test to small changes at existing emissions units. While none of these proposals garnered the full Subcommittee's support, representatives of State and local regulators as well as environmental groups expressed general support for the idea that "benign" changes at existing emissions units do not need to face the actual-to-potential test and the complicated netting rules of existing NSR in every instance. There was also support for the proposition that the NSR applicability test should provide some deference to sources that have already undergone major NSR.

The EPA, after careful consideration of these discussions, has determined that the best approach is one that focuses on the existing emissions performance of a unit, rather than the change being proposed. Almost all sides identified the goal of ensuring that modified units apply state-of-the-art controls as being of paramount importance. Accordingly, where an emissions unit already meets this goal, environmental concerns associated with proposed changes are reduced. For example, it is EPA's experience that in many cases where an existing well controlled unit triggers major NSR, the permitting process does not necessarily result in better controls. On the other hand, where the review is focused on units which have not recently been required to meet a control technology requirement, NSR review can be expected to result in an appreciable level of additional control and therefore result in meaningful reductions in actual emissions to the atmosphere.

2. Description of the Proposal

The EPA is today proposing an exclusion from NSR for two categories of emissions units based on the level of control achieved at the unit. Each category would have its own test, with a different level of stringency, to determine whether a physical or operation change would occur. In the first category are emissions units which have recently undergone the most demanding review for emissions controls, a formal BACT or LAER review pursuant to major NSR. These units, as a consequence of having been permitted under major NSR, will have unit-specific BACT/LAER limits. Under EPA's proposal, applicability can be based on this allowable limit for the first ten years after the permit is issued.

Specifically, under this test, modifications to an emissions unit would not be considered a physical or operational change at the source provided the existing allowable emissions limit implementing the BACT or LAER determination remain in place. In other words, if the proposed change does not require a change in any unit-specific condition on emissions or operations related to emissions (or any averaging time) put in place to satisfy the BACT or LAER determination, major NSR is not applicable.

Provided the unit can still comply with its permitted allowable emissions, the source is free to make any change at the permitted unit including those which could affect a unit's efficiency, capacity, availability, longevity and utilization. However, changes which would bring into question the original emissions unit's BACT/LAER control level or air quality impact (e.g., modified stack parameters which would cause or contribute to violation of any applicable ambient standard, replacement of the unit with a different type or size of unit, or reconstruction of the unit) would not be allowed.

The EPA is proposing that the new test apply to any unit which has received a major NSR permit within the ten years prior to the date of the proposed change. The choice of a ten year period acknowledges that a newly permitted source may take several years to realize its full operational level as it ramps up over its initial years of operation. Ten years also represents the outer bounds, in EPA's judgment, of the period over which a BACT or LAER determination can be considered current. The EPA solicits comment on the use of a longer (e.g., 15 years) or shorter (e.g., 5 years) period as being more appropriate.

It is EPA experience that many sources only keep accurate records on emissions or operations for three to five years, unless otherwise expressly required to do so. The EPA is therefore also soliciting comment on the effect a 10 year look back period would have on the accuracy of the baseline calculation, the need to condition the use of such a period upon the accuracy and completeness of available data, and the need to establish specific criteria for accuracy, completeness and recordkeeping when using old data.

The EPA is aware that in many cases an emissions unit not subject to major NSR is constructed or retrofit with a control technology or strategy nevertheless equivalent to the best controls applied in practice. Usually, this occurs when a source needs to minimize emissions in order to "net" a unit out of review or applies controls to comply with other provisions of the Act. In addition, a few states have a BACT/LAER equivalent control technology requirements as part of their minor NSR permitting program.

The EPA is therefore also proposing a special applicability test for emissions units which have state-of-the-art emissions control technology, but which have not been permitted under major NSR. For these units, EPA is proposing to use a maximum hourly emissions test patterned after the NSPS test found at 40 CFR 60.14. Specifically, for units within this second category, changes which do not increase the unit's hourly potential emissions would not be considered a physical or operational change and thus would not trigger major NSR.[6] For this exclusion to work, it is of course necessary to distinguish a well-controlled unit from a poorly controlled one. In other words, what criteria distinguish a unit eligible for this exclusion from one which shall not be entitled to rely on it? Criteria which allow a broad range of units to qualify could largely transform the existing applicability system into one based solely on potential emissions. The EPA solicits comment on the legal and policy implications of this approach.

One starting point is the level of control representative of current BACT/LAER. That is, if the unit in question has an emissions level equal to the most recently permitted BACT/LAER for its class or category of source then it generally would qualify for category two. The EPA believes that such a stringent test may, however, eliminate many units that while not controlled to the exact BACT or LAER limit, still should qualify as well-controlled

for this reason, is consideri two other mean

qualifying units for category two. The first would be based on an average of BACT/LAER for same or similar sources over a reasonably recent period of time (e.g., most recent three years). The second would be based on the unit's control level being within some percent (e.g., five or ten percent) of the most recent, or average of the most recent, BACT/LAER levels. The EPA is soliciting comment on the three different methods described above, as well as alternative criteria for use in differentiating between well-controlled and poorly controlled units for classification purposes.[7]

Under today's proposal, a unit that does not qualify for this exclusion could install controls meeting the criteria EPA establishes for category two units and thereby qualify for the exclusion. However, the controls or pollution reduction strategy must be in place and federally enforceable at the time the source relys on an exclusion under this provision. Finally, even for units excluded under this proposed revision, the modification must still comply with all otherwise applicable Clean Air Act and SIP requirements including minor new source review requirements.

C. Changes to Non-emitting Source Operations

The EPA is also proposing to add to the list of activities excluded from the definition of physical or operational change any proposed changes to existing non-emitting activities at the source. Under this proposed revision, sources could undertake changes at non-emitting facilities within the source (e.g., portions of a source devoted to parts assembly, transfer and packaging activities, and other activities that do not emit air pollutants), even though such changes would result in an increase in emissions at the source, provided that the source would continue to be operated in compliance with all applicable permitted limits (e.g., emissions, capacity, materials usage restrictions).

The current NSR regulations require only new or modified emissions units to apply BACT/LAER as a result of a major modification to the source [see, e.g., 40 CFR 52.21(j)(3)]. Although an increase in emissions at a source occurring solely from a physical or operational change at a non-emitting activity triggers major NSR, the review will not result in the application of BACT or LAER. Consequently, EPA believes that this proposed exclusion for changes at non-emitting units is reasonable considering the additional certainty and flexibility it adds to the major NSR applicability process. In addition, all otherwise applicable minor source permitting provisions remain in effect and nothing in today's proposed rule would allow a change that could cause or contribute to a violation of an air quality or PSD standard, or adversely impact the air quality related values (including visibility) of a Class I area. Thus, EPA believes that most of the benefits derived from the NSR program would not be compromised by this treatment of non-emitting activities. The only significant environmental detriment of this proposal is that it lessens the State's ability to manage increment consumption at levels below the maximum allowable concentration. The EPA believes this is not a substantial concern for most States but solicits comment on this issue.

The proposed exclusion would also cover the direct replacement of the non-emitting activity to the extent the replacement was equivalent to the original activity in terms of its effects on the source emissions. Specifically, if at its maximum rated capacity, the replacement activity's effect on emissions levels at the source would be no greater than the activity it replaced, the replacement would be excluded. The modification of a non-emitting activity in a way that results in emissions of air pollutants from the activity would, however, be considered a physical or operational change. Likewise, the replacement of a non-emitting unit with an emissions unit or activity would be a physical or operational change.

The construction of a new non-emitting activity would, however, not be excluded if the activity required an existing emissions unit to increase its level of operation to accommodate the new activity. In this type of circumstance, the EPA believes it is not reasonable to exclude new non-emitting activities which will cause the source to increase its operations, even where the new operational levels are consistent with the source's permitted allowable emissions. The EPA is proposing that the magnitude of the increase be measured as the actual expected increase in emissions at the source which relates to the maximum level of operation of the new activity. For example, a new non-emitting process line at its maximum rated capacity would require 10 percent of the total output from the plant's power boiler. In this case the total emissions associated with the new activity would be the emissions equivalent to 10 percent of the operation of the power boiler. Since as discussed above, in such circumstances a major NSR review would not impose any technology requirements, the EPA is soliciting comment on whether sources which have modeled allowable levels in compliance with all applicable standards and requirements should be allowed to exclude the construction of any non-emitting activity from review. The EPA is also soliciting comment on the need to amend the BACT/LAER requirements to apply to emissions units which, although not themselves being modified, will nevertheless increase emissions as a result of a non-emitting activity.

D. Revision to the Netting Baseline

Today's notice describes and solicits comment on a new method for determining a source's baseline for "netting" purposes.

1. Introduction

Industry has long argued that an actual-to-potential test inappropriately forces sources to make a "use or lose" choice. Every time a source makes a non-excluded change, the actual-to-potential test forces a source to limit its post-change emissions to its emissions in the immediately prior two years or some other representative period or else face NSR. This problem, for example, has been especially acute in the automobile industry where low utilization rates for many years leave plant managers with the choice of surrendering capacity (that would not be considered representative of normal operations under the current NSR rules) or taking the time and expense to secure a major NSR permit for even small changes to a portion of the plant.

Provisions in the existing regulations which allow the permitting authority to allow the use a different, "more representative" period have not, in the view of many Subcommittee members, alleviated the problem. As with other aspects of current netting rules, establishing more representative baseline periods can be complex and time-consuming, and involve often-disputed judgment calls.

Several industry applicability proposals included changing to a baseline that allows sources to use the highest 12 months out of the previous 10 years. Generally States favored this increase in flexibility. Moreover, some of the environmental group representatives recognized that the existing baseline approach has the impact of taking away "used and useful" capacity and that a longer baseline period would be appropriate. On the other hand, these participants were concerned that the test for determining a net emissions increase take into account not only annual emissions levels but short-term levels as well. The proposal outlined below attempts to meet these criteria.

2. The EPA Proposal

As discussed, under the current applicability methodology, the actual pre-change emissions of the source are compared to the potential post-change emissions of the unit as modified to determine if the change will result in significant emissions increase. Actual emissions are generally the quantity of pollutant actually emitted

during the 2-year period just before the modification, although a different period may be used if the permitting authority determines that the period is more representative of normal source operations. In the WEPCO rule, EPA announced a new baseline presumption for utilities under which EPA would consider any 2 consecutive years within the 5 years prior to the proposed change as representative of normal source operations. The EPA is today proposing to extend the time period to 10 years and allow sources to base their actual emissions on the highest consecutive 12-month period during this 10-year period. This change would be available for all source categories and would be subject to the restrictions discussed below.

First, EPA's intent is to allow sources to determine applicability based on their highest level of utilization and not necessarily their highest emissions rate. The emissions rate of units at issue may be subject to any number of Federal or State restrictions (i.e., RACT, NESHAP, MACT, BACT, LAER, NSPS) as well as voluntary limits (e.g., reductions used for netting, offsets, Emission Reduction Credits creation, etc.) and these limits may have been imposed since the time the source achieved its highest emissions level. However, these limits must be included in establishing the baseline emissions. For this reason, EPA is today proposing that sources calculate the baseline by using their current emissions factor in combination with the utilization level from the time period selected. This safeguard insures that no significant loss of environmental protection will result from the proposed change.

As noted, EPA's existing regulations provide that the source may seek to use another time period outside the two preceding years upon a finding by the Administrator (or the permitting authority) that this other period is "more representative" of normal source operations. This provision has been a source of confusion and uneven implementation. The EPA therefore today proposes to eliminate this provision. In other words, a source may simply choose the highest consecutive 12-month period of utilization within the past 10 years and neither States nor EPA will retain any discretion to allow a time period outside this extended range.

3. Protection of Short-term Increments and NAAQS

In discussions of a longer baseline, environmental group representatives linked any change from the existing baseline with the adoption of safeguards for short term NAAQS and PSD increments as well. Essentially, these representatives suggested that the current netting analysis be changed to require a source to go through major NSR when there is a net increase in daily [or weekly or monthly, depending on the emission tracking capability of the source] emissions when past actual emissions are represented by the highest day [or week or month] in the previous year. This step could provide assurances that peak emissions, which could cause violations of short-term NAAQS, would not be allowed to increase without full NSR. Some subgroup members argued that the short-term test should be an air quality screening test rather than an NSR trigger.

The EPA has carefully considered the possibility of adding a short-term "increase" test to the netting calculation. However, EPA has determined not to add this provision for two reasons. First, EPA is concerned that a test that freezes a source at its highest hourly (or daily or weekly) emissions would be too easy to evade. For a short time, sources can and will run at maximum capacity so that the baseline hour or day would likely be nothing less than the source's maximum potential emissions.

Moreover, EPA is not sure that limiting the source to its highest past hourly or daily emissions level will necessarily provide any additional protections to NAAQS, increments or Class I AQRVs. The current regulations already restrict the creditability of some decreases in emissions where the overall netting transaction could jeopardize air quality. In particular, a provision in the definition of "net emissions increase" allows credit for a reduction only to the extent that it has approximately the same qualitative significance for public health and welfare as the increase from the proposed change [e.g., 52.21 (b)(3)(iv)(c)]. In a June 28, 1989 rulemaking (see 54 FR 27286) EPA clarified that aspect of the regulations to require that, despite the absence of a significant net increase in emissions, an applicant proposing to net out of review must demonstrate that the proposed netting transaction will not cause or contribute to an air quality violation before the emissions reduction may be credited.

To ensure that the change to a netting baseline based on the highest year out of the last 120 consecutive months does not adversely impact short (or long) term ambient standards, EPA is proposing a clarifying change to the regulations which specifically requires that, to be creditable for netting purposes, an emissions reduction must be sufficient to prevent the proposed increase from causing or contributing to a violation of NAAQS or PSD increment or result in an adverse impact on AQRVs (including visibility) of Class I areas. As discussed above, this requirement is inherent in EPA's current regulations and, therefore, should already be part of any netting analysis. The EPA also solicits comment on the need to provide such explicit regulatory language to safeguard against netting transactions causing or contributing to violations of a NAAQS, PSD increment or AQRV.

Text of Agency's PAL Approach

F. Plantwide Applicability Limits

The EPA today proposes a new applicability approach for major modifications based on plantwide applicability limits (PALs). The EPA proposes to simplify the NSR major modification applicability process through the use of voluntary, source-specific PALs. The voluntary source-specific PAL is a straight forward, yet flexible approach to determining if an emissions increase occurs from changes to an existing major source. This approach offers benefits to sources, permitting authorities, and the environment.

During the NSR Simplification Workshops and NSR Reform Subcommittee meetings, EPA presented two PAL-based approaches. First, EPA discussed an area-wide PAL applicability system fashioned after Oregon's plant site emission limit (PSEL) program. The EPA originally conceptualized this approach as a State or district wide program that, within the State or district, would require every major source to have a PAL. The EPA also developed and presented a voluntary, source-specific PAL approach, similar to that demonstrated by a Minnesota Manufacturing and Mining (3M) facility in St. Paul, Minnesota, which would allow states the option of setting PALs for one or more sources.

Based in part on Subcommittee discussions of both options, EPA has determined that the voluntary source-specific PAL is a realistic and practical method of providing both flexibility and regulatory certainty to many existing sources, as well as benefits to permitting authorities, while maintaining air quality. Accordingly, EPA today proposes to revise its NSR regulations to provide for this approach as a source-specific option to be used on a voluntary basis. Specifically, the provisions address the authority under which State and Federal agencies may apply the PAL approach, the basis on which to establish PALs, requirements for practicable and federally enforceable limits, assessment of air quality impacts of emissions changes under the PAL, and review of and adjustments to PALs. Other significant proposed changes include deleting all other exclusions that exist in the current regulations for a source under a PAL; changing the triggering event for review for a source

under a PAL to "any change" rather than certain "physical or operational changes;" and adding definitions for "plantwide applicability limit" and for "modification" which provide for review of certain emissions trades under the PAL and of other changes that States may wish to review under minor NSR or other State requirements.

The EPA also seeks comment on area-wide PAL approaches consistent with the source specific voluntary criteria in today's proposal and requests comment on other criteria or minimum requirements for area-wide PALs. The EPA also seeks comment on whether, if at all, States should be allowed in an area-wide system to establish PALs at levels higher than actual emissions. Area-wide PALs would not be mandatory for any area under today's proposal, but a permitting authority may choose to adopt an area-wide PAL so that all major sources in the entire area, classified as nonattainment or attainment for a given pollutant, would take on PALs.

1. Background

a. Minnesota Mining and Manufacturing

In 1992, the Minnesota Mining and Manufacturing (3M) Tape Manufacturing Division Plant in St. Paul, Minnesota proposed a source-wide cap on VOC emissions to the Minnesota Pollution Control Agency (MPCA) in return for the ability to make changes at the facility without triggering PSD review. The 3M plant planned over a 5-year period to make nonroutine physical or operational changes and upgrade equipment. The proposed cap of 4,492 tpy was significantly lower than the source's potential to emit (65,000 tpy), and lower than the 2-year average actual emissions for 1990 and 1991 (5,076 tpy), which reflected the addition in 1990 of thermal oxidizers for VOC control. By setting an allowable emissions cap at 4,492 tpy (which would be treated as the source's potential to emit) based on the 1990-1991 average actual annual emissions (5,076 tpy), 3M could make the physical and operational changes contemplated without triggering NSR for a significant net emissions increase.

b. The Oregon Program

The State of Oregon promulgated a PSEL program in 1981, recognizing the "need to establish a more definitive method for regulating increases and decreases in air emissions of air quality permit holders." [Oregon Administrative Rules (OAR), Chapter 340, Division 20 - Department of Environmental Quality 340-20-300] Over a period of 5 years, PSELs for all State and Federal regulated pollutants were incorporated into all Federally enforceable State operating permits as a means of managing airshed capacity.

A PSEL for a facility is established for similar types of emission units rather than for the entire facility. Currently, about 1200 facilities are permitted under the PSEL rule, and Oregon issues about four major NSR permits each year.

The PSELs have both short-term (lb/hr or lb/day) and long-term (tons/year) emission limits. The PSELs are used as the baseline emissions when determining whether a modification at a facility is subject to NSR. Stack testing is the primary method used in determining compliance with the PSEL, but some continuous emission monitors are used as well.

The Oregon PSEL rule differs from the traditional EPA program in that the PSEL rule does not limit consideration of increases and decreases in emissions to a contemporaneous time period when determining whether a significance level has been exceeded. The EPA rules generally limit consideration of increases and decreases to a 5-year contemporaneous time period.

c. Area-wide and Voluntary Source-specific Plantwide Applicability Limits

Under the area-wide approach presented to the Subcommittee, States would not be mandated to adopt a PAL system, but once a State or district determined to adopt the PAL approach, it would be adopted for all sources in the district. Numerous comments were received both in support of this approach and against it. Much of the debate focused on the baseline issue -- the question of the initial level for the PAL. Industry was very concerned that a district or State might set a baseline that confiscates capacity. Environmentalists were concerned that any option that was not based on an actuals emissions baseline would allow sources to make major physical changes that increase actual annual emissions without triggering NSR.

After consideration of the Subcommittee's deliberations, EPA has decided to propose regulatory changes which allow States to set source-specific PALs for individual sources which wish to use a PAL as a NSR applicability alternative. However, while the thrust of the proposed PAL approach is for a voluntary, source-specific approach, EPA's proposed regulations also allow for districts to adopt this applicability approach for all or part of the sources in the area. This area-wide option is, however, built on the same criteria as the source-specific option, including the requirement that the cap be based on the same actual emissions baseline as the individual PAL approach. Thus, EPA proposes to give permitting authorities full discretion as to which sources in the jurisdiction, if any, will be subject to the PAL methodology proposed today.

d. The Benefits and Incentives

The benefits of any PAL approach, as recognized by members of the Subcommittee, include (1) operational flexibility underneath an emissions cap and an increased ability to make changes reacting to market demand, if the permit conditions are appropriately written and the cap is not too restrictive; (2) a correspondingly decreased permitting burden for the source and the permitting authority; (3) an incentive to create room for growth under the capped level of emissions by implementing pollution prevention and other pollution reduction strategies; (4) a likelihood that even when a cap is based on an actual emissions baseline period, emissions not only stay under the levels capped but generally are reduced further; (5) consistency with the title V operating permit program and provisions for allowing emissions trading and alternative scenarios; (6) incentives for improved plant monitoring; (7) certainty created by knowing at what level of emissions a source will be required to undergo NSR thereby eliminating the uncertainty of evaluating a baseline for each modification and determining the contemporaneous increases and decrease and whether a source qualifies under another exclusion or another test of emissions increase; (8) reduction of some of the "paper" emissions in the system and therefore, additional room for growth for new sources; (9) avoidance of a prescriptive technology review by allowing and providing incentives for sources to seek the most cost-effective means of reducing emissions from new emissions units; (10) elimination of unreviewed emission increases that affect air quality because, without a de minimis level established for major modification review, all increases over a cap are reviewed.

After reviewing the comments on this voluntary source-specific PAL approach, EPA believes that the approach offers benefits for air quality, is consistent with statutory mandates for NSR and EPA goals for creating market incentives and pollution prevention incentives as well as other programs, and in general is consistent with the goals of the nonattainment NSR and PSD programs and program reform. Therefore, EPA proposes to revise the NSR regulations to allow States to adopt PAL approaches on a source-by-source basis. Although a source-by-source PAL approach may be implemented in many situations under the current regulations, several issues are not clearly addressed by the current regulations, policy, or practice under the regulations. The EPA believes that regulatory changes would allow for more ease, clarity, and certainty in the implementation of PAL approaches for major modification applicability.

2. The Presentation to the NSR Reform Subcommittee and Today's Proposal.

The EPA proposes that once a PAL is established for the source, the source may make any physical or operational changes at the facility as long as its emissions remain under the limit. Under the proposal, for a source to increase emissions over its source-wide limit, it must first undergo major NSR. Emissions levels set by the PAL would be reevaluated every five years to keep the limits representative of normal operations. The PAL must be Federally and practicably enforceable and must therefore be incorporated into Federally enforceable permits containing compliance methods and related monitoring requirements.

The issues that arise when considering development and implementation of this approach can be placed in five categories: (1) establishing the PAL, (2) changes under the PAL approach, (3) air quality impacts, (4) enforceability, and (5) public participation.

a. Establishing the PAL

The EPA requests comment on five alternatives for establishing the PAL: (1) the current definition of "actual emissions" [see 40 CFR 52.21(b)(21)(iii)]; (2) the current definition of "actual emissions", but add an operating margin (e.g., 10 to 20 percent); (3) the highest 2 years of operation in the 5 years preceding the setting of the PAL; (4) the highest
1-in-10 year test discussed in section III. D. of today's proposal; (5) in nonattainment areas, and for the nonattainment pollutants, any emissions level completely offset and relied upon in attainment demonstrations fully approved by EPA. The first four options are suggested because the first represents the current system and the others provide additional flexibility. Option 5 is an additional potential basis for establishing PAL levels but clearly would be limited to nonattainment areas and to sources whose offsetted levels have been relied upon for air quality planning. The EPA requests comment not only on whether option 5 should be available to establish PAL levels but also whether such levels should be permissible only if established pursuant to a recent major NSR process (e.g., since 1990 or within the past two or five years). The EPA requests comment on these options and any other approaches not suggested here.

There are significant concerns with the emissions levels at which PALs would be established. A restrictive actual emissions level limits the flexibility of sources to grow and operate within a PAL. A high allowable emissions level allows real increases in actual emissions under a PAL without air quality checks and these increases may adversely affect air quality while not providing incentives for pollution prevention and reduction under the PAL. Even more important, under the source-specific PAL approach, demonstrations as to consistency with air quality goals for any source-specific PAL levels may not be an accurate demonstration as to any combination of PALs or allowable levels in an area. When a source is reviewed under major NSR, its emissions levels are reviewed for that specific time. The reviewed emissions levels do not assure that post-modification minor source growth at other facilities or by other types of air pollution sources would not change the impacts of that source's allowable emissions on the area. Under the current regulations, air quality impacts would be reevaluated when a major modification occurs or a minor modification under minor NSR. However, under a PAL approach using allowable emissions levels, the impact would not necessarily be reevaluated, especially where no significant emissions trades occur even within the plant.

The EPA requests comment on the appropriate basis for establishing PAL levels in light of the competing concerns.

b. Changes Under the PAL Approach

The EPA requests comment on several possible scenarios involving changes under the PAL approach. First, sources which wish to increase emissions over the PAL would trigger major NSR. In some instances, the increase will result from the addition of a new unit or physical modification or change in the method of operation of an existing unit. Clearly, these units associated with the increase would have to be reviewed for control technology, apply BACT or LAER, perform air quality impact modeling, and its increase be offset, if applicable. However, the EPA raises for consideration the situation where a source may wish to increase emissions above the PAL as a result of an increase in an overall plant production rate. In this case, it may not be clear which units would have to apply BACT or LAER. The EPA proposes that increases tied to physical or operational changes require that NSR apply to those physical or operational changes that relate to the increase.

Second, the EPA proposes that so long as actual emissions do not exceed PAL emission limits, changes "under" the PAL should not be subject to major NSR. The EPA raises for consideration the possibility that under this proposal major emissions units could be installed or modified under the PAL without any kind of review. The provisions in the proposed regulations allow State and local permitting authorities to maintain or adopt authority to impose minor NSR requirements through SIP provisions or other State requirements, including minor NSR requirements. The provisions also provide the ability for States to adopt this PAL approach in lieu of some or all new source requirements. The EPA also believes that many sources will, in order to stay under the PAL, need to apply good controls to minimize emissions from new and modified units at a capped source.

Third, PALs, once obtained and included in a permit, may be adjusted for a number of reasons. Industry, regulatory agencies, and the public need to understand and know what adjustments to a PAL may be necessary, both on an immediate basis and during some periodic review cycle. The EPA requests comment on why, how, and when PALs should be lowered or increased without major NSR. Such need for adjustments would arise, for example, (1) where technical errors have been made with regard to calculating past actual emissions or potential emissions or emissions factors; (2) when new requirements require a reduction in permitted emissions to "discount" for RACT or other technology requirements such as MACT or SIP-required reductions; (3) to account for the generation of offsets or permanent shutdowns where the State has the authority to remove permanent shutdowns from the emissions inventory after a certain time period; (4) when changes under the PAL might cause or contribute to a violation of a NAAQS, PSD increment or Class I area AQRV; and (5) during periodic review to set the PAL at a level that represents actual emissions and normal operation. A concern was raised about the uncertainty that results from the State review and renewal of the PAL as well as any authority to adjust the PAL. It has been recognized that sources will want to maximize the room for growth under a PAL. However, if there is too frequent opportunity for a downward adjustment to the PAL, a source may be reluctant to accept a PAL for fear of losing any room for growth through the State's ability to make adjustments. The uncertainty may result in very little flexibility to operate and make changes under a PAL.

In the Subcommittee deliberations, a few members were uncomfortable with a number of issues with regard to the changes allowed under the PAL and those which may not be allowed. First, as mentioned, there is some concern that this approach may be building on an existing problem under the current regulations. The current regulations allow sources to net new units and sometimes large modifications out of review, without mandating the application of control technology. The members felt that NSR has two

purposes: first, an air quality purpose for protection of standards and prevention of air quality deterioration, and; second, ensuring that as industrial equipment turns over, new equipment includes the application of new pollution reduction or control strategies or technologies. Some members contended that to allow sources to net out of review without requiring some "good technology" is contrary to the second purpose of NSR. In light of the incentives offered by this approach and the ability of the States to impose technology requirements, EPA requests comment on whether, for new units, to require that States require some control technology or to provide in the Federal regulations an independent mandate for the application of control technology. During the Subcommittee deliberations, EPA sought comment on whether EPA's authority to require technology on new units absent the application of major NSR may be limited under Alabama Power and the Act.

The EPA also requests comment on how to apply the major NSR requirements as a result of an increase not directly associated with a particular modification or physical change to an emissions unit. Major NSR could be applied to: (1) all changes that have occurred under the PAL; (2) all changes that have occurred under the PAL since the last PAL renewal; (3) all changes that have occurred under the PAL in the last five years; (4) only those changes that can be associated with the increase, or (5) the entire facility and BACT or LAER can apply where most appropriately determined, i.e. any uncontrolled units or the less controlled units.

c. Air Quality Impacts

Certain changes under the PAL, such as changes in effective stack parameters, can change a source's impact area, and must therefore be modeled or otherwise assessed to demonstrate protection of NAAQS, increments, and AQRVs. The EPA requests comment on when modeling or other ambient impact assessment should be required, including the usefulness of existing guidance on similar issues (e.g., the Emissions Trading Policy Statement), and what should be done to protect Class I areas.

Changes to emission points within the PAL involving SO_2, nitrogen dioxide (NO_2), carbon monoxide (CO), lead (Pb), or particulates may result in different air quality impacts. The ambient impacts of SO_2, CO, Pb, NO_2 and particulate emissions depend on site- and stack-specific factors such as topography and plume height which are ordinarily evaluated by ambient dispersion modeling. By contrast, the ambient impacts of VOCs and NO_x as ozone precursor emissions are areawide rather than site-specific. Such VOC and NO_x emissions within a broad area are considered comparable, regardless of plume height, topography or related factors. At this time, for purposes of major NSR, VOC-NO_x trading is not generally allowed. For this reason, States must require sources proposing emission point changes to model the new impacts for SO_2, NO_2, CO, Pb, and particulates, to ensure that the emission levels remain consistent with NAAQS, increments, and AQRVs. States may follow the requirements of the Emissions Trading Policy Statement when requiring such modeling. The Emissions Trading Policy Statement requires modeling of changes in emissions of SO_2, CO, Pb or particulates if (a) there is an increase in emissions, (b) the increase is not occurring in the same immediate vicinity of an equivalent decrease, (c) the increase is at a lower plume than the decrease, (d) the source is located near complex terrain, (e) the stacks are not tall enough to avoid downwash, or (f) the trade involves fugitive emissions sources.

d. Enforceability

PALs must be Federally and practically enforceable, and must therefore be incorporated into permits containing compliance methods and related monitoring requirements. General EPA requirements of practical enforceability must be met: sources may be required to meet the requirements of the Enhanced Monitoring rule in 40 CFR part 64. The EPA requests comment on the nature of the necessary conditions to be placed on the source to assure compliance. Considerations include the extent of monitoring required, the method of quantifying emissions, the extent to which limits are unit-specific (as opposed to limits on groups of units), averaging times, alternative operating scenarios, and the interaction between these conditions and title V requirements. The EPA also requests comment on what the permit and enforcement consequences should be of impermissibly exceeding a cap.

In the NSR Subcommittee, concern was raised about the enforceability of PALs. Some felt that the traditional enforcement of unit specific limits allowed enforcement authorities to prioritize enforcement resources on large units or units of most concern due to their contribution to a violation or air quality problem. The perception was that it is a lot easier and more direct to enforce unit-specific limits than plantwide limits. Some disagreed and expressed that plantwide limits are far more manageable than unit-specific limits. Another view is that the current system requires substantially more resources than a PAL system, both for management of a system and for enforceability. Since a PAL system requires more monitoring, generally more information should be available for compliance and enforcement. Additionally, more information should be available on the source's actual emissions. However, also expressed was a concern about requiring too much monitoring for little return on reliability.

The EPA requests comment on whether the PAL would facilitate enforceability, both for government authorities and for the public, and the degree to which sources would more easily comply with and show compliance with PALs rather than unit-specific limits, recognizing that some unit-specific limits will remain in place for purposes of other emissions limits and standards.

e. Public Participation

The Federal NSR permits are subject to public participation requirements. The EPA requests comment on when a PAL permit should undergo public review, including consideration of the following events: initial establishment of a PAL, adjustment of the cap due to technical revision of baseline (e.g., emission factor changes), decreases in the cap due to more stringent Federal or State requirements, BACT/LAER determinations at capped facilities, changes in unit-specific emissions under a PAL (i.e., shifting emissions among units), and PAL renewal. The EPA also requests comment on how title V public participation requirements can be satisfied, and what monitoring and compliance information should be made available to the public, including the process for making it available.

3. Proposed Regulatory Revisions

The proposal would incorporate the PAL approach into the NSR rules by adopting new PAL rules in 40 CFR Sections 51.165a, 51.166a, and 52.21a. The proposal for implementing this approach uses changed the definitions related to major modifications borrowed from 40 CFR 51.165, 51.166 and 52.21. A number of new provisions have been developed to specify the requirements of using a PAL approach. The EPA requests comments on these provisions. This discussion refers to section 52.21a, but the discussion is intended to address the same types of provisions for other NSR rules.

The proposed rules allow the use of a PAL for NSR applicability in lieu of the applicability provisions in 40 CFR Section 52.21. Similarly, revisions to 40 CFR Sections 51.165 and 51.166 are proposed to provide an alternative applicability approach that States may adopt into SIPs to facilitate use of PALs. Under each of these programs, States may choose to adopt or accept delegation of PAL approaches as rules to apply only in lieu of the Federal major NSR regulation or to apply in lieu of State SIP minor NSR requirements. When adopting the PAL approach, States may

choose in their SIPs or delegation agreement to adopt the PAL approach on a limited basis. For example, States may choose to adopt the PAL approach only in attainment areas, only in nonattainment areas, or only for certain pollutants in either or both of these areas. States may also choose to allow the PAL approach only for sources with a record of existing emissions or normal operations for at least 2 years, in order to establish a PAL limit based on historical actual emissions. In general, States may be more stringent than Federal requirements, consistent with section 116 of the Act, even under a PAL approach.

Proposed section 52.21a(y)(1) states that the delegation of authority to States must specify which programs, areas, and pollutants section 52.21a will replace when these provisions are applied to a source.

Proposed section 52.21a(b)(20) provides the basis for setting PAL emissions levels. Under the proposed regulation, PAL levels may only be established at actual emission levels representative of normal operation. However, EPA is taking comment on how these provisions may be modified allow PAL emissions levels to be established based on emissions levels that have been completely offset and have been relied upon in an attainment demonstration fully approved by EPA.

Proposed sections 52.21a(c)(2) and (3) provide that emissions limits established under the PAL not only have to be achievable but must be practicably and Federally enforceable.

Proposed section 52.21a(d) incorporates into the PAL approach the criteria for reviewing emissions trades as described in the Emissions Trading Policy Statement.

Proposed section 52.21a(c)(4) specifically provides that the PAL does not authorize bubbling or other changes to unit-specific requirements. Consistent with EPA's Emission Trading Policy Statement, emissions trading, even under a cap approach, does not allow emissions trades to demonstrate compliance with unit-specific requirements.

Proposed section 52.21a(e)(1) requires periodic review of the PAL emissions levels and adjustments to the emissions levels at appropriate times and to address certain events, such as permanent shutdowns, new applicable requirements, technical errors, and other air quality concerns.

Currently, the proposed provisions do not contain any specific provisions for public notice other than those already required for major and minor NSR review. The public participation requirements of parts 70 and 71 will also be taken into account in EPA's consideration of additional public notice requirements for PALs. Public notice and comment may be involved at each part 70 permit renewal; therefore, if adjustments to the PAL are made at that time, public notice is already a required component. A PAL approach that applies only in lieu of major NSR may result in changes at the source triggering minor NSR, at which time the public notice requirements of minor NSR, sections 51.160 - 51.164, may be triggered. The EPA requests comment on whether to build specific public notice requirements into the PAL approach in addition to the ones already provided for in these existing programs. The definition of PAL implies that public notice is required in order to establish the PAL. However, it may not be clearly stated.

Footnotes:

[1] "Potential to emit" is currently defined 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 a permit limitation, is treated as part of its design provided the limitation or its effect on emissions is Federally enforceable. [See current rules ... 40 CFR 51.165(a)(1)(iii), 51.166(b)(4)]

[2] Roughly speaking, "contemporaneous" emissions increases or decreases are those which have occurred between the date 5 years preceding the proposed physical or operational change and the date that the increase from the change occurs [see 40 CFR 52.21(b)(3)(ii)]. Once a modification is determined to be major, the PSD requirements apply only to those specific pollutants for which there would be a significant net emissions increase [see e.g., 40 CFR 52.21(j)(3) (best available control technology); 40 CFR 52.21(m)(1)(b) (air quality analysis)].

[3] For example, consider a source consisting of an industrial coal-fired boiler, constructed in the late 1960s and therefore "grandfathered" from NSR, which originally had a potential to emit of 1000 tons per year of SO2. Since the mid-1980s, this source may have actually emitted only 500 tons per year (i.e., operated at 50% of its capacity) at reduced utilization due to economic conditions or because the boiler became less efficient as it aged, and hence less economic to operate at full capacity. If the boiler were to be modified through a nonroutine physical change which did not affect the unit's hourly emissions rate, the owner or operator would need either to accept a cap on its post-modification emissions at 539 tons per year (the significant increase level for SO2 is 40 tons per year), or to obtain a major NSR permit if it desires to maintain the ability to operate at 100 percent of its rated capacity. The 500 ton "cushion" between actual and potential emissions that existed prior to the modification would no longer exist.

[4] The regulations define "electric utility steam generating units" as any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatts (MW) of electrical output to any utility power distribution system for sale.

[5] In the WEPCO rule, EPA also created a pollution control project exclusion for utilities (discussed in section III(E)) and amended its PSD and nonattainment NSR regulations to implement sections 409 and 415 of title IV of the 1990 Amendments which create special NSPS treatment for certain repowering projects and limited NSR exemptions for temporary and permanent CCT projects, and for certain "very clean" units. EPA also amended its new source performance standard (NSPS) regulations (40 CFR part 60) to allow a utility to use as its pre-change baseline its highest hourly emissions rate achieved during the 5 years prior to the proposed physical or operational change. The changes implementing sections 409 and 415 as well as the NSPS baseline change are not discussed in this package.

[6] Potential emissions are calculated on an hourly basis as the product of the emissions rate or factor of the unit multiplied by its sustainable maximum hourly achievable capacity. Therefore, changes which would not increase either the emissions or the capacity factor of the unit would not trigger major NSR. A source could, however, compensate for an increase in either factor by a commensurate decrease in the other factor such that the maximum hourly emissions would not increase. However, the change cannot involve an increase in the emissions factor if the higher rate or represents a reduction in the level of control at the unit otherwise currently achieved at the unit.

[7] For all of the above tests, EPA realizes that there are many source and emission unit categories for which BACT/LAER determinations do not exist, let alone recent determinations. For these sources, EPA proposes that their level of control be gauged against the control levels associated with BACT/LAER for emission units with similar emission stream characteristics. That is, if the emissions unit were to be undergoing a BACT/LAER review today what technologies would be evaluated and what are the current BACT/LAER levels associated with those technologies? Since this in effect requires the permitting authority to essentially engage in a BACT/LAER review in order to qualify a unit for this exclusion, EPA is asking for comment on other approaches for qualifying units.

File
Cleveland Fuel.
Illum.

FACSIMILE REQUEST AND COVER SHEET

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Air and Radiation Division
Air Enforcement Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

TO Robert Hodanbosi, Acting Chief

OFFICE Division of Air Pollution Control - OEPA

PHONE # _____ MACHINE # 614-644-3681

FROM William L. MacDowell, Chief, AED, RDS

ORGANIZATION USEPA, REGION 5 ARD, AEB, RDS

PHONE # (312) 886-6798

DATE JUN 17 1992 NUMBER OF PAGES INCLUDING THIS COVER SHEET 5

COMMENTS: _____

INFORMATION FOR SENDING FACSIMILE MESSAGES TO THE AIR AND RADIATION DIVISION

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

May 26, 1992

MEMORANDUM

SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) to the Cleveland Electric, Incorporated, Plant in Willoughby, Ohio

FROM: Edward J. Lillis, Chief
Permits Programs Branch, AQMD (MD-15)

TO: George T. Czerniak, Chief
Air Enforcement Branch, Region V

This memorandum responds to your request for a written applicability determination for a Cleveland Electric, Incorporated, facility in Willoughby, Ohio. As discussed below, my staff has determined that this Cleveland Electric facility is subject to a 100 tons per year (tpy), major source applicability threshold for the PSD requirements at 40 CFR 51.21. If this facility has commenced construction with a minor source construction permit from Ohio, but without undergoing new source review (NSR), as required by 40 CFR 52.21, the source may be in violation of Federal PSD requirements. At this time, the Cleveland Electric Plant does not appear to be subject to the current emissions guideline for municipal waste combustors or NSPS of 40 CFR Part 60, subparts Ca and Ea, respectively. This response has been coordinated with the Compliance Monitoring Branch of the Stationary Source Compliance Division (SSCD), to whom your applicability request was addressed, and with the Standards Development Branch of the Emission Standards Division (ESD) on the applicability of NSPS and emissions guidelines.

In reviewing the information forwarded to our office, we have determined that, for PSD applicability purposes, the Cleveland Electric facility is both a municipal waste incinerator and a fuel conversion plant, as listed at 40 CFR 52.21(b)(1)(c)(iii), and would be major if the source "...emits, or has the potential to emit, 100 tpy of any pollutant subject to regulation under the (Clean Air) Act". The facility appears to meet the criteria for both categories by disposing of municipal

waste using combustion and by producing a low heat value fuel gas. While there are no definitions in the PSD regulations for "municipal waste incinerator," "fuel conversion plant," and other categories listed as subject to the 100 tpy, major source threshold, the Environmental Protection Agency (EPA) has relied on case-by-case determinations in assessing source applicability. These assessments are based on precedents established by NSPS and other regulatory definitions, as well as technical analysis of the character and functions of both the proposed source and the listed source categories. We have used these guidelines in determining that the Cleveland Electric plant is considered listed under two source categories for which the lower PSD applicability threshold applies.

The NSPS regulations define "municipal waste combustor" at 40 CFR 60.51a to mean "... any device that combusts solid, liquid, or gasified (municipal solid waste) including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved air or excess air), furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired) and gasification/combustion units." The emissions guideline of subpart Ca also incorporates this definition by reference (40 CFR 60.31a). On page 10 of Cleveland Electric's December 20, 1991 permit application submittal, the source is described as consisting of seven units, charging 50 tons per day (tpd) per unit, "...converting municipal solid waste into...fuel gas." For NSPS purposes, the Cleveland Electric source is a municipal waste combustor and would be subject to the NSPS standards of 40 CFR Part 60, subpart Ea, if each unit were not below the 250 tpd of refuse combustion capacity per unit applicability threshold of subpart Ea [40 CFR 60.50a(a)].

A municipal waste incinerator "combusts" solid waste and thus is functionally synonymous with municipal waste combustor. Accordingly, EPA has adopted the NSPS definition of municipal waste combustor for determining if a source is subject to the 100 tpy applicability threshold for PSD in section 169(1) of the CAA. Section 169(1), as amended by Section 305(b) of the CAA Amendments of 1990 [P.L. 101-549, sec. 305(b)], lists "municipal incinerators capable of charging more than 50 tons of refuse per day" as being subject to the 100 ton emissions threshold.[1] Under EPA's sourcewide plant definition [40 CFR 52.21(b)(5 and 6)], the 50 tpd charging rate applies to the sum of all units at the Cleveland Electric facility (which will be capable of

[1] The EPA considers the revised definition to be effective by operation of law on November 15, 1990.

charging a total of 350 tons of refuse per day). Therefore, the Cleveland Electric facility will be a major source for PSD purposes if the source emits, or has the potential to emit, 100 tpy of any pollutant regulated under the CAA [except HAP's listed under §112(b) of the CAA].

The production of low heat value fuel gas at the Cleveland Electric facility also classifies the source as a fuel conversion plant. Fuel conversion plants obviously include those plants which accomplish a change in state (e.g., solid to liquid to gas) for a fuel. This definition includes conversion of the following fuels: fossil (e.g., coal or oil shale); biomass (e.g., wood or peat); and anthropogenic (e.g., municipal waste derived fuel and inorganic fuel). The majority of such sources are likely to accomplish these changes through either gasification, liquefaction, or solidification. The category of fuel conversion plants may include, but is not limited to, some types of sources within standard industrial classifications 1311, 2819, 2969, 2421, and 2999. Generally, however, applicability for this source category is determined by whether a facility changes the state (e.g., solid to gas) or form (e.g., process sawdust into a pellet) of a fuel. Therefore, the Cleveland Electric facility fits into the fuel conversion plant category as well. In both cases, as a municipal waste incinerator and as a fuel conversion plant, the source is major and subject to PSD requirements if the source has the potential to emit 100 tpy of a regulated pollutant other than a HAP.

If you have any questions concerning our PSD applicability determination, please contact Bill Lamason of my staff at (919) 541-5374. Questions concerning NSPS should be directed to Walt Stevenson, ESD, at (919) 541-5264. On compliance issues, you may contact Clara Poffenberger, SSCD, at (703) 308-8709.

cc: NSR Contacts, EPA Regions I-X
K. Berry, AQMD
C. Poffenburger, SSCD
W. Stevenson, ESD
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B. Lamason, PPB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

T NOV 1988

REPLY TO THE ATTENTION OF: (5RA-14)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Richard L. Shank Ph.D,
Director
Ohio Environmental Protection Agency
P.O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266

88 NOV 14 AM 10:25

Dear Dr. Shank:

The State of Ohio is implementing the prevention of significant deterioration (PSD) program which was delegated under 40 CFR 52.21(u) in full to Ohio on May 1, 1980. The delegation was made after United States Environmental Protection Agency (USEPA) found the State program contained adequate procedures and authority to issue and enforce construction permits for air pollution sources consistent with the PSD rules.

This letter amends the delegation in order to incorporate revised terms and conditions which arise from policy revisions. Furthermore, since the State is acting on behalf of the Administrator in this Federal delegation, the delegation is being revised to assist the State to achieve more closely the Administrator's goal of preventing significant deterioration of air quality.

Therefore, in accordance with 40 CFR 52.21(u), the USEPA hereby delegates to the State of Ohio authority and responsibility to implement the PSD regulations in accordance with 40 CFR 52.21, as they may be amended and in accordance with the appropriate permit review requirements in 40 CFR 124 Subparts A and C. This delegation is also subject to all USEPA policy guidance and determinations on 40 CFR 52.21, 40 CFR 124 and other applicable regulations.

This delegation is based upon the following terms and conditions:

1. Authority is delegated to the State of Ohio for all sources located in the State subject to review for PSD. This delegated authority includes all source categories listed in 40 CFR 52.21 for each pollutant regulated under the Clean Air Act. With respect to any PSD permits issued by the USEPA, this delegation includes authority to implement the technical, administrative, and enforcement provisions of the PSD regulations. It also includes authority to make permit amendments. This delegation does not include any authority found in 40 CFR 52.21(g) with respect to redesignating areas.

2. The primary responsibility for implementation and enforcement of the PSD regulations in the State of Ohio will rest with the Ohio Environmental Protection Agency (OEPA).

   a. The OEPA will enforce the provisions and regulations that pertain to the PSD program, except in those cases where the rules or policies of the State are more stringent; in which case, the State may elect to implement the more stringent requirements.

   b. OEPA will follow the new source review guidance which has been provided to the State, including the guidance with respect to making best available control technology determinations, and all future guidance representing regional and national policy, including but not limited to guidance on air quality impact modeling.

   c. If the State enforces the delegated provisions in a manner inconsistent with the terms and conditions of this delegation or the Clean Air Act, USEPA may exercise its enforcement authority contained in the Clean Air Act with respect to sources within the State of Ohio subject to the PSD provisions.

   d. This delegation may be amended by the Regional Administrator at any time to assure the implementation of national policy or regulation changes.

   e. No authority under this delegation may be redelegated without the approval of the USEPA Regional Administrator.

3. If the Regional Administrator determines that the State is not implementing or enforcing the PSD program or has not implemented the requirements or guidance with respect to a specific permit in accordance with the terms and conditions of this delegation, the requirements of 40 CFR 52.21, 40 CFR 124, or the Clean Air Act, this delegation may be revoked in whole or in part, after consultation with the OEPA. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the State. Nothing in this paragraph shall preclude USEPA from exercising its enforcement authority, as provided for in paragraph 2.c above.

4. The permit appeal provisions in 40 CFR 124.19(a) shall apply to all appeals to the Administrator on permits issued by the OEPA under this delegation. The provisions of 40 CFR 124.19(b) apply to permits which the Administrator decides to review. The administration of the appeal procedures in 40 CFR 124.19(a) and (b) is not delegated to the State.

5. In accordance with 40 CFR 124.15, upon the issuance of a PSD permit, the State shall notify each person who submitted written comments and each person who requested a notice of the final permit decision. The notice shall include a reference to the procedures in 40 CFR 124.19 for appealing a PSD permit.

6. In accordance with 40 CFR 124.42(a), the State shall promptly provide notice to the Federal Land Manager after receiving a complete application for any major PSD stationary source or major PSD modification whose emissions would affect a Class I area.

7. For purposes of implementing the Federal permit appeal provisions under this delegation and in accordance with 40 CFR 124.15 and 124.20, if there is a public comment requesting a change in a preliminary determination or draft permit conditions, the final permit issued by OEPA is required to contain statements which indicate that for Federal PSD purposes and in accordance with 40 CFR 124.15, 124.19 and 124.20, (1) the effective date of the permit is 30 days after the service of notice of the final decision to issue, modify, or revoke and reissue the permit unless the service of notice is by mail in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Administrator, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

8. Permits issued under this delegation are required to contain language stating that the PSD permit is issued after determining that the Federal PSD requirements have been satisfied. This requirement also applies to any operating permits issued to a PSD source by the State in implementing the new source program.

9. The public notice required by the PSD regulations must state that the proposed permit is being reviewed as a PSD permit. The notice must indicate which of the regulated pollutants was covered by the permit review and which toxic materials, if any, were considered in the control technology review. The notice must include, where an increment exists, the amount of increment consumed by the proposed source, the total increment consumed, and the amount of unused increment remaining in the area of maximum impact.

10. The OEPA must allow for the provisions of 40 CFR 52.21(u)(4) to be met with regard to sources or modifications constructing in class III areas.

11. For purposes of national consistency, prior USEPA concurrence is to be obtained on matter involving the interpretation of Sections 160-169 of the Clean Air Act, of 40 CFR 52.21, and of 40 CFR 124 to the extent that implementation, review, administration or enforcement of these Sections have not been covered by USEPA determinations or guidance sent to the OEPA.

12. The OEPA and USEPA will develop a communication system which accomplishes the following:

    a. The OEPA will report to the USEPA the compliance status on a continuing basis of sources which have received a PSD permit from either OEPA or USEPA prior to this delegations. The existing quarterly reporting system should be used.

    b. The OEPA will (1) forward by certified mail to the USEPA at the start of the public comment period a summary of the findings related to each PSD application and the justification for the OEPA's preliminary determination, and (2) forward to USEPA a copy of the PSD application upon request when an application has been determined to be complete. Consistent with the obligations identified in 40 CFR 124.13 if there are comments or concerns about the pending PSD permit, USEPA will communicate these comments and concerns to the OEPA, as soon as possible, before the closing of the public comment period.

    c. The OEPA will forward to USEPA by certified mail copies of the final actions on PSD permit applications on the day of issuance.

d. A copy of all public comments, except for USEPA comments, with respect to a preliminary determination or draft permit conditions shall be forwarded to Region V upon the issuance of a permit.

13. The State will at no time grant any waivers to the permit requirements, approve any compliance schedule, or issue any administrative order which violates any presently effective PSD provisions.

14. This PSD delegation supersedes the previously delegated authority contained in the May 1, 1980, letter from the Regional Administrator.

15. In the event that the State is unwilling or unable to enforce a provision of this delegation with respect to a source subject to the PSD regulations, the OEPA will immediately notify the Regional Administrator. Failure to notify the Regional Administrator does not preclude USEPA from exercising its enforcement authority.

A notice announcing this delegation will be published in the Federal Register in the near future. Since this delegation is effective upon the date of this letter, there is no requirement that the OEPA notify USEPA of its acceptance. Unless USEPA receives notice from the OEPA of objections within 10 days of the receipt of this letter, the State will have been deemed to have accepted the terms and conditions of this delegation.

Sincerely yours,

for Valdas V. Adamkus
Regional Administrator

mont), John F. Kennedy Federal Building, Boston, Mass. 02203.

Region II (New York, New Jersey, Puerto Rico, Virgin Islands) Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10007.

Region III (Delaware, District of Columbia, Pennsylvania, Maryland, Virginia, West Virginia) Curtis Building, Sixth and Walnut Streets, Philadelphia, PA 19106.

Region IV (Alabama, Florida, Georgia, Mississippi, Kentucky, North Carolina, South Carolina, Tennessee) Suite 300, 1421 Peachtree Street, Atlanta, GA 30309.

Region V (Illinois, Indiana, Minnesota, Ohio, Wisconsin) Federal Building, 230 South Dearborn, Chicago, Illinois 60606.

Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas) 1600 Paterson Street, Dallas, TX 75201.

Region VII (Iowa, Kansas, Missouri, Nebraska) 1735 Baltimore Street, Kansas City, MO 64108.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) 916 Lincoln Towers, 1860 Lincoln Street, Denver, CO 80203.

Region IX (Arizona, California, Hawaii, Nevada, Guam, American Samoa) 100 California Street, San Francisco, CA 94111.

Region X (Washington, Oregon, Idaho, Alaska) 1200 Sixth Avenue, Seattle, WA 98101.

§ 52.17 Severability of provisions.

The provisions promulgated in this part and the various applications thereof are distinct and severable. If any provision of this part or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or application of such provision to other persons or circumstances which can be given effect without the invalid provision or application.

§ 52.18 Abbreviations.

Abbreviations used in this part shall be those set forth in Part 60 of this chapter.

§ 52.19 Revision of plans by Administrator.

After notice and opportunity for hearing in each affected State, the Administrator may revise any provision of an applicable plan, including but not limited to provisions specifying compliance schedules, emission limitations, and dates for attainment of national standards; if:

(a) The provision was promulgated by the Administrator, and

(b) The plan, as revised, will be consistent with the act and with the requirements applicable to implementation plans under Part 51 of this chapter.

§ 52.20 Attainment dates for national standards.

Each subpart contains a section which specifies the latest dates by which national standards are to be attained in each region in the State. An attainment date which only refers to a month and a year (such as July 1975) shall be construed to mean the last day of the month in question. However, the specification of attainment dates for national standards does not relieve any State from the provisions of Subpart N of this chapter which require all sources and categories of sources to comply with applicable requirements of the plan.

[52.20 introductory paragraph amended by 51 FR 40675, November 7, 1986]

(a) As expeditiously as practicable where the requirement is part of a control strategy designed to attain a primary standard, and

(b) Within a reasonable time where the requirement is part of a control strategy designed to attain a secondary standard.

§ 52.21 Prevention of significant deterioration of air quality.

(a) *Plan disapproval.* The provisions of this section are applicable 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. Specific disapprovals are listed where applicable, in Subparts B through DDD of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For the purposes of this section:

(1) (i) "Major stationary source" means:

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Act: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) Notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the Act; or

(c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source, if the changes would constitute a major stationary source by itself.

(ii) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

[52.21(b)(1)(iii) added by 49 FR 43209, October 26, 1984]

(iii) The fugitive emissions of a stationary source shall not be included in deter-

[Sec. 52.21(b)(1)(iii)]

mining for any of the purposes of this source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;
(c) Portland cement plants;
(d) Primary zinc smelters;
(e) Iron and steel mills;
(f) Primary aluminum ore reduction plants;
(g) Primary copper smelters;
(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;

(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;
(s) Secondary metal production plants;

(t) Chemical process plants;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input." and
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(2) (i) "Major modification" means 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 subject to regulation under the Act.

(ii) Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.

(iii) A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement;

(b) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to Subpart I or 40 CFR 51.166; or

[52.21(b)(2)(iii)*(e)(1)* and *(2)* amended by 51 FR 40675, November 7, 1986]

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to Subpart I or 40 CFR 51.166.

[52.21(b)(2)(iii)*(f)* amended by 51 FR 40675, November 7, 1986]

(g) Any change in ownership at a stationary source.

(3) (i) "Net emissions increase" means the amount by which the sum of the following exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and

(b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(a) The date five years before construction on the particular change commences; and

(b) The date that the increase from the particular change occurs.

(iii) 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.

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

[52.21(b)(3)(iv) amended by 53 FR 40670, October 17, 1988]

(v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(vi) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(b) It is federally enforceable at and after the time that actual construction on the particular change begins; and

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(vii) [Reserved]

(viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(4) "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

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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. Secondary emissions do not count in determining the potential to emit of a stationary source.

(5) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act.

(6) "Building, structure, facility, or installation" means 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) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

(7) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Act.

(8) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) "Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

(11) "Begin actual contruction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activites other than preparatory activities which mark the initiation of the change.

(12) "Best available control technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(13)(i) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a baseline date is established and shall include:

(*a*) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section:

(*b*) The allowable emissions of major stationary sources which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.

[52.21(b)(13)(i) amended by 53 FR 40670, October 17, 1988]

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

[52.21(b)(13)(ii)(*a*) and (*b*) amended, (14)(i) revised, new (ii) added and former (ii) redesignated as (iii) by 53 FR 40670, October 17, 1988]

(*a*) Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and

(*b*) Actual emissions increases and decrease at any stationary source occurring after the minor source baseline date.

(14)(i) "Major source baseline date" means:

(*a*) In the case of particulate matter and sulfur dioxide, January 6, 1975, and

(*b*) In the case of nitrogen dioxide, February 8, 1988.

(ii) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

(*a*) In the case of particulate matter and sulfur dioxide, August 7, 1977, and

(*b*) In the case of nitrogen dioxide, February 8, 1988.

(iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21; and

(b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

(15)(i) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 $\mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established.

[52.21(b)(15)(i) amended by 53 FR 40670, October 17, 1988]

(ii) Area redesignations under section 107(d)(1) (D) or (E) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a minor source baseline date; or

[52.21(b)(15)(ii)(a) amended by 53 FR 40670, October 17, 1988]

(b) Is subject to 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.

(16) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) The applicable standards as set forth in 40 CFR Parts 60 and 61;

(ii) The applicable State Implemenation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(17) "Federally enforceable" means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

[52.21(b)(17) amended by 51 FR 40675, November 7, 1986; revised by 54 FR 27285, June 28, 1989]

(18) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

[52.21(b)(18) amended by 47 FR 27560, June 25, 1982]

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving 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.

(20) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(21) (i) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21) (ii) through (iv) of this section.

(ii) In general, actual emissions a... a particular date shall equal the a... age rate, in tons per year, at which t... unit actually emitted the pollutant during a two-year period which precedies 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.

(iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For 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.

(22) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(23) (i) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

[52.21(b)(23)(i) amended by 52 FR 24712, July 1, 1987]

Pollutant and Emissions Rate
Carbon monoxide: 100 tons per year (tpy)
Nitrogen oxides: 40 tpy
Sulfur dioxide: 40 tpy
Particulate matter: 25 tpy of particulate matter emissions; 15 tpy of PM_{10} emissions.
Ozone: 40 tpy of volatile organic compounds
Lead: 0.6 tpy
Asbestos: 0.007 tpy
Beryllium: 0.0004 tpy
Mercury: 0.1 tpy
Vinyl chloride: 1 tpy
Fluorides: 3 tpy
Sulfuric acid mist: 7 tpy
Hydrogen sulfide (H_2S): 10 tpy
Total reduced sulfur (including H_2S): 10 tpy
Reduced sulfur compounds (including H_2S): 10 tpy

(ii) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant

[Sec. 52.21(b)(23)(ii)]

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subject to regulation under the Act that paragraph (b)(23)(i) of this section, does not list, any emissions rate.

(iii) Notwithstanding paragraph (b)(23)(i) of this section, "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 $\mu g/m^3$, (24-hour average).

(24) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(25) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(26) "Low terrain" means any area other than high terrain.

(27) "Indian Reservation" means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.

(28) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.

[29] "Adverse impact of visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

[52.21(b)(29) added by 50 FR 28550, July 12, 1985]

(30) "Volatile organic compounds" excludes each of the following compounds, unless the compound is subject to an emissions standard under sections 111 or 112 of the Act: methane; ethane; methylene chloride; 1,1,1 trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113) (Freon 113); trichlorofluoromethane (CFC-11); dichlorodifluouromethane (CFC-12); chlorodifluoromethane (CFC-22); trifluoromethane (FC-23); dichlorotetrafluoroethane (CFC-114); and chloropentafluoroethane (CFC-115); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); and chlorodifluoroethane (HCFC-142b).

[52.21(b)(30) added by 54 FR 27299, June 28, 1989]

(c) *Ambient air increments.* In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
CLASS I	
Particulate matter:	
TSP, annual geometric mean	5
TSP, 24-hr maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
CLASS II	
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
CLASS III	
Particulate matter:	
TSP, annual geometric mean	37
TSP, 24-hr maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
Nitrogen dioxide:	
Annual arithmetic mean	50

[52.21(c) table amended by 52 FR 24712, July 1, 1987; 53 FR 40670, October 17, 1988]

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* No concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) Upon written request of the governor, made after notice and opportunity for at least one public hearing to be held in accordance with procedures established in 40 CFR 51.102, the Administrator shall exclude the following concentrations in determining compliance with a maximum allowable increase:

[52.21(f)(1) amended by 51 FR 40675, November 7, 1986]

(i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas cur-

tailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources;

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration; and

(v) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources which are affected by plan revisions approved by the Administrator as meeting the criteria specified in paragraph (f)(4) of this section.

[52.21(f)(1)(v) amended by 53 FR 40670, October 17, 1988]

(2) No exclusion of such concentrations shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) of this section, refers or the plan to which paragraph (f)(1)(ii) of this section, refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(3) No exclusion under paragraph (f) of this section shall occur later than 9 months after August 7, 1980, unless a State Implementation Plan revision meeting the requirements of 40 CFR 51.166 has been submitted to the Administrator.

[52.21(f)(3) amended by 51 FR 40675, November 7, 1986]

(4) For purposes of excluding concentrations pursuant to paragraph (f)(1)(v) of this section, the proposed plan revision shall:

(i) Specify the time over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur. Such time is not to exceed 2 years in duration unless a longer time is approved by the Administrator.

[52.21 (f)(4)(i) amended by 53 FR 40670, October 17, 1988]

(ii) Specify that the time period for excluding certain contributions in accordance with paragraph (f)(4)(i) of this section, is not renewable;

(iii) Allow no emissions increase from a stationary source which would:

(a) Impact a Class I area or an area where an applicable increment is known to be violated; or

(b) Cause or contribute to the violation of a national ambient air quality standard;

(iv) Require limitations to be in effect at the end of the time period specified in accordance with paragraph (f)(4)(i) of this section, which would ensure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

(g) *Redesignation.* (1) All areas (except as otherwise provided under paragraph (e) of this section) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in §51.102 of this chapter;

[52.21(g)(2)(i) amended by 51 FR 40675, November 7, 1986]

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (i) of this section, which

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could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided*, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(ii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by—

(i) So much of the stack height of any source as exceeds good engineering practice, or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

[52.21(i) revised by 45 FR 52729, August 7, 1980]

(i) *Review of major stationary sources and major modifications—Source applicability and exemptions.* (1) No stationary source or modification to which the requirements of paragraphs (j) through (r) of this section apply shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements. The Administrator has authority to issue any such permit.

(2) The requirements of paragraphs (j) through (r) of this section shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Act that it would emit, except as this section otherwise provides.

(3) The requirements of paragraphs (j) through (r) of this section apply only to any major stationary source or major modification that would be constructed in an area designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the Act.

(4) The requirements of paragraphs (j) through (r) of this section shall not apply to a particular major stationary source or major modification, if:

(i) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or

(ii) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:

(a) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(iii) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or

(iv) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:

(a) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(v) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:

(a) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;

(b) Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and

(c) Did not discontinuue construction for a period of 18 months or more and completed construction within a reasonable time; or

(vi) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or

(vii) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

[Sec. 52.21(i)(4)(vii)]

(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;
(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;
(s) Secondary metal production plants;
(t) Chemical process plants;
(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act; or

(viii) The source is a portable stationary source which has previously received a permit under this section, and

(a) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and

(b) The emissions from the source would not exceed its allowable emissions; and

(c) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

(d) Reasonable notice is given to the Administrator prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Administrator not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Administrator.

[52.21(i)(4)(ix) and (x) added by 52 FR 24712, July 1, 1987]

(ix) The source or modification was not subject to §52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:

(a) Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State implementation plan before July 31, 1987.

(b) Commenced construction within 18 months after July 31, 1987, or any earlier time required under the State implementation plan; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time;

(x) The source or modification was subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the Administrator subsequently determines that the application as submitted was completed with respect to the particulate matter requirements then in effect in this section. Instead, the requirements of paragraphs (j) through (r) of this section that were in effect before July 31, 1987 shall apply to such source or modification.

(5) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under section 107 of the Act.

(6) The requirements of paragraphs (k), (m) and (o) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

(i) Would impact no Class I area and no area where an applicable increment is known to be violated, and

(ii) Would be temporary.

(7) The requirements of paragraphs (k), (m) and (o) of this section as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each pollutant subject to regulation under the Act from the modification after the application of best available control technology would be less than 50 tons per year.

(8) The Administrator may exempt a stationary source or modification from the requirements of paragraph (m) of this section, with respect to monitoring for a particular pollutant if:

(i) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

[52.21(i)(8)(i) amended by 52 FR 24712, July 1, 1987]

Carbon monoxide—575 $\mu g/m^3$, 8-hour average;
Nitrogen dioxide—14 $\mu g/m^3$, annual average;
Particulate matter:
10 $\mu g/m^3$ of TSP, 24-hour average.
10 $\mu g/m^3$ of PM_{10}, 24-average;
Sulfur dioxide—13 $\mu g/m^3$, 24-hour average;
Ozone: [1]
Lead — 0.1 $\mu g/m^3$, 3-month average;
Mercury—0.25 $\mu g/m^3$, 24-hour average;
Beryllium — 0.001 $\mu g/m^3$, 24-hour average;
Fluorides — 0.25 $\mu g/m^3$, 24-hour average;
Vinyl chloride—15 $\mu g/m^3$, 24-hour average;
Total reduced sulfur—10 $\mu g/m^3$, 1-hour average;
Hydrogen sulfide—0.2 $\mu g/m^3$, 1-hour average;
Reduced sulfur compounds—10 $\mu g/m^3$, 1-hour average, or

(ii) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in paragraph (i)(8)(i) of this section, or the

[1] *No de minimis* air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD would be required to perform an ambient impact analysis including the gathering of ambient air quality data.

[Sec. 52.21(i)(8)(ii)]

pollutant is not listed in paragraph (l)(5)(i) of this section.

(9) The requirements for best available control technology in paragraph (j) of this section and the requirements for air quality analyses in paragraph (m)(1) of this section, shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the Administrator subsequently determines that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978 apply to any such source or modification.

(10)(i) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete with respect to the requirements of this section other than those in paragraphs (m)(1) (ii) through (iv) of this section, and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements shall apply to any such source or modification.

(ii) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was not subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements in paragraphs (m)(1) (ii) through (iv).

[52.21(i)(11) added by 52 FR 24712, July 1, 1987]

(11)(i) At the discretion of the Administrator, the requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(i)-(iv) of this section may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1)(i)-(iv).

(ii) The requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(iii) and (iv) and (m)(3) of this section shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii) of this section, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

(12) The requirements of paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increase took effect as part of the applicable implementation plan and the Administrator subsequently determined that the application as submitted before that date was complete.

[52.21(i)(12) added by 53 FR 40670, October 17, 1988]

(j) *Control technology review.* (1) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emissions standard and standard of performance under 40 CFR Parts 60 and 61.

(2) A new major stationary source shall apply best available control technology for each pollutant subject to regulation under the Act that it would have the potential to emit in significant amounts.

(3) A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

(k) *Source impact analysis.* The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

(1) Any national ambient air quality standard in any air quality control region; or

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

[52.21(l) revised by 51 FR 32178, September 9, 1986]

(l) *Air quality models.*

[52.21(l)(1) and (2) revised by 53 FR 396, January 6, 1988]

(1) 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) and Supplement A (1987) which are incorporated by reference. The guideline (EPA publication No. 450/2-78-027R) and Supplement A (1987) are for sale from the U.S. Department of Commerce, National Technical Information Service, 5825 Port Royal Road, Springfield, Virginia 22161. They are also available for inspection at

the Office of the Federal Register Information Center, Room 8301, 1100 L Street, N.W., Washington, DC 20408. This incorporation by reference was approved by the Director of the Federal Register on February 5, 1988. These materials are incorporated as they exist on the date of approval and a notice of any change will be published in the Federal Register.

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models (Revised)" (1986) and Supplement A (1987) are inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with paragraph (q) of this section.

(m) *Air quality analysis*—(1) *Preapplication analysis.* (i) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

(a) For the source, each pollutant that it would have the potential to omit in a significant amount;

(b) For the modification, each pollutant for which it would result in a significant net emissions increase.

(ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Administrator determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

(iv) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.

(v) For any application which becomes complete, except as to the requirements of paragraphs (m)(1)(iii) and (iv) of this section, between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:

(a) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.

(b) If the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least that shorter period.

(c) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the Administrator may waive the otherwise applicable requirements of this paragraph (v) to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.

(vi) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51 Appendix S, section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as requried under paragraph (m)(1) of this section.

(vii) For any application that becomes complete, except as to the requirements of paragraph (m)(1)(iii) and (iv) pertaining to PM_{10}, after December 1, 1988 and no later than August 1, 1989 the data that paragraph (m)(1)(iii) requires shall have been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

[52.21(m)(1)(vii) added by 52 FR 24712, July 1, 1987; corrected by 52 FR 26401, July 14, 1987]

(viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11)(i) and (ii) of this section, the owner or operator of the source or modification shall use a monitoring method approved by the Administrator and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Administrator.

[52.21(m)(1)(viii) added by 52 FR 24712, July 1, 1987]

(2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Administrator determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) Operations of monitoring tions. The owner or operator major stationary source or m modification shall meet the requirements of Appendix B to Part 58 of this chapter during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section.

(n) *Source information.* The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j), (l), (n) and (p) of this section apply, such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to deter-

[Sec. 52.21(n)(1)(iii)]

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mine that best available control technology would be applied.

(2) Upon request of the Administrator, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

[52.21(p) redesignated as (o) by 45 FR 52729, August 7, 1980]

(o) *Additional impact analyses.* (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) *Visibility monitoring.* The Administrator may require monitoring of visibility in any Federal class I area near the proposed new stationary source for major modification for such purposes and by such means as the Administrator deems necessary and appropriate.

[52.21(o)(3) added by 50 FR 28550, July 12, 1985]

[52.21(q) redesignated as (p) by 45 FR 52729, August 7, 1980]

(p) *Sources Impacting Federal Class I Areas — Additional Requirements* — (1) *Notice to Federal Land Managers.* The Administrator shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal land manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The Administrator shall also provide the Federal land manager and such Federal officials with a copy of the preliminary determination required under paragraph (q) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes such determination. Finally, the Administrator shall also notify all affected Federal land managers within 30 days of receipt of any advance notification of any such permit application.

[52.21(p)(1) revised by 50 FR 28550, July 12, 1985]

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Administrator, whether a proposed source or modification will have an adverse impact on such values.

(3) *Visibility analysis.* The Administrator shall consider any analysis performed by the Federal land manager, provided within 30 days of the notification required by paragraph (p)(1) of this section, that shows that a proposed new major stationary source of major modification may have an adverse impact on visibility in any Federal Class I area. Where the Administrator finds that such an analysis does not demonstrate to the satisfaction of the Administrator that an adverse impact on visibility will result in the Federal Class I area, the Administrator must, in the notice of public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.

[New 52.21(p)(3) added and former (3) — (7) redesignated as (4) — (8) by 50 FR 28550, July 12, 1985]

(4) *Denial — impact on air quality related values.* The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

(5) *Class I variances.* The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal land manager concurs with such demonstration and he so certifies, the State may authorize the Administrator, *Provided,* That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

[52.21(p)(5) amended by 53 FR 40670, October 17, 1988]

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide: Annual arithmetic mean	25

[52.21(p)(5) table amended by 52 FR 24712, July 1, 1987; 53 FR 40670, October 17, 1988]

(6) *Sulfur dioxide variance by Governor with Federal Land Manager's concurrence.* The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that

a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(7) *Variance by the Governor with the President's concurrence.* In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Administrator shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(8) *Emission limitations for Presidential or gubernatorial variance.* In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

MAXIMUM ALLOWABLE INCREASE

(Micrograms per cubic meter)

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(q) *Public participation.* The Administrator shall follow the applicable procedures of 40 CFR Part 124 in processing applications under this section. The Administrator shall follow the procedures at 40 CFR 52.21(r) as in effect on June 19, 1979, to the extent that the procedures of 40 CFR Part 124 do not apply.

(r) *Source obligation.* (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.

(4) 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 the requirements or paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(s) *Environmental impact statements.* Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

(t) *Disputed permits or redesignations.* If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(u) *Delegation of authority.* (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v) (2) and (3) of this section.

(2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the delegate agency is not

[Sec. 52.21(u)(2)(i)]

an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.

(ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.

(3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.

(4) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.

(v) *Innovative control technology.* (1) An owner or operator of a proposed major stationary source or major modification may request the Administrator in writing no later than the close of the comment period under 40 CFR 124.10 to approve a system of innovative control technology.

(2) The Administrator shall, with the consent of the governor(s) of the affected state(s), determine that the source or modification may employ a system of innovative control technology, if:

(i) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(ii) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under paragraph (j)(2) of this section, by a date specified by the Administrator. Such date shall not be later than 4 years from the time of startup or 7 years from permit issuance;

(iii) The source or modification would meet the requirements of paragraphs (j) and (k) of this section, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Administrator;

(iv) The source or modification would not before the date specified by the Administrator:

(*a*) Cause or contribute to a violation of an applicable national ambient air quality standard; or

[52.21(v)(2)(iv)(*b*) removed and (c) redesignated as new (*b*) by 54 FR 27299, June 28, 1989]

(*b*) Impact any area where an applicable increment is known to be violated; and

(v) All other applicable requirements including those for public participation have been met.

(vi) The provisions of paragraph (p) of this section (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.

[52.21(v)(2)(vi) added by 54 FR 27299, June 28, 1989]

(3) The Administrator shall withdraw any approval to employ a system of innovative control technology made under this section, if:

(i) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or

(ii) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(iii) The Administrator decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with paragraph (v)(3) of this section, the Administrator may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

(w) *Permit rescission.* (1) Any permit issued under this section or a prior version of this section shall remain in effect, unless and until it expires under paragraph (s) of this section or is rescinded.

(2) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under 40 CFR 52.21 as in effect on July 30, 1987, or any earlier version of this section, may request that the Administrator rescind the permit or a particular portion of the permit.

[52.21(w)(2) amended by 52 FR 24712, July 1, 1987]

(3) The Administrator shall grant an application for rescission if the application shows that this section would not apply to the source or modification.

(4) If the Administrator rescinds a permit under this paragraph, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.

§ 52.22 Maintenance of national standards.

(a) Subsequent to January 31, 1973, the Administrator reviewed again State implementation plan provisions for insuring the maintenance of the national standards. The review indicates that State plans generally do not contain regulations or procedures which adequately address this problem. Accordingly, all State plans are disapproved with respect to maintenance because such plans do not meet the requirements of § 51.12(g) of this chapter. The disapproval applies to all States listed in Subparts B through DDD of this part. Nothing in this section shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Regulation for review of new or modified indirect sources.* (1) All terms used in this paragraph but not specifically defined below shall have the meaning given them in § 52.01 of this chapter.

(i) The term "indirect source" means a facility, building, structure, or installation which attracts or may attract mobile source activity that results in emissions of a pollutant for which there is a national standard. Such indirect sources include, but are not limited to:

(*a*) Highways and roads.

(*b*) Parking facilities.

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

DEC 1 1987

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Improving New Source Review (NSR) Implementation

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

TO: Regional Administrator,
Regions I-X

On June 27, 1986, I established a special task force to address growing concerns about the consistency and certainty of permits issued under the Clean Air Act's prevention of significant deterioration and nonattainment area NSR programs. Based on the findings and recommendations of the task force, I am today establishing certain program initiatives designed to improve the timeliness, certainty, and effectiveness of these programs.

A great deal of effort will be required to overcome the problems which have developed, but it is my belief that these problems, with your full cooperation and assistance, can be resolved so that these essential air management programs can fulfill their intended roles. Therefore, I urge each of you to provide the maximum priority and resource commitments available to the task.

The outstanding concern we now face in these programs is inadequate implementation. The Office of Air and Radiation intends to apply its resource commitments so as to enhance its ability to provide technical support and guidance, training, workshops, auditing, and enforcement support to the Regions and delegated programs. The Regional Offices must make a corresponding resource commitment for these efforts to succeed. Accordingly, I am requesting that you initiate a self-evaluation of current NSR activities and, to the extent necessary, refocus Regional attention on these programs in an effort to improve and enhance NSR program implementation.

To ensure that we maintain the flexibility to make this effort a dynamic one, capable of sensing and adjusting to the needs of the program, I intend to establish an informal group of our colleagues to report to me on progress in implementing the initiatives discussed below. The mission of the group is to provide the feedback necessary to maximize the effectiveness of NSR implementation and to make NSR reflective of air program needs.

The following is a list of the specific program initiatives I am hereby instituting to bring about improvements in NSR implementation:

Tracking Permit Actions--Initially and until such time as permit quality can be assured, I am requiring that each Regional Office establish (if not already in place) a program to ensure a timely and comprehensive review of all State and local agency-issued major source permits and certain minor source permits. Implementation of the program will be made part of the Regional Office Management System and will require the "real time" exchange and review of information between the Regional Office and the State and local agencies when a key milestone is reached during the permitting process.

Effective communication between the permitting agency and the Regional Office is essential to improving program implementation. Therefore, the Regional Offices will need to ensure that State and local permitting agencies follow certain notification procedures such as:

- Notify the Regional Office and other affected parties (e.g., the Federal land manager if Class I areas are impacted), within a reasonable time, of the receipt of a new major source permit application. This can take the form of a complete copy of the application itself or a brief description of the proposed project. Notification can be made as each application is received or the information may be submitted to the Regional Office in a periodic report.

- Submit to the Regional Office a complete public notification package at the beginning of the public notice period. The package must contain the public notice language, the proposed permit, and a technical analysis demonstrating how the proposed project complies with the technical review requirements of the regulations [e.g., best available control technology (BACT) or lowest achievable emission rate (LAER), air quality impacts or offsets].

- Submit to the Regional Office a copy of the final preconstruction permit when issued, including a response to any appropriate comments submitted during the public comment period.

- Submit to the Regional Office a copy of the operating permit when issued.

Likewise, when informed of a permit action, the Regional Office is responsible for the timely review of the information, specifically:

- Screen incoming information on permit applications for potential issues or concerns and, if warranted, communicate them to the permitting agency.

- Perform a timely and comprehensive review of the public notice package and, if warranted, provide comment during the public comment period. To aid in this task, I have directed the Office of Air Quality Planning and Standards (OAQPS) to start

work on the development of a permit review checklist for use by the Regional Office during the public comment period. The checklist will also be useful to State and local agencies as a tool for self-audit and to understand what the Environmental Protection Agency (EPA) emphasizes when reviewing a proposed permit.

- Review any response to comments and the final permit to ensure that any outstanding concerns have been resolved satisfactorily.

- Review the permit to operate to ensure that it is consistent with the preconstruction permit.

- Take prompt and appropriate action to deter the issuance or use of permits which fail to meet minimal Federal requirements. I have directed OAQPS to work with the Office of General Counsel and the Office of Enforcement and Compliance Monitoring to develop guidance for the Regional Offices on the appropriate legal mechanisms and procedures for handling deficient permit actions.

- To the extent practicable, prior to permit issuance, review potential minor permit actions which exempt an otherwise major source or modification from a major review (e.g., "synthetic" minor sources, major sources netting out of review, and 99.9 or 249.9 tons per year sources).

The most critical element of these initiatives is the Regional Office review of proposed permit actions during the public comment period. The FY 1985 national air audit showed widespread serious permit deficiencies, many of which could have been corrected without interfering with State and local agency processing if dealt with by EPA during the public comment period. By uniformly reviewing all major source permit actions during the comment period, EPA is able to address deficient reviews or permits before the final permit is issued. This not only permits more consistency in the permitting process among the States, but also provides the highest degree of certainty to the applicant that the permit will not be challenged by EPA at a later date. Moreover, if the permit is not reviewed and commented on prior to issuance, the possibility of successfully challenging the action is greatly diminished, as is the opportunity to improve the enforceability of the permit.

BACT Determinations--Of all the NSR processes, BACT (and LAER) determinations are perhaps the most misunderstood and the least correctly applied. The BACT alternative, if presented by the applicant at all, are often poorly documented or biased to achieve the decision the applicant desires.

To bring consistency to the BACT process, I have authorized OAQPS to proceed with developing specific guidance on the use of the "top-down" approach to BACT. 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 already 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 Regional Offices for all sources. I have therefore determined that it should be adopted across the board.

In the interim, while OAQPS develops specific guidance on the "top- down" process, I am requesting the Regional Office to apply it to their BACT determinations and to strongly encourage State and local agencies to do likewise. Moreover, when a State agency proposes as BACT a level of control that appears to be inconsistent with the "top-down" concept, such as failure to adequately consider the more stringent control options, the Regional Office is to provide comment to that agency. A final BACT determination which still fails to reflect adequate consideration of the factors that would have been relevant using a "top-down" type of analysis shall be considered deficient by EPA.

Training--No formal training workshops specific to NSR have been held since 1980. Many State and local agencies, as well as the Regional Offices, have experienced a high rate of NSR personnel turnover since then. Many of the basic problems that are occurring in NSR implementation can be traced to the lack of comprehensive, continuing training for new Regional Office and State agency personnel.

To rectify this situation, in FY 1988, OAQPS will work on developing materials for a comprehensive training program in the form of Regional workshops to be conducted in FY 1989.

Commencing in FY 1989, biannual Headquarters-sponsored NSR workshops will be conducted at each Regional Office with State and local agencies attendance encouraged. Workshop topics will cover the NSR rules and policy, BACT and LAER determinations, effective permit writing, how to review a proposed permit and audit a permit file, and other program areas as needed. Appropriately trained Regional staff are to then hold these workshops at their respective State agencies. The NSR experts from Headquarters or NSR experts from other Regions will be available to assist.

In addition, Regional Offices should reserve the funds necessary to send at least one EPA staff representative to the NSR workshops (for EPA only) held semiannually at Denver, Colorado (February), and Southern Pines, North Carolina (July). Attendance at these workshops plays a vital role in keeping the Regions up to date on program implementation and new and emerging policy.

Policy and Guidance--Continuous litigation and regulatory changes have combined with the complexity of NSR rules to create a log jam of the policy and guidance needed to help interpret and effectively apply these rules. Therefore, I am directing that in FY 1989 OAQPS dedicate at least one staff person to ensuring a timely response to policy and guidance requests. In the interim, I intend to continue OAQPS's efforts to compile and organize NSR reference and guidance materials, such as the NSR electronic bulletin board.

I realize that the initiatives discussed above constitute only the first steps of a continuing process to address concerns and needs relating to NSR program implementation. In recognition of the possible need to maintain flexibility in managing and improving the NSR process I will, as indicated earlier, establish a group to monitor our progress under this new policy. The group will be comprised of representatives from EPA Headquarters and Regional Offices and we will consult with State and local agency officials as part of our effort to obtain timely feedback as we implement these initiatives.

Additional specific guidance on improvements in the program areas discussed above will be issued in the near future. In the meantime, each Regional Office is directed to work closely with its State and local agencies to ensure that all aspects of the NSR permit programs comply with all applicable State and Federal program requirements.

Your comments and suggestions are welcome. Please direct them to Gary McCutchen, Chief, New Source Review Section, MD-15, Research Triangle Park, North Carolina 27711 (FTS 629-5592).

cc: Air Division Directors, Regions I-X

November 3, 1980 PSD Applicability Request, Valero Transmission Company Yoakum, DeWitt County, Texas 3.25

THE TEXT YOU ARE VIEWING IS A COMPUTER-GENERATED OR RETYPED VERSION OF A PAPER PHOTOCOPY OF THE ORIGINAL. ALTHOUGH CONSIDERABLE EFFORT HAS BEEN EXPENDED TO QUALITY ASSURE THE CONVERSION, IT MAY CONTAIN TYPOGRAPHICAL ERRORS. TO OBTAIN A LEGAL COPY OF THE ORIGINAL DOCUMENT, AS IT CURRENTLY EXISTS, THE READER SHOULD CONTACT THE OFFICE THAT ORIGINATED THE CORRESPONDENCE OR PROVIDED THE RESPONSE.

3.25

Nov 03, 1986

Mr. Allen Eli Bell
Executive Director
Texas Air Control Board
6330 Highway 290 East
Austin, Texas 78723

Re: PSD Applicability Request, Valero Transmission Company
Yoakum, DeWitt County, Texas

Dear Mr. Bell:

We have reviewed Valero Transmission Company's request for an applicability determination of Prevention of Significant Deterioration (PSD) permit requirements to the expansion at their Gohlke Plant in DeWitt County, Texas. At issue is whether the relationship between Valero Transmission Company, as a service provider under the SIC major code 49, to Valero Gathering Company under SIC major code 13 is such that there are two distinct PSD sources here.

Valero asserts that its gathering company is a separate company from its transmission company. Valero Gathering Company processes the gas from wells to remove hydrogen sulfide, carbon dioxide, and water to meet pipeline specifications prior to custody transfer to Valero Transmission Company. The principal product of Valero Gathering Company is pipeline quality natural gas under the SIC major code 13, while the principal product of Valero

Transmission Company is the distribution of natural gas through a pipeline system under the SIC major code 49. Valero maintains that the Gathering Company does not convey, store, or otherwise assist in the production of Valero Transmission's principal product, and therefore concludes that the two companies are separate sources for the purpose of PSD applicability. For similar reasons, Valero maintains that Valero Hydrocarbon Company, an extraction facility in close proximity to Valero Transmission Company with an SIC major code 13, is a separate source from Valero Transmission Company.

In reviewing the PSD requirements, it is evident that each source is to be classified according to its primary activity which is determined by its principal product or group of products. Thus, one source classification encompasses both primary and support facilities, even if it includes units with different two digit SIC codes. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product or group of products produced or distributed, or services rendered. See 45 FR 52695 (August 7, 1980).

At issue is whether Valero Transmission Company is a support facility to Valero Gathering Company. A review of the activities of the two companies indicates that both companies produce natural gas as their principal product. We consider Valero Transmission Company as a support facility to Valero Gathering Company since the Transmission Company receives the processed natural gas from Valero Gathering Company and compresses it for distribution into a pipeline system. Thus, Valero Transmission Company is a support facility to Valero Gathering in that it conveys the product natural gas from the processing plant into the pipeline system. Available information further indicates that conveyance of the product natural gas through the Transmission Company is the only means of introducing the product natural gas into commerce. The Gathering Company is not equipped to introduce its product into commerce by any means other than through the Transmission Company. Consequently, for the purposes of determining whether modifications to Valero Transmission Company would be subject to PSD, Valero Transmission Company and Valero Gathering Company are considered to be one source.

On September 26, 1986, Mr. Ken Waid of Waid and Associates asked for clarification on how the distance between two facilities

would affect the applicability of the PSD regulations' one source classification to such facilities. In the case of Valero Gathering Company and Valero Transmission Company, the distance between them does not affect the applicability of the PSD regulations' one source classification to such facilities since they are on contiguous properties. The gathering and transmission plants are one source for the reasons stated above. For cases where sources are not located on contiguous or adjacent properties, EPA cannot say precisely how far apart the activities must be in order to be treated separately. EPA can only answer that question through case-by-case determinations See 45 FR 52695 (August 7, 1980).

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at (214) 767-9875.

Sincerely yours,

(s) JACK S. DIVITA
for
William B. Hathaway
Director
Air, Pesticides and Toxics Division (6T)

cc: Mr. Lawrence Pewitt, P.E., Director
Permits Division
Texas Air Control Board

bcc: Ascenzi (6T-EN)
Diggs (6T-AN)
Rasnic (EN-341)

OhioEPA Inter-Office Communication

TO: Ed Mead, Chief, Air Engineering Services, NWDO DATE: June 26, 1978

FROM: Bob Hodanbosi, Chief, Environmental Assessment Section, OAPC

SUBJECT: Emission Offsets

In response to your question of June 20, 1978, the entity must obtain offsets for the entire amount of emissions i.e. >150 tons per year.

Also the 100 tons per year cutoff is considered to be cumulative emissions for a specific pollutant since December 21, 1976. That is if a facility has installed four 20 TPY hydrocarbon sources since December 21, 1976 and now wants to install a hydrocarbon source of 25 TPY emission offsets must be obtained. The amount of the offset should be greater than 105 tons per year.

BH:gvr

cc: New Source Review Contacts

INTER-OFFICE COMMUNICATION

TO Robert Hodanbosi, OAPC DATE 6-20-78 JUN 22 1978

FROM: Ed Mead, NWDO Em

SUBJECT: Offsets

When an entity wishes to install a new source of air contaminants in a non-attainment area that exceed 100 TPY, must he obtain offsets for just that which exceeds the 100 TPY or for the whole amount; i.e. if a 150 TPY source is proposed, must the entity obtain 50 TPY of offset or 150 TPY of offset?

EM/sd

ChicEPA Inter-Office Communication

TO: New Source Review Contacts DATE: June 28, 1978

FROM: Bob Bonanbosi, Chief, Environmental Assessment Section, OAPC

SUBJECT: PSD Regulation

June 19, 1978 Federal Register

Attached are a copy of the Prevention of Significant Deterioration Regulations recently issued by U.S. EPA. The state does not have delegation for this program, and new sources affected by these regulations should contact Region V to obtain a PSD permit.

Also attached for your information is a copy of a question from NWDO concerning offsets and my response.

If you have any questions feel free to call me

BH:gwr

Attachments

See Jan 16, 1979 (Emission Offsets Ruling)

Forget

MONDAY, JUNE 19, 1978
PART V

Federal Register

ENVIRONMENTAL PROTECTION AGENCY

1977 CLEAN AIR ACT; PREVENTION OF SIGNIFICANT AIR QUALITY DETERIORATION

State Implementation Plans; Requirements

[6560-01]

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

Subchapter C—Air Programs

[FRL 904-3]

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

Prevention of Significant Air Quality Deterioration

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Clean Air Act Amendments of 1977 (Pub. L. 95-95) include comprehensive new requirements for the prevention of significant air quality deterioration (PSD). EPA is today publishing final guidance to assist States in preparing State implementation plan (SIP) revisions meeting the new requirements. Each State is to submit such a revision to EPA for approval within nine months of today.

DATES: State implementation plan revisions due within nine months after this publication date (March 19, 1979).

FOR FURTHER INFORMATION CONTACT:

Darryl Tyler, Chief, Standards Implementation Branch (MD-15), Office of Air Quality Planning and Standards, Research Triangle Part, N.C 27711, 919-541-5425.

SUPPLEMENTARY INFORMATION:

Pre-1977 Amendments

On December 5, 1974, EPA published regulations under the 1970 version of the Clean Air Act (Pub. L. 91-604) for the prevention of significant air quality deterioration (PSD). These regulations, codified at 40 CFR 52.21, established a program for protecting areas with air quality cleaner than the national ambient air quality standards (NAAQS).

Under EPA's regulatory program, clean areas of the Nation could be designated under any of three "Classes." Specified numerical "increments" of air pollution were permitted under each class up to a level considered to be "significant" for that area. Class I increments permitted only minor air quality deterioration; class II increments, moderate deterioration; class III increments, deterioration up to the secondary NAAQS.

EPA initially designated all clean areas of the Nation as class II. States, Indian Governing Bodies, and officials having control over Federal lands (Federal land managers) were given authority to redesignate their lands under specified procedures. The area classification system was administered and enforced through a preconstruction permit program for nineteen specified types of stationary air pollution sources. This preconstruction review in addition to limiting future air quality deterioration required that any source subject to the requirements would apply best available control technology (BACT).

1977 Amendments

On August 7, 1977, the Clean Air Act Amendments of 1977 became law. The 1977 amendments changed the 1970 act and EPA's regulations in many respects, particularly with regard to PSD. (See Clean Air Act sections 160-169, 42 U.S.C. 7470-79 (Clean Air Act Amendments of 1977, Pub. L. 95-95, 127(a), 91 Stat. 731), as amended, Pub. L. 95-190, section 14(a) (40)-(54), 91 Stat. 1401-02 (November 16, 1977) (technical and conforming amendments).) In addition to mandating certain immediately effective changes to EPA's PSD regulations, the new Clean Air Act, in sections 160-169, contains comprehensive new PSD requirements. These new requirements are to be incorporated by States into their implementation plans (under section 110 of the act). By virtue of section 406(d) of the amendments, such State implementation plan revisions are due nine months after EPA issues these regulations published today which provide the States with guidance on submitting approvable plan provisions. In the interim, implementation of the PSD program under 40 CFR 52.21 will continue but as amended today.

In a rulemaking action appearing elsewhere in today's Federal Register, EPA amends its own PSD regulations (40 CFR 52.21) to incorporate all of the new requirements of sections 160-169. The two rulemaking actions promulgated today are essentially identical, with the difference in reviewing agency, EPA as opposed to a State, being the major distinction. The issues discussed below as supplementary information to this rulemaking focus on concerns inherent to State PSD implementation. Other topics of concern to States choosing to develop their own PSD programs are discussed in the rulemaking affecting EPA's current implementation of the PSD program (40 CFR 52.21). Thus, the two rules should be read together.

Protection of Increments

New section 163(b) of the act sets forth immediately effective ambient air increments for particulate matter and sulfur dioxide in class I, class II, and class III areas. EPA specifically solicited public comments as to whether the PSD "increments" were to be protected only through the preconstruction review process of section 165 of the act. Section 161 of the act requires that each implementation plan "contain emission limits and such other measures as may be necessary * * * to prevent significant deterioration * * *." Section 163 requires plans to "contain measures assuring protection of ambient increments and ceilings."

State agencies and major industries that addressed the question uniformly felt that preconstruction review alone was the mechanism considered by Congress to protect increment consumption. Environmental groups felt that the increments should be treated in basically the same regulatory manner as the ambient air quality standards established under Section 109. A careful review of the legislative history indicates that the latter approach is the approach intended by Congress. The legislative history is particularly clear in the conference report on the bill that was finally adopted by Congress and signed into law. (H.R. Rep. No. 95-564, at 149 (1977).) The conference report describes the approach taken in the House bill regarding increment protection: "If increments are exceeded, the State must revise the State implementation plan to insure that the increment is not exceeded. Sources receiving new emission limitations would be eligible for compliance date extensions under the compliance date extension section of the bill." (Id.) This approach differs considerably from the approach in the Senate bill which was specifically limited to the review of major sources. Since Congress had a clear choice to make and as the language in the final act is that of the House bill, States are required to secure appropriate emissions reductions where the increment has been exceeded.

Any SIP relaxations submitted after today that would affect a PSD area must include a demonstration that the applicable increment will not be exceeded. Increment consumption due to a plan relaxation would be typically determined through modeling the difference between the allowable emissions resulting from the new relaxed SIP limit and the emissions of the applicable sources which would be included in the baseline. SIP relaxations received by EPA after August 7, 1977, but before today's Federal Register will consume increment. However, EPA believes that such revisions require special consideration due to the uncertainty of how the new Act would apply to such SIP relaxations. EPA will review these proposed revisions as to the degree of anticipated increment consumption without advance notice would have caused considerable delay and economic disruption. Therefore,

Matthew Bender & Co., Inc.

the Administrator feels that these SIP relaxations need not be individually assessed to determine the precise amount of consumed increment before a relaxations may be approved. The periodic assessment requirement to verify that the applicable increments have not been exceeded is thought to be sufficient protection.

The State must include a program to assess periodically whether emissions from exempted or unreviewed sources are endangering an applicable increment. Such periodic reviews must be subject to the opportunity for public hearing. If a periodic review or the ambient impact review of a major source shows an area to be in violation of an increment, then the plan must be revised within 60 days or such time as determined by the Administrator. The SIP revision should be designed to roll back emissions to a level such that the increment is no longer exceeded. This may induce the use of economic incentives such as emissions charges or the development of offset markets. SIP revisions are more thoroughly discussed in the supplementary information to EPA's PSD regulation published elsewhere in today's FEDERAL REGISTER.

The comments raised a number of other issues related to consumption of increments. The Administrator wishes to clarify first that States can expand the available PSD increment(s) by requiring emission reductions from existing sources. Similarly, the procurement of acceptable emission offsets (i.e., additional control of existing sources) may be used by a source, if a State so permits, in order to allow its construction where the increment would not otherwise allow approval. For further discussion of increment consumption, see the preamble to EPA's PSD regulations published elsewhere in today's FEDERAL REGISTER.

State implementation plan revisions to implement the new PSD requirements are required to specify the measures both to protect the increments and allocate their use. States under today's 40 CFR part 51 regulations are encouraged to examine alternative approaches to the allocation of available increments in order to provide for their individual growth objectives and planning concerns. To support this effort, the Agency is initiating studies to assess the merits and feasibility of various allocation programs. The Agency will evaluate approaches in which economic incentives serve as a supplement to, or a replacement for, an administrative permitting procedure and variations on first-come, first-served permitting. The economic incentive based approaches to be considered include marketable permits, emissions fees, and emissions zoning.

A marketable permit program would allow, among other things, a permitted source to sell portions of its permit to other sources. An ordinary permit specifies certain conditions on the maximum emissions from the source but provides no incentive to reduce emissions below the level specified in the permit. A marketable permit allows the source to sell a portion of its permit proportional to the degree to which it reduces emissions below the level specified in the original permit through the application of improved control technology. Thus, a source would have an incentive to reduce emissions since it could sell the emission reduction to another source. A source would purchase this offsetting reduction if it were cheaper than its own cost of reduction. Thus, a marketable permit program could lead to the same emission reduction as a standard permit program but at a lower total cost. Sources with higher marginal costs of compliance would control less and sources with lower marginal costs would control more.

Under another approach, emission fees would be charged to a source according to the quantity of pollutants it emits. These would serve as an incentive to minimize pollution since reducing pollution will lower costs to the source. Emissions fees might be used as a supplement to or replacement for ordinary permits.

Emission density zoning classifies each land area according to the quantity of pollutants that could be emitted into the air over that land. This might be based on some allowable ambient pollutant concentration. Thus, each acre of land translates to a fixed quantity of emissions allowed. Sources would then purchase the "air rights" to enough land to cover their emissions. If these rights are expensive, sources will control more than if these air rights were cheap. In general, these air rights will be more expensive in areas where there is high demand from many sources than in areas where there are fewer sources of comparable size. More expensive air rights would lead to higher levels of control, since more costly equipment would be justified in order to buy the remaining air rights.

EPA in the past has implemented the PSD program on a first-come, first-served basis. However, it does not appear that this approach alone may be adequate to achieve the purposes of the act on a long-term basis. While EPA is administering the PSD permit program, the Administrator will solicit and give careful consideration during the permit review process to the views of State and local officials regarding the impact of proposed permit decisions on an area's potential for economic development. For further discussion, see the preamble to EPA's PSD regulations published elsewhere in today's FEDERAL REGISTER.

PERMIT REVIEW PROCESS

Virtually every comment spoke to the issue of subjecting sources to PSD review on the basis of their uncontrolled emissions as EPA proposed. Many State and local agencies expressed a deep concern that to make sources subject to the full PSD requirements on this basis would result in an unmanageable number of detailed and resource intensive reviews. The rulemaking allows States generally to exempt from air quality reviews those sources with minimal emissions. Only those sources which would have allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour (50/1,000/100), or would impact a class I area or an area where the increment is known to be violated, must receive an ambient review. In addition only these sources must undergo case-by-case review for BACT and then only as to those pollutants regulated under the act for which the source would be major.

The rulemaking also allows States to exempt sources with allowable emissions of less than 50 tons per year from a case-by-case BACT review where the State feels such an exemption is appropriate. It should be noted that this approach is based on analysis which indicates that, on a national basis, such sources are a very small part of emissions growth. In some States such sources may be a more significant portion of the emissions inventory and thus BACT review of smaller sources may be appropriate. States should examine this issue carefully in preparing their implementation plan. EPA will also consider this issue in evaluating plan revisions submitted by States.

State implementation plans must include procedures for expeditiously informing a PSD permit applicant of the completeness of the application. The permitting authority must specify a time period within which the completeness of a permit application would be determined. For example, EPA specifies 30 days when implementing the PSD program under 40 CFR 52.21.

BACT

The November 3, 1977, proposal solicited comment on the use of a de minimis level of 100 tons per year potential emissions for each pollutant for triggering the BACT requirement. The Agency stated the issue:

> For example, if a source is subject to PSD review either because it is one of the named sources or because it has potential emissions of 250 tons per year of a given pollutant, BACT would be required only for those pollutants whose potential emissions exceed 100 tons per year.

Comments received indicated that if a source is subject to PSD on the basis

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of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT should be required only for those pollutants for which the potential emissions exceed 250 tons). The Administrator agrees with this argument and appropriate changes are made in the regulations set forth below.

MONITORING AND MODELING

Extensive public comment was received on the proposed requirements for monitoring and modeling. These issues are extensively discussed in the Part 52 rulemaking published elsewhere in today's FEDERAL REGISTER. As noted, EPA intends that monitoring should generally focus on obtaining data necessary for required review against NAAQS. Although the increment consumption must of necessity be tracked through the use of modeling, EPA does not intend that there be no "real world" checks on the accuracy of modeling. If a source or other party believes that the recommended models have either overpredicted or underpredicted the air quality impact of a source, the State may accept the submission of data which will more precisely define the impact of the source.

may be permitted only if an area is redesignated has been limited to sources for which an ambient impact analysis must be done. Finally, this rulemaking removes the provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during startup of the new PSD program. All areas were then class II. Now Congress has specifically designated Federal class I areas and States have had considerable opportunity to designate any others. States may establish such a requirement at their own discretion.

Several other issues are discussed in the "Supplementary Information" to the part 52 PSD rulemaking also published today. That discussion should be considered in conjunction with this one.

FINAL ACTION

The following regulatory amendments are nationally applicable, and this action is based upon determina-

coal cleaning plants (with therm dryers), kraft pulp mills, portlar cement plants, primary zinc iron and steel mill plants, prii minum ore reduction plants, p.ima copper smelters, municipal incine ators capable of charging more th 250 tons of refuse per day, hydr fluoric, sulfuric, and nitric acid plan petroleum refineries, lime plan phosphate rock processing plants, col oven batteries, sulfur recovery plan carbon black plants (furnace proces primary lead smelters, fuel conversic plants, sintering plants, seconda metal production plants, chemic process plants, fossil fuel boilers (combination thereof) totaling mo than 250 million British thermal uni per hour heat input, petroleum sto age and transfer units with a tot storage capacity exceeding 300,0(barrels, taconite ore processing plant glass fiber processing plants, and cha coal production plants; and

(ii) Notwithstanding the source size specified in paragraph (b)(1)(i) of th section, any source which emits, or ha the potential to emit, 250 tons pe year or more of any air pollutant regu lated under the Act.

(2) "Major modification" means an physical change in, change in th method of operation of, or addition t a stationary source which increase the potential emission rate of any ai pollutant regulated under the Act (in cluding any not previously and taking into account all acc ed increases in potential emissions oc curring at the source since regulation were approved under this section, o since the time of the last constructior approval issued for the source pursu ant to such regulations approvec under this section, whichever time is more recent, regardless of any emis sion reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

(i) A physical change shall not include routine maintenance, repair and replacement.

(ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

(a) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) An increase in the hours of operation;

(c) Use of an alternative fuel or raw material by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or s perseding legislation), or by re a natural gas curtailment pla effect pursuant to the Federal Power Act;

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of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT should be required only for those pollutants for which the potential emissions exceed 250 tons). The Administrator agrees with this argument and appropriate changes are made in the regulations set forth below.

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may be permitted only if an area is redesignated has been limited to sources for which an ambient impact analysis must be done. Finally, this rulemaking removes the provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during startup of the new PSD program. All areas were then class II. Now Congress has specifically designated Federal class I areas and States have had considerable opportunity to designate any others. States may establish such a requirement at their own discretion.

Several other issues are discussed in the "Supplementary Information" to the part 52 PSD rulemaking also published today. That discussion should be considered in conjunction with this one.

FINAL ACTION

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(d) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material; or

(e) Use of an alternative fuel by reason of an order or rule under section 125 of the Act.

(f) Change in ownership of the source.

(3) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(4) "Source" means any structure, building, facility, equipment, installation or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control).

(5) "Facility" means an identifiable piece of process equipment. A stationary source is composed of one or more pollutant-emitting facilities.

(6) "Fugitive dust" means particulate matter composed of soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces and soil storage piles, and other activities in which soil is either removed, stored, transported, or redistributed.

(7) "Construction" means fabrication, erection, installation, or modification of a source.

(8) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals and either has:

(i) Begun, or caused to begin, a continuous program of physical on-site construction of the source to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

(9) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State implementation plan.

(10) "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification 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 source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of the best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61. If the reviewing agency determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard, or combination thereof, to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

(11) "Baseline concentration" means that ambient concentration level reflecting actual air quality as of August 7, 1977, minus any contribution from major stationary sources and major modifications on which construction commenced on or after January 6, 1975. The baseline concentration shall include contributions from:

(i) The actual emissions of other sources in existence on August 7, 1977, except that contributions from facilities within such existing sources for which a plan revision proposing less restrictive requirements was submitted on or before August 7, 1977, and was pending action by the Administrator on that date shall be determined from the allowable emissions of such facilities under the plan as revised; and

(ii) The allowable emissions of major stationary sources and major modifications which commenced construction before January 6, 1975, but were not in operation by August 7, 1977.

(12) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(13) "High terrain" means any area having an elevation of 900 feet or more above the base of the stack of a facility.

(14) "Low terrain" means any area other than high terrain.

(15) "Indian Reservation" means any federally-recognized reservation established by treaty, agreement, Executive order, or act of Congress.

(16) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(17) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR Part 60 and Part 61,

(ii) The applicable State implementation plan emission limitation, or

(iii) The emission rate specified as a permit condition.

(18) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1)-(3). A reconstructed source will be treated as a new source for purposes of this section, except that use of an alternative fuel or raw material by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under Section 125 of the Act, shall not be considered reconstruction. In determining best available control technology for a reconstructed source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR Part 60 is applicable to such source.

(19) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(c) *Ambient air increments.* The plan shall contain emission limitations and such other measures as may be necessary to assure that in areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I	
Particulate matter:	
Annual geometric mean	5
24-hr maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Class II	
Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Class III	
Particulate matter:	
Annual geometric mean	37
24-hr maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* The plan shall provide that no concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* The plan shall provide that—

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) The plan may provide that the following concentrations shall be excluded in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order.

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan.

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities, and

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(2) If the plan provides that the concentrations to which paragraph (f)(1) refers shall be excluded, it shall also provide that—

(i) No exclusion of such concentrations shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) refers or the plan to which paragraph (f)(1)(ii) refers, whichever is applicable.

(ii) If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(g) *Redesignation.* (1) The plan shall provide that all areas of the State (except as otherwise provided under paragraph (e) of this section) shall be designated either Class I, Class II, or Class III. Any designation other than Class II shall be subject to the redesignation procedures of this paragraph. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The plan may provide that the State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II: *Provided*, That:

(i) At least one public hearing has been held in accordance with procedures established in § 51.4.

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing.

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion.

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) The plan may provide that any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of provisions established in accordance with paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that such redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation (including resolutions where appropriate) concurring in the redesignation;

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(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification subject to provisions established in accordance with paragraph (l) of this section which could receive a permit only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available, insofar as was practicable, for public inspection prior to any public hearing on redesignation of any area as Class III.

(4) The plan shall provide that lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided*, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this section or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed area designation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* The plan shall provide, as a minimum, that the degree of emission limitation required for control of any air pollutant under the plan shall not be affected in any manner by—

(1) So much of a stack height, in existence before December 31, 1970, as exceeds good engineering practice, or

(2) Any other dispersion technique implemented before then.

(i) *Review of major stationary sources and major modifications—Source applicability and general exemptions.* (1) The plan shall provide that no major stationary source or major modification shall be constructed unless, as a minimum, requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), and (r) of this section, have been met. The plan may provide that such requirements shall apply to a proposed source or modification only with respect to those pollutants for which the proposed construction would be a major stationary source or major modification.

(2) The plan may provide, as a minimum, that requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that—

(i) As to that pollutant, the source or modification is subject to the emission offset ruling (41 FR 55524) as it may be amended or to regulations approved or promulgated pursuant to Section 173 of the Act, and

(ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act).

(3) The plan may provide that requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), and (r) shall not apply to nonprofit health or education institutions.

(4) The plan may provide that a portable facility which has received construction approval under requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), (q), and (r) may relocate without being subject to such requirements if—

(i) Emissions from the facility would not exceed allowable emissions; and

(ii) Such relocation would impact no Class I area and no area where an applicable increment is known to be violated; and

(iii) Notice is given to the reviewing authority at least 30 days prior to such relocation identifying the proposed new location and the probable duration of operation at such location.

(j) *Control technology review.* The plan shall provide that—

(1) A major stationary source or major modification shall meet all applicable emission limitations under the State implementation plan and all applicable emission standards and standards of performance under 40 CFR Part 60 and Part 61.

(2) A major stationary source or major modification shall apply best available control technology for each applicable pollutant, unless the increase in allowable emissions of that pollutant from the source would be less than 50 tons per year; 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

(i) The preceding hourly or daily rates shall apply only with respect to a pollutant for which an increment, or national ambient air quality standards, for a period less than 24 hours or a period of 24 hours, as appropriate, has been established.

(ii) In determining whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(3) In the case of a modification, the requirement for best available control technology shall apply only to each new or modified facility which would increase the allowable emissions of an applicable pollutant.

(4) Where a facility within a source would be modified but not reconstructed, the requirement for best available control technology, notwithstanding paragraph (j)(2) of this section, shall not apply if no net increase in emissions of an applicable pollutant would occur at the source, taking into account all emission increases and decreases at the source which would accompany the modification, and no adverse air quality impact would occur.

(5) For phased construction projects the determination of best available control technology shall be reviewed, and modified as appropriate, at the latest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(6) In the case of a major stationary source or major modification which the owner or operator proposes to construct in a Class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase that would be applicable if the area were a Class II area and where no standard under 40 CFR Part 60 has been promulgated for the source category, the Administrator shall approve the determination of best available control technology.

(k) *Exemptions from impact analysis.* (1) The plan may provide that with respect to a particular pollutant the requirements of provisions established in accordance with paragraphs (l), (n), and (p) of this section shall not apply to a proposed major stationary source or major modification, if—

(i) The increase in allowable emissions of that pollutant from the source or modification would impact no Class I area and no area where an applicable increment is known to be violated; and

(ii) The increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive; or

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(iii) The emissions of the pollutant are of a temporary nature including but not limited to those from a pilot plant, a portable facility, construction, or exploration; or

(iv) A source is modified, but no increase in the net amount of emissions for any pollutant subject to a national ambient air quality standard and no adverse air quality impact would occur.

(2) The hourly or daily rates set in paragraph (k)(1)(ii) of this section shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period of less than 24 hours or for a period of 24 hours, as appropriate, has been established.

(3) The plan shall provide that, in determining for the purpose of provisions established in accordance with paragraph (k)(1)(ii) of this section whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(4) The plan shall provide that, in determining for the purpose of provisions established in accordance with paragraph (k)(1)(iv) of this section whether and to what extent there would be an increase in the net amount of emissions of any pollutant subject to a national ambient air quality standard from the source which is modified, there shall be taken into account all emission increases and decreases occurring at the source since August 7, 1977.

(5) The plan may provide that the requirements of provisions established in accordance with paragraphs (l), (n), and (p) of this section shall not apply to a major stationary source or major modification with respect to emissions from it which the owner or operator has shown to be fugitive dust.

(l) *Air quality review.* (1) The plan shall provide that the owner or operator of the proposed source or modification must demonstrate that allowable emissions increases from the source or modification, in conjunction with all other applicable emissions increases or reductions, will not cause or contribute to air pollution in violation of—

(i) Any national ambient air quality standard in any air quality control region; or

(ii) Any applicable maximum allowable increase over the baseline concentration in any area.

(m) *Air quality models.* (1) The plan shall provide for procedures which specify that—

(i) All estimates of ambient concentrations required under paragraph (l) shall be based on the applicable air quality models, data bases, and other requirements specified in the *Guidelines on Air Quality Models* (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978).

(ii) Where an air quality impact model specified in the *Guideline on Air Quality Models* is inappropriate, the model may be modified or another model substituted.

(iii) A substitution or modification of a model shall be subject to public comment procedures developed in accordance with paragraph (r) of this section.

(iv) Written approval of the Administrator must be obtained for any modification or substitution.

(v) Methods like those outlined in the *Workbook for the Comparison of Air Quality Models* (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1977) should be used to determine the comparability of air quality models.

(2) The *Guideline on Air Quality Models* is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register library.

(3) The documents referenced in this paragraph are available for public inspection at EPA's Public Information Reference Unit, Room 2922, 401 M Street SW., Washington, D.C. 20460, and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711. Also, copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Va. 22161.

(n) *Monitoring.* The plan shall provide that—

(1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the reviewing authority determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a national ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a national ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operato demonstrates to the Administrator satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air quality standard.

(o) *Source information.* (1) The plan shall provide that the owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with this section.

(2) The plan may provide that such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied;

(3) The plan shall provide that up request of the State, the owner or erator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(p) *Additional impact analyses.* The plan shall provide that—

(1) The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or modification.

(q) *Sources impacting Federal Class I areas—additional requirements—*

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(i) *Notice to EPA.* The plan shall provide that the reviewing authority shall transmit to the Administrator a copy of each permit application relating to a major stationary source or major modification and provide notice to the Administrator of every action related to the consideration of such permit.

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of Class I lands have an affirmative responsibility to protect the air quality related values (including visibility) of any such lands and to consider, in consultation with the Administrator, whether a proposed source or modification would have an adverse impact on such values.

(3) *Denial—impact on air quality related values.* The plan shall provide a mechanism whereby a Federal Land Manager of any such lands may present to the State, after the reviewing authority's preliminary determination required under procedures developed in accordance with paragraph (r) of this section, a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of any Federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the State concurs with such demonstration, the reviewing authority shall not issue the permit.

(4) *Class I Variances.* The plan may provide that the owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies to the State, the reviewing authority may: *Provided,* That applicable requirements are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	19
24-hr. maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr. maximum	91
3-hr. maximum	325

(5) *Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence.* The plan may provide that—

(i) The owner or operator of a proposed source or modification which cannot be approved under procedures developed pursuant to paragraph (q)(4) of this section may demonstrate to the Governor that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility);

(ii) The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase; and

(iii) If such variance is granted, the reviewing authority may issue a permit to such source or modification in accordance with provisions developed pursuant to paragraph (q)(7) of this section: *Provided,* That the applicable requirements of the plan are otherwise met.

(6) *Variance by the Governor with the President's concurrence.* The plan may provide that—

(i) The recommendations of the Governor and the Federal Land Manager shall be transferred to the President in any case where the Governor recommends a variance in which the Federal Land Manager does not concur;

(ii) The President may approve the Governor's recommendation if he finds that such variance is in the national interest; and

(iii) If such a variance is approved, the reviewing authority may issue a permit in accordance with provisions developed pursuant to the requirements of paragraph (q)(7) of this section: *Provided,* That the applicable requirements of the plan are otherwise met.

(7) *Emission Limitations for Presidential or Gubernatorial Variance.* The plan shall provide that in the case of a permit issued under procedures developed pursuant to paragraph (q)(5) or (6) of this section, the source or modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum Allowable Increase

(Micrograms per cubic meter)

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(r) *Public participation.* The plan shall provide that—

(1) The reviewing authority shall notify all applicants within a specified time period as to the completeness of the application or any deficiency in the application or information submitted. In the event of such a deficiency, the date of receipt of the application shall be the date on which the reviewing authority received all required information.

(2) Within one year after receipt of a complete application, the reviewing authority shall:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(ii) Make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant, the Administrator and to officials and agencies having cognizance over the location where the proposed construc-

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tion would occur as follows: any other State or local air pollution control agencies, the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. The reviewing authority shall make all comments available for public inspection in the same locations where the reviewing authority made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the reviewing authority made available preconstruction information and public comments relating to the source.

(s) *Source obligation.* The plan shall include legally enforceable procedures to provide that approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the plan and any other requirements under local, State or Federal law.

NOTE.—Incorporation by reference provisions approved by the Director of the Federal Register April 27, 1978.

[FR Doc. 78-16889 Filed 6-14-78; 4:15 pm]

[6560-01]

[FRL 904-3A]

PART 52—APPROVAL AND PROMULGATION OF STATE IMPLEMENTATION PLANS

1977 Clean Air Act Amendments to Prevent Significant Deterioration

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: By these final regulations, EPA amends its regulations relating to prevention of significant air quality deterioration (PSD) in order to implement the new PSD requirements of the Clean Air Act Amendments of 1977 (Pub. L. 95-95). As amended, the PSD regulations are now more comprehensive and stringent than they were. States may substitute comparable requirements through implementation plan revisions pursuant to regulations also being published today.

DATES: See §52.21(i) of the regulations.

FOR FURTHER INFORMATION CONTACT:

Darryl Tyler, Chief, Standards Implementation Branch, Control Programs Development Division, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711.

SUPPLEMENTARY INFORMATION:

INTRODUCTION

In 1974, EPA promulgated regulations under Section 101(b)(1) of the Clean Air Act (Act) to prevent emissions of sulfur dioxide (SO_2) and particulate matter (PM) from significantly deteriorating air quality in areas where concentrations of those pollutants were lower than the applicable national ambient air quality standards (NAAQS). 39 FR 42510 (codified at 40 CFR 52.21). EPA incorporated those regulations into the implementation plan (SIP) of each State. The regulations, as amended before August 7, 1977, prohibited construction of any stationary source in any of nineteen specified categories, unless EPA or a delegate State had issued a permit evidencing that the source would apply "best available control technology" (BACT) for SO_2 and PM and that emissions of those pollutants from the source would not cause significant deterioration of air quality in any area. For determining what levels of deterioration were significant, the regulations set out an area classification system. Under it, clean air areas could be classified as Class I, II, or III. In Class I areas, small increases of SO_2 and PM would be significant; in Class II areas, moderate increases; and in Class III areas, increases up to a NAAQS. The regulations classified all clean areas as Class II, but gave States, Indian Governing Bodies and Federal Land Managers the opportunity to reclassify their lands under specified requirements.

On August 7, 1977, the President signed into law new PSD requirements as part of the Clean Air Act Amendments of 1977 (1977 Amendments). These requirements follow the outline of the pre-existing regulations, but are in general more comprehensive and stringent. The permit requirements and classification system remain; but, among other things, many more sources are covered, Class II increments are different and sometimes more restrictive, Class III increments are now specifically defined, ambient ceiling requirements apply, BACT applies to all pollutants regulated under the Act, certain lands are permanently Class I, the procedures for reclassifying to Class III are more rigorous, the scope of the ambient impact analysis is much broader, and the opportunity for public comment on a proposed permit must include an opportunity for a public hearing. See Clean Air Act Sections 160-169 42 U.S.C. §§7470-79 (Clean Air Act Amendments of 1977, Pub. L. 95-95, §127(a), 91 Stat. 731), as amended, Pub. L. 95-190, Sections 14(a)(40)-(54), 91 Stat. 1401-02 (November 16, 1977) (technical and conforming amendments).

On November 3, 1977, EPA announced in the FEDERAL REGISTER several specific actions. The first was a final decision not to implement the new PSD requirements of Section 165 of the Act as of August 7, 1977, 42 FR 57459. The second, which embodied the first, was the promulgation of amendments to the pre-existing PSD regulations conforming them, not to Section 165, but primarily to Sections 162(a), 163(b) and 164(a) of the Act in accordance with Section 168(b). Id. Section 162(a) sets forth the new mandatory Class I areas; Section 163(b) identifies the new Class II and Class III increments and the ambient ceilings requirement; and Section 164(lists those areas which may not be reclassified as Class III and outlines the new Class III reclassification procedures. The third action EPA announced was the proposal of regulations giving guidance for the preparation of SIP revisions which would meet the new PSD requirements. Id. at 57471. The fourth action was the proposal of further, comprehensive amendments to the pre-existing PSD regulations. Id. at 57479. In announcing the proposals, EPA said that it intended to promulgate final regulations no later than March 1, 1978. Id. at 57459, 57471, 57479. Because Section 406(d)(2) of the 1977 Amendments directs the States to submit required SIP revisions within nine months of the promulgation of regulations giving guidance for their preparation, EPA also said that SIP revisions incorporating the new PSD requirements would be due no later than December 1, 1978. Id. at 57471, 57479.

On December 8, 1977, EPA published a supplement to the November 3 proposals. In the supplement, EPA clarified what sources the proposed amendments would exempt from the new PSD requirements, solicited comments on two additional issues, notified the public that technical and conforming amendments to the 1977 Amendments had been enacted on No-

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vember 16, 1977, and stated that it would hold public hearings on January 9, 1978. 42 FR 52020.

On December 23, 1978, EPA extended, from January 3, 1978, to January 31, 1978, the deadline for submitting written comments on the November 3 proposals and on the Air Quality Modeling Conference held on December 14-15, 1978. 42 FR 64378. The conference was announced at 42 FR 58542 and 58561 (November 10, 1977). EPA noted in the December 23, 1977 notice that it might not be able to promulgate the new PSD regulations by March 1, 1978, and that it nevertheless intended to maintain "the previously-announced 'permit deadline' of March 1, 1978, for determining whether sources will be subject to the new PSD rules * * *."

On January 9, 1978, public hearings on the proposals took place in Washington, Chicago and Denver and are included as part of the written record. Transcripts have been made of the oral comments. On January 31, the comment period ended. EPA received more than 250 written comments on the proposals. EPA has considered in preparing the final regulations not only the oral and written comments on the proposals, but also the comments submitted in connection with the modeling conference. EPA has also had occasion to measure the proposals against concrete problems arising during and after the comment period.

The discussion which follows focuses on the important issues raised by the proposed amendments to the pre-existing regulation, summarizes the comments relating to each issue, and presents EPA's resolution. Elsewhere in today's FEDERAL REGISTER, EPA is announcing the promulgation of the necessary requirements for the preparation, adoption and submittal of State PSD programs. Since those regulations parallel these, both preambles should be read together. States should submit their SIP revisions no later than nine months from today.

HIGHLIGHTS

The regulations made final today apply to any source in any of 28 categories with a potential emissions increase of 100 tons per year or more of any pollutant regulated under the Act and to any source with a potential emissions increase of 250 tons per year or more of any pollutant regulated under the Act, including a source which would have been in one of the 28 categories if it were not under the applicable size cutoff. Potential emissions mean uncontrolled emissions.

Not all covered sources will receive full PSD review. Only those which would have allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, or would impact a Class I area or an area where the increment is known to be violated, will receive such review. However, the combined impact of sources not receiving full review will be determined periodically.

In general, only those sources with allowable emissions of 50 tons per year, 1,000 pounds per day, or 100 pounds per hour or more will undergo case-by-case review for BACT, and then only as to those pollutants regulated under the Act for which the source would be major.

To avoid duplicating State new source review, EPA will in general review a source which has allowable emissions under an enforceable SIP permit of less than 50 tons per year, 1,000 pounds per day or 100 pounds per hour, and which would impact no Class I area or area where an increment is known to be violated, only to the extent of ensuring that it would meet any applicable emission limitation and has undergone adequate public scrutiny.

Where PSD and nonattainment reviews both apply, the State must act first before EPA can issue final construction approval under PSD.

PSD applies irrespective of where a source would locate, except that it does not apply to any source which with respect to a particular pollutant is subject to the nonattainment requirements and would impact no clean air area.

The PSD increments must be protected through both preconstruction review and the SIP review process. If an increment is exceeded, the applicable plan must be revised. SIP relaxations submitted after today that would cause significant deterioration cannot be approved.

A Governor can upon written request exempt certain emission increases from consuming an applicable increment while EPA implements the PSD program. The State must submit an approvable PSD SIP revision incorporating the exemption within 9 months to retain the exemption.

Additional guidance is provided on what constitutes commencement of construction, particularly for sources constructing in several distinct phases.

PSD sources submitting applications after August 7, 1978, may have to provide extensive air quality monitoring data.

SOURCE APPLICABILITY

A. TRANSITION

In passing the 1977 Amendments, Congress left standing contradictory indications as to when it intended the new PSD requirements to be effective. On the one hand, Section 168 of the Act provides that the pre-existing PSD regulations, with amendments conforming them only to Section 162(a), 163(b) and 164(a), are to remain in effect as to a particular area until the applicable SIP is revised to include the rest of the new requirements. Section 406(b) of the 1977 Amendments reinforces Section 168. It provides in pertinent part:

> All * * * regulations * * * duly issued * * * pursuant to the Clean Air Act as in effect immediately prior to the date of enactment of this Act * * * shall continue in full force and effect after the date of enactment of this Act until modified or rescinded in accordance with the Clean Air Act as amended by this Act.

See also 1977 Amendments section 406(c). In effect, Section 168, and Section 406(b), say that, until EPA or the States revise the SIP's to include the new requirements, construction may commence after August 7, 1977, so long as it meets the requirements of the pre-existing regulations, as amended.

On the other hand, Section 165(a) can be read as prohibiting, until its requirements were met, most of the post-enactment construction that Section 168 would permit. It provides in pertinent part that "[n]o major emitting facility on which construction is commenced after the date of the enactment of this part, may be constructed in any area to which this part applies, unless" all of the new permit requirements are met. Also, Section 165(a) would have imposed a lengthy moratorium on new construction, since Sections 165(a)(2) and (e) require an analysis in accordance with regulations that as of August 7, 1977, had not even been proposed. Section 168 would not have imposed such a moratorium.

Because of the contradiction between Section 165 and 168, EPA had no choice but to fashion a reasonable program for the transition from the old to the new requirements. Accordingly, on November 3, 1977, it announced its final decision not to implement the requirements of Section 165 as of August 7, 1977, and its promulgation of the Section 168 amendments to the pre-existing regulations. Then, in the subsequent November 3 proposal and the December 8 supplement, it proposed to apply the requirements of Section 165 as of March 1, 1978. Under the proposal, the requirements would apply to construction of a major stationary source or major modification occuring on or after March 1, 1978, unless the source or modification had received certain permits before March 1 and construction commenced before December 1, 1978. The permit that a source subject to the pre-existing regulations would have to get was a permit under those regulations. A source not subject to the pre-existing regulations would have to get the permit or permits required under the applicable SIP.

In their comments on this proposal, industries asserted that EPA was with-

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out legal justification to implement any regulations prior to the submittal of SIP revisions. At the other extreme, some environmental groups contended that EPA was acting improperly in not making Section 165 effective as of August 7, 1977. State agencies generally indicated approval of the proposal.

Today, EPA is announcing that it has promulgated the proposed program with only a minor change. For the December 1, 1978 date, it has substituted a date nine months from today.

Three major considerations have shaped this transition program. One is that the rate of consumption of the increments should be minimized. A paramount goal of both the House and the Senate was to give the States a full opportunity to revise and implement their own PSD programs. The value and significance of this opportunity diminishes as the increments are consumed during the period from August 7, 1977, to the time EPA has approved any PSD revisions to the SIP. Hence, during that period, the rate of consumption of the increments should be minimized. The other two major considerations are that economic disruption should be minimized and that orderly administration of the new requirements should be maximized.

The first of the relevant considerations pulls sharply in the direction of implementing the new requirements as of August 7, 1977. The more sources that must apply BACT, the slower the rate of consumption of the increments. The new PSD requirements might subject up to twenty-four times[1] as many sources to a more restrictive control technology review as did the old requirements. In doing so, the new requirements will capture approximately 230,000 tons of PM, and 570,000 tons of SO_2, per year, beyond what the old requirements would have captured.[2] While such capture is clearly significant to increment consumption on a national basis, it could be even more significant to individual localities where more than one of the affected sources might construct and consume a large portion of the available increment. Hence, the sooner EPA implements the new requirements, the slower will be the rate of increment consumption. Other less compelling considerations pull in that direction, too. Until the new requirements are implemented, mandatory Class I areas will not have the protection Section 165(d) affords nor will variances to the Class I increments be available. In addition, until then, Federal Land Managers will continue to have the power to reclassify Federal lands, and EPA will continue to be able to disapprove reclassifications on other than procedural grounds.

The other two major considerations, however, suggest the opposite conclusion. Immediate implementation of the new requirements would have resulted in severe economic disruption. As stated above, Section 165(a) would have imposed, because of Sections 165(a)(2) and (e), a moratorium on new construction equal to the length of time required to promulgate the necessary regulations.[3] Even if Sections 165(a)(2) and (e) were ignored, undue economic disruption would have resulted from sudden imposition of the new requirements. Applicants had designed major construction projects to meet the old PSD requirements and the State new source review requirements as applicable. Many of them had not commenced construction by August 7, 1977, but had either obtained a permit or were about to obtain one. Reevaluation under the new requirements would have meant that construction could not have commenced until long after the time originally planned. The applicant would often have had to repropose control technology and provide analyses of the direct and indirect total environmental effects of the source. EPA would then have had to redetermine the necessary control equipment and open any redeterminations to public comment, including a public hearing.

Immediate implementation also would have promoted disorderly administration, since it would have precluded normal notice and comment and the attending opportunity to better understand the statute, anticipate its effects and establish generic ground rules. Each issue would have been refought with each new application. In the absence of generic rules, inconsistency and confusion in the treatment of applications throughout the country might well have occurred.

The transition program promulgated today is reasonable. It has equitably accommodated these competing considerations. It has allowed informed development of generic rules and minimized economic disruption by avoiding entirely a lengthy moratorium on new growth and amply forewarning the public of the time when the new requirements would have to be met. At the same time, the program has minimized the period of time during which the new requirements were not working to slow consumption of the increments. It has also minimized the time during which mandatory Class I areas lacked the protection of Section 165(d), Class I increment variances were unavailable, Federal Land Managers were able to reclassify Federal lands, and EPA was able to disapprove reclassifications on other than procedural grounds.

Four aspects of the program require further explanation. First, why is EPA implementing the new requirements as of March 1, 1978, rather than the date of promulgation? In effect, EPA has suspended the issuance of PSD permits from March 1 to the date of promulgation. The consequence of implementing them as of promulgation would have been that sources would have consumed the increments to a much greater extent than they have. In addition, the public has received early and ample warning of the March 1 deadline and therefore an adequate opportunity to plan for this short-term impact on construction schedules. Finally, in accordance with a directive dated February 22, 1978, from the Assistant Administrator for Air and Waste Management and the Assistant Administrator for Enforcement, EPA has upon request reviewed certain applications as to their approvability under the proposed regulations.

Second, why exempt from the new requirements those sources which have received a PSD permit before March 1, 1978, even though construction on the source may not have commenced by then? Arguably, to exempt only those sources on which construction had commenced before this date would have paralleled the approach in Section 165, better served the policy of slowing increment consumption and not disserved the policy of ensuring an adequate opportunity for public comment. It would not, however, have minimized economic disruption. In October of 1977, many sources for which PSD applications had been completed and were pending could not have both received a permit and commenced construction before March 1, 1978. Their potential consumption of the increment beyond what they would have consumed under the new requirements was not so great as to warrant denying

[1] The pre-existing regulations applied to sources belonging to any of nineteen specified categories, or approximately 165 per year. The new requirements apply to any source in any of 28 specified categories which has the potential to emit 100 tons per year or more of any pollutant regulated under the Act and to any other source which has the potential to emit 250 tons per year or more of any such pollutant. Defining "potential to emit" as maximum capacity in the absence of control equipment, as do these regulations, the annual number of covered sources is estimated to be about 4,000 with approximately 1,600 sources being subject to a detailed BACT and ambient air quality review.

[2] Under the old requirements, annual emissions from all new and modified sources, whether covered or not, totalled approximately 770,000 tons of PM and 1,220,000 tons of SO_2. EPA estimates that for these same sources under the new requirements annual emissions will be reduced to 540,000 tons for PM and 650,000 tons for SO_2.

[3] The legislative history contains strong indications that Congress intended not to impose a moratorium on development. See H.R. Rep. No. 95-294, at 171 (1977); Congressional Record—House, August 4, 1977.

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them an opportunity for exemption. Hence, EPA proposed, and has decided, to exempt sources for which a PSD permit had been obtained before March 1, 1978, so long as construction commences by the time SIP revisions are due.

Third, EPA as previously proposed has also decided to exempt sources not subject to the pre-existing regulations if they have received before March 1, 1978, all permits required under the applicable SIP, even though construction may not have commenced by then. Not to exempt these sources, arguably, would have better served the policy of slowing increment consumption. Nevertheless, there were many such sources in circumstances not significantly different from those of sources with PSD permits pending in October of 1977. Hence, out of fairness, EPA has decided to exempt such sources, so long as construction commences by the time SIP revisions are due.

Finally, in establishing a deadline for commencement of construction, why is EPA using a date nine months from today, instead of December 1, 1978, as proposed? EPA originally set the deadline nine months from March 1, not because March 1 was the date of implementation, but rather because it was the anticipated date of promulgation. EPA selected the nine month period after promulgation because it provided ample opportunity to commence construction and it is the period within which Section 406(d) in effect requires States to submit their SIP revisions. Consequently, the Administration has revised the December 1, 1978, date to coincide with a date nine months from promulgation of these regulations.

B. EDF V. COSTLE

On February 17, 1978, the Environmental Defense Fund, Inc. (EDF) brought an action in the District Court for the District of Columbia challenging EPA's November 3, 1977 decision not to implement the new PSD requirements as of August 7, 1977. On February 24, 1978, the Court issued an order which governed the further processing of pending applications to EPA for PSD permits under the pre-existing regulations and will affect the application of the March 1, 1978, and commence construction deadlines. The order expired on March 28, 1978. It provided in pertinent part:

2. EPA shall process all applications for PSD permits that do not comply with the requirements of Section 165 according to its existing procedures *except that*, in the case of any permit which EPA concludes it would issue (but for the existence of this order), EPA shall, on the date on which EPA so concluded, mark every such permit:

This permit would issue this date (date), but for the order entered in *Environmental Defense Fund* v. *Douglas M. Costle*, No. 78-281 (D.D.C.) (Entered on February 24, 1978).

EPA shall give prompt notice of the above action to the permittee and all appropriate State and local authorities. The above action shall not constitute permission to commence construction, nor shall it constitute final action for purposes of judicial review.

3. If and when any permit marked as described in paragraph 2 is issued, such permit shall be effective and considered to have been issued as of the date on which it was so marked and shall be subject to the relevant regulations applicable on such date.

4. In addition, any deadline which determines the applicability of EPA regulations under the Clean Air Act to any facilities receiving such permits shall be extended by a period of time equal to the number of days between the time EPA marks the permit as described in Paragraph 2 and the date when EPA releases the permit as described in Paragraph 7.

In accordance with paragraph 3 of the order, EPA will treat any permit marked pursuant to paragraph 2 and released after the order expired as having been issued as of the date it was marked for the purpose of determining whether the source is exempt from the new PSD requirements under the March 1, 1978, program. Also, in accordance with paragraph 4, construction on a source which has received or will receive a marked permit need commence, not within nine months from today, but rather within a period equal to nine months from today plus the number of days between the time the permit was marked and the time it was released.

C. SPECIAL EXEMPTIONS

In the March 8, 1978, FEDERAL REGISTER (42 FR 9529), EPA announced a final decision, made on February 28, 1978, to exempt from the new PSD requirements any source the evaluation of which EPA would have completed before March 1, 1978, but for an extension of the public comment period pursuant to a meritorious request for such an extension. The Administrator communicated this final decision to each of the Regional Administrators. His statement to them, which appeared in the FEDERAL REGISTER on March 8, 1978, follows:

As some of you are aware, significant public comment has been generated in the case of certain sources that have submitted applications for PSD permits. In some of these cases, interested persons have requested additional time to comment on the propriety of granting the permit. While I do not believe that the situations are many, I am concerned about the completion of any PSD review of any case where an extension of the comment period has been requested on meritorious grounds. Accordingly, by this notification I am announcing a policy change regarding the March 1 PSD deadline. This policy change will be applicable only to those situations where the normal public comment period has ended and EPA review of a permit would have been completed by March 1, were it not for a reque for additional comment time requested b interested parties.

In the case of any such situation, d scribed above, the comment period involve may be extended as provided by EPA's cu rent PSD regulations. Where such an exte sion is granted, the March 1 date now desi nated as the effective date of the new PSI requirements will not apply to that permi application. Instead, the permit applicatio may continue to be processed (and grante or denied) under EPA's current PSD regula tions.

I intend to put a notice in the FEDERA REGISTER to the above effect. I wish t reemphasize that the policy set forth abov only applies to those situations when review would have been completed b March 1 absent our action granting a re quest for additional comment time.

D. POTENTIAL EMISSIONS

Section 165 of the Act requires that each new or modified "major emitting facility" undergo preconstruction or premodification review for PSD. Section 169(1) defines "major emitting facility" in terms of a source's "potential to emit." On November 3, 1977, EPA proposed to define "potential emissions" as "those emissions expected to occur without control equipment • • •" 42 FR 57479, 57483.

Virtually every comment spoke to the issue of subjecting sources to PSD review on the basis of their uncontrolled emissions. Industry and State pollution control agency comments noted that the Agency's interpretation would needlessly force through PSD review several sources whose allowable emissions would be relatively insignificant. Allowable emissions are those that would occur after the application of the controls required under any air pollution control laws and regulations or more stringent controls under an enforceable permit. Many State and local agencies expressed a deep concern that subjecting sources to the PSD requirements solely on the basis of uncontrolled emissions would result in an unmanageable number of detailed and costly reviews. The organization representing State air pollution control agencies, State and Territorial Air Pollution Program Administrators (STAPPA), urged the Agency to consider both uncontrolled emissions and allowable emissions in determining which sources would be subject to review. It suggested that EPA assess the air quality impact of only those sources whose allowable emissions would be significant. Industry comments uniformly urged the Agency to interpret "potential to emit" as referring to allowable emissions.

The Agency has decided to apply PSD solely on the basis of what a source might emit without control. The final regulations published today define "potential to emit" as the "capability at maximum capacity to emit a pollutant in the absence of air pollu-

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tion control equipment." See § 52.21(b)(3).

The Agency has concluded that Congress intended "potential to emit" to refer to uncontrolled, not allowable, emissions. If Congress had intended PSD to apply on the basis of allowable emissions, it would not have included Section 165(b) in the Act. Section 165(b) provides that an applicant for a PSD permit for a modification to certain major emitting facilities need not show that the modification will not cause or contribute to a violation of a Class II increment, if the "allowable emissions" of SO_2 and PM from the modification would after the application of BACT "be less than fifty tons per year" and would not cause or contribute to a violation of the applicable NAAQS. Section 169(1) defines "major emitting facility" as a source with the "potential to emit" either, depending on its type, 100 or 250 tons per year or more. If Section 169(1) were read to subject to PSD only those modifications with allowable emissions equal to or greater than 100 or 250 tons per year before the application of BACT, no owner or operator whose modification would emit less than 50 tons per year after BACT would need the relief Section 165(b) provides. This is because, if BACT or some less stringent control could reduce the emissions of the modification to less than 50 tons per year, the owner or operator would apply it in order to reduce the emissions of the modification to below the applicable 100 or 250 ton cutoff and thereby avoid PSD altogether. Congress, however, did include Section 165(b). Hence, it appears that Congress did not intend PSD to apply on the basis of allowable emissions. *See also* Sen. Rep. No. 95-127, at 33 (1977) (last paragraph). Since the only other concept to which Congress could have been referring is that of uncontrolled emissions, it must have intended PSD to apply on the basis of such emissions.

There is another similar reason for reaching that conclusion: if Congress had intended PSD to apply on the basis of emissions after controls, it would not have used the phrase "potential to emit" in Section 169(1).[4] First, Congress would not have used two different phrases to refer to the same concept, and it had already used "allowable emissions" in Section 165(b). Second, Congress knew that EPA had already established in its offset policy for nonattainment areas (41 FR 55524 (December 21, 1976)) the phrase "allowable emissions" as denoting emissions after controls. Pub. L. 95-95, section 129(a)(1), 91 Stat. 745 (1977). Indeed, Congress has been careful to distinguish "allowable emissions" from at least one other concept. Prior to the enactment on November 16, 1977, of technical and conforming amendments to the 1977 Amendments, Section 165(b) contained the phrase "actual allowable emissions." Id. section 127(a), at 736. The November 16 amendments deleted the word "actual" in order to "eliminate an apparent inconsistency." 123 Cong. Rec. H11955, H11957 (November 1, 1977). Finally, the legislative history indicates that Congress knew that in the air pollution field the phrase "potential emissions" has traditionally been understood to denote uncontrolled emissions. *See e.g.* Sen. Rep. No. 95-127, at 45, 96-97 (1977).

The Agency has decided to apply PSD on the basis of uncontrolled emissions also for an important practical reason. In enforcement programs, reporting systems have been and must be based on uncontrolled emissions. Otherwise a source with controls to capture 90 percent of the potential emissions might well be below the cutoff for reporting, but could virtually turn off the control equipment, emit 10 times the allowed level and not be tracked.

In its November 3 definition of "potential emissions," EPA indicated that, in determining the potential emissions of a source, it would not take into account emissions that "necessary" or "integral" control equipment would capture. Equipment was "necessary" or "integral" if business or production consequences would follow, independently of applicable air pollution laws and regulations, from removing or not using the equipment. Several comments pointed out that such a general credit could not realistically be implemented, since the permitting authority would be faced frequently with having to make difficult case-by-case factual determinations. Considerable time would be lost by both the applicant and the permitting authority in making such case-by-case decisions.

In view of these comments, the Agency will interpret the phrase "air pollution control equipment" in the definition of "potential to emit" as referring to control equipment which is not, aside from air pollution control requirements, vital to production of the normal product of the source or to its normal operation. The Agency will consider equipment vital if the source could not produce its normal product or operate without it.

E. TWO-TIERED REVIEW

By the proposed regulations, EPA indicated its intention to subject each new major stationary source and major modification to full PSD review. Full review would have consisted of (1) a case-by-case BACT determination as to each pollutant regulated under the act for which the source or modification would be considered major, (2) ambient impact analyses of whether the source or modification would cause or contribute to a violation of the applicable increments and NAAQS, (3) an assessment of the direct and indirect effects of the source or modification on visibility, soils, and vegetation, and (4) public comment, including an opportunity for a public hearing, on each material determination. Full review might also have entailed an analysis of the effects of the source or modification on air quality related values in a class I area. Finally, full review might have required the applicant to submit extensive air quality monitoring data and to commit to post-construction monitoring.

As noted above, STAPPA predicted that the States would find PSD applications too numerous, and their review too costly, to manage. STAPPA and others asserted that full PSD review would contribute unduly to the construction costs experienced by small, otherwise well-controlled sources.

In response to these comments, EPA attempted to quantify the effects of full PSD review under the proposal. It estimated that the new requirements would cover approximately 4,000 sources and modifications per year. The old PSD regulations, by contrast, covered only 165 sources per year. EPA also projected that permitting authorities would have to devote approximately 279 more man-years of new source review effort to conduct full PSD review of these new sources (or an additional 65 percent of their present effort on new source review), and that applicants would have to spend up to $6 million on modeling and $24 million on monitoring (or $30 million in total) to obtain PSD permits for these sources.

Applicants would also have to spend additional time and money meeting the requirements of a detailed PSD review. Considerable delay costs are expected from the increased planning and construction costs as well as the foregone return on investment from delaying start-up for a new source. Although it is not possible to accurately quantify the amount of these costs due to their site-specific nature, such costs could be greater than the monitoring and modeling costs of $30 million. In addition the changeover from reviewing 165 sources to 4,000 sources per year would probably lead to delays in the start-up of new sources.

Section 165(b) of the act shows that Congress shared the concern of STAPPA and the other commentators. As noted above, section 165(b) exempts certain modifications with allowable emissions of less than 50 tons

[4] Part D of the Act parallels Part C in its usage of the phrases "allowable emissions" and "potential to emit." Section 173(1)(A) refers to "allowable emissions," whereas the section defining those sources to which Part D applies, Section 320(j), uses the phrase "potential to emit."

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per year after the application of BACT from demonstrating that they would not cause or contribute to a violation of any applicable class II increment, and thus from substantial expenditures on modeling and monitoring. The Senate Committee explained:

> Section [165(b)] exempts smaller, well-controlled sources which are expansions of existing facilities from having to demonstrate compliance with the class II increments. Many such sources which are *small and relatively insignificant with respect to air quality* would otherwise be brought under the requirements of [Part C] by the "major emitting facility" definition of 100 tons per year potential emissions of any pollutant.

Sen. Rep. No. 95-127, at 33 (1977) (emphasis added).

Following Congress lead, EPA attempted to quantify the effects of expanding the exemption in section 165(b) to all new sources and modifications with less than 50 tons per year allowable emissions. Analysis revealed that under such an exemption only 1,600 of the 4,000 sources per year are likely to undergo full PSD review, that permitting authorities would need to devote only an additional 112 man-years to the effort of reviewing those 1,600 sources fully if the remaining 2,400 are first reviewed under the State new source review program, and that applicants might now have to spend only about $2 million on modeling and $7 million on monitoring (or $9 million in total).

Delay costs would also be reduced significantly. The sources exempted from the full PSD review would typically be small. The average size of the investment for these sources is thought to be about $1 million. If delays of two months occur for each of these 2,400 sources, this could lead to delay costs from foregone returns on investment of about $16 million. (This is based on an estimated four percent difference between the rate of return for a new source and the investor's next best alternative, an average two-month delay and an average new source investment of $1 million.) Delay costs would be higher in those cases where the delay leads to increased construction and planning costs.

Subsequent analysis indicated that the costs of making a case-by-case BACT determination each year for each of the 2,400 sources with allowable emissions under an enforceable SIP construction permit of less than 50 tons per year far outweighed the benefits of such a determination. EPA estimated that the applicable SIP would in many cases impose its own BACT requirement. To conduct a PSD BACT review of those sources would be pointless. In the other cases, applicants would incur the expense of preparing a BACT proposal and the associated delay for review and approval by the permitting authority. Permitting authorities would have to expend the necessary time and effort to make the BACT determination. For EPA, this determination would in general require it to duplicate much of the effort that the State permitting authority had already expended in becoming knowledgeable about the source. The benefits, in contrast, are relatively insignificant. EPA estimates that BACT applied by virtue of PSD review to the 2,400 50-ton sources would capture annually only 300 tons more of SO_2 and 8,000 tons more of PM than what those controls that the source would install in order to meet the 50 tons per year cutoff would capture. 300 tons is less than 1 percent of the estimated total new emissions of SO_2 per year, while 8,000 tons is less than 2 percent of the estimated total new emissions of PM per year.

In light of section 165(b) and these findings, EPA has decided generally to exempt from full PSD review any new major stationary source or major modification (hereafter, a "major new source") which would have allowable emissions of less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is more restrictive (hereafter, a "50-ton source"). The 100 pounds per hour criterion, it should be noted, would apply only with respect to a pollutant for which an increment or standard for a period less than 24 hours had been established. For example, the criterion would apply to a source with respect to SO_2, but not PM.

In accordance with the decision, under § 52.21(j), no 50-ton source need apply BACT in order to get a PSD permit. An applicant must demonstrate, however, that the source would meet all applicable emission limitations under the SIP and all applicable emission standards and standards of performance under 40 CFR part 60 and part 61. An applicant may demonstrate that the source would meet those limitations and standards by presenting an enforceable SIP permit under which the source would have to meet them. Any major new source with allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour would be subject to the case-by-case BACT requirement.

Under § 52.21(k), no applicant for a PSD permit for a 50-ton source would have to demonstrate that the source would not cause or contribute to a violation of an applicable increment or NAAQS, to assess the direct and indirect effects of the source on visibility, soils and vegetation, and to provide monitoring data, unless the source would impact a class I area or an area where an applicable increment is known to be violated.

To ensure that air quality does not deteriorate beyond the level of any increment, EPA will periodically assess increment consumption in an area. For the same purpose, it has, in the part 51 regulations also published today, imposed on each State the same obligation as well as the obligation to revise its SIP to cure the violation of any increment. It should be noted, too, that the assessment of increment consumption must be subject to public comment and an opportunity for a public hearing.

Finally, under § 52.21(r), the issuance of a PSD permit to a 50-ton source would be subject to public scrutiny only if and to the extent that the underlying determinations had not been previously subject to public scrutiny. For example, if the State in granting a SIP permit provided an opportunity for only written comment on whether the source would meet the applicable emission limitations and standards, then EPA would require an opportunity for a public hearing on those questions and an opportunity for written comment and a public hearing on whether the source would impact a class I area or an area where the increment is known to be violated. The purpose of this public participation exemption is to avoid duplication of effort. Applicants should be prepared to prove to what extent the public had an opportunity to scrutinize the issuance of the SIP permit.

The general exemption for 50-ton sources is consistent with the relevant purposes of the new PSD requirements as set forth in sections 101(b)(1) and 160 of the act: to prevent significant deterioration of air quality, to "preserve, protect and enhance" air quality over class I areas, and to assure that any decision to permit increased air pollution is made only after careful evaluation and informed public participation. Nondeterioration is assured since increment consumption will be assessed periodically and SIPs revised to cure any violation. Class I areas are fully protected, since the exemption does not apply as to them. Finally, each material determination behind the issuance of a PSD permit will be subject to at least one round of public participation.

The exemption, moreover, is within the spirit of section 165(b). Each year it will avoid imposing an unnecessary expenditure of up to $21 million on approximately 2,400 controlled sources of relatively insignificant air quality impact. It will, in addition, conserve substantial Federal and State resources for other, more important air pollution control tasks. Finally, the exemption will encourage improvements in control technology, since potential applicants will strive to reduce their emissions below 50 tons per year in order to be eligible for the streamlined review process.

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EPA has included the short-term criteria of pounds per day or per hour to ensure that seasonal or intermittent operation of sources which have significant short-term emissions will be subject to review. Industries which commented uniformly felt that the Agency was without legal ability to implement the short-term criteria. The act does not, however, preclude the use of short-term criteria and, in fact, seems to require their use in those cases where short-term increments and NAAQS have been established. The short-term criteria would not apply under the regulations where no counterpart increment or standard had been established. State agency comments agreed that short-term criteria would be an important and necessary mechanism to assist in the protection of short-term increments and national ambient air quality standards.

F. OTHER EXEMPTIONS

The regulations promulgated today incorporate several other review exemptions. These exemptions will streamline the review process so that the review will focus on those sources of real air quality significance.

The exemptions are effective only when the public has been afforded an opportunity to comment on any material determinations. Also, protection of increment is assured by, first, not allowing a review exemption that might affect a class I area or an area where an applicable increment is known to be violated and, second, by EPA (or the State when implementing PSD) periodically reviewing the aggregate air quality impacts of unreviewed sources. Such periodic reviews of aggregate impacts, as mentioned above, shall be subject to public comment and an opportunity for public hearing. Additionally, the relevant impact of emissions of all previously unreviewed sources must be included in the review of any source subject to ambient air impact analysis.

Under the first exemption, any major source subject to nonattainment offset requirements for a particular pollutant which would impact no clean air area is not subject to PSD review for that pollutant. Review of such a source would be pointless. The nonattainment requirements would impose LAER, a limitation more stringent than BACT, and would ensure that the source would not contribute to a violation of any applicable NAAQS. Since the source would impact no clean air area, ambient review would be unnecessary to forestall any significant deterioration.

Temporary sources are also exempt from full PSD review, since their ambient air impacts are short-lived. Temporary emissions include, but are not limited to, those from a pilot plant, portable facility, construction or exploration. Emissions occurring for less than 2 years at one location would generally be considered temporary. Emissions for longer periods of time might also be considered to be temporary (such as the emissions related to the construction of power plants or other large sources), but should be dealt with on a case-by-case basis. Additionally, once a portable facility has received a PSD permit, it may relocate without undergoing PSD review: *Provided*, That the source notifies the reviewing agency of such relocation 30 days in advance, the proposed relocation would impact no class I area and no area where the increment is known to be violated, and emissions from the facility would not exceed allowable emissions.

The Agency's proposed PSD regulations stated that if an emitting unit within a source were modified so as to increase potential emissions by 250 tons per year (100 tons for certain listed source types), the unit be required to install best available control technology even if accompanying emission reductions within the source totally offset the new emissions. Industry roundly criticized this proposal as an unauthorized extension of the PSD program to situations where no threat of worsening air quality would exist. After a careful review of the meaning of "modification" in the PSD provisions of the act and consideration of the potential air quality effects of intrasource pollutant tradeoffs, the Agency has decided to adopt a regulatory scheme that in part accommodates industry's expressed concerns.

The regulations apply the definition of "modification" to the entire source (plant), with the result that if net emissions from the source do not increase when an existing unit is revamped, the source would not require full PSD review. This exemption would not be applicable as to BACT in situations where a major facility is added to or is reconstructed at a source, whether the addition is to replace previous production capacity or for growth.

The Agency believes that this approach is consistent with Congress' use of the term "modification" in section 169(2)(C). In adopting that section, one of the November 1977 "technical and conforming amendments" to the 1977 amendments, Congress said that it was honoring the conference agreement by conforming the terminology to its use in section 111, the provision on new source performance standards. At the time the conferees reached agreement and at the time the technical amendments were enacted, "modification" in section 111 had been interpreted by EPA regulation to allow source owners and operators to avoid the application of new source performance standards to changed existing facilities whose emissions would increase, if that increase were totally offset elsewhere in the source. Although the EPA interpretation was overturned by a United States court of appeals in early 1978 (*ASARCO v. EPA*, 11 ERC 1129 (D.C. Cir.)), there is no reason to believe that the Congress in late 1977 did not regard the definition, which had existed as law since 1975, as being well-suited to its purposes in the PSD program.

Under the regulations, source owners or operators who claim to be undertaking a modification exempt from the PSD program because of intrasource tradeoffs will typically not be allowed to obtain credit for reducing emissions from stacks while increasing emissions from roof monitors or other low-level emission points. Stack and nonstack emissions generally have very different impacts on air quality in areas near a source. Since the PSD program is ultimately concerned with effects on air quality, EPA does not feel bound to apply mechanically the pre-*ASARCO* case definition of "modification" in section 111, a section directed toward technology, so as to frustrate the air quality protection purpose of PSD.

The effects of treating "modifications" as discussed above will be that modifications to existing facilities may not require installation of best available control technology determined on a case-by-case basis, if the owner or operator demonstrates that zero net emissions would attend the change. The delay and expense involved in those determinations will, therefore, be avoided. Any applicable new source performance standards will, however, apply to modified facilities in accordance with the *ASARCO* decision.

The Administrator intends to use the following criteria in determining whether a no net increase exemption for a modified facility from the BACT requirement would apply: (1) All emission reductions from sources included in the baseline will be credited in terms of actual emissions using reasonable assumptions for operating conditions, except in two cases. Where a SIP revision was pending as of August 7, 1977, the applicable SIP as later relaxed would represent the baseline for crediting emission reduction. Changes in allowable emissions will also be used to credit reductions from major construction which commenced before January 6, 1975, but was not yet operating by August 7, 1977. For emission reductions from major construction previously approved to consume portions of an increment, allowable emissions as expressed in the PSD permit will be the basis for determining reduction credit. (2) All reductions must be enforceable (e.g., contained in the permit) and proposed in conjunc-

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tion with the source undergoing preconstruction review. Proposed reductions must occur or have occurred before construction is complete. In determining whether no net increase would occur, credit will be given only for emission reductions accomplished in conjunction with the proposed modification. (3) The reduction(s) must equal or exceed those allowable emissions approved for the proposed construction. This determination will generally be made on a pounds-per-hour basis when all facilities involved are operating at their maximum expected production rate. When reductions are proposed on a tons-per-year basis, actual annual operating hours for the previous 1- or 2-year period will be used, as appropriate. (4) All proposed emission reductions must not be otherwise needed to provide for additional growth already approved. Finally, (5) air quality need not improve at every location affected by the proposed construction but on balance the affected area should not be adversely impacted.

The Administrator further believes that all new or modified facilities within sources without a net emission increase should generally be exempt on a pollutant-specific basis from the detailed ambient review requirements. In most cases no useful purpose is served by requiring an air quality impact review of sources that would obviously not degrade air quality. This exemption is not intended to apply when the source would impact a class I area or an area where the increment is known to be violated. The Administrator generally intends to use the same criteria as mentioned above for BACT exemptions in determining if a zero emission increase exemption for ambient review would apply. However, in contrast to the analysis required in the case of modified facilities seeking exemption from BACT review, the no net emission increase analysis employed for purposes of exemption from the ambient review shall take into account all emission increases and decreases occurring at the source since August 7, 1977.

G. FUGITIVE DUST

Several comments from representatives of strip mine and other surface mining interests questioned whether Congress intended dust emissions from surface mines resulting from mobile source activity and the action of the wind on exposed surfaces to be taken into account in reviewing the mines for PSD. The commentors contended that Congress only intended PSD review to apply to "stationary" sources and that mobile source activity and the action of the wind were not stationary sources. While Congress apparently did intend PSD to apply to stationary sources only, surface mines are stationary sources. Consequently, dust emanating from them should not be excluded from PSD review merely on the basis of what causes it to become airborne.

It was also argued that surface mines should receive some relief from strict consideration of ambient particulate concentrations associated with surface mining activities. A number of arguments were presented: that a large majority of the associated particulate matter is nonrespirable; that mining activity occurs in areas with limited population; that the particulate matter arises at ground level and falls out within very short distances; that visibility is not affected because the light scattering which hinders visibility is caused by smaller particles; and that even after the application of BACT, short-term particulate standards for NAAQS and PSD increments might not be met.

In view of these comments and other studies,[1] EPA has decided to exclude from any air quality impact assessment of a source or modification any fugitive dust that would emanate from it. "Fugitive dust", as defined in the regulations, consists of particles of native soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may come from haul roads or exposed surfaces through the action of man or the wind or both.

Additional support for this exclusion can be found in the legislative history. It points to the utilization of "administrative good sense" regarding fugitive dust (see S. Rep. No. 95-127, at 98 (1977)) and suggests that Congress did not intend PSD to prohibit surface mines of an economically viable size (see H. Rep. No. 95-294, at 165-66 (1977)). In addition, accurately assessing the short-term ambient impact of fugitive dust is often not possible. The Agency will continue its efforts to develop better short-term modeling techniques for fugitive dust.

Certain aspects of this exclusion for fugitive dust should be noted. First, the burden of showing to what extent emissions from the proposed source or modification would be made up of fugitive dust rests with the applicant. Second, the regulations do not exclude fugitive dust from the determination of potential emissions. Any source or modification which, taking into account emissions of fugitive dust, would have potential emissions equal to or greater than 250 tons per year would be subject to the applicable PSD requirements, especially in many instances the BACT requirement. Finally, EPA will treat emissions of fugitive dust as not consuming increment for the purpose of evaluating other sources under PSD.

The Administrator would like to emphasize that EPA intends to implement the above policy of excluding the fugitive dust only on an interim basis. EPA will reassess the implications of the policy and any possible technical improvements in modeling fugitive dust, and will adjust the policy as appropriate.

H. COMMENCE CONSTRUCTION

It is important in many cases to determine whether a source has commenced construction by a certain date. If a source commenced construction before June 1, 1975, it would be exempt (or "grandfathered") from PSD review altogether. 40 CFR 52.21(d). If a source commenced construction before August 7, 1977, it would be exempt from the amendments that EPA promulgated on November 3, 1977. 42 FR 57459. Finally, certain major stationary sources or major modifications will be exempt from today's final regulations if they obtained all applicable air pollution permits by March 1, 1978, and commence construction before 9 months from today.

In determining whether construction has "commenced," as that term is defined in section 169(2) of the act, it is first necessary to determine whether the owner or operator has obtained and continues to hold all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations under the applicable State implementation plan. If all such permits have not been obtained or maintained, the inquiry can stop; this requirement is a prerequisite for finding that construction has commenced.

Assuming that the permit requirement is satisfied, it is still necessary to determine whether the source meets one of two additional requirements. The first requirement is that a continuous, physical on-site construction program has begun by the date in question and will be completed within a reasonable time. The words "continuous" and "on-site" are key to this test. It will not suffice merely to have begun erection of auxiliary buildings or construction sheds unless there is clear evidence (through contracts or otherwise) that construction of the entire facility will definitely go forward in a continuous manner (no breaks greater than 18 months). Nor will it suffice that erection of certain components began off-site.

The second requirement is that by the date in question binding agree-

[1] *NW Colorado Environmental Impact Statement*, Department of Interior, 1976; *Survey of Fugitive Dust from Coal Mines*, EPA 908/1-78-003, February, 1978; *Impact of Significant Deterioration Proposals Upon Western Surface Coal Mining Operations*, Federal Energy Administration, May 5, 1976.

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ments were established for construction of the facility to be completed within a reasonable time. From the legislative history, it is clear that boiler contracts, even those with penalty clauses, will typically not suffice. See S. Rep. No. 95-127, at 32-33 (1977). The source must enter into a site-specific commitment through contracts.

The act specifies that the agreements must be ones "which cannot be cancelled or modified without substantial loss". The word "substantia"l is clearly key to this test. EPA proposed for public comment on November 3, 1977, a "10 percent" test. Under this test, if the amount the owner would have had to pay to cancel construction agreements as of the date in question would have totalled more than 10 percent of the total project cost, the loss would be deemed "substantial."

Several comments were received, particularly from industry, on the "10 percent" test. Many of the commentators thought that the 10 percent rule was arbitrary since they regarded even smaller percentage losses on a $100,000,000 project as clearly being substantial. In response to these comments, EPA has abandoned the proposed 10 percent test as a firm rule. However, in order to help minimize administrative burdens and to provide some certainty, the Administrator will consider a loss as being substantial if it would be more than 10 percent of the total project cost. Whether a loss equal to or less than 10 percent is substantial will be determined on a case-by-case basis. The dominant consideration will be whether the "source has so committed itself, financially and otherwise, to the use of a particular site for a particular facility that relocation is not an option and delay or substantial modification would be severely disruptive." Id. at 32.

For a phased construction project for which a permit has been given for a number of phases (additional guidance below), EPA will apply the 10 percent guide to each phase of the project. Thus, if the loss for a phase would exceed 10 percent of the total cost of the phase, then EPA will treat the substantial loss criterion as having been met for that phase.

L. PHASED CONSTRUCTION PROJECTS

Multifacility sources approved for construction in distinct phases require special guidance. In general, if the phases of the major facilities involved are mutually dependent * and one of the major facilities has, by an applicable grandfather date, commenced construction, then all other dependent facilities specifically approved for construction at the same time will also hold such status. Conversely, each independent facility must individually commence construction by the prescribed grandfather date(s). For example, if a power company commenced construction on the first boiler of a three-boiler project in 1977 and plans to commence construction on the second in 1980, and on the third in 1982, the fact that there may be a phased construction process at the same general site does not mean that the boilers to be constructed in 1980 and 1982 can escape the new PSD requirements promulgated today.

The Administrator is concerned about the issuance of permits for phased construction projects that would have the effect of "reserving" the increment for a single source, thereby limiting growth options in the area. The options are to not issue phased construction permits at all or to limit the conditions under which a phased construction may reserve an increment well into the future. The Administrator intends to implement the latter option when plans for a phased project are certain and well-defined. One mechanism to be used is to reassess the BACT determination for the later phases of the project prior to construction to ensure that the most up-to-date control technology will be used. The Administrator will specify at the time that the original permit is issued which BACT determinations will be reassessed. The Administrator may also adopt regulations in the future to deal with this issue more comprehensively.

Also, for phased construction projects, the Administrator does not generally intend to limit the time for construction of the project. However, the first phase must be commenced within 18 months after permit approval, and each construction phase thereafter must commence within 18 months of the date approved in the permit and must not have breaks exceeding 18 months. The Administrator will further evaluate the 18 month criteria as it applies to breaks in construction to determine if a shorter time period (e.g., 6 months) should be used.

J. MISCELLANEOUS SOURCE APPLICABILITY QUESTIONS

EPA also sought comments as to the applicability of PSD to proposed sources below the stated size cutoffs present on the list of 28 source types. The Administrator specifically asked in the December 8, 1977 supplement to the November 3 proposal if fossil-fuel fired steam electric plants rated at or below 250 million British thermal units per hour heat input, municipal incinerators charging not more than 250 tons per day of refuse, fossil-fuel boilers rated at or below 250 million British thermal units per hour heat input, and petroleum storage and transfer units with a capacity of 300,000 barrels or less should be subject to PSD review under the general 250 tons per year potential emission applicability criterion.

EPA has decided that the 250 tons per year criterion should apply even though a source may be below a stated size cutoff. For example, a modification that increases capacity by more than 300,000 barrels for a petroleum storage unit would be subject to review if it has 100 tons per year potential emissions. Also, if a modification increases capacity by only 290,000 barrels but would have more than 250 tons per year potential emissions, then it, too must be reviewed. It should also be noted that the capacity size cutoff like the increased potential emission criteria for defining major modification is cumulative in nature. This approach prevents the "sized" sources from avoiding PSD review merely by limiting an increase to just below the size cutoff. It also ensures that all sources with potential emissions of 250 tons per year or more are treated equally.

In the November 3, 1977 proposal, EPA proposed not to treat a voluntary switch to an alternative fuel or raw material as a modification, if, prior to January 6, 1975, the source were capable of accommodating such fuel or material. Environmentalists opposed this treatment of voluntary fuel switches on the ground that Congress intended all such switches to be treated as modifications. EPA disagrees with this contention. Section 169(2)(C) of the Act by its reference to Section 111(a) in effect adopts the definition of "modification" under Section 111(a) for the purposes of PSD. In adding Section 169(2)(C) to the Act, Congress indicated that it intended to conform the meaning of "modification" to "usage in other parts of the Act." 123 Cong. Rec. H11955, 11957 (November 1, 1977). At the time, regulations promulgated under Section 111 had defined "modifications" to exclude voluntary fuel switches when the source, "prior to the date any standard under this part becomes applicable to that source type * * * [,] was designed to accommodate that alternative use." 40 CFR 60.14(e)(4) (1977). Apparently, Congress intended voluntary fuel switches to be treated similarly for PSD purposes. The PSD regulations first became applicable on January 6, 1975. Consequently, it would appear

*The dependence of facilities within a source will be determined on an individual basis. Two or more facilities will generally be considered dependent if the construction of one would necessitate the construction of the other facility(ies) at the same site in order to complete a given project or provide a given type (not level of) service. A kraft pulp mill is an example of a source with dependent facilities, whereas a three-boiler power plant is a typical example of a source with major independent facilities.

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that Congress did not intend voluntary fuel switches to be treated as modifications for PSD purposes, if the source could have accommodated the fuel prior to January 6, 1975. In any event, the proposed treatment of voluntary fuel switches has been an integral part of the PSD regulations since their original promulgation in 1974. *See* 39 FR 42510 (December 5, 1974) § 52.01(d)(2)(iii)).

Since the proposed treatment of voluntary switches is consistent with Congressional intent and since that treatment was already a part of the pre-existing regulations, EPA has retained it in the revisions promulgated today. It should be noted, however, that although such switches will not be subject to PSD review, they will consume increment.

EPA also asked on November 3 whether it should treat a conversion to an alternative fuel by reason of an order under the Energy Supply and Environmental Coordination Act of 1974 or a natural gas curtailment plan pursuant to the Federal Power Act as a modification or not. Shortly thereafter, Congress answered this question. On November 16, it enacted technical and conforming amendments to the 1977 Amendments. Among those amendments was Section 169(2)(C). It in effect defined a modification as not including such conversions. *See* Clean Air Act Sections 111(a)(8) and 169(2)(C) (the latter added by Pub. L. 95-190, Sections 14(a)(54), 91 Stat. 1393, 1402 (November 16, 1977)).

In order to conform the final regulation to the Act and avoid confusion, EPA has further qualified the definition of "major modification" by adding the provision that a switch to an alternative fuel by reason of an order or rule under Section 125 of the Act is not a modification. *See* Clean Air Act Section 125(e).

Best Available Control Technology

The November 3, 1977 proposal solicited comment on the use of a de minimis level of 100 tons per year potential emissions for each pollutant for triggering the BACT requirement. The Agency stated the issue:

> For example, if a source is subject to PSD review either because it is one of the named sources or because it has potential emissions of 250 tons per year of a given pollutant, BACT would be required only for those pollutants whose potential emissions exceed 100 tons per year.

Comments received indicated that if a source were subject to PSD on the basis of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT would be required only for those pollutants for which the potential emissions exceed 250 tons per year). The Administrator agrees with this argument and appropriate changes are made in the regulations set forth below.[1]

Some questions have been raised regarding what "subject to regulation under this Act" means relative to BACT determinations. The Administrator believes that the proposed interpretation published on November 3, 1977, is correct and is today being made final. As mentioned in the proposal, "subject to regulation under the Act" means any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type. This then includes all criteria pollutants subject to NAAQS review, pollutants regulated under the Standards of Performance for new Stationary Sources (NSPS), pollutants regulated under the National Emission Standards for Hazardous Air Pollutants (NESHAP), and all pollutants regulated under Title II of the Act regarding emission standards for mobile sources.

BACT determinations are to be made on a case-by-case basis by the reviewing authority, taking into account several factors, including cost, energy, and technical feasibility. Efforts are now underway within EPA to assist States (and EPA itself in the interim) in making BACT determinations when they assume responsibility for implementing the PSD program. The Agency is preparing and will distribute a guidance document to assist reviewing authorities in implementing the BACT requirement. In addition, the Agency, in response to numerous comments, will establish a national clearinghouse for distributing BACT determinations. The Administrator intends that such a clearinghouse will serve to advise reviewing authorities of each other's determinations and thereby promote a consistent basis of experience. The clearinghouse is not, however, intended to substitute for a case-by-case analysis on the part of the reviewing authority to assess what control technology is required under BACT for the specific source undergoing review.

Other questions have arisen concerning the possibility for requiring control technology transfer for installing control technology to meet the BACT requirement. In general, the BACT requirement does not preclude consideration of technology used in other types of sources but not yet demonstrated for the specific source type undergoing review. However, due consideration of the other factors (economic costs, energy, etc.) must also be given before requiring such technology transfer in order to comply with the BACT requirement.

[1] It should be remembered that a 50-ton source is exempt from BACT review only as to the pollutant for which it is such a source.

In addition, some questions, predominantly from the industrial sector, were raised during the public comment period concerning EPA's ability to impose a design, equipment, work practice, or operational standard under the review for BACT. The Administrator continues to believe that using such a standard is well within the intent of Congress. Under Section 111 (Standards of Performance for New Stationary sources (NSPS)) such a standard, or a combination of such standards, can be promulgated by the Administrator if in his judgment such a standard is achievable and a conventional standard of performance is not feasible. Since an applicable NSPS forms the minimum BACT requirement, it follows that the Administrator should be able to prescribe a design, equipment, work practice, or operational standard for BACT. In addition, EPA's Interpretative Ruling of December 21, 1976 (41 FR 55524) to Section 110 governing new source review in nonattainment situations includes an opportunity for the Administrator to prescribe such a standard where emission limits are not feasible. The Administrator should also have this ability under PSD. It should be emphasized that the Administrator will prescribe a design, equipment, work practice, or operational standard only when technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible.

Finally, it has come to the Administrator's attention that it may be appropriate to make the innovative technology waiver for NSPS under Section 111(j) of the Act applicable to BACT determinations under the PSD program. Briefly, Section 111(j) allows additional time for a source to comply with an applicable NSPS if: (1) The source plans to use innovative technology which has a substantial likelihood of meeting the NSPS at lower cost in terms of energy, economic, or non-air quality environmental impacts; and (2) the source would not cause an unreasonable risk to public health or welfare in its operation or malfunction. The addition of similar provisions to the PSD regulations would seem consistent with Congressional intent under NSPS and perhaps necessary to avoid the BACT determinations from negating the provisions of Section 111(j). Comments are solicited on this issue.

Geographic Applicability

The regulations made final today require any major source that affects air quality in areas with air quality cleaner than NAAQS (both internal and external to areas designated as nonattainment under Section 107) to meet

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the applicable preconstruction requirements of Section 165. In this respect, the Section 107 designations are not binding on source obligations. This reflects a continuation of EPA's policy of reviewing sources in nonattainment areas to prevent the transport of any emissions which would cause significant deterioration in an affected clean area. Conversely, any source which can make a specific demonstration, subject to public comment and opportunity for public hearing, that no impact will occur in a clean area (whether the area in question is designated as attainment or nonattainment) is exempt from PSD preconstruction review for the applicable pollutant.

Due to several comments received regarding the applicability of the PSD review in rural areas impacted by dust consisting of native soil, the Administrator wishes to reaffirm Agency policy that PSD preconstruction review generally applies to these areas. In general, a new major source to be located in a rural area with infrequent short-term violations of the total suspended particulate matter NAAQS should be allowed to construct after applying the required controls provided that the dust in question is uncontaminated by pollutants from industrial activity and the emissions of the source in conjunction with emissions from other sources in the vicinity (excluding such dust) would not cause a violation of the applicable increment(s) or the applicable NAAQS, assuming as to the NAAQS an appropriate "non-urban" background concentration.[6]

MODELING

In the regulations published today, EPA's assessment of the air quality impacts of new major sources and modifications will be based on EPA's "Guideline on Air Quality Models," OAQPS 1.2-080, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, April, 1978. This guideline is incorporated by reference into the regulations. Sources may request approval from the Administrator to use air quality dispersion models other than those noted in the "Guideline." If the Administrator determines that the model recommended in the "Guideline" and the model proposed by a source are comparable, the proposed model may be used. Methods outlined in EPA's "Workbook for the Comparison of Air Quality Models," U.S. EPA, Research Triangle Park, N.C. 27711, November 1977, may be used to determine comparability of models.

[6]Guideline on Air Quality Models, OAQPS 1.2-080, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, 1978.

The comments on the "Guideline" received in connection with the November 3 proposal and the Modeling Conference addressed three basic policy issues regarding implementation of the modeling guidelines. The first is whether a preliminary screening technique should be used to determine if full scale modeling would be necessary for preconstruction review. The second is whether the modeled estimate of source impact should be limited to a certain distance or a minimum numerical impact or both. Finally, the need to create an arbitration board to resolve modeling disputes was raised.

Industry and State agency comments on the first issue favored the use of some type of screening technique to alleviate resource burdens, i.e., the costs and time involved in sophisticated computer modeling of ambient air impacts. For screening purposes, conservative estimates of emission characteristics and ambient impacts would be modeled using relatively straightforward mathematical formula. However, industry comments stated that the specific screening techniques proposed on November 3, 1977, would be of little real value because of what they considered undue conservatism in the techniques. Environmental groups, however, felt screening techniques would improperly allow deterioration beyond increment allowances.

EPA intends to retain the screening procedures set forth in "Guidelines for Air Quality Maintenance Planning and Analysis, Vol. 10 (Revised), Procedures for Evaluating Air Quality Impact of New Stationary Sources," (October 1977, U.S. EPA, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711). The purpose of such procedures is to reduce resource burdens where there is little or no threat to the PSD increments or NAAQS. However, as the threat to the increment increases, more sophisticated techniques would be used. If these procedures indicate that the ambient concentration increase would exceed one-half of the remaining ambient increment or ceiling allowance, then refined analytical techniques would be used. Thus, as the available increment becomes smaller, sources that can be quickly estimated as impacting less than half the remaining increment will necessarily be those with smaller and smaller impacts.

As a result of comments received on the second policy issue, the Administrator intends to limit generally the application of air quality models to a downwind distance of no more than 50 kilometers. This is because dispersion parameters commonly in use are based on experiments relatively close to sources, and extending these parameters to long downwind distances results in great uncertainty as to the accuracy of the model estimates at such distances. Also, since the air quality impact of many sources falls off rapidly to insignificant levels, EPA does not intend to analyze the impact of a source beyond the point where the concentrations from the source below certain levels (which are generally based on the Class I increments). These levels shown below are therefore interpreted by the Administrator as representing the minimum amount of ambient impact that is significant.

Significant Impact

Pollutant	Annual	Averaging time			
		24-Hour	8-Hour	3-Hour	1-Hour
SO_2	1 ug/m³	5 ug/m³		25 ug/m³	
TSP	1 ug/m³	5 ug/m³			
NO_2	1 ug/m³				
CO			0.5 mg/m³		2 mg/m³

However, since the 1977 Amendments provide special concern for Class I areas, any reasonably expected impacts for these areas must be considered irrespective of the 50 kilometer limitation or the above significance levels.

Comments were also received urging the creation of an arbitration board to resolve disputes in situations where refined assessment techniques are not readily available and where significant professional judgment must be made on a case-by-case basis, such as those involving fugitive dust and complex terrain problems, and long range transport. The Agency feels that such an approach would serve to unduly delay the decision making process. The Agency realizes that special concern will have to be addressed to these situations and that EPA Regional Office consistency will have to be assured. EPA intends to use the requirements under section 301(a)(2) of the Act as the mechanism for ensuring Regional consistency. Additionally, the Agency intends to establish an external advisory group to review periodically the modeling guidance and re-

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ommend proposed changes as necessary.

Many other comments of a technical nature were made regarding the Agency's modeling guidance. In many cases, solutions to the issues raised must rely on further scientific development. Some inherently must rely on case-by-case technical judgments by qualified scientists. EPA is actively working in the areas of model validation and improvement, turbulence characterization and the use of representative meteorological data and will provide additional guidance on these areas as it becomes available. Any proposed revisions to the currently issued "Guideline on Air Quality Models" will be subjected to review by the scientific community and interested and affected parties. Procedural mechanisms for effecting a thorough review are currently being investigated. It is anticipated that the "Guideline on Air Quality Models" will be reviewed and updated every 18-24 months. Notice of any proposed revisions will at a minimum be published in the FEDERAL REGISTER for review and comment prior to final issuance.

MONITORING REQUIREMENTS

Another issue frequently raised in the comments was that of the proposed monitoring requirements. Through sections 165 (a)(2) and (e) of the Act, Congress imposed on the owner or operator of a proposed major source who submits an application after August 7, 1978, the task of gathering and analyzing air quality monitoring data for inclusion in the application. Such data must be related to and gathered over the year preceding submittal of the complete application. In addition, through section 165(a)(7), the owner or operator may be required to conduct such post-construction monitoring as may be necessary to determine the effect the source or modification may have or is having on air quality in any area it might affect. It is apparent that Congress included the monitoring requirements as a means of checking the accuracy of the modeling results. However, in many cases, monitoring data may not provide an adequate "real world" check on the accuracy of modeling as it applies to increment consumption.

As proposed, EPA has decided generally not to require preconstruction or postconstruction ambient monitoring to determine how much of the increment has been used up. First, the year-to-year variability of air quality data limits the usefulness of certain data collected. Next, the increments are generally consumed by new or modified sources on the basis of allowable emissions, whereas ambient monitoring will measure air quality as it is affected by changes in actual emissions. Moreover, several emission changes that would be detected by an ambient monitor may not consume increment. That is because certain emissions which do or will affect air quality levels do not count against the increments (e.g., emissions from any source commencing construction prior to January 6, 1975, but completed at some later date; emissions resulting from compliance with an order under section 125). In addition, the State may exempt certain emission changes which otherwise would consume a portion of the available PSD increment (e.g., Federally-ordered fuel switches, temporary emissions, and new sources outside the United States). Finally, the stack height provisions of section 123 of the Act require in any case where a source uses a stack the height of which exceeds good engineering practice that dispersion modeling efforts assume a good engineering practice stack height. In actual practice, assessment of the available increment will normally be accomplished through an accounting procedure whereby atmospheric modeling of individual sources will be used to keep track of changes in actual and allowable emissions as appropriate.

Although increment consumption must of necessity be tracked through modeling, EPA does not intend that there be no "real world" checks on the accuracy of modeling. If an applicant or other party believes that a model used by EPA has either overpredicted or underpredicted the air quality impact of a source, EPA welcomes the submission of data which will more precisely define the impact of the source. For isolated sources, air quality monitoring may be sufficient for this purpose. However, model validation using air quality monitoring is generally expensive, since a complex monitoring network is usually required to ensure that maximum concentrations are measured. Other model validation methods may be less expensive and more reliable (e.g., tracer studies and wind tunnel experiments), especially where more than one source may contribute to the increment consumption. In any case, where subsequent data demonstrate to EPA's satisfaction that the modeling is in error, EPA will make appropriate adjustments so as to provide more (or less) of the increment for future use.

Since PSD review now includes a review against the applicable NAAQS, EPA intends to focus the preconstruction and postconstruction monitoring requirements on obtaining the necessary data for this purpose. To that end existing air quality data will be used to the maximum extent practicable and preconstruction monitoring will only be required as necessary. Also, if preliminary modeling or other data indicate that the new source would not pose a threat to a NAAQS, EPA will exempt the source from the preconstruction monitoring requirements altogether. For example, if an SO_2 source plans to construct in an area with no other SO_2 sources, no preconstruction monitoring for SO_2 would be required. On the other hand, because of the long range transport of oxidants, if a major source of volatile organic compounds intends to locate in an attainment or unclassified area for photochemical oxidant, EPA will routinely require that the source submit oxidant monitoring data. Finally, since certain sources with allowable emissions of less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, are exempt from an air quality impact analysis, air quality monitoring would not be required for such sources.

All air quality monitoring must adhere to EPA's monitoring procedures in effect at the time of the monitoring. Currently, these requirements include criteria for siting monitors and instrument probes, the specification of reference methods and equivalent methods, and a minimum quality assurance program. EPA will implement the monitoring requirements promulgated in this rulemaking primarily through guidance found in "Ambient Air Monitoring Guidelines for Prevention of Significant Deterioration," OAQPS 1.2-096, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May 1978. EPA encourages permit applicants to consult with the reviewing authority regarding the need for and implementation of the monitoring requirements.

The number of monitors will be based on a case-by-case determination considering source emission characteristics, terrain and meteorology. In some cases, one instrument per pollutant may be adequate. The source will be permitted to use existing data where appropriate. Judgments on the representativeness of existing data taken near the source must be made on a case-by-case basis.

Twenty-four hour samples for SO_2 (bubbler method) will not be acceptable, since 3-hour values would not be available for comparison with the 3-hour secondary NAAQS standard and increment. Also, if bubblers were to be used, detailed quality assurance requirements would be required because of known temperature instability problems with the bubbler methods. In most situations, the cost of running a bubbler may not be significantly different from a continuous analyzer due to the more rigid quality assurance procedures and the need for laboratory support.

Existing 24-hour particulate samples on 6-day intervals will generally be acceptable. In many areas, such data have been collected for a period of

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years. As to such areas, additional monitoring will generally be unnecessary. However, the Administrator may require sample collection more often than every sixth day.

Baseline Concentration

The term "baseline concentration" is used in an abstract sense to establish the starting point for defining significant deterioration. This term is applicable for only sources of SO_2 and PM. Changes in the emission levels of these pollutants from sources contributing to the baseline concentration will in turn affect the amount of air quality increment that remains available to accommodate additional growth.

On November 3, 1977, EPA proposed a definition of baseline concentration that reflected a January 6, 1975, starting date for most sources. Additionally, this proposal contained specific guidance on how a baseline concentration might be established in a given area. Due to several implementation and legal concerns raised during the public comment period, the proposal of November 3 has been amended in three respects. The regulations promulgated today reflect an August 7, 1977, baseline date, place primary emphasis on tracking emission changes rather than on establishing a baseline concentration, and provide additional guidance as to what emission levels contribute to the baseline concentration.

Section 169(4) of the Act generally defines baseline in terms of the ambient concentration existing at the time of the first application for a permit in an area. However, major construction commencing after January 6, 1975, is specifically acknowledged to consume increment and cannot be considered as contributing to the baseline concentration. Both the November 3 proposal and the regulations promulgated today recognize the severe technical and administrative problems with implementing a definition of baseline concentration that relates to the date of first permit application in an area. The administrator believes that a strict interpretation of the Act's language would create thousands of different areas each with different baseline starting points. Moreover, these areas would eventually overlap as more and more sources applied for PSD permits. The final regulations and those proposed on November 3, 1977, resolve those problems by establishing a uniform starting date for defining the baseline concentration in all areas. The November 3 proposal, however, differs with the final regulations as to what the starting date should be.

The Administrator believes that an August 7, 1977, baseline date rather than one of January 6, 1975, better fulfills the requirements of the Act and is the earliest possible time that could be used as a uniform starting date. This date coincides with the time that PSD review under some of the new Act provisions could have taken place and with the time that States were given affirmative responsibility to protect the applicable PSD increments in their plans. As required by the Act, major source construction commencing after January 6, 1975, is not included in the baseline. Such activities consume increments as discussed below.

The November 3, 1977, proposal also contained guidance for establishing a baseline concentration through the use of existing air quality data. That proposal also suggested an alternative means to construct a baseline concentration using air quality dispersion modeling when appropriate air quality data did not exist. The regulations promulgated today no longer suggest that the baseline concentration be formally established. The Administrator feels that increment consumption can be best tracked by tallying changes in the emission levels of sources contributing to the baseline concentration and increases in emissions due to new sources. Data to establish baseline air quality in an absolute sense would be needed only if increment consumption were to be tracked using ambient measurements. Thus, to implement the air quality increment approach set forth in the Act, the reviewing authority needs to verify that all changes from baseline emission rates (decreases or increases as appropriate) in conjunction with the increased emissions associated with approved new source construction will not violate an applicable increment or NAAQS. However, before this concept can be carried out, some additional guidance must be given regarding the type of emission changes that must be tracked.

EPA generally intends to use an actual emissions concept in implementing the above baseline approach. The concept of an actual emissions baseline has been used in implementing EPA's previous PSD regulations, and the Administrator believes that the Act intends for this concept to be continued. Section 169(4) defines baseline concentration in terms of existing air quality. In carrying out an actual emissions baseline, EPA will use reasonable assumptions for various factors affecting the level of source operation. 1977 values will generally be used for hours of operation, capacity utilization, and the types of materials combusted, processed and/or stored, unless another previous year would be more representative or such use would not be allowed under established permit conditions. Actual emissions also includes into the baseline any future increases in hours of operation or capacity utilization as they occur if such are allowed to the source as of August 7, 1977, and if the source could have been reasonably expected to make these increases on this date. This policy is consistent with the intent of the Act to base increment consumption on all emission increases from new and modified sources, but to allow consumption of the increment to occur from only certain non-modification activities (e.g., some fuel-switches) of existing sources. Thus, with the exceptions mentioned below, the Administrator will implement an actual emissions baseline in the regulations promulgated today.

An actual emissions baseline would be inappropriate to address situations where a SIP relaxation had been submitted to EPA, and was still pending, on August 7, 1977. Application of an actual emissions baseline would penalize those States that required sources which the SIP relaxation would affect to comply with the allowable rates under the existing SIP while EPA was in the process of reviewing the proposed SIP revision. Such States should not be forced to lose substantial portions of the applicable increments when other States allowed their sources to emit at the relaxed SIP level in advance of formal EPA approval. Therefore, the regulations promulgated today require that contributions to the baseline concentration from existing sources affected by a SIP relaxation pending as of August 7, 1977, would be based on the allowable emissions under the SIP as revised.

In addition, the actual emissions concept does not apply to those sources on which construction commenced before January 6, 1975, but which were not in operation by August 7, 1977. In such cases, the allowable emissions as defined in the construction approval will be used to define the contribution of those sources to baseline.

Increment Consumption

The comments raised a number of specific issues related to the consumption of PSD increments. The Administrator wishes to clarify first that increment consumption occurs in general as a result of new major stationary sources and major modifications commencing construction after January 6, 1975. The degree of such consumption is in general determined on the basis of approved allowable emissions. This procedure is consistent with the Act language of Part C to restrict increases in ambient concentration above baseline levels less than certain specified increments. Increases in the baseline emissions of sources contributing to the baseline concentration will also consume increment (see discussion on baseline concentration). Conversely, reductions in the baseline emissions of sources existing in 1977 generally expand the available PSD

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increment(s). As indicated above, the degree of increment expansion that is creditable will generally be determined through air quality dispersion modeling of the source's emission clean-up beyond its 1977 actual emissions level. For a new source permitted under PSD before August 7, 1977, any renegotiated emission limits more restrictive than those previously permitted will count toward expanding the PSD increment available for other new source construction. States are free to choose the mechanisms for allocating the allowable increment to sources, including reversing any expansion of the increment achieved by control of existing sources for those sources which have installed additional controls.

In addition, offsets (i.e., additional control of existing sources) may be permitted in order to allow the construction of a new source in an area where the increment would not otherwise permit the construction of the source. Such offsets have always been acceptable under the Agency's PSD regulations, and the regulations promulgated below do not change this policy. To be acceptable, such reductions must be expressed in terms of actual emissions when the offsetting source has its emissions included in the baseline. An exception to this would be a major source commencing construction prior to January 6, 1975, but not yet operating by August 7, 77. For such sources and for situations involving reductions from major construction projects commencing construction after January 6, 1975, offsets are to be transacted on the basis of allowable emissions.

In an area where the PSD increments are known to be exceeded, then the plan must be revised to correct any such violation. Applicable SIP revisions may include the use of economic incentives such as emission charges or the development of offset markets. In such areas major construction cannot continue to be approved unless all increment violations significantly impacted by the proposed emission increase are corrected prior to operation of the proposed source. Accordingly, if acceptable offsets are secured by the proposed source, then such source can be approved for construction. Alternatively, the SIP can be revised by the State to restore an increment and thus accommodate the new construction. Where a proposed major construction project would cause a new violation of the applicable increment, offsetting reductions must be obtained that are sufficient to avoid causing the violation.

The Administrator intends that any increment analysis as appropriate include the effects of growth and reduction in emissions of other sources in the area affected by the proposed source occurring since the date of the effective baseline. Sources will be generally required to obtain such information, but the information will be available from the State air pollution control agency.

Questions have also arisen regarding how SIP relaxations are to be taken into account in terms of consuming available PSD increments. As stated above, increments are consumed as allowable emissions are increased, and this is true whether those increases are a result of new source growth or SIP relaxations. The regulations promulgated elsewhere in today's FEDERAL REGISTER require that any SIP relaxation that would affect a PSD area must include a determination that the applicable increment will not be exceeded. Whether a plan relaxation would consume the available increment would be typically determined through modeling the difference between the allowable emissions resulting from the new relaxed SIP limit and the emissions of the applicable source(s) which were included in the baseline.

SIP relaxations received by EPA after August 7, 1977, but before today's FEDERAL REGISTER do consume increment. However, EPA believes that such revisions require special consideration due to the uncertainty of how the new Act would apply to such SIP relaxations. To review these proposed revisions as to the degree of anticipated increment consumption without advance notice would have caused considerable delay and economic disruption. Therefore, the Administrator feels that these SIP relaxations need not be individually assessed to determine the precise amount of consumed increment before such relaxations may be approved. The periodic assessment requirement to verify that the applicable increments have not been exceeded is thought to be sufficient protection. This assessment would result in revisions to the SIP if an increment were found to have been violated. All SIP relaxations received after today will be individually reviewed against the available PSD increments. If deterioration beyond that allowed under the available increments would occur under a SIP relaxation, then such a SIP revision would be disapproved to the extent that it would cause significant deterioration.

The Administrator is concerned that while States are developing their own PSD regulations and EPA is implementing the PSD program, EPA should not make decisions which would have a significant impact upon future growth options of the States. In the interim, EPA generally will allocate use of the increments on a first-come, first-served basis as has been done under the previous PSD regulations. The Administrator recognizes that this approach may not be adequate on a long-term basis to achieve the purposes of the Act. Other options are available and should be pursued by the States in the development of their plans for PSD. Under 40 CFR 51.24, published today, States are required to develop a program for increment allocation and a number of program options are suggested for their consideration. EPA will be assessing the merits and feasibility of several allocation options (including first-come, first-served) and thereafter issue guidance for the submission of revised State implementation plans. This evaluation will consider alternatives in which carefully designed economic incentives serve as an adjunct to or a replacement for an administrative permitting procedure. The economic incentive programs to be considered include marketable permits, emission fees, and emissions density zoning.

While EPA is administering the PSD permit program, the Administrator will solicit and give careful consideration during the permit process to the views of State and local officials regarding the impact of proposed permit decisions on an area's potential for economic development. Additionally, where a source is expected to consume the entire remaining increment, the Administrator will notify the Governor of this proposed action.

In response to comments from the Department of Energy, EPA while implementing the PSD program will exclude, if so requested by a Governor, certain concentrations in calculating increment usage as provided in section 163(c) of the Act. These concentrations include ambient impacts from federally ordered fuel switches, fuel switches caused by gas curtailment plans, temporary emissions and new sources outside the United States. The Administrator will assume that all fuel conversion operations consume portions of the available increment unless otherwise requested by the Governor.

The Governor's ability to effect exclusions under section 163(c) will not automatically extend beyond nine months from today. No exclusion beyond this time will occur unless the Governor has submitted a plan which meets all requirements of 40 CFR 51.24 (published elsewhere in today's FEDERAL REGISTER). The Administrator would also like to point out that exclusions under section 163(c) are not always of a permanent nature. Exclusions from increment consumption for stationary sources affected by a natural gas curtailment plan or by orders under the Energy Supply and Environmental Coordination Act of 1974 may occur no later than 5 years after the effective date of the applicable plan or order. A Governor should realize that full use of such exclusions may lead to plan revisions in the future in order to

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preserve the PSD increment. The exclusions will allow more sources to be approved than could be otherwise in the interim. Consequently, when the exclusions expire, the excluded concentrations may well cause exceedences.

To allow the Governor to make use of section 163(c) prior to plan approval reflects a change from the Agency's preliminary position. In the November 3, 1977, proposal, the Agency stated that the Act does not appear to make such exclusions available as to a particular State until EPA has approved a PSD SIP revision for that State. Behind that position was the Agency's perception that Congress had conditioned the availability of the exclusions on approval of such revisions in order to give the States added incentive for submitting them. The Agency still believes that that was Congress' purpose. It has concluded, however, that making the exclusions unavailable nine months from today to States which have failed to submit an approvable PSD revision will serve that purpose as well as making them available at that time only to States which have submitted such a revision. A State will have as much reason to submit a plan revision under the present rule as it would have had under the old. In addition, making the exclusions available now will give the States more flexibility than they would have had for permitting growth.

Another issue related to increment consumption and EPA involvement concerns the review of major construction that would impact interstate areas. The Administrator is pursuing various mechanisms to allocate the amount of increment consumption to such sources when affected States are in disagreement. If an interstate dispute arises before more definitive guidance can be prepared, the Administrator intends to restrict increment consumption to equal amounts at the State line. In other words, when two States are involved in an interstate dispute over increment consumption, no source or series of sources in either State can be approved for construction if they would consume over one-half of the total applicable increment at the State line. Applicable increment here refers to that increment applying in the State where such construction would occur.

Federal Lands

A number of comments suggested that EPA prepare and publish guidance on determining the impacts a source may have on "air quality related values." Such general guidance is not currently available and, until such time as it is, determinations should be made on a case-by-case basis. Sources which may impact Federal Class I areas should consult with the EPA Regional Offices on questions concerning the possibility of adverse impacts on air quality values and the type of analysis that must be included with the permit application.

Environmental groups pointed out that the proposed regulations did not specifically require Federal Land Managers to protect "affirmatively" air quality related values in Federal Class I areas. Federal Land Managers do have such a responsibility, and the regulations now say so explicitly. It was also suggested that a Federal Land Manager is obligated to withhold any other permits for which he or she is the issuing authority or over which he or she may have control, if EPA did not concur with the Federal Land Manager's determination that air quality related values would be adversely impacted. Part C of the Act and therefore the regulations promulgated today do not require this, but neither do they prohibit a Federal Land Manager from withholding a permit.

Section 165(d)(2)(C)(ii) of the Act would bar the issuance of a PSD permit "[i] in any case where the Federal Land Manager (of lands in a Class I area) demonstrates to the satisfaction of the State" that the proposed source or modification would adversely impact the air quality related values of such lands. Section 165(d)(2)(C)(iii), on the other hand, would allow the "State" to issue a permit if the Federal Land Manager were to certify that the source or modification would not adversely impact such values, even though it would cause or contribute to a violation of the applicable Class I increments. Both sections presuppose that the "State" would be the permitting authority. The final regulations published today contain provisions (§ 52.21(q) (3) and (4)) which for the most part parallel Sections 165(d)(2)(C) (ii) and (iii). The regulations, however, treat the "Administrator" as the permitting authority, not the "State". This is appropriate. Congress must have recognized that there would be instances in which EPA, and not a State, would be the permitting authority. Furthermore, Congress would have expected, in such instances, that the safeguard of Section 165(d)(2)(C)(ii) and the variance of Section 165(d)(2)(C)(iii) would be available.

National Ambient Air Quality Standards

Under the regulations published today, no PSD permit for a source whose increased allowable emissions are equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour may be granted without assurance that emissions from the source will not cause or contribute to a violation of a NAAQS. If an initial determination shows that such a source may interfere with an applicable ambient standard, the owner or operator must reduce emissions or secure appropriate emission offsets from other nearby sources. While EPA is implementing the PSD program, it does not intend to be involved directly in approving emission offsets for a proposed source except where EPA is also implementing a State new source review program. Thus, the owner or operator would first have to obtain offsets through the State agency new source review program before EPA could approve the source under PSD. An EPA permit cannot be issued until the State permit is granted. Sources are encouraged to seek concurrent review from the State when applying for a PSD permit to minimize review delays. Such action will assist the source to commence construction on schedule as required under the PSD permit.

Other Issues

A number of other important concerns were raised by comments, including undue review delays, the effects of pending reclassifications on preconstruction reviews, guidance on other impact analyses, the definition of source and the high costs of required newspaper advertisements.

Several comments raised the concern that PSD review might be unduly long, especially for those sources which would have only minimal air quality impacts. The Administrator will take steps to expeditiously evaluate permit applications and will inform applicants as to the completeness of their submittals within 30 days or less of receiving the application. In addition, the exemption for 50-ton sources discussed above will greatly reduce the permit delays that were possible under the proposed regulation. The Administrator expects that such sources will satisfy most, if not all, their PSD requirements by going through the State new source review programs. Although such a source must still obtain a PSD permit the Administrator does not intend generally to duplicate the analyses and determinations made during the State new source review. In reviewing a 50-ton source, every effort will be made to complete the required analyses within 30 days after receiving a complete application and the public participation process to the extent necessary within 45 days thereafter. If a public comment period is necessary, it will run for 30 days from the first day of the 45-day period. On that day EPA will give due notice of the Agency's determinations and tentative decision. At this time, EPA will also solicit comment on the need to conduct a public hearing, if one is necessary. If no response to the latter is received by day

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15, no public hearing will be held. If no supportable concerns are received during the scheduled 30-day public comment period (or the public hearing if one is held), the Administrator intends to issue final approval to construct within 15 days after the public comment period has ended. These are current estimates of the maximum time required for PSD review of smaller sources. Every effort will be made to shorten this review time.

In response to comments received, EPA has excluded from the final regulations the proposed provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during start-up of the new PSD program. Under the previous PSD regulations, all areas were initially class II. Now Congress has designated several mandatory class I areas. Moreover, States have had considerable opportunity to designate any others. Thus, this provision is no longer necessary. States may establish such a requirement as part of their own implementation plans.

The analysis related to a source's impact on soils, vegation, and visibility should focus primarily on such impacts in class I areas, since final approval may turn on the effects of the source on air quality related values in class I areas. Where there would be no class I impacts, impacts elsewhere may affect the BACT determination, but would typically not have a significant bearing on the final approval decision. The impact assessment should generally be qualitative in nature and designed to inform the general public of the relative impact of the source on those values. It should be noted, too, that the Administrator intends to base approval or disapproval of a major source regarding its ambient air quality impact on both the direct emissions of that source and those secondary emissions that can be accurately quantified.* All secondary emissions that cannot be accurately estimated during the preconstruction review will consume the applicable increment(s) as they occur.

*Where a new source will result in specific and well defined secondary emissions which can be accurately quantified, the reviewing authority should consider such secondary emissions in determining whether the source would cause or contribute to a violation of an ambient ceiling or increment. However, since EPA's authority to perform or require indirect source review relating to mobile sources regulated under Title II of the Act (motor vehicles and aircraft), has been restricted by statute, consideration of the indirect impacts of motor vehicles and aircraft traffic is not required under this Ruling.

Pursuant to comments on the November 3, 1977, proposal, the Administrator is revising the definition of source to mean any structure, building, facility, equipment, installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and owned or operated by the same person or persons under common control. This precludes a large plant from being separated into individual production lines for purposes of determining applicability of the PSD requirements. This in turn resolves the issue raised in the proposal regarding PSD applicability to a facility which is constructed at the site of, but is different than, a source listed in the 28 categories. Such a facility would be part of the source under the above definition, and thus would be subject to PSD review as a modification to it.

A number of State agencies commented that the cost of "prominent newspaper advertisement" of the opportunity for public comment at a hearing could become prohibitively expensive, especially if the number of PSD reviews under the act increases as expected. Therefore, the regulations have been changed to remove the requirement for "prominent" newspaper advertisement. Nevertheless, whatever notice is given must provide a meaningful opportunity for public comment.

FINAL ACTION.

The following regulatory amendments are nationally applicable, and this action is based upon determinations of nationwide scope and effect. Therefore, under section 307(b)(1) of the act, judicial review may be sought only in the United States Court of Appeals for the District of Columbia. Petitions for judicial review must be filed on or before August 18, 1978.

(Sec. 101(b)(1), 110, 114, 123, 125(e), 160-169, and 301(a) of the Clean Air Act, as amended (42 U.S.C. 7401(b)(1), 7410, 7414, 7423, 7425(e), 7470-7479, 7601(a)).)

Dated June 9, 1978.

DOUGLAS M. COSTLE,
Administrator.

Title 40, Part 52 of the Code of Federal Regulations is amended as follows:

1. Section 52.21 is revised as follows:

§ 52.21 Prevention of significant deterioration of air quality.

(a) *Plan disapproval.* The provisions of this section are applicable 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. Specific disapprovals are listed where applicable, in subparts B through DDD of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in subparts B through DDD of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For the purposes of this section:

(1) "Major stationary source" means—

(i) Any of the following stationary sources of air pollutants which emit, or have the potential to emit, 100 tons per year or more of any air pollutant regulated under the Clean Air Act (the "Act"): Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300 thousand barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants; and

(ii) Notwithstanding the source sizes specified in paragraph (b)(1)(i) of this section, any source which emits, or has the potential to emit, 250 tons per year or more of any pollutant regulated under the Act.

(2) "Major modification" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the act (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since August 7, 1977, or since the time of the last construction approval issued for the source pursuant to this section, which-

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ever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

(i) A physical change shall not include routine maintenance, repair and replacement.

(ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

(a) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) An increase in the hours of operation;

(c) Use of an alternative fuel or raw material by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;

(d) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material; or

(e) Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;

(f) Change in ownership of the source.

(3) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(4) "Source" means any structure, building, facility, equipment, installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control).

(5) "Facility" means an identifiable piece of process equipment. A source is composed of one or more pollutant-emitting facilities.

(6) "Fugitive dust" means particulate matter composed of soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces and soil storage piles and other activities in which soil is either removed, stored, transported, or redistributed.

(7) "Construction" means fabrication, erection, installation, or modification of a source.

(8) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of physical on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

(9) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State implementation plan.

(10) "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR part 60 and part 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, a design, equipment, work practice or operational standard, or combination thereof, may be prescribed instead to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(11) "Baseline concentration" means that ambient concentration level reflecting actual air quality as of August 7, 1977, minus any contribution from major stationary sources and major modifications on which construction commenced on or after January 6, 1975. The baseline concentration shall include contributions from:

(i) The actual emissions of other sources in existence on August 7, 1977, except that contributions from facilities within such existing sources for which a plan revision proposing less restrictive requirements was submitted on or before August 7, 1977, and was pending action by the Administrator on that date shall be determined from the allowable emissions of such facilities under the plan as revised; and

(ii) The allowable emissions of major stationary sources and major modifications which commenced construction before January 6, 1975, but were not in operation by August 7, 1977.

(12) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(13) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a facility.

(14) "Low terrain" means any area other than high terrain.

(15) "Indian Reservation" means any Federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(16) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(17) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1)-(3). A reconstructed source will be treated as a new source for purposes of this section, except that use of an alternative fuel or raw material by reason of an order in effect under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under section 125 of the act, shall not be considered reconstruction. In determining best available control technology for a reconstructed source, the provisions of

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40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR part 60 is applicable to such source.

(18) "Fixed capital cost" means the capital needed to provide all of the depreciable components.

(19) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR part 60 and part 61,

(ii) The applicable State implementation plan emission limitation, or

(iii) The emission rate specified as a permit condition.

(c) *Ambient air increments.* In areas designated as class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Maximum allowable increase.

[Micrograms per cubic meter]

Pollutant	
Class I	
Particulate matter:	
Annual geometric mean	5
24-h maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-h maxium	5
3-h maximum	25
Class II	
Particulate matter:	
Annual geometric mean	19
24-h maximum	37
Sulfur dioxide:	
Annual arithmetic	20
24-h maximum	91
3-h maximum	512
Class III	
Particulate matter:	
Annual geometric mean	37
24-h maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-h maximum	182
3-h maximum	700

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* No concentration of a polutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) Upon written request of the Governor, made after notice and opportunity for at least one public hearing to be held in accordance with procedures established in 51.4 of this chapter, the Administrator shall exclude the following concentrations in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary activities; and

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(2) No exclusion under paragraph (f)(1) (i) or (ii) of this section shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) refers or the plan to which paragraph (f)(1)(ii) refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(3) No exclusion under paragraph (f) of this section shall occur after March 19, 1979, if a State implementation plan revision meeting the requirements of 40 CFR 51.24 has not been submitted to the Administrator by that time.

(g) *Redesignation.* (1) All areas (except as otherwise provided under paragraph (e) of this section) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in § 51.4 of this chapter;

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

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(3) Any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (i) of this section, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided*, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by—

(i) So much of the stack height of any source as exceeds good engineering practice, or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

(i) *Review of major stationary sources and major modifications—Source applicability and general exemptions.* (1) No major stationary source or major modification shall be constructed unless the requirements of paragraphs (j) through (r) of this section, as applicable, have been met. The requirements of paragraphs (j) through (r) shall apply to a proposed source or modification only with respect to those pollutants for which it would be a major stationary source or major modification.

(2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to the review requirements of 40 CFR 52.21(d)(1) for the prevention of significant deterioration as in effect before March 1, 1978, if the owner or operator—

(i) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;

(ii) Commenced construction before March 19, 1979; and

(iii) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

(3) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was not subject to 40 CFR 52.21 as in effect before March 1, 1978, if the owner or operator—

(i) Obtained all final Federal, State and local preconstruction permits necessary under the applicable State implementation plan before March 1, 1978;

(ii) Commenced construction before March 19, 1979; and

(iii) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

(4) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to 40 CFR 52.21 as in effect before March 1, 1978, if review of an application for approval for the source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978.

(5) The requirements of paragraphs (j), (l), (n) and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that—

(i) As to that pollutant, the source or modification is subject to the emission offset ruling (41 FR 55524), as it may be amended, or to regulations approved or promulgated pursuant to Section 173 of the Act; and

(ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act).

(6) The requirements of paragraphs (j) through (r) of this section shall not apply, upon written request of the Governor of a State, to a nonprofit health or education institution to be located in that State.

(7) A portable facility which has previously received construction approval under the requirements of this section as applicable may relocate without again being subject to those requirements if—

(i) Emissions from the facility would not exceed allowable emissions;

(ii) Emissions from the facility would impact no Class I area and no area where an applicable increment is known to be violated; and

(iii) Notice is given to the Administrator at least 30 days prior to such relocation identifying the proposed new location and the probable duration of operation at such location.

(j) *Control technology review.* (1) A major stationary source or major modification shall meet all applicable emission limitations under the State implementation plan and all applicable emission standards and standards of performance under 40 CFR Part 60 and Part 61.

(2) A major stationary source or major modification shall apply best available control technology for each applicable pollutant, unless the increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

(i) The preceding hourly and daily rates shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period less than 24 hours or for a

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24 hour period, as appropriate, has been established.

(ii) In determining whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(3) In the case of a modification, the requirement for best available control technology shall apply only to each new or modified facility which would increase the allowable emissions of an applicable pollutant.

(4) Where a facility within a source would be modified but not reconstructed, the requirements for best available control technology, notwithstanding paragraph (j)(2) of this section, shall not apply to such facility if no net increase in emissions of an applicable pollutant would occur at the source, taking into account all emission increases and decreases at the source which would accompany the modification, and no adverse air quality impact would occur.

(5) For phased construction projects the determination of best available control technology shall be reviewed, and modified as appropriate, at the latest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(k) *Exemptions from impact analyses.* (1) The requirements of paragraphs (l), (n), and (p) shall not apply to a major stationary source or major modification with respect to a particular pollutant, if—

(i) The increase in allowable emissions of that pollutant from the source or modification would impact no Class I area and no area where an applicable increment is known to be violated; and

(ii) The increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1000 pounds per day, or 100 pounds per hour, whichever is more restrictive; or

(iii) The emissions of the pollutant are of a temporary nature including but not limited to those from a pilot plant, a portable facility, construction, or exploration; or

(iv) A source is modified, but no increase in the net amount of emissions for any pollutant subject to a national ambient air quality standard and no adverse air quality impact would occur.

(2) The hourly and daily rates set in paragraph (k)(1)(ii) of this section shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period of less than 24 hours or for a 24 hour period, as appropriate, has been established.

(3) In determining for the purpose of paragraph (k)(1)(ii) of this section whether and to what extent the modification would increase allowable emissions, there shall be taken into account no emission reduction achieved elsewhere at the source at which the modification would occur.

(4) In determining for the purpose of paragraph (k)(1)(iv) of this section whether and to what extent there would be an increase in the net amount of emissions for any pollutant subject to a national ambient air quality standard from the source which is modified, there shall be taken into account all emission increases and decreases occurring at the source since August 7, 1977.

(5) The requirements of paragraphs (l), (n) and (p) of this section shall not apply to a major stationary source or to a major modification with respect to emissions from it which the owner or operator has shown to be fugitive dust.

(l) *Air quality review.* The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, would not cause or contribute to air pollution in violation of:

(1) Any national ambient air quality standard in any air quality control region; or

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

(m) *Air quality models.* (1) All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models" (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978). This document is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register library.

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment under paragraph (r) of this section. Written approval of the Administrator must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models" (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May, 1978) should be used to determine the comparability of air quality models.

(3) The documents referenced in this paragraph are available for public inspection at EPA's Public Information Reference Unit and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711. Also, copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Va. 22161.

(n) *Monitoring.* (1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the Administrator determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a national ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a national ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the Administrator's satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air quality standard.

(o) *Source information.* The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j), (l), (n) and (p) of this section apply, such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to deter-

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mine that best available control technology would be applied.

(2) Upon request of the Administrator, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(p) *Additional impact analyses.* (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(q) *Sources impacting Federal Class I areas—additional requirements.*—(1) *Notice to Federal Land Managers.* The Administrator shall provide notice of any permit application for a proposed major stationary source or major modification the emissions from which would affect a Class I area to the Federal Land Manager, and the Federal official charged with direct responsibility for management, of any lands within any such area. The Administrator shall provide such notice promptly after receiving the application. The Administrator shall also provide the Federal Land Manager and such Federal officials with a copy of the preliminary determination required under paragraph (r) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes it.

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Administrator, whether a proposed source or modification will have an adverse impact on such values.

(3) *Denial—impact on air quality related values.* The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

(4) *Class I variances.* The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and he so certifies, the State may authorize the Administrator: *Provided*, That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325

(5) *Sulfur dioxide variance by Governor with Federal Land Manager's concurrence.* The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(6) *Variance by the Governor with the President's concurrence.* In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Administrator shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(7) *Emission limitations for Presidential or gubernatorial variance.* In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum Allowable Increase

(Micrograms per cubic meter)

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(r) *Public participation.* (1) Within 30 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this section, the date on which the Administrator received all required information.

(2) Within 1 year after receipt of a complete application, the Administrator shall make a final determination on the application. This involves performing the following actions in a timely manner:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

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(ii) Make available in at least one location in each region in which the proposed source or modification would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: State and local air pollution control agencies, the chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making a final decision. The Administrator shall make all comments available for public inspection in the same locations where the Administrator made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Administrator made available preconstruction information and public comments relating to the source or modification.

(3) The requirements of paragraph (r) of this section shall not apply to any major stationary source or major modification which paragraph (k) would exempt from the requirements of paragraphs (l), (n), and (p), but only to the extent that, with respect to each of the criteria for construction approval under the applicable State implementation plan and for exemption under paragraph (k), requirements providing the public with at least as much participation in each material determination as those of paragraph (r) have been met in the granting of such construction approval.

(s) *Source obligation.* (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.

(t) *Environmental impact statements.* Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under Section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

(u) *Disputed permits or redesignations.* If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(v) *Delegation of authority.* (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v) (2) and (3) of this section.

(2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the delegate agency is not an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.

(ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.

(3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the

State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.

(4) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.

§ 52.01 [Amended]

2. In § 52.01, paragraph (f), which defines "best available control technology," is deleted and reserved.

3. In §§ 52.60 (AL), 52.96 (AK), 52.144 (AZ), 52.181 (AR), 52.270 (CA), 52.343 (CO), 52.382 (CT), 52.432 (DE), 52.499 (DC), 52.530 (FL), 52.581 (GA), 52.632 (HI), 52.683 (ID), 52.738 (IL), 52.793 (IN), 52.833 (IA), 52.884 (KS), 52.931 (KY), 52.986 (LA), 52.1029 (ME), 52.1116 (MD), 52.1165 (MA), 52.1180 (MI), 52.1234 (MN), 52.1280 (MS), 52.1339 (MO), 52.1382 (MT), 52.1436 (NB), 52.1485 (NV), 52.1529 (NH), 52.1603 (NJ), 52.1634 (NM), 52.1689 (NY), 52.1778 (NC), 52.1829 (ND), 52.1884 (OH), 52.1919 (OK), 52.1987 (OR), 52.2058 (PA), 52.2083 (RI), 52.2131 (SC), 52.2178 (SD), 52.2233 (TN), 52.2303 (TX), 52.2346 (UT), 52.2380 (VT), 52.2451 (VA), 52.2497 (WA), 52.2528 (WV), 52.2581 (WI), 52.2630 (WY), 52.2676 (GU), 52.2729 (PR), 52.2779 (VI), and 52.2827 (AmS), paragraphs (a) and (b) are revised to read as follows:

• • • • •

(a) The requirements of sections 160 through 165 of the Clean Air Act are not met, since the plan does not include approvable procedures for preventing the significant deterioration of air quality.

(b) *Regulation for preventing significant deterioration of air quality.* The provisions of § 52.21 (b) through (v) are hereby incorporated and made a part of the applicable State plan for the State of ———.

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[FR Doc. 78-16890 Filed 6-14-78; 4:15 pm]

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM:

DATE: November 24, 1986

SUBJECT: Need for a Short-term Best Available Control Technology (BACT) Analysis for the Proposed William A. Zimmer Power Plant

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards
(MD-10)

TO: David Kee, Director
Air Management Division, Region V (5AR-26)

This is in response to your November 17, 1986, memorandum, in which you requested comment on Region V's belief that prevention of significant deterioration (PSD) permits must contain short-term emission limits to ensure protection of the applicable national ambient air quality standards (NAAQS) and PSD increments. I concur with your position and emphasize to you that this position reflects our current national policy. Consequently, I recommend that you continue to identify this apparent deficiency to the Ohio Environmental Protection Agency and seek correction of the draft permit for the William A. Zimmer Power Plant.

The PSD regulations clearly require that the application of BACT conform with any applicable standard of performance under 40 CFR Part 60 at a minimum. However, this should not be taken to supercede any additional limitations as needed to enable the source to demonstrate compliance with the NAAQS and PSD increments. In the case of sulfur dioxide (SO2), source compliance with the 30-day rolling average emission limit under subpart D(a) does not adequately demonstrate compliance with the short-term NAAQS and PSD increments. Consequently, enforceable limits pertaining to the performance of the flue gas desulfurization system on a short-term basis must also be established. Note, however, that the short-term limits can result from either BACT analyses or the need to protect air quality. Therefore, the short-term limit could be more stringent than the BACT limit.

I recognize that the sulfur variability issue tends to complicate the setting of short-term SO2 emission limits, but such limits must be defined nevertheless. Continuous emission monitoring data from comparable sources can be used in order to estimate worst-case short-term SO2 emissions that could occur at the plant. The modeling techniques used to determine compliance with the short-term NAAQS and increments should employ the enforceable short-term SO2 emission limits which the permitting agency establishes.

CPDD:SIB:NSRS:D.deroech:m.Whitt629-5591:rtp MD15:11/19/86
deRoeck 5-29-3

From	Control No.
David Kee	CPDD-427
Subject and Date	Date Rec'd

Request for Guidance on Short Term BACT Analysis		11-18-86 Due Date 11-21-86
Referred(1) McCutchen	(2) DeRoeck	(3)	(4)
Date 11-18-86	11-18-86		
Reply Sent To		Date Released	
Remarks Easy response -- Agree with Region 5; if disagree, see Darryl. Prepare reply for Gerald A. Emison's signature.		Acknowledged-Date No Answer Needed (Explain in Remarks)	

MAIL CONTROL SCHEDULE

To: G.EMISON (EPA6200)

FROM: ARB/REG.V (EPA9553) (Posted) Mon 17-Nov-86 10:44 EST Sys 63 (39)

SUBJECT: Request for Guidance on Short-Term BACT Analysis

Request for Guidance on Short-Term BACT Analysis

David Kee, Director
Air Management Division (5AR-26)

Gerald A. Emison, Director
Office of Air Quality Planning & Standards

Region V has recently completed an evaluation of Ohio EPA's draft permit for the William A. Zimmer Power Station Plant. Compliance with all pertinent Clean Air Act requirements, including Best Available Control Technology (BACT) requirements, was evaluated. During the course of these evaluations, a potentially significant problem arose in dealing with this fossil-fueled power plant employing flue gas desulfurization (FGD). Ohio's SO2 BACT analyses and emissions limits appear to have been based solely on a 30-day rolling average, an approach consistent with Subpart D(a) provisions for fossil fuel fired steam electric generating units. Region V is concerned that no emission limits based on 3-hr or 24-hr averaging periods have been included in Ohio's draft permit. The Region believes that short-term limits are necessary to ensure protection of the NAAQS and to adequately assess and protect increment consumption.

Accordingly, Region V has expressed its concerns to Ohio about the potential need for the SO2 BACT analysis to consider the performance of FGD systems on a short-term basis (i.e., 3-hr and/or 24-hr). Region V has also indicated that such short-term limits are necessary to protect the NAAQS and PSD increments. Region V would appreciate your guidance, concurrence or comments on the BACT analysis issue. Since Region V and Ohio will be discussing the need for a short-term BACT analysis and emission limits within ten (10) days, a prompt response is important. If you have any questions regarding this matter, please contact Joseph Paisie of my staff at 886-5777.

September 2, 1997

Donald Sutton, Manager
Permits Section
Division of Air Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19506
2200 Churchill Road
Springfield, Illinois 62794-9506

Dear Mr. Sutton:

The purpose of this letter is to provide further guidance on the major modification provisions of the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, as applied to construction of a proposed soybean extraction plant (Application 96100019) at the Archer Daniels Midland (ADM) plant in Decatur, Illinois. Per electronic mail correspondence and telephone calls between USEPA and Illinois Environmental Protection Agency (IEPA) staff during the period August 21 to 28, 1997, the record is not complete regarding the BACT analyses for hexane and ethanol (VOM) emissions associated with the proposed project. USEPA staff also highlighted to IEPA staff concerns raised in my letter to you of January 7, 1997, regarding ADM's proposed use of fugitive roadway dust emission reductions as offsets for increases resulting from a proposed project. In addition, it should be noted that, since it is our understanding that there are several proposed ADM projects that will need PSD review, if there is an integral relationship between any of these projects or sub-projects such that one depends upon another, then construction may not commence on any part of these inter-dependent projects until a PSD permit or permits has/have been issued for the whole project, that is, all of the integral portions of the project.

The following summarizes those concerns raised between USEPA and IEPA staff on the proposed permit which have yet to be addressed:

A "top-down" analysis of control technologies was not presented to support the BACT determinations of the proposed permit, nor have the BACT analyses themselves been provided. My staff has expressed a request for these analyses but have yet to receive them. The permitting record is incomplete without such analyses.

The VOM consumption limit for hexane, 10.4 pounds per ton of soybean processed, does not compare well with other similar limits from previous BACT determinations. A BACT determination in 1981 for Boon Valley Co-op and Owensboro Grain established a 2.9 pounds per ton limit. A PSD permit issued in the last several months to an ADM facility in North Kansas City, MO has a limit of 0.25 gallon per ton. Since the density of hexane is 5.63 pounds per gallon, this limit is equal to about 1.4 pounds per ton. Given that there is room for discussion whether pounds of hexane lost, consumed, and emitted are equivalent terms, the proposed limit seems well in excess of established limits.

Based on the information given to USEPA at this time, the proposed soybean extraction project appears to be a major modification pursuant to PSD for PM. More data is needed to make an accurate PSD determination with regard to the creditable contemporaneous PM emission increases and decreases claimed for this project. Unless ADM can prove through the netting of emissions that the overall increase in PM emissions from this project will not exceed major modification significance level, 15 tpy, PSD requirements do apply.

Leak detection and repair (LDAR) for the proposed project should be more well-defined. For example, what is the meaning of "prompt repair" and "detailed inspection"?

The following are additional issues of concern the USEPA has regarding the proposed permit:

BACT is an emission limitation. The proposed permit does not include an emission rate limit for VOM. The BACT rate must be directly related to emissions to the atmosphere.

How will ADM maintain records of VOM usage? Is the area of the proposed project sufficiently separated from the rest of the operations at the Decatur facility such that all VOM entering the area are readily recorded?

A detailed list of PM-emitting units/equipment at ADM and related maximum PM emission rates is attached to the proposed permit. The same type of list should be attached for VOM.

The liquid to gas (L/G) ratio defined in the proposed permit

is not a true L/G ratio. The proposed permit sets a limit for the mineral oil scrubber of 5 gallons per minute of scrubber cross-sectional area. This only relates to liquid flow and not to gas flow. The proposed permit should include a true L/G ratio limitation, and scrubber gas and liquid flow rates need to be monitored.

I hope you will find this information useful. If we can answer any questions regarding these comments, or if we can provide any further guidance, please contact John Kelly, of my staff, at (312) 886-4882. Once again, thank you for your commitment to working with us to improve the permitting process.

Sincerely yours,

/s/

Cheryl L. Newton, Chief
Permits and Grants Section

AIR AND RADIATION DIVISION
77 WEST JACKSON BOULEVARD (A-18J)
CHICAGO, ILLINOIS 60604
(800) 621-8431 OR (312) 353-2212

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

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT: Applicability of New Source Review Circumvention Guidance to 3M - Maplewood, Minnesota

FROM: John B. Rasnic, Director
Stationary Source Compliance Division

Office of Air Quality Planning and Standards

TO: George T. Czerniak, Chief
Air Enforcement Branch
Region V

This is in response to your memorandum dated March 16, 1992, requesting guidance on New Source Review (NSR) permitting for the Minnesota mining and Manufacturing (3M) Center located in Maplewood, Minnesota. Specifically, you requested guidance on the applicability of the circumvention guidance to this source and other sources in similar situations. We also received from your staff more information about the modifications at 3M and we suggested that you issue a SS114 request to the source for more inf ormation. In early November, we received a copy of the response to the SS114 request dated October 30, 1992. We hope this memorandum provides sufficient guidance on permitting this source and other sources in similar situations.

Background

In your memorandum of March 16, 1992, you notified us that the 3M Center in Maplewood, Minnesota received four synthetic minor permits for modifications between October 1991 and March 1992. The permits for the four modifications combined allow emission increases of 33.6 tons per year (tpy) of particulates, 39.8 tpy of sulfur dioxide, 39.4 tpy of nitrogen dioxide, 22.0 tpy of carbon monoxide, and 119.2 tpy of volatile organic compounds. You learned during the Region's discussions with Minnesota that i n 18 months, the source received 12 minor permits, and applied for several other minor permits. As a result, you indicated to the Minnesota Pollution Control Agency (MPCA) that 3M may be circumventing the Prevention of Significant Deterioration (PSD) regulations through these small projects. The MPCA, however, felt that these modifications were justified as separate modifications based on each 3M division pursuing its own research schedule.

Although it is somewhat unclear, the response to the SS114 request arguably supports 3M's justification. Yet in light of criteria for identifying circumvention situations, as further explained below, the Stationary Source Compliance Division (SSCD) believes the source may not have been permitted properly for its modifications.

EPA Policy and Authority

EPA stated in the June 28, 1989 Federal Register notice on the definition of federally enforceable (54 FR 27274) and in its June 13, 1989 guidance on "Limiting Potential to Emit in New Source Permitting" that it is not only improper but also in violation of the Clean Air Act to construct a source or major modification with a minor source permit when there is intent to operate as a major source or major modification. Permits with conditions that do not reflect a source's planned mode of operation are s
ham permits, are void ab initio, and cannot shield a source from the requirement to undergo preconstruction review. 40 CFR SS52.21(r)(4) requires application of NSR requirements to a source that asks for a relaxation of permit limits which would make the source major. EPA stated that it will require application of SS52.21(r)(4) even where a source legitimately changes a project after finding it cannot comply with the operating restrictions which were taken in good faith.

Generally in "sham" permitting, a source attempts to expedite construction by securing minor source status through permits containing operational restrictions from which the source intends to free itself shortly after completion of construction and commencement of operation. Such attempts are treated as unlawful circumvention of the preconstruction review requirements. Similarly, attempts to expedite construction by securing several minor source permits and avoiding major modification requirements should be treated as circumvention. A memorandum dated September 18, 1989 from John Calcagni to William Hathaway stated this position (see Memorandum 4.42 in the NSR Guidance Notebook).

EPA stated in the 1989 Federal Register notice that it is not possible to set forth, in detail, the circumstances in which EPA considers an owner or operator to have evaded preconstruction review through minor permits, and thus subject itself to enforcement sanctions under SSSS113 and 167 from the beginning of construction. However, EPA will look to objective indicia to identify circumvention situations. For example, EPA provided examples of objective criteria in the June 13, 1989 guidance on limiting potential to emit. EPA also stated some criteria in the Federal Register notice which include: the filing of an application for a federal PSD permit at or near the same time as a state minor source permit; the economic realities surrounding a transaction; and projected levels of operation as portrayed to

lending institutions and other records of projected demand and output. EPA stated that where it appears obvious that a proposed source or modification, by its physical and operational design characteristics, could not economically be run at minor source levels for an appreciable length of time, EPA will consider minor source limits taken by the source unrealistic and sham.

Specific Criteria

Similar to the 1989 guidance, this memorandum provides criteria to permitting and enforcement authorities to apply when making determinations whether a source is circumventing major NSR through the minor modification process.

1. Filing of more than one minor source or minor modification application associated with emissions increases at a single plant within a short time period.

If a source files more than one minor source permit application simultaneously or within a short time period of each other, this may constitute strong evidence of an intent to circumvent the requirements of preconstruction review. Authorities should scrutinize applications that relate to the same process or units that the source files either before initial operation of the unit or after less than a year of operation. The September 18, 1989 memorandum from John Calcagni to William Hathaway states that two or more related minor changes over a short time period should be studied for possible circumvention.

2. Application of funding.

Applications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has treated the projects as one modification for financial purposes. 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) without the other projects, this should be considered evidence of circumvention.

3. Reports of 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.

5. EPA's own analysis of the economic realities of the projects considered together.

EPA may determine that it is reasonable to expect that company management would coordinate the planning and execution of projects considering their intrinsic relationship with each other (physical proximity, stages of production process, etc.) and their impact on economic viability of the plant (scheduling down time in light of production targets, economies of scale, etc.).

Analysis of 3M-Maplewood

Although 3M applied for and received several minor source permits within 18 months, in response to the SS114 request, 3M stated that independent divisions at the plant made the funding

decisions for each independent project and that each project is independently viable. Thus, they suggest, the projects are not part of an attempt to circumvent preconstruction review. 3M and Minnesota have indicated that the divisions, actions should be reviewed separately and should not be treated as parts of a whole. However, the law plainly treats the Maplewood plant as one major emitting facility for NSR purposes. The NSR regulations do not provide special treatment because it is a research and development plant. Further, given the nature of this source, under normal conditions, a certain level of production or research development of new products can be expected. Although the NSR program generally allows sources to modify below significance levels without aggregating other contemporaneous net increases, sources c annot use the minor modification process to circumvent major modification requirements.

Where a source is permitted for several minor modifications that may in good faith be intended to be,separate but result in the source's aggregate increases to be major even considering decreases over a short time period (e.g., one year or 18 months), the modifications may require major new source review. Such modifications could require NSR if they are viewed as being consistent with the source's overall production goals or plans for a short planning period. In other words, 3M should not benefit fro m the absence of a plant-wide production plan. Given the nature of the plant's work, 3M may be able to reasonably anticipate that modifications will occur within a relatively short period of time.

5

Reports on consumer demand and projected production or emission levels may provide evidence that this plant is expected to modify regularly in response to such demands or research needs. some minimum level of research activity and commensurate emissions, source-wide, perhaps could be expected from year to year, as would be expected to keep the 3M plant productive or operable. These emissions and thereby modifications cannot be presumed to be independent given the plant's overall basic purpose to support a variety of research and development activities. Therefore, even though each research project may have been individually conceived and separately funded, it is appropriate to look at the overall expected research activity in assessing NSR applicability and enforcement.

without regard to whether 3M intended to circumvent NSR requirements, this source and the State should discuss alternative permitting that could minimize the uncertainty of intent. Although we cannot require aggregation of all de minimis net increases, we believe that net increases should be aggregated for each "planning period" of the plant. One way to treat this source is to set a plant-wide emissions level, that can be raised only by going through major NSR. Recently, we worked with you and the MP CA to develop a plantwide emissions cap permit for a 3M facility in St. Paul. Although there are a number of concerns that must be addressed in such an approach, we believe that the source and the State would benefit from the certainty that such an approach provides.

If you have any questions regarding this matter, please contact Clara Poffenberger at (703) 308-8709.

cc: Karen Schapiro, OE
Greg Foote, OGC
Bill Lamason, AQMD Air Division

Example
PSD Env Bes
Approved

Coshocton County

PUBLIC NOTICE

DIRECTOR'S INTENTION TO APPROVE A POLLUCTION CONTROL PROJECT REQUEST BY STONE CONTAINER CORPORATION, COSHOCTON, OHIO

Public notice is hereby given that the Director of the Ohio EPA intends to approve a request received from Stone Container Corporation for installation of a proposed environmentally beneficial project at their Coshocton paper production facility.

Stone is requesting approval to install a regenerative thermal oxidizer to control volatile organic compounds and reduce odors from the existing Copeland Reactor unit. This control device will reduce approximately 3495 tons/year of actual VOC emissions. Carbon Monoxide emissions are also projected to decrease by 496 tons/year. However, emissions of NO_x will increase by 175 tons/year.

Any increase in NO_x of this magnitude at a major facility would normally require prevention of significant deterioration (PSD) permit review by Ohio EPA, under 40 CFR Part 52.21, and OAC Chapter 3745-31. However, USEPA has issued guidance entitled "Guidance on Excluding Pollution Control Projects from New Source Review", for the exclusion of pollution control projects from the PSD permit requirements. The permitting authority, Ohio EPA, is to review any requests made under this guidance for exclusion from PSD review. The project must also meet the requirements of the OAC Chapter 3745-31.

Ohio EPA has reviewed Stone Container's submittal, and finds that it meets the criteria of an environmentally beneficial pollution control project under the USEPA Guidance and OAC Chapter 3745-31. Therefore, the Director intends to issue a letter of approval to Stone Container so that they may proceed with this installation.

Ohio EPA is accepting comments from the public during the 30 da comment period, which commences with the date of this notice. Please submit any comments in writing to Fred Klingelhafer, APC Supervisor, Ohio EPA-Southeast District Office, 2195 Front Street, Logan, Ohio, 43138. The Director will consider all comments submitted during this period before issuing any final approval to Stone Container Corporation.

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS: MAILING ADDRESS:

Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

October 21, 1996

Cheryl Newton
USEPA - Region 5
Air and Radiation Div.
Regulation Development (AR-18J)
77 West Jackson Street
Chicago, IL 60604

Dear Ms. Newton:

Enclosed please find a copy of the public notice sent to the local newspaper early this month, which proposes to approve an environmentally beneficial project for Stone Container Corporation, in Coshocton County.

This request has been under review by Ohio EPA, and we have determined that it fits the USEPA Guidance on Excluding Pollution Control Projects from New Source PSD Review. More details are provided in the attached notice.

If you have any further questions, you or your staff may contact me at (614) 644-2270.

Sincerely,

Misty Parsons
Environmental Specialist
Division of Air Pollution Control

cc: Mike Hopkins, AQM&P

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

October 30, 1996

Cadmial Gupta
USEPA - Region 5
Air and Radiation Div.
Regulation Development (AR-18J
77 West Jackson Street
Chicago, IL 60604

Dear Mr. Gupta:

Enclosed is the additional information you requested concerning the Stone Container Corporation, Inc. request for an environmentally beneficial project determination and exclusion from PSD review.

They are planning to install a VOC control device, a regenerative thermal oxidizer. A comparatively small increase in NOx emissions will result from the operation of the incinerator, but a large decrease in VOC will be achieved (see details in attached). There will also be a reduction in nuisance odors and HAPs emissions. They will be required to demonstrate that the projected emissions changes are accurate, once the control device begins operation.

A public notice of the Director's intention to approve this project was placed in the news paper, and the 30-day comment period will expire soon. Please notify me soon if you have any comments.

Thank you for you interest in this matter.

Sincerely

Misty Parsons
Environmental Specialist

cc: Mike Hopkins, Manager, AQM&P
Ron Hancher, SEDO

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

RE: COSHOCTON COUNTY
STONE CONTAINER CORPORATION
RTO PROJECT

Gary G. Egleston - Regional Environmental Manager
Stone Container Corporation
Containerboard & Paper Division
1979 Lakeside Parkway Suite 300
Tucker, Georgia 30084

Dear Mr. Egleston:

In February, 1996, you sent a request to Ronald Hancher of our Southeast District Office requesting a waiver from the federal PSD requirements contained 40 CFR PART 52.21 and OAC Chapter 3745-31 for your proposed pollution control project on your Copeland Reactor located in Coshocton. In August you sent the modeling and additional information required for review of this type of request.

The Division of Air Pollution Control has reviewed your request and determined that this project is an environmentally beneficial pollution control project under the USEPA Guidance and OAC Chapter 3745-31. In order to fulfil the requirements of the USEPA Guidance, the Ohio EPA has published an explanation of our intention to approve this request in the local newspaper for public comment.

The Ohio EPA did not receive any formal comments concerning this project within the 30 day comment period, however USEPA Region 5 did request additional information from us. USEPA has verbally informed us that they agree that the project should be approved. Therefore, the Ohio EPA approves the installation of a Regenerative Thermal Oxidizer on your Copeland Reactor in Coshocton for the purpose of controlling VOC and CO emissions. You may proceed with the installation of the control system at your earliest convenience.

Once the system is operational, you will be required to provide some demonstration that the outlet emissions are as expected. Our Southeast District Office will work with you in satisfying this requirement. If you have any questions please contact Ronald Hancher of our Southeast District Office at 614-385-8501.

Sincerely,

Donald R. Schregardus
Director
Ohio Environmental Protection Agency

cc: Ronald Hancher, SEDO

MP/RH

July 1, 1994

MEMORANDUM

SUBJECT: Pollution Control Projects and New Source Review (NSR) Applicability

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics
Management Division, Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation and Toxics Division,
Region III
Director, Air and Radiation Division,
Region V
Director, Air, Pesticides and Toxics Division,
Region VI
Director, Air and Toxics Division,
Regions VII, VIII, IX and X

This memorandum and attachment address issues involving the Environmental Protection Agency's (EPA's) NSR rules and guidance concerning the exclusion from major NSR of pollution control projects at existing sources. The attachment provides a full discussion of the issues and this policy, including illustrative examples.

For several years, EPA has had a policy of excluding certain pollution control projects from the NSR requirements of parts C and D of title I of the Clean Air Act (Act) on a case-by-case basis. In 1992, EPA adopted an explicit pollution control project exclusion for electric utility generating units [see 57 FR 32314 (the "WEPCO rule" or the "WEPCO rulemaking")]. At the time, EPA indicated that it would, in a subsequent rulemaking, consider adopting a formal pollution control project exclusion for other source categories [see 57 FR 32332]. In the interim, EPA stated that individual pollution control projects

involving source categories other than utilities could continue to be excluded from NSR by permitting authorities on a case-by-case basis [see 57 FR at 32320]. At this time, EPA expects to complete a rulemaking on a pollution control project exclusion for other source categories in early 1996. This memorandum and attachment provide interim guidance for permitting authorities on the approvability of these projects pending EPA's final action on a formal regulatory exclusion.

The attachment to this memorandum outlines in greater detail the type of projects that may qualify for a conditional exclusion from NSR as a pollution control project, the safeguards that are to be met, and the procedural steps that permitting authorities should follow in issuing an exclusion. Projects that do not meet these safeguards and procedural steps do not qualify for an exclusion from NSR under this policy. Pollution control projects potentially eligible for an exclusion (provided all applicable safeguards are met) include the installation of conventional or innovative emissions control equipment and projects undertaken to accommodate switching to an inherently less-polluting fuel, such as natural gas. Under this guidance, States may also exclude as pollution control projects some material and process changes (e.g., the switch to a less polluting coating, solvent, or refrigerant) and some other types of pollution prevention projects undertaken to reduce emissions of air pollutants subject to regulation under the Act.

The replacement of an existing emissions unit with a newer or different one (albeit more efficient and less polluting) or the reconstruction of an existing emissions unit does not qualify as a pollution control project. Furthermore, this guidance only applies to physical or operational changes whose primary function is the reduction of air pollutants subject to regulation under the Act at existing major sources. This policy does not apply to air pollution controls and emissions associated with a proposed new source. Similarly, the fabrication, manufacture or production of pollution control/prevention equipment and inherently less-polluting fuels or raw materials are not pollution control projects under this policy (e.g., a physical or operational change for the purpose of producing reformulated gasoline at a refinery is not a pollution control project).

It is EPA's experience that many bona fide pollution control projects are not subject to major NSR requirements for the simple reason that they result in a reduction in annual emissions at the source. In this way, these pollution control projects are outside major NSR coverage in accordance with the general rules for determining applicability of NSR to modifications at existing

sources. However, some pollution control projects could result in significant potential or actual increases of some pollutants. These latter projects comprise the subcategory of pollution control projects that can benefit from this guidance.

A pollution control project must be, on balance, "environmentally beneficial" to be eligible for an exclusion. Further, an environmentally-beneficial pollution control project may be excluded from otherwise applicable major NSR requirements only under conditions that ensure that the project will not cause or contribute to a violation of a national ambient air quality standard (NAAQS), prevention of significant deterioration (PSD) increment, or adversely affect visibility or other air quality related value (AQRV). In order to assure that air quality concerns with these projects are adequately addressed, there are two substantive and two procedural safeguards which are to be followed by permitting authorities reviewing projects proposed for exclusion.

First, the permitting authority must determine that the proposed pollution control project, after consideration of the reduction in the targeted pollutant and any collateral effects, will be environmentally beneficial. Second, nothing in this guidance authorizes any pollution control project which would cause or contribute to a violation of a NAAQS, or PSD increment, or adversely impact an AQRV in a class I area. Consequently, in addition to this "environmentally-beneficial" standard, the permitting authority must ensure that adverse collateral environmental impacts from the project are identified, minimized, and, where appropriate, mitigated. For example, the source or the State must secure offsetting reductions in the case of a project which will result in a significant increase in a nonattainment pollutant. Where a significant collateral increase in actual emissions is expected to result from a pollution control project, the permitting authority must also assess whether the increase could adversely affect any national ambient air quality standard, PSD increment, or class I AQRV.

In addition to these substantive safeguards, EPA is specifying two procedural safeguards which are to be followed. First, since the exclusion under this interim guidance is only available on a case-by-case basis, sources seeking exclusion from major NSR requirements prior to the forthcoming EPA rulemaking on a pollution control project exclusion must, before beginning construction, obtain a determination by the permitting authority that a proposed project qualifies for an exclusion from major NSR requirements as a pollution control project. Second, in considering this request, the permitting authority must afford the public an opportunity to review and comment on the source's

application for this exclusion. It is also important to note that any project excluded from major new source review as a pollution control project must still comply with all otherwise applicable requirements under the Act and the State implementation plan (SIP), including minor source permitting.

This guidance document does not supersede existing Federal or State regulations or approved SIP's. The policies set out in this memorandum and attachment are intended as guidance to be applied only prospectively (including those projects currently under evaluation for an exclusion) during the interim period until EPA takes action to revise its NSR rules, and do not represent final Agency action. This policy statement is not ripe for judicial review. Moreover, it is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. Agency officials may decide to follow the guidance provided in this memorandum, or to act at variance with the guidance, based on an analysis of specific circumstances. The EPA also may change this guidance at any time without public notice. The EPA presently intends to address the matters discussed in this document in a forthcoming NSR rulemaking regarding proposed changes to the program resulting from the NSR Reform process and will take comment on these matters as part of that rulemaking.

As noted above, a detailed discussion of the types of projects potentially eligible for an exclusion from major NSR as a pollution control project, as well as the safeguards such projects must meet to qualify for the exclusion, is contained in the attachment to this memorandum. The Regional Offices should send this memorandum with the attachment to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate EPA Regional Office. Regional Office staff may contact David Solomon, Chief, New Source Review Section, at (919) 541-5375, if they have any questions.

Attachment

cc: Air Branch Chief, Regions I-X
NSR Reform Subcommittee Members

Attachment

GUIDANCE ON EXCLUDING POLLUTION CONTROL PROJECTS FROM MAJOR NEW SOURCE REVIEW (NSR)

I. Purpose

The Environmental Protection Agency (EPA) presently expects to complete a rulemaking on an exclusion from major NSR for pollution control projects by early 1996. In the interim, certain types of projects (involving source categories other than utilities) may qualify on a case-by-case basis for an exclusion from major NSR as pollution control projects. Prior to EPA's final action on a regulatory exclusion, this attachment provides interim guidance for permitting authorities on the types of projects that may qualify on a case-by-case basis from major NSR as pollution control projects, including the substantive and procedural safeguards which apply.

II. Background

The NSR provisions of part C [prevention of significant deterioration (PSD)] and part D (nonattainment requirements) of title I of the Clean Air Act (Act) apply to both the construction of major new sources and the modification of existing major sources.[1] The modification provisions of the NSR programs in parts C and D are based on the broad definition of modification in section 111(a)(4) of the Act. That section contemplates a two-step test for determining whether activities at an existing major facility constitute a modification subject to new source requirements. In the first step, the reviewing authority determines whether a physical or operational change will occur. In the second step, the question is whether the physical or operational change will result in any increase in emissions of any regulated pollutant.

The 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 insignificant change in the way that pipe is utilized). However, EPA has recognized that Congress did not intend to make every activity at a source subject to new source requirements under parts C and D. As a result, EPA has by regulation limited the reach of the modification provisions of parts C and D to only major modifications. Under NSR, a "major modification" is generally a

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[1]The EPA's NSR regulations for nonattainment areas are set forth at 40 CFR 51.165, 52.24 and part 51, Appendix S. The PSD program is set forth in 40 CFR 52.21 and 51.166.

physical change or change in the method of operation of a major stationary source which would result in a significant net emissions increase in the emissions of any regulated pollutant [see, e.g., 40 CFR 52.21(b)(2)(i)]. A "net emissions increase" is defined as the increase in "actual emissions" from the particular physical or operational change together with any other contemporaneous increases or decreases in actual emissions [see, e.g., 40 CFR 52.21(b)(3)(i)]. In order to trigger major new source review, the net emissions increase must exceed specified "significance" levels [see, e.g., 40 CFR 52.21(b)(2)(i) and 40 CFR 52.21(b)(23)]. The EPA has also adopted common-sense exclusions from the "physical or operational change" component of the definition of "major modification." For example, EPA's regulations contain 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, e.g., 40 CFR 52.21(b)(2)(iii)].

In the 1992 "WEPCO" rulemaking [57 FR 32314], EPA amended its PSD and nonattainment NSR regulations as they pertain to utilities by adding certain pollution control projects to the list of activities excluded from the definition of physical or operational changes. In taking that action, EPA stated it was largely formalizing an existing policy under which it had been excluding individual pollution control projects where it was found that the project "would be environmentally beneficial, taking into account ambient air quality" [57 FR at 32320; see also id., n. 15].[2]

The EPA has provided exclusions for pollution control projects in the form of "no action assurances" prior to November 15, 1990 and nonapplicability determinations based on Act changes as of November 15, 1990 (1990 Amendments). Generally, these exclusions addressed clean coal technology projects and fuel switches at electric utilities.

Because the WEPCO rulemaking was directed at the utility industry which faced "massive industry-wide undertakings of pollution control projects" to comply with the acid rain provisions of the Act [57 FR 32314], EPA limited the types of projects eligible for the exclusion to add-on controls and fuel switches at utilities. Thus, pollution control projects under the WEPCO rule are defined as:

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[2]This guidance pertains only to source categories other than electric utilities, and EPA does not intend for this guidance to affect the WEPCO rulemaking in any way.

> any activity or project undertaken at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:
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> (A) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide (SO_2) and nitrogen oxides (NO_x) controls and electrostatic precipitators;
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> (B) An activity or project to accommodate switching to a fuel which is less polluting than the fuel in use prior to the activity or project . . .

[40 CFR 51.165(a)(1)(xxv) (emphasis added)]. The definition also includes certain clean coal technology demonstration projects. Id.

The EPA built two safeguards into the exclusion in the rulemaking. First, a project that meets the definition of pollution control project will not qualify for the exclusion where the "reviewing authority determines that (the proposed project) renders the unit less environmentally beneficial . . ." [see, e.g., 51.165(a)(1)(v)(C)(8)]. In the WEPCO rule, EPA did not provide any specific definition of the environmentally-beneficial standard, although it did indicate that the pollution control project provision "provides for a case-by-case assessment of the pollution control project's net emissions and overall impact on the environment" [57 FR 32321]. This provision is buttressed by a second safeguard that directs permitting authorities to evaluate the air quality impacts of pollution control projects that could--through collateral emissions increases or changes in utilization patterns--adversely impact local air quality [see 57 FR 32322]. This provision generally authorizes, as appropriate, a permitting authority to require modelling of emissions increases associated with a pollution control project. Id. More fundamentally, it explicitly states that no pollution control project under any circumstances may cause or contribute to violation of a national ambient air

quality standard (NAAQS), PSD increment, or air quality related value (AQRV) in a class I area. Id.[3]

As noted, the WEPCO rulemaking was expressly limited to existing electric utility steam generating units [see, e.g., 40 CFR 51.165(a)(1)(v)(C)(8) and 51.165(a)(1)(xx)]. The EPA limited the rulemaking to utilities because of the impending acid rain requirements under title IV of the Act, EPA's extensive experience with new source applicability issues for electric utilities, the general similarity of equipment, and the public availability of utility operating projections. The EPA indicated it would consider adopting a formal NSR pollution control project exclusion for other source categories as part of a separate NSR rulemaking. The rulemaking in question is now expected to be finalized by early 1996. On the other hand, the WEPCO rulemaking also noted that EPA's existing policy was, and would continue to be, to allow permitting authorities to exclude pollution control projects in other source categories on a case-by-case basis.

III. Case-By-Case Pollution Control Project Determinations

The following sections describe the type of projects that may be considered by permitting authorities for exclusion from major NSR as pollution control projects and two safeguards that permitting authorities are to use in evaluating such projects--the environmentally-beneficial test and an air quality impact assessment. To a large extent, these requirements are drawn from the WEPCO rulemaking. However, because the WEPCO rule was designed for a single source category, electric utilities, it cannot and does not serve as a complete template for this

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[3]The WEPCO rule refers specifically to "visibility limitation" rather than "air quality related values." However, EPA clearly stated in the preamble to the final rule that permitting agencies have the authority to "solicit the views of others in taking any other appropriate remedial steps deemed necessary to protect class I areas. . .. The EPA emphasizes that all environmental impacts, including those on class I areas, can be considered. . .." [57 FR 32322]. Further, the statutory protections in section 165(d) plainly are intended to protect against any "adverse impact on the AQRV of such [class I] lands (including visibility)." Based on this statutory provision, EPA believes that the proper focus of any air quality assessment for a pollution control project should be on visibility and any other relevant AQRV's for any class I areas that may be affected by the proposed project. Permitting authorities should notify Federal Land Managers where appropriate concerning pollution control projects which may adversely affect AQRV's in class I areas.

guidance. Therefore, the following descriptions expand upon the WEPCO rule in the scope of qualifying projects and in the specific elements inherent in the safeguards. These changes reflect the far more complicated task of evaluating pollution control projects at a wide variety of sources facing a myriad of Federal, State, and local clean air requirements.

Since the safeguards are an integral component of the exclusion, States must have the authority to impose the safeguards in approving an exclusion from major NSR under this policy. Thus, State or local permitting authorities in order to use this policy should provide statements to EPA describing and affirming the basis for its authority to impose these safeguards absent major NSR. Sources that obtain exclusions from permitting authorities that have not provided this affirmation of authority are at risk in seeking to rely on the exclusion issued by the permitting agency, because EPA may subsequently determine that the project does not qualify as a pollution control project under this policy.

A. Types of Projects Covered

1. Add-On Controls and Fuel Switches

In the WEPCO rulemaking, EPA found that both add-on emissions control projects and fuel switches to less-polluting fuels could be considered to be pollution control projects. For the purposes of today's guidance, EPA affirms that these types of projects are appropriate candidates for a case-by-case exclusion as well. These types of projects include:

- the installation of conventional and advanced flue gas desulfurization and sorbent injection for SO_2;
- electrostatic precipitators, baghouses, high efficiency multiclones, and scrubbers for particulate or other pollutants;
- flue gas recirculation, low-NO_x burners, selective non-catalytic reduction and selective catalytic reduction for NO_x; and
- regenerative thermal oxidizers (RTO), catalytic oxidizers, condensers, thermal incinerators, flares and carbon adsorbers for volatile organic compounds (VOC) and toxic air pollutants.

Projects undertaken to accommodate switching to an inherently less-polluting fuel such as natural gas can also

qualify for the exclusion. Any activity that is necessary to accommodate switching to a inherently less-polluting fuel is considered to be part of the pollution control project. In some instances, where the emissions unit's capability would otherwise be impaired as a result of the fuel switch, this may involve certain necessary changes to the pollution generating equipment (e.g., boiler) in order to maintain the normal operating capability of the unit at the time of the project.

2. Pollution Prevention Projects

It is EPA's policy to promote pollution prevention approaches and to remove regulatory barriers to sources seeking to develop and implement pollution prevention solutions to the extent allowed under the Act. For this reason, permitting authorities may also apply this exclusion to switches to inherently less-polluting raw materials and processes and certain other types of "pollution prevention" projects.[4] For instance, many VOC users will be making switches to water-based or powder-paint application systems as a strategy for meeting reasonably available control technology (RACT) or switching to a non-toxic VOC to comply with maximum achievable control technology (MACT) requirements.

Accordingly, under today's guidance, permitting authorities may consider excluding raw material substitutions, process changes and other pollution prevention strategies where the pollution control aspects of the project are clearly evident and will result in substantial emissions reductions per unit of output for one or more pollutants. In judging whether a pollution prevention project can be considered for exclusion as a pollution control project, permitting authorities may also consider as a relevant factor whether a project is being undertaken to bring a source into compliance with a MACT, RACT, or other Act requirement.

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[4]For purposes of this guidance, pollution prevention means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants and other pollutants to the environment (including fugitive emissions) prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal [see Pollution Prevention Act of 1990 section 6602(b) and section 6603(5)(A) and (B); see also "EPA Definition of 'Pollution Prevention,'" memorandum from F. Henry Habicht II, May 28, 1992].

Although EPA is supportive of pollution control and prevention projects and strategies, special care must be taken in classifying a project as a pollution control project and in evaluating a project under a pollution control project exclusion. Virtually every modernization or upgrade project at an existing industrial facility which reduces inputs and lowers unit costs has the concurrent effect of lowering an emissions rate per unit of fuel, raw material or output. Nevertheless, it is clear that these major capital investments in industrial equipment are the very types of projects that Congress intended to address in the new source modification provisions [see Wisconsin Electric Power Co. v. Reilly, 893 F.2d 901, 907-10 (7th Cir. 1990) (rejecting contention that utility life extension project was not a physical or operational change); Puerto Rican Cement Co., Inc. v. EPA, 889 F.2d 292, 296-98 (1st Cir. 1989) (NSR applies to modernization project that decreases emissions per unit of output, but increases economic efficiency such that utilization may increase and result in net increase in actual emissions)]. Likewise, the replacement of an existing emissions unit with a newer or different one (albeit more efficient and less polluting) or the reconstruction of an existing emissions unit would not qualify as a pollution control project. Adopting a policy that automatically excludes from NSR any project that, while lowering operating costs or improving performance, coincidentally lowers a unit's emissions rate, would improperly exclude almost all modifications to existing emissions units, including those that are likely to increase utilization and therefore result in overall higher levels of emissions.

In order to limit this exclusion to the subset of pollution prevention projects that will in fact lower annual emissions at a source, permitting authorities should not exclude as pollution control projects any pollution prevention project that can be reasonably expected to result in an increase in the utilization of the affected emissions unit(s). For example, projects which significantly increase capacity, decrease production costs, or improve product marketability can be expected to affect utilization patterns. With these changes, the environment may or may not see a reduction in overall source emissions; it depends on the source's operations after the change, which cannot be predicted with any certainty.[5] This is not to say that these

[5]This is in marked contrast to the addition of pollution control equipment which typically does not, in EPA's experience, result in any increase in the source's utilization of the emission unit in question. In the few instances where this presumption is not true, the safeguards discussed in the next section should provide adequate environmental protections for

types of projects are necessarily subject to major NSR requirements, only that they should not be excluded as pollution control projects under this guidance. The EPA may consider different approaches to excluding pollution prevention projects from major NSR requirements in the upcoming NSR rulemaking. Under this guidance, however, permitting authorities should carefully review proposed pollution prevention projects to evaluate whether utilization of the source will increase as a result of the project.

Furthermore, permitting authorities should have the authority to monitor utilization of an affected emissions unit or source for a reasonable period of time subsequent to the project to verify what effect, if any, the project has on utilization. In cases where the project has clearly caused an increase in utilization, the permitting authority may need to reevaluate the basis for the original exclusion to verify that an exclusion is still appropriate and to ensure that all applicable safeguards are being met.

B. Safeguards

The following safeguards are necessary to assure that projects being considered for an exclusion qualify as environmentally beneficial pollution control projects and do not have air quality impacts which would preclude the exclusion. Consequently, a project that does not meet these safeguards does not qualify for an exclusion under this policy.

1. Environmentally-Beneficial Test

Projects that meet the definition of a pollution control project outlined above may nonetheless cause collateral emissions increases or have other adverse impacts. For instance, a large VOC incinerator, while substantially eliminating VOC emissions, may generate sizeable NO_x emissions well in excess of significance levels. To protect against these sorts of problems, EPA in the WEPCO rule provided for an assessment of the overall environmental impact of a project and the specific impact, if any, on air quality. The EPA believes that this safeguard is appropriate in this policy as well.

Unless information regarding a specific case indicates otherwise, the types of pollution control projects listed in III. A. 1. above can be presumed, by their nature, to be environmentally beneficial. This presumption arises from EPA's

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these additions of pollution control equipment.

experience that historically these are the very types of pollution controls applied to new and modified emissions units. The presumption does not apply, however, where there is reason to believe that 1) the controls will not be designed, operated or maintained in a manner consistent with standard and reasonable practices; or 2) collateral emissions increases have not been adequately addressed as discussed below.

In making a determination as to whether a project is environmentally beneficial, the permitting authority must consider the types and quantity of air pollutants emitted before and after the project, as well as other relevant environmental factors. While because of the case-by-case nature of projects it is not possible to list all factors which should be considered in any particular case, several concerns can be noted.

First, pollution control projects which result in an increase in non-targeted pollutants should be reviewed to determine that the collateral increase has been minimized and will not result in environmental harm. Minimization here does not mean that the permitting agency should conduct a BACT-type review or necessarily prescribe add-on control equipment to treat the collateral increase. Rather, minimization means that, within the physical configuration and operational standards usually associated with such a control device or strategy, the source has taken reasonable measures to keep any collateral increase to a minimum. For instance, the permitting authority could require that a low-NO_x burner project be subject to temperature and other appropriate combustion standards so that carbon monoxide (CO) emissions are kept to a minimum, but would not review the project for a CO catalyst or other add-on type options. In addition, a State's RACT or MACT rule may have explicitly considered measures for minimizing a collateral increase for a class or category of pollution control projects and requires a standard of best practices to minimize such collateral increases. In such cases, the need to minimize collateral increase from the covered class or category of pollution control projects can be presumed to have been adequately addressed in the rule.

In addition, a project which would result in an unacceptable increased risk due to the release of air toxics should not be considered environmentally beneficial. It is EPA's experience, however, that most projects undertaken to reduce emissions, especially add-on controls and fuel switches, result in concurrent reductions in air toxics. The EPA expects that many pollution control projects seeking an exclusion under this guidance will be for the purpose of complying with MACT requirements for reductions in air toxics. Consequently, unless

there is reason to believe otherwise, permitting agencies may presume that such projects by their nature will result in reduced risks from air toxics.

2. Additional Air Quality Impacts Assessments

(a) General

Nothing in the Act or EPA's implementing regulations would allow a permitting authority to approve a pollution control project resulting in an emissions increase that would cause or contribute to a violation of a NAAQS or PSD increment, or adversely impact visibility or other AQRV in a class I area [see, e.g., Act sections 110(a)(2)(C), 165, 169A(b), 173]. Accordingly, this guidance is not intended to allow any project to violate any of these air quality standards.

As discussed above, it is possible that a pollution control project--either through an increase in an emissions rate of a collateral pollutant or through a change in utilization--will cause an increase in actual emissions, which in turn could cause or contribute to a violation of a NAAQS or increment or adversely impact AQRV's. For this reason, in the WEPCO rule the EPA required sources to address whenever 1) the proposed change would result in a significant net increase in actual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis; and 2) the permitting authority has reason to believe that such an increase would cause or contribute to a violation of a NAAQS, increment or visibility limitation. If an air quality impact analysis indicates that the increase in emissions will cause or contribute to a violation of any ambient standard, PSD increment, or AQRV, the pollution control exclusion does not apply.

The EPA believes that this safeguard needs to be applied here as well. Thus, where a pollution control project will result in a significant increase in emissions and that increased level has not been previously analyzed for its air quality impact and raises the possibility of a NAAQS, increment, or AQRV violation, the permitting authority is to require the source to provide an air quality analysis sufficient to demonstrate the impact of the project. The EPA will not necessarily require that the increase be modeled, but the source must provide sufficient data to satisfy the permitting authority that the new levels of emissions will not cause a NAAQS or increment violation and will not adversely impact the AQRV's of nearby potentially affected class I areas.

In the case of nonattainment areas, the State or the source must provide offsetting emissions reductions for any significant increase in a nonattainment pollutant from the pollution control project. In other words, if a significant collateral increase of a nonattainment pollutant resulting from a pollution control project is not offset on at least a one-to-one ratio then the pollution control project would not qualify as environmentally beneficial.[6] However, rather than having to apply offsets on a case-by-case basis, States may consider adopting (as part of their attainment plans) specific control measures or strategies for the purpose of generating offsets to mitigate the projected collateral emissions increases from a class or category of pollution control projects.

(b) Determination of Increase in Emissions

The question of whether a proposed project will result in an emissions increase over pre-modification levels of actual emissions is both complicated and contentious. It is a question that has been debated by the New Source Review Reform Subcommittee of the Clean Air Act Advisory Committee and is expected to be revisited by EPA in the same upcoming rulemaking that will consider adopting a pollution control project exclusion. In the interim, EPA is adopting a simplified approach to determining whether a pollution control project will result in increased emissions.

The approach in this policy is premised on the fact that EPA does not expect the vast majority of these pollution control projects to change established utilization patterns at the source. As discussed in the previous section, it is EPA's experience that add-on controls do not impact utilization, and pollution prevention projects that could increase utilization may not be excluded under this guidance. Therefore, in most cases it will be very easy to calculate the emissions after the change: the product of the new emissions rate times the existing utilization rate. In the case of a pollution control project that collaterally increases a non-targeted pollutant, the actual increase (calculated using the new emissions rate and current utilization pattern) would need to be analyzed to determine its air quality impact.

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[6]Regardless of the severity of the classification of the nonattainment area, a one-to-one offset ratio will be considered sufficient under this policy to mitigate a collateral increase from a pollution control project. States may, however, require offset ratios that are greater than one-to-one.

The permitting authority may presume that projects meeting the definition outlined in section III(A)(1) will not change utilization patterns. However, the permitting authority is to reject this presumption where there is reason to believe that the project will result in debottlenecking, loadshifting to take advantage of the control equipment, or other meaningful increase in the use of the unit above current levels. Where the project will increase utilization and emissions, the associated emissions increases are calculated based on the post-modification potential to emit of the unit considering the application of the proposed controls. In such cases the permitting agency should consider the projected increase in emissions as collateral to the project and determine whether, notwithstanding the emissions increases, the project is still environmentally beneficial and meets all applicable safeguards.

In certain limited circumstances, a permitting agency may take action to impose federally-enforceable limits on the magnitude of a projected collateral emissions increase to ensure that all safeguards are met. For example, where the data used to assess a projected collateral emissions increase is questionable and there is reason to believe that emissions in excess of the projected increase would violate an applicable air quality standard or significantly exceed the quantity of offsets provided, restrictions on the magnitude of the collateral increase may be necessary to ensure compliance with the applicable safeguards.

IV. Procedural Safeguards

Because EPA has not yet promulgated regulations governing a generally applicable pollution control project exclusion from major NSR (other than for electric utilities), permitting authorities must consider and approve requests for an exclusion on a case-by-case basis, and the exclusion is not self-executing. Instead, sources must receive case-by-case approval from the permitting authority pursuant to a minor NSR permitting process, State nonapplicability determination or similar process. [Nothing in this guidance voids or creates an exclusion from any applicable minor source preconstruction review requirement in any SIP that has been approved pursuant to section 110(a)(2)(C) and 40 CFR 51.160-164.] This process should also provide that the application for the exclusion and the permitting agency's proposed decision thereon be subject to public notice and the opportunity for public and EPA written comment. In those limited cases where the applicable SIP already exempts a class or category of pollution controls project from the minor source permitting public notice and comment requirements, and where no collateral increases are expected (e.g., the installation of a

baghouse) and all otherwise applicable environmental safeguards are complied with, public notice and comment need not be provided for such projects. However, even in such circumstances, the permitting agency should provide advance notice to EPA when it applies this policy to provide an exclusion. For standard-wide applications to groups of sources (e.g., RACT or MACT), the notice may be provided to EPA at the time the permitting authority intends to issue a pollution control exclusion for the class or category of sources and thereafter notice need not be given to EPA on an individual basis for sources within the noticed group.

V. Emission Reduction Credits

In general, certain pollution control projects which have been approved for an exclusion from major NSR may result in emission reductions which can serve as NSR offsets or netting credits. All or part of the emission reductions equal to the difference between the pre-modification actual and post-modification potential emissions for the decreased pollutant may serve as credits provided that 1) the project will not result in a significant collateral increase in actual emissions of any criteria pollutant, 2) the project is still considered environmentally beneficial, and 3) all otherwise applicable criteria for the crediting of such reductions are met (e.g., quantifiable, surplus, permanent, and enforceable). Where an excluded pollution control project results in a significant collateral increase of a criteria pollutant, emissions reduction credits from the pollution control project for the controlled pollutant may still be granted provided, in addition to 2) and 3) above, the actual collateral increase is reduced below the applicable significance level, either through contemporaneous reductions at the source or external offsets. However, neither the exclusion from major NSR nor any credit (full or partial) for emission reductions should be granted by the permitting authority where the type or amount of the emissions increase which would result from the use of such credits would lessen the environmental benefit associated with the pollution control project to the point where the project would not have initially qualified for an exclusion.

IV. Illustrative Examples

The following examples illustrate some of the guiding principles and safeguards discussed above in reviewing proposed pollution control projects for an exclusion from major NSR.

Example 1

PROJECT DESCRIPTION: A chemical manufacturing facility in an attainment area for all pollutants is proposing to install a RTO to reduce VOC emissions (including emissions of some hazardous pollutants) at the plant by about 3000 tons per year (tpy). The emissions reductions from the RTO are currently voluntary, but may be necessary in the future for title III MACT compliance. Although the RTO has been designed to minimize NO_x emissions, it will produce 200 tpy of new NO_x emissions due to the unique composition of the emissions stream. There is no information about the project to rebut a presumption that the project will not change utilization of the source. Aside from the NO_x increase there are no other environmental impacts known to be associated with the project.

EVALUATION: As a qualifying add-on control device, the project may be considered a pollution control project and may be considered for an exclusion. The permitting agency should: 1) verify that the NO_x increase has been minimized to the extent practicable, 2) confirm (through modeling or other appropriate means) that the actual significant increase in NO_x emissions does not violate the applicable NAAQS,[7] PSD increment, or adversely impact any Class I area AQRV, and 3) apply all otherwise applicable SIP and minor source permitting requirements, including opportunity for public notice and comment.

Example 2

PROJECT DESCRIPTION: A source proposes to replace an existing coal-fired boiler with a gas-fired turbine as part of a cogeneration project. The new turbine is an exact replacement for the energy needs supplied by the existing boiler and will emit less of each pollutant on an hourly basis than the boiler did.

EVALUATION: The replacement of an existing emissions unit with a new unit (albeit more efficient and less polluting) does not qualify for an exclusion as a pollution control project. The company can, however, use any otherwise applicable netting credits from the removal of the existing boiler to seek to net the new unit out of major NSR.

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[7]If the source were located in an area in which nonattainment NSR applied to NO_x emissions increases, 200 tons of NO_x offset credits would be required for the project to be eligible for an exclusion.

Example 3

PROJECT DESCRIPTION: A source plans to physically renovate and upgrade an existing process line by making certain changes to the existing process, including extensive modifications to emissions units. Following the changes, the source will expand production and manufacture and market a new product line. The project will cause an increase in the economic efficiency of the line. The renovated line will also be less polluting on a per-product basis than the original configuration.

EVALUATION: The change is not eligible for an exclusion as a pollution control project. On balance, the project does not have clearly evident pollution control aspects, and the resultant decrease in the per-product emissions rate (or factor) is incidental to the project. The project is a physical change or change in the method of operation that will increase efficiency and productivity.

Example 4

PROJECT DESCRIPTION: In response to the phaseout of chlorofluorocarbons (CFC) under title VI of the Act, a major source is proposing to substitute a less ozone-depleting substance (e.g., HCFC-141b) for one it currently uses that has a greater ozone depleting potential (e.g., CFC-11). A larger amount of the less-ozone depleting substance will have to be used. No other changes are proposed.

EVALUATION: The project may be considered a pollution control project and may be considered for an exclusion. The permitting agency should verify that 1) actual annual emissions of HCFC-141b after the proposed switch will cause less stratospheric ozone depletion than current annual emissions of CFC-11; 2) the proposed switch will not change utilization patterns or increase emissions of any other pollutant which would impact a NAAQS, PSD increment, or AQRV and will not cause any cross-media harm, including any unacceptable increased risk associated with toxic air pollutants; and 3) apply all otherwise applicable SIP and minor source permitting requirements, including opportunity for public notice and comment.

Example 5

PROJECT DESCRIPTION: An existing landfill proposes to install either flares or energy recovery equipment [i.e., turbines or internal combustion (IC) engines]. The reductions from the project are estimated at over 1000 tpy of VOC and are currently not necessary to meet Act requirements, but may be necessary some time in the future. In case A the project is the replacement of an existing flare or energy system and no increase in NO_x emissions will occur. In case B, the equipment is a first time installation and will result in a 100 tpy increase in NO_x. In case C, the equipment is an addition to existing equipment which will accommodate additional landfill gas (resulting from increased gas generation and/or capture consistent with the current permitted limits for growth at the landfill) and will result in a 50 tpy increase in NO_x.

EVALUATION: Projects A, B, and C may be considered pollution control projects and may be considered for an exclusion; however, in cases B and C, if the landfill is located in an area required to satisfy nonattainment NSR for NO_x emissions, the source would be required to obtain NO_x offsets at a ratio of at least 1:1 for the project to be considered for an exclusion. [NOTE: VOC-NO_x netting and trading for NSR purposes may be discussed in the upcoming NSR rulemaking, but it is beyond the scope of this guidance.] Although neither turbines or IC engines are listed in section III.A.1 as add-on control devices and would normally not be considered pollution control projects, in this specific application they serve the same function as a flare, namely to reduce VOC emissions at the landfill with the added incidental benefit of producing useful energy in the process.[8]

The permitting agency should: 1) verify that the NO_x increase has been minimized to the extent practicable; 2) confirm

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[8]The production of energy here is incidental to the project and is not a factor in qualifying the project for an exclusion as a pollution control project. In addition, any supplemental or co-firing of non-landfill gas fuels (e.g., natural gas, oil) would disqualify the project from being considered a pollution control project. The fuels would be used to maximize any economic benefit from the project and not for the purpose of pollution control at the landfill. However, the use of an alternative fuel solely as a backup fuel to be used only during brief and infrequent start-up or emergency situations would not necessarily disqualify an energy recovery project from being considered a pollution control project.

(through modeling or other appropriate means) that the actual significant increase in NO_x emissions will not violate the applicable NAAQS, PSD increment, or adversely impact any AQRV; and 3) apply all otherwise applicable SIP and minor source and, as noted above, in cases B and C ensures that NO_x offsets are provided in an area in which nonattainment review applies to NO_x emissions increases. permitting requirements, including opportunity for public notice and comment.

S/L Directors, BC

FEB 22 1994

February 7, 1994

NOTE TO STEVE ROTHBLATT

Steve, you may be aware that as part of the NSR reform effort, we are currently developing guidance regarding NSR applicability to pollution control and prevention projects. We expect to issue a policy memo in the next few months with a rulemaking proposal on the issue to follow early next year. A copy of the current draft pollution control project memorandum is attached for your reference.

Pending the rulemaking, EPA's current policy is to review proposed pollution control projects to determine whether they should be excluded from NSR based on a case-by-case assessment of the net emissions and overall environmental impact of the project (see WEPCO rulemaking). Pollution control projects that are environmentally beneficial and meet certain safeguards may be excluded.

As a result of the NSR Reform effort, we understand that Eli Lilly has raised the issue of an NSR exclusion for their regenerative thermal oxidizer (RTO) project at their Tippecane Laboratories in Shadeland, Indiana with Region V and the Indiana Department of Environmental Management (IDEM). Based upon our understanding of the facts, we feel that it meets all the qualifications for an exclusion from NSR as a pollution control project under the terms discussed in our draft memorandum as well as the WEPCO rule. Consequently, we would encourage the Region to work with IDEM and the source in evaluating the project for an NSR exclusion.

Our position is to encourage and support pollution control projects whenever possible and issue case specific exclusions where appropriate. Your effort with GM last year was one example; another is outlined in the attached RO VI memo.

Please give me a call if you would like to discuss. We would be glad to provide assistance.

Ed Lillis

ATTACHMENTS

cc: Lydia Wegman w/o
Kent Berry w/o
Dave Kee w/o
David Solomon w/o

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL
# of pages ▶ 1
To [redacted]
From David Solomon
Dept./Agency RO V
Phone # (919) 541-5375
Fax #
Fax #
NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

OhioEPA
State of Ohio Environmental Protection Agency
P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020 Fax (614) 644-2329

Richard F. Celeste
Governor

M O R A N D U M

To: New Source Review Contacts

From: Bob Hodanbosi, AQM&P

Subject: New Guidance on Increment Consumption/Ambient Impact

Date: January 15,

Attached is a guidance document recently developed to assist n the discussions with PSD permit applicants.

It explains the background behind the allowable ambient impact under the PSD regulations and the purpose for the increment consumption policy. In each particular case, the determination of increment consumption would be made during the review process.

This new document should be added to your New Source Review Guidebook as section B2h.

RECEIVED
JAN 17 1991
OHIO EPA/CDO

BH/MP/mmc

attachment

Guideline for Consumption of Air Quality Increment or Ambient Impact

Issue: Many sources ask how much increment can be used under the Prevention of Significant Deterioration (PSD) regulations or what ambient impact is acceptable

Response: The PSD regulations are applicable to major sources or major modifications and specify how much "clean air" can be consumed by a new source. The increments are permanent limitations on air quality degradation for areas cleaner than the ambient air quality standards.

Soon after Ohio EPA received Delegation of Authority to review PSD applications and issue PSD permits, it was recognized that a uniform program for PSD increment consumption had to be formulated. The PSD regulations allow for the orderly consumption of increment by prohibiting the consumption of increment in one state caused by a source in another state by greater than one-half the available increment.

Consistent with the PSD regulations, Ohio EPA informs applicants that whether the source impacts an interstate area or not, the maximum ambient impact from a source would be one-half the available increment. This will prevent one source from building in an area, consuming tl entire increment, and effectively preventing any future new sourc growth.

There are exceptions to the implementation of the increment consumption program. First, if the maximum impact of a source occurs at the plant boundary due to downwash conditions, greater than one-half the increment may be consumed. Since the maximum impact is at the plant property, in all likelihood, the facility would be detrimentally affected by the increment consumption. Secondly, the Director may also decide that it is in the best interest of the state to allow a greater consumption of increment.

Since major sources in attainment areas are restricted to certain impacts, for the protection of air quality, minor sources in attainment areas or sources in nonattainment areas are required to meet the same ambient air quality impacts. This program allows for the protection of air quality and continued economic growth.

TABLE 3

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS), PSD INCREMENTS, SIGNIFICANT EMISSION RATES, SIGNIFICANT IMPACT INCREMENTS, AND MONITORING DE MINIMIS CONCENTRATIONS

PRECONSTRUCTION AMBIENT AIR

Pollutant	Averaging Period	NAAQS (µg/m3) Primary	NAAQS (µg/m3) Secondary	PSD Increments (µg/m3) Class I	PSD Increments (µg/m3) Class II	PSD Increments (µg/m3) Class III	Significant Emission Rates (tons/year)	Significant Impact Increments (µg/m3)	Monitoring de Minimis Concentrations (µg/m3)
Total suspended particulates	Annual (Geometric mean)	75	60/a	5	19	37	25		
	24-hour	260/b	150/b	10/b	37/b	75/b		5	10
Particulate matter less than 10 µ	Annual (Arithmetic mean)	50					15		
	24-hour	150						5	10
Sulfur dioxide	Annual (Arithmetic mean)	80		2	20	40	40	1	
	24-hour	365/b		5/b	91/b	182/b		5	13
	3-hour		1300/b	25/b	512/b	700/b		25	
Nitrogen dioxide	Annual (Arithmetic mean)	100	/c	2.5	25	50	40		14
Ozone	1-hour	235/d	/c				40/e		/f
Carbon monoxide	8-hour	10,000/b	/c	--	--		100	500	575
	1-hour	40,000/b	/c	--	--			2000	--
Lead	Calendar quarter	1.5	/c				0.6		0.19
Total reduced sulfur (TRS)	1-hour						10		10

a/Guide, not a formal enforceable standard.
b/Concentration not to be exceeded more than once per year.
c/Same as primary NAAQS.
d/Expected number of days in which one or more hourly ozone concentrations exceed this value must be greater than 1.
e/Emissions of volatile organic compounds.
f/Increase in volatile organic compounds of more than 100 tons/year.
g/Twenty-four-hour average.

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| SEE ALSO |
| 4.39 |

September 18, 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. Conse- quently, 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 NOx (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 NOx 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 SO2 is required. However, the NOx increase from the proposed modification is by itself less than significant. Consequently, netting is not performed for NOx even though the modification is major for SO2.

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 representa- tive 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

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| SEE ALSO |
| 4.42 |

October 28,1988

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 signifi- cant, 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 permit- ting 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 (40 CFR 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

June 3, 1983 Net Emission Increase Under PSD 4.24

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4.24

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 PI 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 relations 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.

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

June 14, 1994

MEMORANDUM

SUBJECT: Offsets Required Prior to Permit Issuance

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides, and Toxics
Management Division,
Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation and Toxics Division,
Region III
Director, Air and Radiation Division,
Region V
Director, Air, Pesticides, and Toxics Division,
Region VI
Director, Air and Toxics Division,
Regions VII, VIII, IX, and X

This memorandum and Attachment A respond to the February 2, 1994 memorandum (Attachment B) from David Howekamp, Region IX, requesting a statement of the Environmental Protection Agency's (EPA's) position on the timing of offset requirements for permitting construction and operation of new or modified major sources under section 173 of the Clean Air Act. Attachment A provides a full discussion of the issues and current EPA policy. As discussed in Attachment A, in most cases offsets must be federally enforceable before a permit to construct and operate may be issued, although the offsetting emissions reductions need not be achieved until the permitted source commences operation. However, because of uncertainties surrounding NO_x reasonably available control technology requirements, EPA established an alternative approach which allowed sources to wait until commencement of operation to secure

federally-enforceable NO_x offsets, rather than require such offsets prior to issuance of a construction permit. See the Nitrogen Oxides Supplement to the General Preamble for Implementation of Title I ("NO_x Supplement") (57 FR 55620, Nov. 25, 1992).

The guidance in Attachment A elaborates on EPA's statements in the NO_x Supplement which enables States to issue new source review construction permits prior to the acquisition of federally-enforceable NO_x offsets. While EPA's guidance continues to allow for the acquisition of federally-enforceable NO_x offsets after permit issuance, it allows such delay primarily in cases where the Federal enforceability of a NO_x offset hinges on EPA approval of a State implementation plan (SIP) revision. Case-by-case situations may also be identified in the future where such a delay would be justified. In all other circumstances, including the draft permit identified in David Howekamp's memorandum, federally-enforceable NO_x offsets must be secured prior to issuance of a construction permit.

Today's policy does not supersede existing Federal or State regulations or approved SIP's. The policy set out in Attachment A is intended solely as guidance and does not represent final Agency action. The policy statement is not ripe for judicial review. Moreover, it is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. This policy is not binding on EPA or any regulated parties, and may be challenged in judicial review of final Agency action for which it is relevant. The EPA also may change this guidance at any time without public notice.

The Regional Offices should immediately distribute this memorandum with the attachments to States within their jurisdiction in order to provide notice of EPA's clarified NO_x offset policy. Questions concerning specific issues should be directed to the appropriate EPA Regional Office. Regional Office staff may contact Dan deRoeck of the New Source Review Section at (919) 541-5593, if they have any questions.

Attachments

cc: Air Branch Chief, Regions I-X

bcc: NSR Contacts
J. Martel, OGC
L. Wegman
E. Lillis
T. Helms
D. Solomon
D. deRoeck

ATTACHMENT A

DISCUSSION ON THE TIMING OF NITROGEN OXIDES (NO_x) OFFSET REQUIREMENTS FOR PERMITTING NEW AND MODIFIED MAJOR SOURCES UNDER SECTION 173 OF THE CLEAN AIR ACT(ACT)

Region IX has requested a statement of the Environmental Protection Agency's (EPA's) policy on the timing of offset requirements for construction permits issued under section 173 of the Act. The Yolo-Solano Air Quality Management District (Yolo-Solano AQMD) is challenging Region IX's position in connection with a permit to construct and operate a paper recycling plant that MacMillan-Bloedel, Haindl Papier, and HIPP Engineering are proposing to build. According to Region IX, this facility will have the potential to emit major amounts of NO_x) and volatile organic compounds (VOC). Region IX further indicated that the Yolo-Solano AQMD and the California Air Resources Board are contesting Region IX's position that specific offsets must be federally enforceable before the permit may be issued and actually must be achieved by the time the source commences operation. This attachment clarifies current Agency policy concerning the timing of offsets.

The EPA's general policy is that emissions offsets for a major new or modified stationary source must be federally enforceable prior to the issuance of a part D new source review (NSR) construction permit. This position is consistent with congressional intent as reflected in the changes made to the Act under the 1990 Amendments. Nevertheless, on November 25, 1992, EPA published special guidance for obtaining NO_x offsets in the NO_x Supplement to the General Preamble for Implementation of Title I ("NO_x Supplement") [see 57 FR 55620 at 55624 (Nov. 25, 1992)]. Today's policy statement elaborates that the offset policy provided in the NO_x Supplement is generally limited to situations where States are generating offsets through State implementation plan (SIP) measures that EPA must process as a SIP submission in order for the measures to be fully enforceable by EPA. This policy may also apply in other specific circumstances for NOx offsets, on a case-by-case basis. The EPA further intends to solicit comment on this policy in its forthcoming rulemaking implementing changes to the NSR program under the 1990 Amendments.

In the 1990 Amendments, Congress added or changed statutory language in section 173 in three places regarding the timing of offsets. In section 173(a)(1)(A), Congress added language to specify that the permitting authority may issue a permit to construct and operate if it determines that by the time the source is to commence operation "offsetting emissions reductions have been obtained." At the end of section 173(a)(1), Congress changed language to explicitly provide that the offsets required as a precondition of permit issuance under paragraph (a)(1) "shall be federally

enforceable before such permit may be issued." This clarified prior law which stated that the offsets must be "legally binding" before the permit may be issued. Finally, in new section 173(c)(1), Congress specified that offsetting emission reductions "shall be, by the time a new or modified source commences operation, in effect and enforceable."

The EPA had actually proposed to delete the federally- enforceable requirement pursuant to a settlement in Chemical Manufacturers' Association (CMA) v. EPA, (No. 79-1112) (D.C. Cir.); 48 FR 38742 (August 25, 1983) (proposal pursuant to "CMA Exhibit A"). While EPA ultimately rejected deleting the federally-enforceable requirement, 54 FR 27274 (June 28, 1989), Congress had reason to clarify this issue and codify its position.

The EPA's fundamental position, that offsets for nonattainment pollutants must be federally enforceable before a construction permit may be issued, pre-dates the 1990 Amendments; the Agency understands that most States have incorporated this requirement into their nonattainment NSR programs [see 40 CFR 51.165(a)(3)(ii)(E) and Appendix S]. As explained in the General Preamble for the Implementation of Title I:

> The 1990 Amendments clarified the existing requirement by requiring that the offsets be federally enforceable before permit issuance [see revised section 173(a)]. Accordingly, while it is possible for a State to issue a permit to construct once sufficient emissions offsets have been identified and made federally enforceable (generally through a permit condition made to the permit of the existing source), the State must also ensure that the required emissions reductions actually occur no later than the date on which the new source or modified source would commence operation.

[see 57 FR 13498, 13553 (April 16, 1992)].

The requirement that offsets be federally enforceable is based on sound policy, as well. Federal enforceability for the source making the offsetting reductions ensures that the Agency may hold the reducing source responsible in an enforcement action for failure to make the reductions. It further ensures that the criteria for fully-creditable offsets (quantifiable, surplus, permanent) are addressed before construction may commence. After commencement of construction, the equity considerations shift in favor of the new or modified source needing offsets. Once constructed, it may become more difficult for EPA or a State to prevent that source from commencing operation even though the offsetting reductions are not yet identified, quantified, and secured with federally-enforceable restrictions.

As a result of new requirements established by the 1990 Amendments, NO_x emissions must be regulated similarly to VOC as precursors to ozone under the nonattainment NSR requirements. That is, sources of NO_x locating in a nonattainment area for ozone must meet the part D nonattainment permit requirements, including the applicable requirements for offsets. On

November 25, 1992, EPA published special guidance for obtaining NO_x offsets in the NO_x Supplement. There, the Agency explained that some sources had expressed concern that the delay in adopting rules for reasonably available control technology (RACT) applicable to utility boilers and other stationary sources might make efforts to locate offsets more difficult for new or modified major sources needing offsets. This was purportedly because uncertainty over the eventual NO_x RACT limit could lead existing NO_x sources to retain NO_x emissions reductions for their own use.

The EPA took the position that in order to ameliorate this situation, it would approve NSR SIP revisions that require the acquisition of federally-enforceable NO_x offsets, but allow sources to delay their acquisition up to the time that the new or modified source commences operation, thus enabling sources to wait out any initial uncertainties regarding the NO_x emissions reduction market. The EPA stated that it would not object if States were to issue permits to sources on the basis of an enforceable commitment to secure federally-enforceable offsets by the time the source is ready to commence operation. However, the NO_x Supplement further stated that construction permits would have to contain "federally-enforceable provisions that expressly prohibit the commencement of any actual operations until such time as the necessary offsetting emissions reductions have been identified, approved, and secured with appropriate permit restrictions on the source providing the offset." Finally, EPA intended in the NO_x Supplement that construction permits could be issued based on a commitment to secure offsets before commencement of operation only for NO_x offsets.

The EPA is concerned both about the consistency of this approach with Act requirements, and the potential abuse of it in practice. As discussed above, once a new or modified major source has completed construction and is ready to operate, it may be very difficult for reasons of equity for EPA or a State indefinitely to prevent the source from operating pending acquisition of sufficient creditable offsets that have been secured with federally-enforceable restrictions. In general, therefore, EPA does not believe it is appropriate to allow a construction permit to be issued until creditable offsets are identified, quantified, and made federally enforceable.

Still, EPA understands that in particular circumstances States have been prompted to adopt SIP measures to generate NO_x offsets, and that the only step remaining to ensure that EPA can enforce the measures is EPA approval of the SIP submission. In such circumstances, creditable offsets have been identified, quantified, adopted as a matter of State law, and submitted to EPA, but the EPA administrative process to approve the measure may not be completed by the time the source seeks to commence construction. This was precisely the situation recently in a case where the State of Maine adopted an extended enhanced vehicle inspection/maintenance program to generate NO_x offsets that would be used, in part, to provide offsets for new construction (see letter from Linda Murphy, EPA Region I, to Dennis Keschl, Maine Department of Environmental Protection, dated March 1, 1994). In such cases, it may not be feasible for EPA's administrative process needed to make the offsets federally enforceable to be completed within the ordinary timeframe for issuing a construction permit. Thus, EPA believes it is appropriate in these cases to retain the policy announced in the NO_x Supplement that a construction permit may be issued on the basis of a federally-enforceable commitment that the

source may not commence operation until the offsets are made federally enforceable by EPA approval of the SIP measure. That is, the construction permit would have to contain a federally-enforceable condition that expressly prohibits the commencement of any actual operations pending EPA approval of the SIP measure.

The EPA recognizes that there may be circumstances other than SIP measures awaiting EPA approval where sufficient creditable offsets have been identified and certain administrative obstacles remain to making the offsets federally enforceable. The EPA believes that it may be appropriate, on a case-by-case basis, to extend similar treatment to these sources, allowing them to obtain a construction permit that contains an explicit condition prohibiting operations until the offsets are made federally enforceable.

In the case of the Yolo-Solano AQMD's draft permit for the recycling plant, however, there is no pending SIP revision awaiting EPA approval that would generate federally-enforceable NO_x offsets. Indeed, apparently offsets have not yet even been identified. Further, the draft permit appears not to meet even the minimal guidance calling for a federally-enforceable condition prohibiting the commencement of operation until federally-enforceable offsets are actually accomplished, as set forth in the NO_x Supplement. The draft permit contains only a condition that, "[p]rior to initial reliability testing, [the source] shall submit to the District evidence of mitigation of all oxides of nitrogen and volatile organic compounds emitted." In light of the noted deficiencies in the Yolo-Solano AQMD's draft permit, the issuance of the final construction permit for the recycling facility is not acceptable.

ATTACHMENT B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

February 2, 1994

RECEIVED
2-4 1994
RADIATION DIVISION

MEMORANDUM

SUBJECT: Offsets required prior to permit issuance

FROM: David P. Howekamp
Director, Air & Toxics Division
Region IX

TO: John S. Seitz
Director, Office of Air Quality Planning and Standards

Yolo-Solano AQMD is intending to issue Authority to Construct (A/C) permits for a proposed paper recycling plant without requiring the source to obtain necessary offsets prior to permit issuance. The draft permits contain a condition which states: "Prior to initial reliability testing, [the source] shall submit to the District evidence of mitigation of all oxides of nitrogen and volatile organic compounds emitted." The facility, owned by MacMillan-Bloedel, Haindl Papier, and HIPP Engineering, will have the potential to emit approximately 70 tpy each of NO_x and VOCs, in an area where the 50 ton/yr major source threshold applies.

Region IX commented in writing on the draft permits on January 18, 1994. We stated that offsets must be federally enforceable at time of permit issuance and actually achieved by the time the source commences operation. Our comment is consistent with our understanding of section 173 of the Act and EPA's historic position regarding the timing of obtaining offsets. Specifically, section 173(a) of the Act reads: "Any emissions reductions required as a precondition of the issuance of a permit... shall be federally enforceable before such permit may be issued." Furthermore, we understand that EPA has interpreted the language of section 173 to require that emission reductions claimed as offset credit to be federally enforceable prior to the issuance of a permit, and to be in effect by the time the permitted new source or modification commences operation. Region IX believes that this interpretation of section 173 represents current policy, which some argue is already a relaxation of EPA's previous position. However, Region IX is also aware that certain language in the NO_x Supplement to the General Preamble supports a contrary interpretation of section 173. It states, for example: "sources [may] secure the offset at any time up until the source commences operation." Under a strict reading, EPA could interpret this provision to apply only to NO_x sources, because the rationale for its inclusion was premised on the uncertainty of eventual NO_x RACT limits.

Region IX is being challenged by the Yolo-Solano AQMD and the California Air Resources Board (ARB) on our interpretation that offsets for sources proposing to locate in

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nonattainment areas be secured prior to permit issuance. They have asserted, based on the language of section 173, that offsets are not required until the source starts operation, coinciding with the issuance of a District operating permit. Further, ARB and the Yolo-Solano AQMD contend that strongly worded language in the A/Cs providing for offsets that are federally enforceable and achieved by the start of operation will prevent the source from operating without satisfying the offset requirement. ARB and Yolo-Solano AQMD have not yet relied on the NO_x supplement to support their argument. Rather, they have argued that the references to permit issuance in section 173 encompass both preconstruction permits and District operating permits. Region IX believes that it is critical for EPA to affirm its historic interpretation that section 173 requires obtaining federally enforceable offsets prior to issuance of A/C permits, even if it requires clarifying or revising the NO_x supplement.

Region IX is particularly concerned about the precedent that would be established if we allow ARB and the District to postpone the requirement for obtaining offsets until District operating permits are issued. Requiring offsets prior to A/C permit issuance allows EPA and public review, in conjunction with the 30 day public notice of the draft permit. Postponing the offset commitment complicates EPA's ability to impose federally enforceable conditions on the source pertaining to offsets. In addition, issues of equity arise if offsets are not available after the source has constructed.

We therefore request your office to provide Region IX with a statement of EPA's position on the timing of offsets. We believe that your statement on this issue is particularly necessary because of the contradictory positions between our historic interpretation of section 173 and the statements in the NO_x supplement. If you have any questions regarding this issue, please call me or have your staff call Matt Haber of my staff at (415) 744-1254.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

4/M OFFSETS

ATTACHMENT C

March 1, 1994

Dennis Keschl, Director
Bureau of Air Quality Control
Department of Environmental Protection
State House, Station No. 17
Augusta, Maine 04333-4746

Dear Mr. Keschl: Dennis

This letter is in response to a Maine Department of Environmental Protection (DEP) proposal outlined in a December 12, 1993 letter regarding allocation of surplus nitrogen oxide (NO_x) emission reductions generated by Maine's enhanced Inspection and Maintenance (I/M) program to the Louisiana-Pacific (L-P) Corporation. In general, EPA supports the DEP's extension of its I/M program provided that specific requirements are satisfied by L-P and the DEP. The following paragraphs will further explain EPA's position on the DEP's proposal.

BACKGROUND

As described in your letter, L-P is proposing to construct an expansion to its oriented strandboard facility in New Limerick, Maine in Aroostook County. Aroostook county is part of the Ozone Transport region (OTR). Pursuant to the new source review requirements applicable in the OTR, L-P must secure sufficient emission reductions of NO_x for licensing approval. Your letter states that L-P will need approximately 200 tons of NO_x to offset the increase resulting from the expansion. The DEP indicates that 200 tons of NO_x credits are not available in Maine's inventory. According to L-P, the company's timetable for construction and commencement of operations necessitates that surplus NO_x reductions become available shortly. L-P is currently scheduled to begin construction on the proposed facility in the Spring of 1994 and to commence operations by April of 1995.

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The DEP intends to resolve L-P's need for NO_x offsets by relying on surplus NO_x reductions (i.e., reductions not otherwise required by the Clean Air Act) from Maine's enhanced I/M program, which Maine is extending to all moderate nonattainment areas in the State. Surplus NO_x reductions expected to be generated by this program would be utilized as offsets for new source emissions in the state, including the new emission increases expected from the expanded L-P facility. The December 12, 1993 letter indicates that Maine's enhanced I/M program would generate approximately 2000 tons of NO_x reductions, of which about 1200 tons would be considered surplus. The DEP submitted its enhanced I/M program to EPA in November, 1993 as a state implementation plan (SIP) revision. The DEP plans to allocate a portion of the surplus reductions (200 tons) to L-P as offsets for the proposed expansion.

In previous guidance on emission trading, EPA set forth the minimum requirements for the creation and use of emission reduction credits. EPA requires that emission reductions be surplus, quantifiable, permanent, and federally enforceable for use as emission offsets. Emission Trading Policy, 51 FR 43812 (December 4, 1986). In its NO_x Supplement to the Title I General Preamble, the agency recited these minimum criteria for the creation and use of NO_x emission reductions in emission trades. 57 FR 55620, 55625 (Nov. 25, 1992). EPA has evaluated the DEP's December 12, 1993 proposal in light of these criteria. The following section of this letter evaluates the requirements for Maine's NO_x emission reductions to be surplus, quantifiable and permanent. Thereafter, the letter discusses the requirement that these reductions be federally enforceable.

SURPLUS, QUANTIFIABLE AND PERMANENT REDUCTIONS

In order to create and use emission reductions from its enhanced I/M program, the reductions must be surplus, quantifiable and permanent. The first question for the DEP is whether or not NO_x emission reductions generated by the implementation of Maine's enhanced I/M program are surplus. The 1990 Amendments to the Clean Air Act codified EPA's longstanding policy that offsets must be surplus. See section 173(c)(2) of the Clean Air Act, which provides that "emission reductions otherwise required by the Act shall not be creditable" as offsets. EPA has interpreted this provision flexibly. Consequently, where appropriate, a block of emission reductions must be discounted to reflect reasonably available control technology (RACT), new source performance standards, I/M rule requirements, or any other requirement applicable to or reasonably foreseeable at the source of the emission reductions at the time of the use of the emission reductions as offsets. EPA's final I/M rule states, in part,

"emission reduction benefits from expanding coverage beyond the minimum urban area boundaries can... be used for offsets..." 40 CFR 51.350 (b)(3). After reviewing the population density criteria identified in EPA's I/M rule and the nonattainment status of areas in Maine, EPA Region I has determined that Cumberland County is the only area in Maine where enhanced I/M is required. The DEP intends to implement enhanced I/M in the seven counties currently designated as moderate nonattainment (i.e., Androscoggin, Cumberland, Kennebec, Knox, Lincoln, Sagadahoc, and York). Emission reductions of NO_x due to implementation of enhanced I/M in all counties except for Cumberland County would thus be surplus and available for generating NO_x emission reduction credits.[1]

The DEP's intention to allocate the Volatile Organic Compound (VOC) emission reductions achieved from implementing enhanced I/M in these six counties toward its 15% Reasonable Forward Progress (RFP) reduction requirement does not prohibit the treatment of the NO_x reductions as surplus. The NO_x emission reductions from Maine's enhanced I/M program will not and cannot be used towards the 15% reduction requirement. Thus, as noted above, the NO_x reductions from enhanced I/M that are being set aside for offsets are surplus provided that they are not necessary for, and will not be used in, any relevant attainment demonstration plan. The DEP committed in its December 12, 1993 letter not to rely on any of the 200 tons of NO_x that it plans to allocate to L-P as offsets in its attainment demonstration. The DEP should recognize that if further reductions are necessary to reach attainment of the ozone NAAQS, the DEP will need to implement additional control programs.

In order to allocate the NO_x reductions from the enhanced I/M program to L-P, the DEP must also show that the reductions are quantifiable and permanent. The DEP must demonstrate that it will secure sufficient emission reductions (200 tons) from implementation of its enhanced I/M program in the six counties. This could be done using estimates of Maine's vehicle miles travelled (VMT) and EPA's MOBILE model. EPA has not yet provided guidance on calculations of excess NO_x credits generated by an enhanced I/M program. In the absence of such guidance, EPA suggests that the DEP calculate the credit conservatively in order to ensure whether the trade will be approved. A conservative way to calculate the amount of excess NO_x credits

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[1] Please note that basic I/M is required in the Lewiston Auburn Nonattainment area. No NO_x reductions, however, are predicted from the basic I/M requirements. Therefore, the NOx reductions from Maine's enhanced I/M program in this area would be surplus.

available would be to multiply 1990 estimates of VMT times the emissions difference (in grams per mile) between no I/M program and Maine's program in the year 2020 as predicted by EPA's MOBILE5a model. The EPA recommends the year 2020 because enhanced I/M benefits are lowest in the out years and the MOBILE model does not presently predict beyond 2020. Maine's present program may have lower compliance rates, or waiver rates, because of the low mileage waiver presently authorized under Maine state law. Nevertheless, EPA currently expects that the level of credit generated through this calculation should be adequate for the immediate need to set aside a pool of credits for offsets in the near-term. EPA will be glad to work with you to define appropriate modeling assumptions for determining the exact level of credits available from year to year.

EPA suggests that the DEP revise its enhanced I/M SIP submittal (November, 1993) to articulate its intent to set aside credits and to make the demonstration discussed above. In addition, Maine should specify exactly how much credit it intends to set aside for the L-P permit. In addition to quantifying these reductions and ensuring that they are surplus, the DEP must also ensure that the offsets occur no later than the date on which the new source or modification commences operation. Prior to L-P beginning operation, the DEP should submit a demonstration acceptable to EPA which shows that the state is implementing its enhanced I/M program on schedule and that the enhanced I/M program has secured enough emission reductions of NO_x to meet the offset requirements for L-P. This will demonstrate to EPA that the emission reductions have occurred before the modification commences operation.

In addition, L-P should include documentation in its application for a new source review permit. L-P's application should quantify the amount of offsets needed by the company to expand its plant and describe how it plans to meet the offset requirements. The DEP should also include similar documentation in the proposed Findings of Fact and Order Air Emission License for this major modification. This will ensure that L-P submits a complete application and that the public has an opportunity to comment on the proposed offsets.

FEDERALLY ENFORCEABLE REDUCTIONS

Maine's enhanced I/M program that will generate the offsetting NO_x emission reductions must also be federally enforceable prior to L-P's commencement of operations at its expansion.

Section 173(a)(1) of the Clean Air Act provides that "permits to construct and operate may be issued if ... by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained." Subsection (a) goes on to provide that offsets on which a permit to construct and operate is conditioned under paragraph (1) "shall be federally enforceable before such permit may be issued." This augments the language of section 173 prior to the 1990 amendments that provided that offsets must be "legally binding" before a permit to construct and operate may be issued. Finally, section 173 (c)(1) provides that offsets "shall be, by the time a new modified source commences operation, in effect and enforceable."

As noted above, EPA's policy has long been that emission reductions must be federally enforceable for use as emission offsets. See Emission Trading Policy Statement, 51 FR 43812 (Dec. 4, 1986). In the General Preamble for Implementation of title I, EPA interpreted changes to section 173 in the 1990 Amendments as clarifying that offsets must be federally enforceable before the permit to construct and operate is issued. 57 FR 13498, 13553 (April 16, 1992). Further, EPA explained that, "while it is possible for a state to issue a permit to construct once sufficient emissions offsets have been identified and made federally enforceable (generally through a permit condition made to the permit of the existing source), the State must also ensure that the required emissions reductions actually occur no later than the date on which the new source or modified source would commence operation." Id.

Nevertheless, under the circumstances of this case, EPA will not object if the DEP issues L-P's permit to construct prior to EPA approval of Maine's enhanced I/M program that will generate the offsetting NO_x reductions, as long as L-P's permit contains a federally enforceable condition that expressly prohibits the commencement of any actual operations until EPA's approval of the Maine's enhanced I/M SIP submittal that will generate the offsets. EPA believes this position is appropriate for several reasons.

EPA recognizes the concern that sources of offsetting NO_x emission reductions are scarce in Maine. Based on discussions with you and your staff, it does appear that only a few potential sources of NO_x reductions exist in Maine, and you indicated at the November 29, 1993 meeting between Region I and the DEP that even those few sources combined would be insufficient to satisfy L-P's needs. Further, Maine has not yet adopted NO_x RACT regulation for existing stationary sources, and uncertainty regarding NO_x RACT rules could hinder efforts by new or modified sources to secure NO_x offsets. This is because the uncertainty could lead existing NO_x sources to retain potentially surplus NO_x

emission reductions for their own use. The offsets in this case have been identified and are to be achieved by an adopted State program that has already been submitted to EPA as a SIP revision. Maine's program involves extension of its enhanced I/M program to areas where it is not otherwise required to achieve NOx reductions, and EPA does not foresee substantial obstacles to promptly approving the NO_x elements of the program for such areas. Moreover, the DEP intends to rely on the enhanced I/M program to achieve VOC reductions needed for its SIP planning obligations. Under these circumstances, EPA can be particularly confident that Maine will actually implement its enhanced I/M program to achieve the offsetting NO_x emission reductions by the time L-P is to commence operations. In short, EPA does not believe it is necessary to hold up L-P's permit pending the longer period needed to review Maine's SIP submittal, especially since the offsets have been identified, appear reliable, and because the SIP submittal provides particularly great security that the offsets will be achieved.

In recognition of L-P's plan to commence operations in April 1995, EPA will expedite its review of Maine's enhanced I/M program. Section 110(k)(2) provides that EPA must take final action on a SIP submittal within 12 months of determining that the submittal is complete. EPA determined that Maine's enhanced I/M submittal was complete on January 24, 1994. To speed up EPA's processing of this submittal, EPA recommends that the State of Maine request an expedited EPA approval of the portion of the I/M program not mandated as part of the federal I/M regulation. This will allow EPA to approve the program in those "surplus" areas even if Maine's program does not completely meet all of the requirements established by EPA's enhanced I/M rule. Because the program in those areas goes beyond the requirements of the Clean Air Act, it does not need to meet all of the requirements of the enhanced I/M rule.[2]

[2] It should be noted that, to the extent that the program does not meet the requirements of EPA's enhanced I/M rule, Maine may need to reduce the amount of emission reductions creditable to its I/M program.

If you or staff have any questions regarding this determination, please contact Brendan McCahill at (617) 565-3262 for new source review issues or Robert Judge at (617) 565-3233 for mobile source issues. Thank you for your assistance in this matter.

Sincerely,

Linda M. Murphy, Director
Air, Pesticides and Toxic Management Division

cc: Dean Marriott - Maine DEP
Dennis Keschl - Maine DEP
Bryce Sproul - Maine DEP
John Chandler - Maine DEP
Marc Cone - Maine DEP
Peter Chase - Operations Manager, L-P
Daniel Boxer - Pierce, Atwood, Scribner, Allen, Smith & Lancaster
George Mitchell - US Senator, Maine
Michael Michaud - State Rep., Maine

MEMORANDUM July 21, 1993

SUBJECT: Use of Shutdown Credits for Offsets

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Addressees

This memorandum and attachment respond to issues involving the Environmental Protection Agency's (EPA's) new source review (NSR) rules and guidance concerning the use of shutdown credits. The attachment provides a full discussion of the issues and this policy. The regulations in 40 CFR 51.165(a)(3)(ii)(C)(2) provide that where a State lacks an approved attainment demonstration, emissions reductions from shutdowns or curtailments cannot be used as new source offsets unless the shutdown or curtailment occurs on or after the date a new source permit application is filed. A concern raised is that because the Clean Air Act Amendments of 1990 (1990 Amendments) have created new schedules for submitting attainment demonstrations,[1] the existing NSR rules restricting the use of so called "prior shutdown credits" may be read as unnecessarily hindering a State's ability to establish a viable offset banking program for several years. Since this situation was not accounted for in EPA's prior policy statement, EPA determined it was appropriate to reconsider its position in light of the 1990 Amendments.

The reconsideration led to the conclusion that States should be able to follow, during the interim period between the present and the date when EPA acts to approve--or--disapprove an attainment demonstration that is due, the shutdown requirements applicable to areas with attainment demonstrations. This interpretation only extends to those otherwise creditable shutdowns and curtailments actually occurring during the time period from enactment of the 1990 Amendments (November 15, 1990) through the period until EPA acts to approve--or--disapprove

[1]For instance, attainment demonstrations are not due until November 15, 1993 for moderate ozone nonattainment areas, and November 15, 1994 for serious and above areas. Attainment demonstrations are not required by the Clean Air Act (Act) for marginal and nonclassified ozone nonattainment areas and for ozone attainment and unclassifiable areas in the ozone transport region (OTR).

an attainment demonstration that is due. This policy cannot be extended to situations where an attainment demonstration is lacking. In addition, to be sure that the State remains on track for attainment, the lifting of the shutdown restrictions is conditioned on the State meeting other applicable part D planning requirements as discussed in the attachment to this memorandum.

If the State's submittal is delinquent for any of the reasonable further progress (RFP) milestone submissions identified in the attachment or the State's attainment demonstration is disapproved, the restrictions on use of shutdowns will again apply. To be creditable, the shutdowns or curtailments being used as offsets must have occurred on or after November 15, 1990; the emissions from the shutdown or curtailment must be included in the emissions inventory for attainment demonstration and RFP milestone purposes; and the amount of the credit must be the lower of actual or allowable emissions for the source. Pursuant to EPA's existing regulatory framework, the shutdown or curtailment must be permanent, quantifiable, and federally enforceable.

For marginal ozone nonattainment areas and for the attainment and unclassifiable ozone areas in the OTR, EPA's present interpretation is that these areas should be allowed to follow the less-restrictive shutdown policies applicable to areas in compliance with the attainment demonstration requirements. Since these areas are not required by the 1990 Amendments to submit attainment demonstrations, it would be inconsistent with EPA's purposes in adopting the shutdown restrictions to treat these areas as if they had failed to make this demonstration. The RFP will be protected by the mandatory bump-up provisions applicable to marginal ozone areas and by the requirement that ozone nonattainment areas in the OTR continue to meet RFP milestones in order to qualify for this interim policy.

States may interpret their own regulations or, when necessary, make a State implementation plan (SIP) submittal in accordance with this policy. This policy statement is limited to ozone nonattainment areas and ozone attainment and unclassifiable areas in the OTR. States may wish to seek relaxation of the policy for other pollutants. We will consider these requests on a case-by-case basis. It should be noted that at least some attainment demonstrations are in fact due.[2]

This guidance document does not supersede existing Federal or State regulations or approved SIP's. The policies set out in this memorandum and attachment are intended solely as guidance during the interim period as specified in this memorandum and do not represent final Agency action. This policy statement is not ripe for judicial review. Moreover, it is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United

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[2]For instance, attainment demonstrations in moderate carbon monoxide areas were due on November 15, 1992; attainment demonstrations for moderate PM-10 (particles with an aerodynamic diameter of less than or equal to a nominal 10 micrometers) areas were due on November 15, 1991.

States. Agency officials may decide to follow the guidance provided in this memorandum, or to act at variance with the guidance, based on an analysis of specific circumstances. The EPA also may change this guidance at any time without public notice. The EPA presently intends to address further the matters discussed in this document in its forthcoming NSR rulemaking regarding regulatory changes mandated by the 1990 Amendments and will take comment on this interpretation of the shutdown provisions in light of the 1990 Amendments as part of that rulemaking.

The Regional Offices should send this memorandum with the attachment to their States. Questions concerning specific issues and cases should be directed to the appropriate EPA Regional Office. Regional Office staff may contact Mr. David Solomon, Chief, New Source Review Section, at (919) 541-5375, if they have any questions.

Attachment

Addressees
Director, Air, Pesticides and Toxics, Regions I, IV and VI
Director, Air and Waste Management, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air and Toxics Division, Regions VII, VIII, IX and X

cc: Air Branch Chief, Regions I-X

Attachment

FULL DISCUSSION ON USE OF PRIOR SHUTDOWNS

In response to concerns regarding use of pre-application shutdowns that have arisen by virtue of the Clean Air Act Amendments of 1990 (1990 Amendments), the Office of Air Quality Planning and Standards has reviewed the policy on the use of prior shutdown credits. This policy, and the regulations in part 51, were revised in 1989 to allow for the use of prior shutdown credits for offset purposes in those areas having approved attainment demonstration plans [see 54 FR 27286 (June 28, 1989)]. The Agency, however, retained a restriction on the use of prior shutdown credits in areas without approved attainment demonstrations. All of these areas had failed to attain the national ambient air quality standards by the statutory deadline.

The 1990 Amendments created new deadlines and new control requirements which have dramatically changed the circumstances that shaped EPA's 1989 decision regarding the use of shutdown credits, such that a literal reading of the 1989 regulation would now be inconsistent with EPA's underlying policy in some circumstances. All nonattainment areas are subject to new attainment deadlines, and all ozone nonattainment areas classified as moderate and above are now required to submit new attainment demonstrations. Indeed, in ozone nonattainment areas, the 1990 Amendments impose a series of planning requirements and milestones to mark progress towards attainment. For instance, the amended Clean Air Act (Act) required States with moderate ozone nonattainment areas to submit revised control measures, revised new source review (NSR) rules, and a 1990 emissions inventory by November 15, 1992, and allows States until November 15, 1993 to submit additional control measures and an attainment demonstration plan that achieves at least a 15 percent reduction in volatile organic compounds (VOC) emissions. Serious and above ozone areas were required to submit numerous new or revised control measures, revised NSR rules, and a 1990 emissions inventory by November 15, 1992; additional control measures and a 15 percent reduction plan by November 15, 1993; and full attainment demonstration plans by November 15, 1994.

In 1983, EPA proposed to lift nearly all restrictions on the use of prior shutdown credits. In making that proposal, the Agency presumed that by the time it took final action on the proposal, areas would either have in place approved attainment demonstrations or be subject to a construction moratorium (see 54 FR 27292). However, by the time EPA took final action--some 6 years later--this proved not to be the case. Many States neither fully demonstrated attainment nor were subject to a construction moratorium. Thus, in justifying the decision to continue restrictions on the use of prior shutdowns in areas without an attainment demonstration, EPA explained that "the nonattainment areas requiring but lacking attainment demonstrations . . . are at the center of EPA's current concern regarding the shutdown credit issue . . . " (Id.).

Specifically, EPA explained that the unrestricted use of shutdown credits would lead to offset transactions where there was no nexus between the decision to shut down the existing source or unit and the decision to construct new capacity. Instead, shutdowns that would occur regardless of any potential to sell the resulting emissions reduction would not be available for

reasonable further progress (RFP), but instead would be used to accommodate additional emissions growth in the nonattainment area. In the face of a State's failure to adopt an attainment plan long past the statutory deadline for submitting an approvable plan, EPA determined that the unrestricted approach was inconsistent with the requirements of RFP. Accordingly, EPA retained its restrictive shutdown policy for such areas in order to guarantee to the extent possible that the new source would secure the offsetting reduction out of the area's existing emissions and thus assure RFP (Id. at 27293). On the other hand, where the State implementation plan (SIP) contained a demonstration of attainment--"and hence an independent assurance of RFP"--EPA would be satisfied with a "more attenuated link" between the shutdown and the new construction (Id.).

Another factor favoring retention of the narrow shutdown policy in areas needing but lacking approvable attainment demonstrations was EPA's intention at the time to impose substantial planning burdens on many States for their failure to meet the December 31, 1987 attainment date for ozone and carbon monoxide. At the time EPA published the 1989 shutdown regulations, it believed that many States would be facing the prospect of adopting severe measures to respond to EPA's finding that their present efforts at achieving RFP and attainment were substantially inadequate. Under those circumstances, EPA believed "that it would be inappropriate even to hold out the possibility that States could obtain approval at this time for expanded use of shutdown offset credits in areas with inadequate plans" (Id. at 27294). At a minimum, States would need an approved inventory so that EPA could verify the proposed use of a prior shutdown credit (Id.).

The 1990 Amendments changed this landscape dramatically. The Act as amended gives States new attainment deadlines and new dates for submitting attainment demonstrations.[3] No State can be said to have missed the overall attainment deadline or the date for submitting attainment demonstrations for ozone as required by the 1990 Amendments. Instead, States are in the process of developing new attainment demonstrations based on the specific planning requirements of the new provisions of the 1990 Amendments. As discussed, these provisions include not only specific emissions reduction strategies that must be implemented, but requirements that areas demonstrate periodically that the reductions are occurring and that specific progress towards attainment has been made. In addition, the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (General Preamble) [see 57 FR 13498 (April 16, 1992)] includes a specific methodology for reconciling prior shutdowns with the 1990 ozone inventory, and assures that these reductions must be taken into account when

[3]Some areas subject to offset requirements (such as marginal ozone nonattainment areas and attainment areas in the ozone transport region) are not even required to submit attainment demonstrations.

submitting the attainment demonstration and when showing compliance with the various RFP milestones (see General Preamble, pp. 13507-13509).[4]

In total, these provisions provide the "independent assurance of RFP" that EPA pointed to before as being necessary to allow generous use of prior shutdown credits. Of course, if a State misses any of the RFP milestones, the rationale for a more restrictive use of shutdown credits returns. For this reason, EPA's position is that use of pre-application shutdown credits as offsets can only be allowed where State submissions have met and continue to meet the statutory planning mandates and air quality improvement milestones. As described below, once a State fails to meet any of the milestones in its SIP or to meet a RFP benchmark, EPA cannot be assured that the safeguards in the Act guaranteeing proper progress towards attainment are sufficient, and the restriction on use of pre-application shutdowns and curtailments must automatically resume until the delinquent planning provisions are submitted.[5]

In ozone nonattainment areas, this means that the temporary lifting of the restrictions under this policy is subject to the following conditions as they apply and as they come due:

- The State has submitted a completed emissions inventory as required by § 182(a)(1);

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[4]The increased offset ratios for VOC and nitrogen oxides in ozone nonattainment areas [see, e.g., § 182(a) - (e)] and the new requirement that all offsets be based on actual emissions reductions [§ 173(c)] provide further assurances that new source increases will in fact be counterbalanced by real reductions in actual emissions.

[5]In the General Savings Clause (§ 193), Congress required EPA to retain all regulations and other requirements in effect at the time of the passage of the Act, "except to the extent otherwise provided under this Act [or] inconsistent with any provisions of this Act." The EPA views the new deadlines for attainment and for the submittal of an attainment demonstration as creating sufficient inconsistencies to justify changing--during the short interim period until the date EPA acts on an attainment demonstration that is due--its pre-enactment position on shutdowns. This is especially true in the few nonattainment areas that are no longer subject to the attainment demonstration requirement and can never qualify for the more relaxed shutdown policy under the existing regulations.

! The State has submitted complete revisions to its NSR program as required by § 182(a)(2)(C);

! The State submits the 15 percent VOC reduction plan required by § 182(b)(1)(A) for moderate and above areas; and

! The State submits the attainment demonstration required by § 182(c)(2) for moderate and above areas.

Under this policy, if any of these submissions are delinquent, or if any of these submissions are deemed incomplete or disapproved, emissions reductions from shutdowns or curtailments can no longer be used for NSR offsets unless the criteria laid out in 40 CFR 51.165(a)(3)(ii)(C)(2) are met. Where there is an emissions reduction credit bank in place, banked credits from prior shutdowns or curtailments will be frozen until the State submits the delinquent SIP elements.

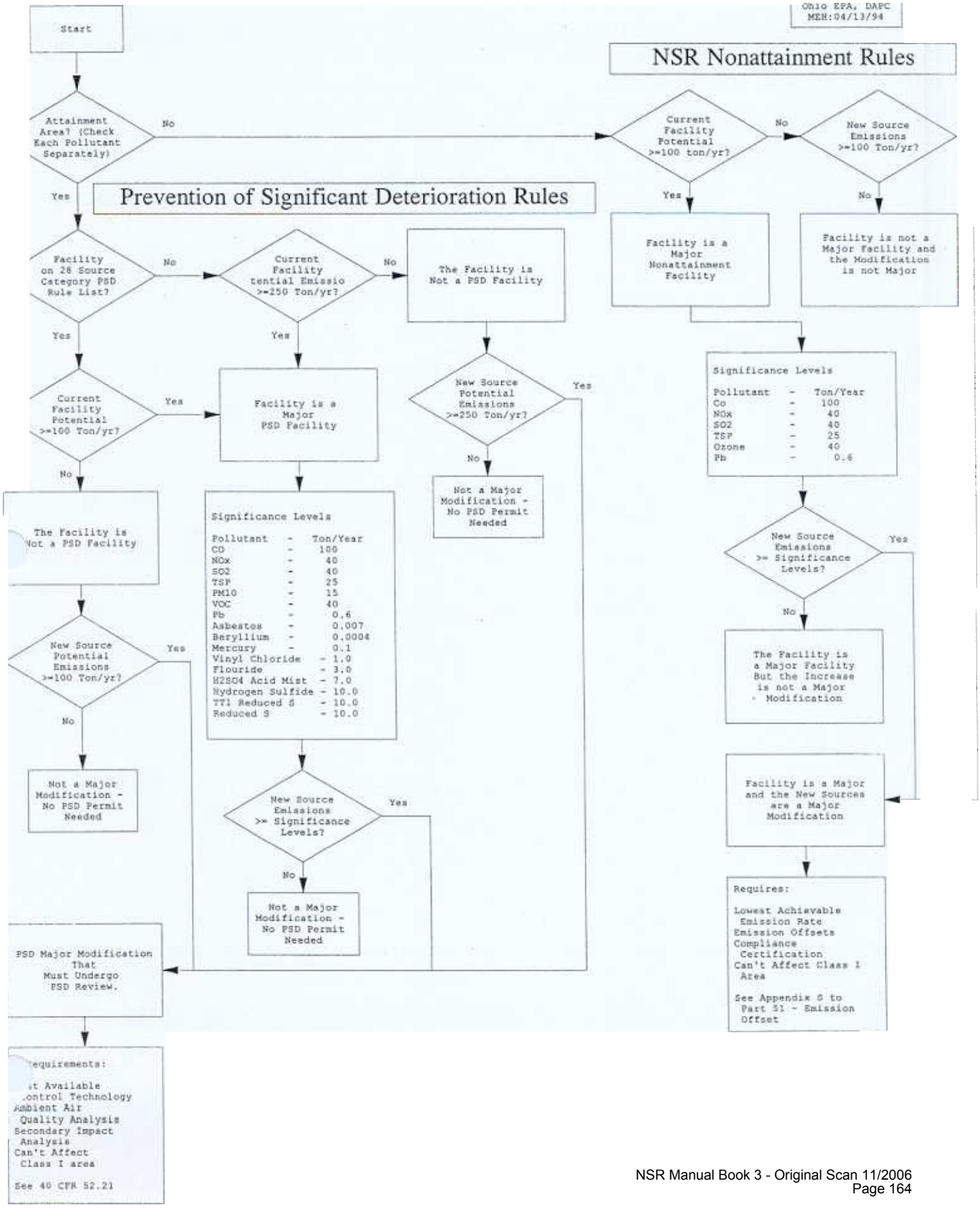
Furthermore, the emissions reductions represented by the shutdown or curtailment cannot be otherwise required by the Act, EPA regulations, or rules adopted by the State under the Act. In other words, the State cannot rely on emissions reductions credits in its overall attainment plan and rely on the same credits in the issuance of a NSR permit (i.e., no "double counting"). Consequently, where appropriate, emissions reductions from source shutdowns or curtailments must be discounted to reflect reasonably available control technology (RACT), new source performance standards, or any other Act requirement applicable to the source or reasonably foreseeable at the time of the use of the emissions reductions as offsets. For example, a State may have already developed RACT rules that would require compliance by a source in 1995. Any reductions at the source that would be necessary to meet the upcoming RACT requirement would need to be excluded in computing the offsets that would be available by a complete shutdown of the source.

It is possible that, during review of a permit application that uses emissions reductions from prior shutdowns or curtailments as offsets as allowed under this policy, a State may become delinquent in meeting the planning provisions outlined above. At such time as a State becomes delinquent, the restrictions for offsets are automatically restored. However, in such cases, States may allow offsets to remain creditable if the permit application was complete (as determined in writing by the reviewing authority) before the State became delinquent. Alternatively, States may use a later point in the permitting process for determining if these offsets are creditable.

History of the Federal Nonattainment New Source Review Program and Key Definitions

Applicabiltiy Dates	40 CFR Cite	Major Source Definition	Major Modification Definitions	Key Other Definitions
12/21/76-1/15/79	Interpretative Ruling at 40 FR 55524	100 ton of allowable emissions per year non - methane hydrocarbons	Increase in allowable emissions of greater than 100 ton/year where you add all increases (no decreases) from either the date of promulgation or from the most recent permit approval.	Allowable is defined as the applicable NSPS, SIP and the maximum rated capacity. If no NSPS or SIP, then it is the maximum rated capacity and the emission rate agreed to by the sources as a permit condition.
1/16/79-8/6/80	Appendix S to 40 CFR Part 51	PTE >100 ton per year	Increase in PTE of greater than 100 ton per year where you include all increases(no decreases) from the date of promulgation of the ruel or from the most recent construction approval.	PTE is the maximum capacity to emit absent controls taking into account enforceable permit conditions that limit operating rate, hours, type of amount of materials combusted or processed.
8/7/80 -	45 FR 59879 as amended	PTE >100 ton per year	significant net emission increase (forVOC - 40 ton/yr)	Significant net emission increase is based on the federally enforceable PTE of new sources minus the past actual of old modified sources. Add all increases and subtract all past actual decreases within the five year window.

Prevention of Significant Deterioration/Nonattainment Major Source Decision Chart



Prevention of Significant Deterioration/Nonattainment Major Source Decision Chart

Ohio EPA, DAPC
MSH:04/13/94

Start

Attainment Area? (Check Each Pollutant Separately)

No

Yes

Facility on 28 Source Category PSD Rule List?

No

Yes

Current Facility Potential >=100 Ton/yr?

No

Yes

Facility is a Major PSD Facility

Significance Levels

Pollutant	-	Ton/Year
CO	-	100
NOx	-	40
SO2	-	40
TSP	-	25
PM10	-	15
VOC	-	40
Pb	-	0.6
Asbestos	-	0.007
Beryllium	-	0.0004
Mercury	-	0.1
Vinyl Chloride	-	1.0
Flouride	-	3.0
H2SO4 Acid Mist	-	7.0
Hydrogen Sulfide	-	10.0
TTl Reduced S	-	10.0
Reduced S	-	10.0

New Source Emissions >= Significance Levels?

No

Not a Major Modification - No PSD Permit Needed

Yes

PSD Major Modification That Must Undergo PSD Review.

Requirements:

Available Control Technology
Ambient Air Quality Analysis
Secondary Impact Analysis
Can't Affect Class I area

See 40 CFR 52.21

The Facility is Not a PSD Facility

New Source Potential Emissions >=250 Ton/yr?

No

Not a Major Modification - No PSD Permit Needed

Yes

Current Facility Potential >=100 Ton/yr?

No

The Facility is t a PSD Facility

New Source Potential Emissions >=100 Ton/yr?

No

Not a Major Modification - No PSD Permit Needed

Yes

40 CFR Part 52.21

Prevention of Significant Deterioration Rules

40 CFR Part 51, Appendix

NSR Nonattainment Rules

Current Facility Potential >=100 ton/yr?

No

New Source Emissions >=100 Ton/yr?

Yes

No

Facility is not a Major Facility and the Modification is not Major

Yes

Facility is a Major Nonattainment Facility

Significance Levels

Pollutant	-	Ton/Year
Co	-	100
NOx	-	40
SO2	-	40
TSP	-	25
Ozone	-	40
Pb	-	0.6

New Source Emissions >= Significance Levels?

No

The Facility is a Major Facility But the Increase is not a Major Modification

Yes

Facility is a Major and the New Sources are a Major Modification

Requires:

Lowest Achievable Emission Rate
Emission Offsets
Compliance Certification
Can't Affect Class I Area

See Appendix S to Part 51 - Emission Offset

THE FOLLOWING SOURCES SHALL NOT BE INCLUDED IN DETERMINING APPLICABILITY OF THESE RULES: THE SOURCE IS ONE OF THE EXCLUDED CATEGORIES LISTED IN 40 CFR 52.21(b)(1)(iii) OR APPENDIX S II(A)(4)(i-ii)

COAL CLEANING PLANTS
KRAFT PULP MILLS
PORTLAND CEMENT PLANTS
ETC.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK. NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MAY 4 1995

Mr. Robert Kalish
Environmental Services Department
The Dow Chemical Company
Post Office Box 150
Plaquemine, Louisiana 70765-0150

Dear Mr. Kalish:

This letter responds to your letter dated April 10, 1995 concerning the Environmental Protection Agency's (EPA) guidance memorandum of March 11, 1991 entitled "New Source Review Transitional Guidance." You specifically request clarification on the applicability of the prevention of significant deterioration (PSD) regulations at 40 CFR 52.21 to modifications at major stationary sources that increase emissions of noncriteria air pollutants.

Under the PSD regulations, stationary sources that emit, or have the potential to emit, <u>any</u> air pollutant subject to regulation under the Clean Air Act (Act) in major amounts [see 40 CFR 52.21 (b)(1)(i)(a)] are major sources. The pollutants regulated under the Act may be criteria or noncriteria pollutants. Likewise, major modifications for <u>any</u> air pollutant subject to regulation under the Act, either criteria or noncriteria, at major stationary sources are subject to the PSD regulations (see 40 CFR 52.21(i)(2)]. For PSD applicability purposes, an increase in a criteria pollutant is not a requisite for modifications that increase noncriteria pollutants to be subject to PSD. For your example, this means that a modification resulting in a net emissions increase of 4 tons per year of fluorides is a major modification subject to the PSD requirements even if there would be no increase in the emissions of a criteria pollutant. Note that under section 112(b)(6) of the Act as amended in 1990, the hazardous air pollutants listed under section 112 of the Act are not subject to the PSD provisions.

Enclosed for your information is EPA's workshop manual entitled "New Source Review Workshop Manual." This manual provides additional information on the applicability of the PSD program.

Questions concerning this issue may be directed to Mr. Mike Sewell of this office at (919) 541-0873. I appreciate this opportunity to be of service and trust this information will be helpful to you.

Sincerely,

John S. Seitz
Director
office of Air Quality Planning
and Standards

Enclosure

cc: Regional Air Division Directors
Mike Sewell (MD-12)

(REF: OZPMRH-2-97)

MEMORANDUM

SUBJECT: Interim Implementation of New Source Review Requirements for $PM_{2.5}$

FROM: John S. Seitz, Director
Office of Air Quality Planning & Standards (MD-10)

TO: See Addressees

This memorandum addresses the interim use of PM_{10} as a surrogate for $PM_{2.5}$ in meeting new source review (NSR) requirements under the Clean Air Act (Act), including the permit programs for prevention of significant deterioration of air quality (PSD). The revised national ambient air quality standards (NAAQS) for particulate matter, which include the revised NAAQS for PM_{10} and new NAAQS for $PM_{2.5}$, became effective on September 16, 1997. In view of the significant technical difficulties that now exist with respect to $PM_{2.5}$ monitoring, emissions estimation, and modeling (described below), EPA believes that PM_{10} may properly be used as a surrogate for $PM_{2.5}$ in meeting NSR requirements until these difficulties are resolved. The EPA's views on implementing the ozone and PM_{10} NAAQS during the interim period following the effective date of the new 8-hour ozone and revised PM_{10} NAAQS will be set forth in a separate EPA memorandum.

Section 165(a)(1) of the Act provides that no new or modified major source may be constructed without a PSD permit. Moreover, section 165(a)(3) provides that the emissions from any such source may not cause or contribute to a violation of any NAAQS. Also, section 165(a)(4) requires best available control technology for each pollutant subject to regulation under the Act. The EPA's recent promulgation of the primary and secondary standards for $PM_{2.5}$ marks the first time that EPA has specifically regulated fine particles--less than 2.5 microns in diameter--as a discrete indicator for particulate matter. Hence, this memorandum addresses how to implement PSD for $PM_{2.5}$ in light of significant technical difficulties which presently exist.

Of specific concern is the lack of necessary tools to calculate emissions of $PM_{2.5}$ and related precursors and project ambient air quality impacts so that sources and permitting authorities can adequately meet the NSR requirements for $PM_{2.5}$. Any comprehensive system for regulating $PM_{2.5}$ must take into account not only the fine particles emitted directly by stationary sources but also the various precursors, emitted by certain sources, which result in secondarily-formed fine particles through chemical reactions in the atmosphere. Recent studies suggest that

secondary particulate matter may account for over half of total ambient $PM_{2.5}$ nationwide. Emissions factors for the fine particles emitted directly by stationary sources, and for some important precursors (e.g., ammonia), are largely unavailable at the present time.

The EPA is in the process of developing a comprehensive modeling system which will be designed to include precursor emissions and account for secondary fine particle formation. The modeling system will also incorporate a method for nesting small local impacts from individual point sources within a greater modeling domain. Before this can be completed, it will be necessary to collect sufficient monitoring data to verify and validate protocol modeling results.

Ambient monitoring for PSD purposes must be collected from appropriately designed monitors. Sufficient quantities of such monitors will not be available specifically for PSD monitoring purposes in the near future. Initially, as these monitors become available, they will be needed to establish the new monitoring stations for the national network of $PM_{2.5}$ sites, including the required core $PM_{2.5}$ State and local air monitoring stations. A high priority has been placed on the establishment of the necessary $PM_{2.5}$ monitoring sites nationwide so that the information from these sites can be analyzed and evaluated in order to establish plans and priorities for implementing the $PM_{2.5}$ NAAQS, including the promulgation of section 107 designations.

For the reasons stated above, EPA believes that it is administratively impracticable at this time to require sources and State permitting authorities to attempt to implement PSD permitting for $PM_{2.5}$. The EPA has projects underway that will address the current technical and informational deficiencies, but it will take 3-5 years to complete these projects. Until these deficiencies are corrected, EPA believes that sources should continue to meet PSD and NSR program requirements for controlling PM_{10} emissions (and, in the case of PM_{10} nonattainment areas, offsetting emissions) and for analyzing impacts on PM_{10} air quality. Meeting these measures in the interim will serve as a surrogate approach for reducing $PM_{2.5}$ emissions and protecting air quality.

This memorandum presents EPA's views on the issues associated with implementation of the new $PM_{2.5}$ NAAQS under Federal, State and local NSR programs. The statements do not bind State and local governments and the public as a matter of law. When the technical difficulties are resolved, EPA will amend the PSD regulations under 40 CFR 51.166 and 52.21 to establish a $PM_{2.5}$ significant emissions rate, and EPA will also promulgate other appropriate regulatory measures pertinent to $PM_{2.5}$ and its precursors. Because the earliest date on which $PM_{2.5}$ nonattainment areas will be designated is in 2002, and nonattainment NSR does not apply until after nonattainment designations are made, implementation of the nonattainment NSR requirements under part D of title I of the Act need not be addressed at this time.

If you have any questions concerning this memorandum or wish to address any issues raised herein, please contact Dan deRoeck at (919) 541-5593.

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and Toxics Division, Region VII
Assistant Regional Administrator, Office of Pollution
Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air Quality, Region X

cc: New Source Review Contacts
Greg Foote (2344)
Mark Kataoka (2344)
Lydia Wegman (MD-10)

bcc: Karen Blanchard (MD-12)
Tom Curran (MD-12)
Dan deRoeck (MD-12)
Bill Hamilton (MD-15)
Sally Shaver (MD-15)

USEPA:OAQPS:ITPID:IIG:DDEROECK:PJSMITH:CBaines:NCMU:RM700:MD-12:10-21-97
FILENAME: A:\pmmemo.021
revised: 10/21/97

November 17, 1998

MEMORANDUM

SUBJECT: Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements

FROM: Eric V. Schaeffer, Director
Office of Regulatory Enforcement

TO: Addressees

This guidance sets forth the injunctive relief that the U.S. Environmental Protection Agency (EPA) should seek in settlements of major New Source Review (NSR) enforcement actions.[1] Monetary penalties should continue to be determined pursuant to the Clean Air Act Stationary Source Penalty Policy and Appendices.

Introduction

To maintain a level playing field for regulated sources across the country, the Office of Regulatory Enforcement (ORE) is issuing this guidance setting forth the injunctive relief it expects to see in judicial Consent Decrees and in administrative case settlements concerning major NSR enforcement cases.[2] In particular, this guidance addresses cases where either (1) a source failed to obtain a major NSR permit prior to commencing construction of a major source or a major modification or (2) a source with a synthetic minor limit[3] regularly violated that limit.

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[1] New Source Review includes the Clean Air Act Part D nonattainment NSR and the Part C Prevention of Significant Deterioration (PSD) programs.

[2] Many civil major NSR cases are deemed to be "nationally significant," and hence, require Headquarters concurrence. This guidance also applies to administrative major NSR cases. Thus, any reference to requirements of a "Consent Decree" in the context of a civil case applies equally to the resolution of an administrative major NSR case.

[3] A "synthetic" minor limit restricts potential emissions at an otherwise major source to levels below applicable major source thresholds. These limits generally are in the form of

As Congress stated in the Prevention of Significant Deterioration (PSD) portion of the Clean Air Act (CAA or Act), the general purpose of the NSR programs is to protect public health and welfare (including air quality) while "insur[ing] that economic growth will occur in a manner consistent with the preservation of existing clean air resources." 42 U.S.C. § 7470. One method relied on to achieve this purpose is to require the use of ever-improving control technology as new sources of air pollution are built. The NSR programs also are a means to phaseout the grandfathering of existing sources created in the 1977 Act. As the D.C. Circuit stated in Alabama Power v. Costle, "[t]he statutory scheme intends to 'grandfather' existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program." 636 F.2d 323, 400 (D.C. Cir. 1979). Thus, the NSR programs are instrumental in implementing the Act and in attaining the goal of clean air throughout the United States.

In order to effectuate the purpose of the NSR programs, EPA generally should, at a minimum, require the installation and operation of control technology or process changes that result in emission reductions equivalent to the best available control technology (BACT) in PSD cases and the lowest achievable emission rate (LAER) in nonattainment cases when resolving NSR enforcement actions.[4] When the case involves a source that failed to obtain any type of permit or limit at the time of construction, the source should not be allowed to avoid the installation and operation of pollution control equipment or process changes by obtaining a "synthetic" minor limit (usually a permit) after the fact unless compelling circumstances exist (see below).[5]

Similarly, if a case involves a source that obtained a timely synthetic minor limit, but which regularly violates that limit, this document provides guidance regarding when it is appropriate to

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operational or production limits. The term may also refer to limits an existing major source takes to restrict its potential emissions from a modification to levels below applicable significance thresholds (e.g., 40 tpy of SO_2). See 40 C.F.R. § 52.21(b)(23).

[4] Generally, BACT and LAER require the installation of add-on pollution control equipment. There are instances, however, when BACT or LAER may be reflected in a change in processes equipment design or operation (e.g., material usage). References to BACT/LAER in this guidance include both control equipment technology and operational changes.

[5] This reference to synthetic minor permits includes limits solely on operation and production (e.g., hours of operation) as well as limits that require installation and operation of control technology. In other words, a violating source may not avoid the injunctive relief required in this guidance by installing air pollution control equipment or making process changes which may reduce its emissions to below the applicable thresholds, but does not reduce emissions to the level possible with BACT/LAER-equivalent controls or process changes.

allow the source to merely come into compliance with the limit and when it is appropriate to require that the source achieve emissions reduction equivalent to those achieved by BACT/LAER-equivalent air pollution control equipment or process changes.

Failure to Obtain a Permit Prior to Construction

There are two scenarios addressed in this portion of the guidance; both involve a source with potential emissions above the applicable major source threshold that failed to obtain either a major NSR permit or synthetic minor limits prior to construction of a new major source or major modification.[6] Under the first scenario, the source's actual emissions exceeded the major source threshold. Under the second, the source's actual emissions never exceeded the major source threshold. This guidance only reflects the position that EPA may adopt in settling the matter and, like the Stationary Source Civil Penalty Policy, considers many factors when resolving an enforcement action. Importantly, under both scenarios, the source has violated the NSR requirements and could be compelled to comply fully with the statutory NSR permitting process. As discussed above, NSR is a key component to ensuring that economic growth and expansion occur in a way that minimizes any adverse impact on air quality. Thus, NSR violations often result in hundred of tons of excess emissions. Moreover, sources that violate major NSR requirements often gain a competitive advantage due to their ability to (1) avoid the time involved with the permitting process and (2) invest money that should have been allocated to emission reduction efforts to other activities. These reasons, as well as others, necessitate strict enforcement of NSR requirements.

When a violation involves the first scenario (the source's actual emissions exceeded the major source threshold) the source should be required to comply fully with all applicable NSR requirements, including major NSR permitting, control technology, air quality impact analysis and offsets. As part of an EPA settlement, the Consent Decree should require a minimum level of control which the Agency believes ensures BACT/LAER-equivalent emission reductions.[7] The

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[6] This guidance applies equally to new and existing sources. Thus, any and all references to new source construction and major source thresholds apply equally to modifications at existing sources and the applicable significance thresholds (e.g., 40 tpy of SO_2). See 40 C.F.R. § 52.12(b)(23).

[7] This guidance does not alter EPA's current policy that the BACT or LAER determination is made at the time a source goes through NSR permit review. Thus, if a source violates NSR in 1995 (e.g., by constructing a major source without a major NSR permit) and finally applies for a permit in 1998, whatever technology is BACT or LAER in 1998 should be required in the NSR permit. See, e.g., "BACT/LAER Determination Cut-off Date" (Jan. 11, 1990) (BACT determination cut-off at date of final permit issuance) (document no. 8.43 in New Source Review Guidance Notebook).

Consent Decree should be crafted to allow the source the option of installing and operating more effective control equipment if the permitting agency requires a different (e.g., more stringent) control technology, but it should not allow the source to obtain a permit with controls that are less stringent than required by the Consent Decree.

If a violation involves a source with actual emissions that never exceeded the major source threshold, the source should be required to achieve BACT/ LAER-equivalent emission reductions. If the source's potential emissions are below the applicable major source thresholds after application of BACT/LAER-equivalent controls or process changes, Regions have discretion to determine based on facts of the specific case whether to require full NSR compliance, or whether to allow the source to obtain a synthetic minor permit after it achieves BACT/LAER-equivalent emission reductions.

Moreover, based on the Agency's experience with enforcing the NSR requirements for the past 20 years, ORE has determined that it is no longer appropriate merely to allow a source to "correct" an NSR violation by dismantling an illegal modification, unless emissions from the new or modified unit would essentially become zero (e.g., the entire process line was shutdown). Thus, a source generally should not be able merely to return to pre-violation conditions in order to avoid installation of control equipment or implementation of process changes. For example, a source that illegally began burning tires in a boiler could not avoid NSR review (under scenario 1), or installation and operation of BACT/LAER-equivalent control equipment or process changes (under scenario 2), merely by agreeing to reducing the number of tires burned or by partial SO_2 controls. If the source had properly permitted the boiler at the time it began burning tires, it would most likely have been required to install and operate pollution control equipment that would still be operational and control emissions after the source stopped burning tires because the boiler would still be operating after the "modification" was undone (e.g., there would be emissions from whatever fuel was burned in lieu of tires). Thus, ceasing the burning of tires would not necessarily bring the source to the same level of emissions that could be achieved with additional control equipment.

Nonetheless, as stated above, the appropriate injunctive relief articulated for both scenarios is subject to consideration of compelling circumstances. Because it is a very case-specific, fact-intensive determination, it is not possible to define all potential compelling circumstances. For instance, a source's actual emissions may be so low that imposition of add-on control equipment would constitute economic waste (e.g., in the above example, total SO_2 and PM/PM_{10} emissions after the source stopped burning tires were too low to control in a cost-effective manner). Or perhaps the source is replacing the violating units with cleaner, energy-efficient new units that emit air pollution at levels near those that would be achieved by the older units with BACT/LAER-equivalent controls or process changes. Other compelling circumstances may involve significant, case-specific litigation risks related to whether a violation of major source requirements actually occurred or whether the injunctive relief set forth in this memorandum is appropriate in a particular case (e.g., permit shield or equity concerns; duration of violation is

extremely short). Importantly, because Headquarters must concur on most Consent Decrees involving major NSR violations, Regions are encouraged to coordinate with Headquarters early regarding consideration of compelling circumstances and prior to initiating settlement discussions with a defendant. After this guidance has been implemented for some time, ORE will consider supplementing it with any trends regarding what constitutes a compelling circumstance that may develop.

Failure to Comply with an Existing Synthetic Minor Limit

Generally, when a source with limits that restrict its potential emissions below major source threshold levels violates those limits, EPA can enforce the limits and/or the major source NSR requirements. This guidance is not meant to restrict the Regions' ability to enforce the terms of an existing synthetic minor limit or permit. However, pursuant to the court's reasoning in United States v. Louisiana-Pacific, 682 F. Supp. 1142, 1161-62 (D. Colo. 1988), when a source "knowingly and regularly" violates a synthetic minor limit, EPA's position is that it need not consider the limit when calculating the source's potential to emit and determining its major source status.[8]

EPA should take the position that a source's synthetic minor limit does not effectively limit the source's potential emissions when evidence indicates that the source has knowingly or regularly violated (or currently regularly violates) the limit. Thus, the source cannot simply claim that it has a limit that restricts its potential emissions; obviously this is not the case if the source's actual emissions have exceeded that "limit." A source should not be able to hold a limit up as a shield to major source status when it repeatedly violates the limit. As the court in Louisiana-Pacific stated,

> 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.

Id. at 1161. Allowing sources to merely come into compliance with the synthetic minor limits would encourage sources to make modifications without preconstruction review and even exceed existing permits until they were caught, rather than go through NSR review prior to making modifications. Treating the source as a major source or major modification should be EPA's

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[8] Although all permit limits and conditions are enforceable, only operational or production limits that are "practically enforceable" will be used to determine a source's potential to emit. See, e.g.,, "Guidance on Limiting Potential to Emit in New Source Permitting" (June 13, 1989) (document no. 2.31 in NSR Guidance Notebook). The EPA is in the process of proposing a rule which would codify the elements of a practically enforceable limit.

position even when the source's actual emissions do not exceed major source thresholds or significance levels. To allow a source to violate a limit that restricts potential emissions until its actual emissions exceeded major source or significance levels would collapse potential and actual emissions and ignore the mandate of the Act to consider both.

Nonetheless, there may be circumstances where the appropriate response is enforcement of the synthetic minor permit. Such circumstances may include situations where the permit violations are (a) relatively infrequent, (b) known to be minor in nature and (c) where the synthetic minor limit is significantly lower than the relevant applicability threshold.[9] As with the first portion of this guidance, the Regions are encouraged to coordinate early with Headquarters regarding application of these distinctions.

Conclusion

The guidance is effective immediately with respect to all cases in which the first injunctive relief offer has not yet been transmitted to the opposing party. To the extent earlier guidance, memoranda or other EPA documents imply that injunctive relief requiring a source to come into compliance with existing "synthetic" minor source limits, or obtain synthetic minor limits, is an acceptable resolution of an enforcement case, it is superseded by this guidance. As stated above, many major NSR enforcement cases are already considered "nationally significant," due to either issues in the case or penalty amounts of $500,000 or more, and thus require Headquarters concurrence. In addition, to ensure consistent implementation of this guidance, each Region should consider the first three major NSR cases (civil and administrative), regardless of the size of the penalty, it begins negotiating after the date of this guidance as "nationally significant" for delegation purposes and include Headquarters in the concurrence chain.

The policies set forth in this memorandum are intended solely as guidance to government personnel to be used to settle enforcement actions. They do not represent final Agency action, are not binding on any party, and cannot be relied upon to create any rights enforceable by any party. The EPA reserves the right to change this guidance at any time without public notice.

Questions concerning specific issues and cases should be directed to Carol Holmes of the Air Enforcement Division,, at 202-564-8709. This document will also be available on AED's Webpage at http://www.epa.gov/oeca/ore/aed.

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[9] EPA realizes that in some instances, a new source may not precisely know what its emissions will be until it has constructed and begun operations. Thus, a source which in good faith obtained synthetic minor source limits may find itself unable to meet those limits. Although this is a concern when determining the appropriate penalty, it should not affect the appropriate injunctive relief.

cc: John Seitz, OAQPS
Bruce Jordan, OAQPS
Lydia Wegman, OAQPS
Alan Eckert, OGC
Greg Foote, OGC

Addressees:
Regional Counsels, Regions I-X
Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Division of Air Quality, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Assistant Regional Administrator, Office of Pollution Prevention, State, and Tribal Assistance, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX
Director, Office of Air Quality, Region X
Joel Gross, Chief, Environmental Enforcement Section, DOJ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MEMORANDUM

DATE: DEC 1987

SUBJECT: Resolving Nonattainment NSR Violations by Making Major Sources Minor

FROM: Bruce P. Miller, Chief
Air Programs Branch

TO: Gary McCutchen, Chief
New Source Review Section (MD-15)
OAQPS

Recently, Region IV has had to address several questions regarding the proper permitting procedures for violating sources in nonattainment areas. In order to help resolve the questions with which we are now faced, we are requesting written confirmation of the following positions:

1) In nonattainment area, is it permissible for a source that was permitted as a minor source (i.e., less than 100 tons per year of the nonattainment pollutant), but actually operated at a level above the 100 ton per year threshold, to retain its minor source status?

   It is our position that a minor source can remain a minor source, even if it actually operated as a major source, provided the proper penalties are assessed for the period of violation.

2) It is permissible for a source in a nonattainment area which never obtained a construction permit (or which received an invalid minor source permit), but was built and operated at a level above the 100 ton per year threshold for some period of time, to be permitted as a minor source (i.e., potential emissions restricted to below 100 tons per year of the nonattainment pollutant)?

   If so, will the permitting of the violating source as a minor source negate the Lowest Achievable Emission Rate (LAER) and emissions offset requirements which would have been imposed if the source had been permitted as a major new source at the time of construction?

It is our position that a source that constructed and operated (without a permit) as a major source may be permitted as a minor source, provided the proper penalties are assessed, to remove the economic benefit achieved by the company for operating a major source without controls or without a valid permit.

It is also our position that if such a source is permitted as a minor source that the requirements for LAER and offsets would not apply.

3) Do these same conclusions hold true for sources in attainment areas?

It is our position that they do.

Please concur with our position or advise otherwise. You may contact me or Wayne Aronson of my staff at FTS 257-2864 if you need further clarification or additional information.

JUN 22 1990

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

JUN 18 1990

Robert Hodanbosi
Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266-0149

Dear Mr. Hodanbosi:

This is in response to your April 19, 1990, letter related to the proposed modification to the city of Columbus Municipal Electric Plant. The application attempts to make the argument that the addition of gas burners to the coal and refuse derived fuel fired boiler should be exempted from Prevention of Significant Deterioration (PSD) permit review. The application suggests that, since the boiler has an operating history, the "WEPCO" decision sets a basis for using past operating practices for establishing post-modification potential emissions.

The application appears to suggest the following. First, gas firing (the gas is a combination of natural gas and land fill gas) would replace coal firing on a British Thermal Unit (BTU) for BTU basis. Second, the emission rates for nitrogen oxides, sulfur dioxide, and particulate matter are less for gas firing than for coal firing. Finally, by utilizing gas, there would be no emission increase, but rather a decrease in emissions. The applicant further argues that gas burners are being added to reduce the formation of dioxins and furans and to reduce opacity readings during start-ups. Therefore, according to the applicant, the burners should be exempted as air pollution control devices.

With respect to the "WEPCO" decision, the court made the decision based on "like kind" replacements in existing equipment. In this case, new gas burners are being added to a unit which now has no gas burners. Therefore, the "WEPCO" decision does not apply in this case.

With respect to exempting the burners as air pollution control devices, such exemptions are not given to modifications which may increase capacity utilization. Because some of the fuel, coal, which is relatively expensive, will be replaced by land fill gas, which has very little cost, there may be an incentive to use previously under utilized boiler capacity to generate electricity for sale into the grid. Neither the application nor the draft permit made it clear that increased equipment utilization will not occur. Therefore, no exemption as an air pollution control device can be made.

The proper way to determine the applicability of the PSD rules with this source is to compare the actual annual emissions before the modification with the actual annual emissions after the modifications according to 40 CFR 52.21(b)(2),(3) and (21). The calculation should be done only for unit 6 which is the only unit being modified. In this case, the actual emissions before the modification are calculated in one of the following two ways:

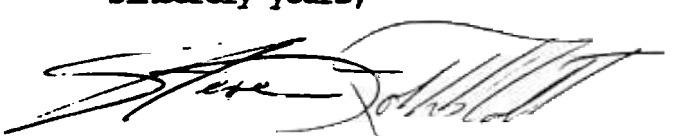
1) For pollutants limited by a source-specific requirement in the original PSD permit under which the plant was constructed, the actual emissions shall equal the allowable emissions in the PSD permit according to 40 CFR 52.21(b)(21)(iii). This is explained on page 52718 of the August 7, 1990, FEDERAL REGISTER.

2) For pollutants resulting from gas combustion which were not limited by a source-specific requirement in the PSD permit, actual emission calculations are based on data from the prior 2 year operating history according to 40 CFR 52.21(b)(21)(ii). In this case, it may include, for example, carbon monoxide and/or particles less than or equal to 10 microns in diameter.

If the computation of actual emissions, as described above, exceeds the post-modification potential emissions by the significance level; than the PSD requirements apply to that pollutant.

The nonapplicability determination as set forth in the City's permit application and draft permit is erroneous. We recommend that the application be reviewed in light of the above information and resubmitted for public comment. From the information available to us, it is not possible to determine if this source modification is subject to the PSD rules.

Sincerely yours,



Steve Rothblatt, Chief
Air and Radiation Branch

February 15, 1989 Applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) Provisions to the Proposed Life Extension Project at the Port Washington steam Electric Generating Station 2.35b

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2.35b

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 15 1989

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

Dear Mr. Boston:

This is a revised final determination, on reconsideration, regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) provisions 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). This determination supplements the determination set forth in an October 14, 1988 letter to you from Lee M. Thomas, which in turn

incorporated my September 9, 1988 memorandum. I find it necessary to reconsider EPA's original determination and issue this revised determination in part to address matters raised by, and new information submitted by, WEPCO representatives since the October 10 letter. WEPCO believes that these new aspects call into question the accuracy of EPA's prior determination.

For the following reasons, EPA today reaffirms, with limited exceptions detailed below, its earlier findings regarding the Port Washington life extension project. I hereby incorporate by reference the October 14 letter and the September 9 memorandum, and reaffirm the findings and conclusions in those two documents except where they are specifically superseded below.

This action constitutes final agency action for purposes of judicial review under section 307(b) of the Clean Air Act, 42 U.S.C. Section 7607(b).

I. CAPITAL EXPENDITURE

EPA explained in its earlier determination that under the General Provision of the NSPS regulation, a physical or operational change which increases emissions at an affected facility is a modification subject to NSPS. See 40 CFR 60.14(a). However, 40 CFR 60.14(e) provides certain exceptions to that general rule. In particular, section 60.14(e) (2) provided that an increase in production rate at an affected facility would not, by itself, be considered a modification if that increase is accomplished without a capital expenditure.

As has been discussed in recent meetings between WEPCO and EPA, the October 14, 1988 letter from Lee M. Thomas was based in

part on information supplied by WEPCO in a letter dated October 11, 1988 which indicated that the increase in production rate at each of the five units would be accomplished with a capital expenditure. On October 13, 1988, and November 22, 1988 WEPCO submitted revised capital expenditure calculations. EPA has carefully reconsidered its earlier determination based on those two additional submissions(see Footnote 1). However, as explained below, they provide no grounds on which to alter EPA's earlier finding on capital expenditure.

The modification provisions are designed in part to subject to NSPS those emissions increases caused by an increase in production rate that is in turn attributable to a significant investment in improvements to the capital stock. Consistent with this intent, capital expenditure

calculations employ the total, as opposed to annual, cost of a given project at each affected facility.

Thus, the December 16, 1975 preamble to the promulgated definition of capital expenditure states that "the total cost of increasing the production or operating rate must be determined. All expenditures necessary to increasing the facility's operating rate must be included in this total" (40 FR 58416) (emphasis added). The total cost of the planned work at each facility is then compared to the product of the existing facility's basis and the annual asset guideline repair allowance percentage used by the Internal Revenue Service for taxation purposes. If the total project cost for each facility exceeds the product of the basis and repair percentage for each facility, there is a capital expenditure at that facility. See 40 CFR 60.2.

It is appropriate to accumulate, for capital expenditure purposes, the cost of the renovations necessary to increase the facility's production rate, because the overall work necessary to increase a facility's production rate pursuant to a particular renovation project is the same whether the work is performed in one calendar year or during two (or more) years. The use of annual costs could encourage sources to distort normal business planning by artificially stretching out costs over time as a means of evading a finding of capital expenditure and consequent NSPS coverage (see Footnote 2).

(Footnote 1) October 13, 1988 submission was not received in time to be considered in issuing EPA's letter of October 14, 1988.

(Footnote 2) Indeed, it appears that WEPCO may have extended the planned length of the Port Washington life extension project for precisely this purpose after being informed by EPA in the October

Rather, the purpose of the exemption in 40 CFR 60.14(e) (2) is to exclude from NSPS coverage increases in production rate that are accomplished without "an expenditure for long-term additions or improvements." See 39 FR 36948 (preamble to proposed NSPS regulations). Where the economic realities of the case are that increased production and, hence, emissions, are due to normal fluctuations in the business cycle rather than a considered decision to invest in substantial capital improvements, the NSPS do not apply.

The letter submitted on October 13 from Neil Childress of your staff to Gary McCutchen of EPA presented updated basis figures (determined by multiplying the original capital investment in the facility by a coefficient representing the inflation in construction

costs between the year of the investment and the year in which the capital expenditure calculation is made) for each of the emissions units at Port Washington. These figures included costs of repair or replacement of equipment, such as steam turbines, that is not part of the existing affected facility for NSPS purposes. Since applicability determinations under the NSPS modification provisions are based on the existing affected facility, capital expenditure determinations likewise are limited to costs associated with the affected facility. For NSPS Subpart Da, the affected facility is the steam generating unit as defined at 40 CFR 60.40a. Therefore, EPA staff requested WEPCO to limit the basis figures to the steam generating unit.

The November 22, 1988 letter from Neil Childress to Walt Stevenson of EPA presented revised cost figures on the renovation work on steam generating units 1 - 4 related to the capital expenditure calculations. These November 22 basis figures are understood to be limited to costs associated with the affected facility. The November 22 letter also presented a revised and extended schedule for the renovation work, under which the costs of repairs in any one year would not exceed the product of the annual asset guideline repair allowance percentage, which is 5% for electric utility steam generating units, and the basis of each unit. Mr Childress' letter concluded that since 5% of each

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14, 1988 letter that there would be a capital expenditure using the original schedule. The unit 1 renovations have been extended from four years to five; unit 2 has been extended from four years to six; unit 3 had been extended from three years to six; unit 4 has been extended from two years to four. (Compare Telecopier Transmission, Neil Childress, WEPCO, to Gary McCutchen, EPA, October 11, 1988 (table attached to Response to Question No. 4) with Letter, Neil Childress, WEPCO, to Walt Stevenson, EPA, November 22, 1988, at page 2.)

unit's updated basis is not exceeded by the cost of renovation work in any one year, there would not be a capital expenditure at any of the units. The revised figures also show that the total costs for each unit over the entire renovation period would exceed the 5% basis figure by 5O% to 325%.

As explained above, it is the total cost, not the annual cost of a renovation project that determines whether a capital expenditure has occurred. Accordingly, based on the calculations and total project costs in WEPCO's November 22, 1988 letter, the proposed project

would result in a capital expenditure at each of the five Port Washington units, and those units would not qualify for the exemption in the NSPS modification provisions at 40 CFR 60.14(e)(2) (see Footnote 3). As to unit 5, WEPCO did not submit cost data limited to the affected facility. Thus, I have no reason to alter EPA's original determination that WEPCO has not demonstrated that the increase in production rate at unit 5 can be accomplished without a capital expenditure.

In addition, I have determined that it is more appropriate to utilize the original basis of each affected facility (as adjusted to reflect past capital improvements), expressed in nominal dollars, rather than the updated basis, expressed in current dollars, in determining NSPS applicability. Thus, even if WEPCO were correct that annual renovation costs, rather than total costs, should be used in capital expenditure calculations, in this case a comparison of annual renovation costs and the

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(Footnote 3) WEPCO has argued that since the definition of capital expenditure at 40 CFR 60.2 refers to the IRS "annual asset guideline repair allowance percentage" (emphasis added), EPA is bound by the literal language of its own regulations to use annual rather than total project costs in making capital expenditure calculations. However, the regulations do not dictate such a result. Instead, on their face they call for a comparison between total renovation costs and the annual asset guideline. Had EPA intended the result suggested by WEPCO, it would have explicitly called for comparison of annual costs of the change for project, exceeding one year with the annual asset guideline. This it did not do. In addition, as indicated above, the purpose of the capital expenditure provision would not be served by annualizing project costs for capital expenditure purposes.

(adjusted) original basis of each affected facility shows that a capital expenditure would still occur (see Footnote 4).

In making a more detailed inquiry into the capital expenditure matter in response to WEPCO's request, I have found that neither the NSPS General Provisions nor the preamble thereto contain any discussion of the matter of original versus updated basis, and that EPA has rarely been called upon to address this issue. However, upon review of EPA's past practice in this area, I have found that in developing performance standards for particular industries, EPA has provided the regulated community a mechanism to calculate the original basis in making capital expenditure calculations. See, e.g., "Equipment Leaks

of VOC in Petroleum Refining Industry -- Background Information for Promulgated Standards," EPA-450/3-81-015b, December 7, 1983 (see Footnote 5). This suggests that EPA intended the original basis to be utilized to determine whether a capital expenditure is going to be made.

Moreover, I believe that the use of original basis is consistent with the overall purpose of the NSPS modification regulations in general, and the capital expenditure provisions in particular. The effect of using original basis is that the greater the age of an affected facility, the more likely it is that a given investment resulting in increased production will be deemed a capital expenditure and trigger NSPS. This is consistent with Congress' intent in adopting new source performance standards. Older facilities are more likely to use outdated equipment which does not reduce pollution to the extent more current technology does. Congress included modified sources within the new source performance standards of section 111 to ensure the use of new technology on such sources. See CAA Sections 111(a) (2) , 111(a) (4);

II. AIR HEATER RENOVATIONS AT UNIT 1

In January 1989, WEPCO asked EPA to determine whether replacement of the heat transfer surface elements on the unit 1 air heater would trigger PSD or NSPS applicability. However, in a letter dated February 3, 1989, WEPCO withdrew this request,

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(Footnote 4) It is worth noting in this regard that if EPA were to adhere to a literal reading of IRS guidelines as urged by WEPCO, it would have no choice but to use original basis as well as annualized costs in making capital expenditure calculations for Port Washington. Using this formula, WEPCO would exceed the repair allowance percentage at units 1 - 5 for most years, and NSPS would still apply.

(Footnote 5) This Background Information Document provides an alternative to the method prescribed in the General Provision when it is difficult to determine original costs. The formula uses replacement costs and an inflation index to "approximate the original cost basis of the affected facility."

asserting that it could not receive approval in the time necessary, while reserving the right to renew it at a later time as to unit 1 or any other unit at Port Washington. Because this issue may arise again, and because I believe it bears upon the project as a whole, I find it appropriate to address the matter of air heater element replacement.

Based on the information submitted regarding this new plan, as well as the earlier information submitted regarding air heater replacement work, I conclude that if WEPCO were to proceed under its revised and now withdrawn plan, it would not alter EPA's earlier finding that PSD and NSPS would apply. In order to explain this finding, it is useful to first summarize the relevant facts.

Originally, WEPCO advised EPA that it planned to replace the air heaters at units 1 - 4 in their entirety. As WEPCO explained:

> Air heaters are subject to the erosive and corrosive effects of the flue gas passing through them and require regular maintenance of the heat transfer surfaces.
>
> The plate-type air heaters on Units 1 - 4 do not lend themselves to replacement of the individual elements. Worn sections have been patched and blocked, where accessible, over the years. Now, however, overall corrosion and perforation has passed beyond the practical point of repair, and replacement of the air heaters is the economical way to maintain the air preheater system.
>
> The air heaters on Port Washington Unit 5 and the other units on the Wisconsin Electric system [other than Port Washington units 1 - 41 are of the Ljungstrom basket design, which allows the heat transfer surfaces (baskets) to be replaced easily. ***

See, e.g., List of Port Washington Projects, p. 6 (Attachment to April 21, 1988 letter from John W. Boston, WEPCO, to Gary McCutchen, EPA).

On January 11, 1989, WEPCO informed the State of Wisconsin that it was considering replacing all the plate elements at unit 1. In a letter to the State of Wisconsin, WEPCO described this project as routine repair work, "necessary to halt the continuing decrease in the capability of Unit 1," and submitted a list of 40 generating units where significant portions of the air heater have been replaced. See Letter, with attachment, from Mark P. Steinberg, WEPCO, to Dale Ziege, Wisconsin Department of Natural Resources, January 11, 1989.

In a telephone conversation with EPA staff the next day, WEPCO indicated that it desired to perform the unit 1 plate replacement work during a current unit outage; that it intended to replace only half, not all, of the elements, at a cost of approximately $500,000; that it intended to later scrap this work and replace the entire air heater as described in the original scope of work, at a cost of $2,600,000; and

that it was considering performing the same work at unit 4 also. See Record of Telephone Conversation between David Schulz, EPA, and Mark Steinberg, Neil Childress, and Walter Woelfle, WEPCO, January 12, 1989.

In a meeting on January 17, 1989, WEPCO related that if it replaced half of the plate elements now, it probably would replace the remainder as part of the total renovation project at a later date and not replace the air heater in whole. WEPCO also related that complete replacement of the plate elements should increase unit 1's capability to the original design capacity. Finally, WEPCO stated in response to questions from EPA staff that none of the air heaters or plate elements at units 1 - 4 had ever been replaced in the past. See Memorandum, Meeting with WEPCO regarding the Port Washington Generating Station, from David Schulz, EPA, to Files, January 27, 1989.

In addition to the above information, I note that WEPCO's list of 40 units at which air heater element replacements have occurred include no units containing plate elements such as those on units 1 - 4 at Port Washington. Instead, all of the examples submitted are of the Ljungstrom basket type or the tubular type. I conclude that those examples are too dissimilar to the plate-type elements in use at units 1 - 4 to support WEPCO's contention that the work in question is routine (see Footnote 6).

Based on all of the foregoing, I find no reason to depart from EPA's earlier conclusion that PSD and NSPS would apply to the air heater work on unit 1. It appears that despite WEPCO's recent recharacterization of this work as a separate project, it in properly viewed as an integral part of the overall Port Washington life extension project. WEPCO cannot evade PSD and NSPS applicability by carving out, and seeking separate treatment of, significant portions of an otherwise integrated renovation program. Such piecemeal actions, if allowed to go unchallenged, could readily eviscerate the clear intent of the Clean Air Act's

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(Footnote 6) Further, even the list of air heater replacement work submitted by WEPCO did not establish this as routine repair work. Those 40 units comprise only a small fraction of total operating utility units, and even at the 40 units, air heater repair or replacement appears to have been a one-time occurrence, not routine repair.

new source provisions. Accordingly, if seen as part of WEPCO's previously proposed renovation project, the recent recharacterization of the unit 1 air heater work does nothing to alter the factors

determinative of PSD and NSPS coverage.

III. CAPACITY TESTING FOR UNITS 1 - 4

A. Impact of Test Results on NSPS Applicability.

In Lee Thomas' October 14, 1988 letter, EPA stated that baseline emissions for NSPS purposes are determined by hourly maximum capacity just prior to the renovations. EPA relied on actual operating data to determine that current maximum capacity at units 1 - 4 has significantly deteriorated, such that the restoration of original design capacity through the life extension project would result in corresponding emissions increases. As to unit 5, EPA stated that current capacity at unit 5 is zero because it is physically inoperable. EPA rejected WEPCO's unsupported assertions that all five units could be operated at high capacities, but held open the possibility of further discussions on that point. Subsequently, in November and December of 1988, following discussions with EPA, WEPCO conducted capacity tests to determine current actual capacity.

Based on its review and analysis of the test data, EPA finds that the tests adequately demonstrate that units 2 and 3 can be operated at their original design capacity on a sustained basis. Accordingly, I hereby supersede EPA's earlier determination and find that NSPS would not apply to units 2 and 3 by virtue of the proposed renovations so long as the capacity of these units after completion of the work is no higher than demonstrated in the recent tests (694,000 and 690,000 pounds of steam per hour, respectively). As discussed in more detail below, this revised NSPS determination does not affect our determination that the PSD provisions would be applicable to the proposed work on these two units.

During the tests on units 1 and 4, WEPCO was able to operate these units at 497,000 and 586,000 pounds of steam per hour, respectively, representing 72% and 89% of these units' respective original design capacities. These tests are adequate to confirm EPA's original determination that units 1 and 4 are not capable of operating at their original design capacities, and that restoration of the lost capacity through the life extension will trigger NSPS coverage. EPA today also determines that these tests are not adequate to show that current actual capacity for purposes of establishing the NSPS baseline is as high as the levels achieved during the recent tests. Rather, I reaffirm that baseline for those units is determined by the lower capacities reflected in recent actual operating data as set forth in Lee Thomas' October 14 letter. EPA must reject the tests for

purposes of establishing actual NSPS baselines because during the testing discussed above, there were significant, measured exceedances of the applicable particulate mass emission limit, and several measured exceedances of the applicable opacity limit contained in the Wisconsin State Implementation Plan. One of the purposes of these tests was to determine the maximum actual capacity of the Port Washington units that can be achieved in a lawful manner. As a consequence of the measured exceedances, WEPCO's tests cannot be relied on to demonstrate that the company could lawfully sustain the levels achieved during the testing.

Regarding unit 5, I find that by declining to conduct or schedule capacity tests, WEPCO has effectively conceded that unit 5 is at present inoperable. Therefore, I reaffirm that its baseline for NSPS purposes is zero.

B. Impact of Test Results on PSD Applicability.

In its February 3, 1989 letter, WEPCO asserted that EPA's October 14, 1988 determination assumed that the emission rate of each unit would increase following the renovations. Thus, WEPCO claims, EPA did not address the question whether units that are not increasing their emission rates following renovation can be deemed to trigger PSD. WEPCO is incorrect on both counts.

EPA's prior determination explained that under the PSD program, unlike NSPS, baseline emissions are determined by representative actual emissions prior to the physical or operational change. Accordingly, the results of testing conducted by WEPCO, intended to determine current maximum hourly capacity, have no impact on the existence of a significant net emissions increase for PSD purposes. Hence, those test results provide no reason to alter EPA's prior determination regarding PSD applicability.

Actual emissions are the product of the emission rate (amount of pollution per unit of production or throughput, e.g., pounds of sulfur dioxide per ton of coal combusted), the production rate or capacity utilization (amount of production or throughput per hour, e.g., tons of coal combusted per hour), and the hours of operation (e.g., hours per year). In its prior determination, EPA explained that an increase in any one of these three factors, if attributable to a physical or operational change, can trigger an emissions increase for PSD purposes, and rejected WEPCO's contention that only increases in the emission rate were determinative. In so doing, EPA explicitly assumed that emissions increases at Port Washington would come not from an increase in emission rate, but rather from increases in production rate or hours of operation. Sec Memorandum from Don R.

Clay, September 9, 1988 at 8.

WEPCO further implies in its February 3, 1989 letter that the demonstration that units 2 and 3 can operate now at maximum design capacity means that there will be no increase in production rate for PSD purposes following the renovations. This is not the case because PSD baseline emissions are determined by representative actual emission rate, production rate, and hours of operation prior to the physical change. Representative actual emissions are determined by examining the actual emissions during a representative two year period, (See 40 CFR 52.21(b) (21) (ii)) which in this case the Administrator determined to be 1983 and 1984 (See Lee Thomas' Oct. 14 letter, at 5) . The hourly capacity demonstration for NSPS purposes is not relevant to the PSD analysis.

IV. NSPS OPERATIONAL LIMITATIONS

In my September 9, 1988 memorandum, I pointed out that an affected facility cannot avoid NSPS applicability by offsetting, through the use of fuel with a lower sulfur content, an increase in the emission rate that would otherwise occur due to a physical or operational change. As I explained at that time, 40 CFR 60.14(e) provides that use of an alternative fuel or raw material -- such as higher-sulfur coal -- which an existing facility was designed to accommodate before a physical or operational change does not constitute a modification for NSPS purposes. It follows that the facility cannot avoid NSPS by switching to lower-sulfur fuel to counteract a prospective increase in emission rate because, under the regulations, the facility would always have to option to switch back to a higher-sulfur fuel at a later date without triggering NSPS.

Subsequent to the issuance of EPA's October 14, 1988 letter, WEPCO inquired whether it might be able to utilize lower-sulfur coal to avoid NSPS at Port Washington, notwithstanding the regulatory provision explained above, by agreeing to federally enforceable permit conditions that would bar the company from switching back to higher sulfur coal in the future. Restrictions of this nature are acceptable for netting transactions under the Act's PSD provisions. However, the statute reflects a basic political decision that fossil fuel-fired sources not rely only on natural occurring less-polluting fuels to comply with the NSPS. Instead, Congress declared that compliance must depend in part upon the application of flue gas treatment or other pollution control technologies. Thus, section 111(a) (1) (A) (ii) defines "standard of performance" for fossil fuel-fired sources as

> requiring the achievement of a percentage reduction in the

> emissions from such category of sources from the emissions which would have resulted from the use of

> fuels which are not subject to treatment prior to combustion

Congress further clarified this point in a later paragraph of section 111(a) by adding:

> For the purpose of subparagraph (1) (A) (ii), any cleaning of the fuel or reduction in the pollution characteristics of the fuel after extraction and prior to combustion may be credited ... to a source which burns such fuel.

This core policy judgment is reflected as well in the legislative history of the 1977 Clean Air Act amendments. For example, the Conference Report states:

> The Senate concurs in the House provision with minor amendments. The agreement requires (1) that the standards of performance for fossil fuel-fired boilers be substantially upgraded to require the use of the best technological system of continuous emission reduction and to preclude use of untreated low sulfur coal alone as a means of compliance; ... (3) that for fossil fuel-fired sources, the new source performance standards must be comprised of both a standard of performance for emissions and an enforceable requirement for a percentage reduction in pollution from untreated fuel.

H.R. Rep. No. 95-564, 95th Cong., 1st Sess. 130.

Because the will of Congress is so clear that lower-sulfur fuels alone will not suffice to comply with NSPS, it would be inconsistent with the legislative intent for EPA to allow sources to use lower-sulfur fuel to avoid coverage of NSPS in the first instance in the manner suggested by WEPCO. If EPA were to follow such a course, numerous modifications to existing facilities could escape coverage in a manner contrary to the statutory purpose.

V. THE TIMING OF THE LIFE EXTENSION PROJECT

In discussions with EPA, WEPCO has challenged, on grounds of timing, EPA's position on baseline emissions for NSPS purposes. In its prior determination, EPA explained that under the NSPS regulations, baseline emissions are determined by hourly maximum capacity just prior to the renovations. Thus, the baseline for unit 5 at Port Washington is zero because the unit has been shut down for several years due to safety concerns. In response,

WEPCO has presented the hypothetical question whether EPA would still have found a zero baseline if unit 5 had been shut down on a Friday due to some unexpected or catastrophic failure of a major component previously in good working order, and WEPCO had sought to replace that component on the following Monday. WEPCO asserts that in such circumstances, EPA should have established baseline emissions using the emissions rate just prior to the breakdown.

I find it unnecessary to engage in speculation by addressing the hypothetical situation presented by WEPCO, because it is far removed from the true circumstances surrounding the proposed Port Washington life extension project. In fact, unit 5 has been shut down for over four years, not a weekend, and that is the foundation of EPA's analysis and determination.

In conclusion, with limited exceptions, EPA today reaffirms the decisions reached in the October 14 determination. In addition, EPA has concluded that the work on each unit constitutes a capital expenditure and that the proposed air heater plate replacement work on unit 1 would trigger PSD and NSPS. As a result of the capacity test demonstration, however, I find that units 2 and 3 at Port Washington can be operated at their design capacity on a sustained basis. Therefore EPA's earlier determination with respect to NSPS applicability is superseded and NSPS would not apply to units 2 and 3 by virtue of the proposed renovations so long as the capacity of these units after the completion of this work is no higher than demonstrated in the recent tests. This determination does not affect PSD applicability for these two units. If you should have any questions about the foregoing, please feel free to contact me. Thank you for your cooperation in this matter.

Sincerely,

Don R. Clay

Acting Assistant Administrator

for Air & Radiation .

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

OCT 14 1988

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.

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. Section 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 CFR 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. Section 52.21(b)(2)(i), and physical and operational changes for 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. Sections 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. Section 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. Section 60.14(a) and (b).

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 WEPCO. 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 withrespect to the baselines for calculating the PSD and NSPS emissions increases reflected in Enclosures A and B.

Regarding the questin of routineness, the renovations involve the replace 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 was 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

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. 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 no 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 --

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 emission 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. Section 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.

Again, thank you for your cooperation in this matter.

Sincerely,

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)

Pollutant	Actual Emissions Baseline (1)	Potential Emissions (2)	Net Emissions Increase	PSD Level	Subject to PSD Review
Total suspended particulate	170	283 (3)	108	25	yes
Sulfur dioxide	24,236	56,621 (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	38	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
SO2 (LBS/HR)	1417	1828	2043	1580	-0-
PM (LBS/HR)	15	16	12	12	-0-
NOx (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
SO2 (LBS/HR)	2046	2037	2088	2269	2695
PM (LBS/HR)	16	16	12	17	15
NOx (LBS/HR)	696	392	297	316	369

SUBJECT TO NSPS (AFTER RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	YES (a)	YES (a)	YES (a)	YES (a)	YES
PM (LBS/HR)	YES (b)	NO	NO	YES (b)	YES
NOx (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 NOx emissions (lb/MM Btu) are expected to be less than NSPS requirements. However, NSPS would require a CEMS for NOx.

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MEMORANDUM

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 (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)(iii)(a)].

In determining whether proposed work at an existing facilityis "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 tothe 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.

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

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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.

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 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"

2The WEPCO's July 29, l988 letter to EPA stated (on page l3) 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.

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 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, l988 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.

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 priorto 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

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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.

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 modifi- cation 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.l4(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 toaccommodate 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, l988 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.l4(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 unitwhich 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 tocombust 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, l988 letter (at pages l4-l5) 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

bcc: G. Foote, OGC
L. Wegman, OAR
J. Seitz, SSCD
M. Alushin, AED
Air Branch Chief, Regions I-X
Regional NSR Contacts, Regions I-X
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Ron Adler
Renee Hopkins

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	LAA Directors, DO Unit Supervisors and all permit review staff
from:	Bob Hodanbosi, Chief, DAPC
subject:	Emission calculations for printing presses
date:	November 21, 1996

The Printing Industry of Ohio (PIO) has recently published a self help manual entitled "ENVIROPRINT" which explains regulatory requirements for printing companies. The ENVIROPRINT project was jointly funded by the Ohio Environmental Education Fund, Ohio Air Quality Development Authority, and PIO and has received the support of Director Schregardus. The manual is designed to explain multi-media compliance issues in a plain language, easy to understand format.

The chapter dealing with air pollution regulations concentrates on calculating potential emissions from printing presses using materials tracking and equipment utilization worksheets. The emission calculation methods found in ENVIROPRINT involve the use of ink solvent retention factors of 20% for heatset lines, 95% for non-heatset, sheetfed lines and also have emission factors for low vapor pressure clean-up solvents. These calculation methods are based on U.S. EPA's 1993 CTG and ACT documents for offset lithographic printing and should be considered valid. In fact, some of these factors and emission calculation methods have already been incorporated into recent permits to operate.

This is especially important for non-heatset or sheetfed printing presses which qualify for the less than 3 TPY exemption per OAC Rule 3745-31-03(A)(1)(s). Non-heatset lithographic printers make up the vast majority of the estimated 2500 printing companies in Ohio and many of these will qualify for the PTI/PTO exemption.

An Engineering Guide is being developed for non-heatset printing lines. Engineering Guide #56 for heatset web-offset lines is also being revised based on the ACT and CTG documents. Until these are completed, the following percentages should be used for printing press emission calculations:

Lithographic Printing Lines

Heatset Web Offset Presses:

1. **Inks.** Assume 20% of the ink solvent is retained in the web or substrate and the remaining 80% goes to the dryer.

2. **Fountain solution.** For alcohol substitutes only, assume 30% fugitive and 70% goes to the dryer.

3. **Blanket Wash.** For automatic blanket wash systems, assume 60% of the solvent is fugitive and 40% goes to the dryer.

Non-heatset, Sheetfed or Web Presses:

1. **Inks.** Assume 95% of the ink solvent is retained in the web or substrate and 5% is emitted.

2. **Fountain solution.** Assume all fountain solution VOC is emitted.

Cleanup operations (all presses):

1. If cleanup is done by hand wiping and closed containers are used to store the cleanup cloths, assume 50% of the solvent is retained in the cloths and 50% is emitted if the solvent has a vapor pressure of 10 mm Hg or lower at 20 degrees Celsius (68 deg. F).

If you have any questions regarding emission calculations for printing lines, please contact Rick Carleski at (614) 728-1742 or Tom Kalman at (614) 644-3598.

Thank you.

cc: Jim Orlemann, DAPC
Mike Hopkins, DAPC
Bill Stickney, PIO

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State of Ohio Environmental Protection Agency

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Ref- draft Mar ch 31

George V. Voinovich
Governor

To: Distribution

From: Bob Hodanbosi Chief, DAPC, Ohio EPA

Re: "Replacement" Source Guidance - DRAFT - For Comment

Date: March 22, 1995

The following policy is in draft form. This draft policy is being issued to solicit comments from all parties involved. Any comments on this draft policy should be submitted to Mike Hopkins, Manager, Air Quality Modeling and Planning Section, Ohio EPA, PO Box 1049, Columbus, Ohio 43216. Comments received prior to April 30, 1995 will be considered prior to final issuance of the policy.

Background: In March 1994 the Ohio Supreme Court issued a decision in State v. National Lime & Stone Company that affected our interpretation of when an entity putting in a piece of equipment is required to have a permit to install. The court stated that:

> A like-kind replacement of a piece of equipment that is a component of a complex manufacturing operation involving the emission of an air contaminant does not constitute "the installation of a new source of air pollutants" within the meaning of OAC Rule 3745-31-02(A).
>
> 68 Ohio St. d at 377.

Additionally, the Supreme Court stated

> In considering the parties' contentions, the trial court determined that Ohio Administrative Code 3745-31-02(A) does not govern the **replacement** of any air contaminant source, but rather requires a PTI only for the **installation** of a new source of air contaminants or the **modification** of an air contaminant source. The trial court further concluded that the term "replacement" could easily have been included in the rules, but, since it was not the doctrine of expressio unis est exlusio alterius applies.
>
> 68 Ohio St. d at 381-82

Guidance:

The practical effect of this decision will come when you inspect a facility and find a new piece of equipment that the owner

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claims is merely a replacement for a prior piece or when a company owner asks you whether or not he needs a PTI for a particular piece of equipment and you discover it replaces an existing piece of equipment.

In both cases the analysis is the same. The first question to ask is: Leaving the question of replacement entirely aside, does the installation of this equipment fit within our definition of either "install" a new source or "modify" an existing one. If the answer is "yes" and no exemption applies, then you apply the following criteria:

1. Is the piece of equipment free-standing, i.e., not connected to any other part of the operation like a boiler to heat the office buildings? This evaluation should be similar to the bottlenecking evaluation. Can the piece of equipment operate on its own? Or, is it part of a complex operation in which all components of the complex operation must operate together?

   If replaced operation is an independent operation then a PTI is required. If not, go on to the next question.

   The following are examples:

   a. *Printing lines typically consist of one or more print stations. Each print station cannot operate on its own - it needs the rest of the line (paper unrolling, paper cutting, ovens, paper rolling, etc.) in order to operate. In this case, the replacement of a printing station, if it met the additional tests described below (not a major modification, no new emissions, no increase in allowables, etc.), would not need a permit to install.*

   b. *In the National Lime and Stone case, a rock crusher was replaced in a rock crushing and sizing line. The rock crusher was designed as part of the complex operation - the crushing and sizing line. The rock crusher was not designed to operate independently and instead was designed to operate as part of the line. The court decided that this was part of a complex operation which was a replacement and, because it met the additional test described below, did not need a permit to install.*

   c. *Take the case of a coal-fired boiler which provides process steam to a manufacturing operation. Boilers in this case typically operate independently (they often start-up prior to any manufacturing and shutdown before manufacturing is complete). If a company wants to replace this type of boiler, because it is an*

independent operation, they must obtain a permit to install.

d. *Take the example of a burner in a bake-off oven. A bake-off oven typically has multiple burners, conveying equipment, and exhaust equipment. The burner would be considered a piece of equipment in a complex manufacturing operation (emissions unit). The burner would not operate independently of the oven. If the company wants to replace the burner and it meets the additional criteria described below, then no permit to install is required.*

2. Is the emissions unit a significant air pollution source per OAC rule 3745-31-01(O)? If no, go on to the next question. If yes, does any increase in emissions result in ambient impacts greater than the modification thresholds under OAC rule 3745-31-01(J)(1)(b)? If yes, then a permit to install is required. If no, go on to the next question.

Discussion:

OAC rule 3745-31-01(O) defines what is considered a "significant air pollution source." This evaluation should be done before the modification and should look at the existing emissions unit, not just the replaced part of the emissions unit. The significants cutoffs are as follows:

Particulate Matter	*100 tons per year*
Sulfur Dioxide	*100 tons per year*
Nitrogen Oxides	*100 tons per year*
Organic Compounds	*100 tons per year*
Carbon Monoxide	*1000 tons per year*
Lead	*2 tons per year*

If the emissions unit is considered a significant air pollution source, then modeling must be done to determine if the impact of the increase of emissions is greater than the ambient impact threshold levels. This modeling should follow Ohio EPA modeling guidelines. These threshold levels can be found in OAC rule 3745-31-01(J)(1)(b). If the ambient impact due to the change is greater than the threshold levels, then a permit to install is required.

3. Is the modification a major modification under federal rules as per OAC rule 3745-31-(J)(1)(a)(iv)? Remember, the federal rules have their own methods of deciding if a modification triggers NSR, NSPS, or NESHAPS. If it is a major modification under federal rules, then a permit to install is required. If not, then go on to the next question.

4. Did the replacement component relocate? If yes, determine if the portable source policy (Engineering Guide number 44) requires a permit to install. If the engineering guide requires a permit to install, then a permit to install is required. If the engineering guide does not require a permit to install, then go on to the next question.

5. Did the change result in the emission of any type of air contaminant which was not previously emitted? If yes, then a permit to install is required. If no, then go on to the next question.

6. Is there an increase in the allowable air contaminant emission rate under any applicable law? (Note: Extremely minor increases should not be considered unless they result in the emissions unit no longer being in compliance with existing emissions limits.)

   If yes, a PTI is required. If no, no permit to install is required.

   An example of this evaluation is as follows:

   Company Pollute, Inc. operates a widget operation which is regulated under OAC rule 3745-17-11. This process has a process weight rate of 60 pounds per hour. The company proposes to replace a part of the widget operation (a complex operation) which results in a new process weight rate of 62 pounds per hour (a minor increase). The allowable emissions are based on Table I of rule 3745-17-11. Under this table, the original allowable is 0.551 pounds per hour. This limit is listed in their permit. At 62 pounds per hour process weight rate the allowable based on Table I is also the same - 0.551 pounds per hour. In this case no permit to install is needed if it meets the other criteria.

Attached is a flow chart which graphically illustrates this guidance. Any questions or comments concerning this policy should be directed to Mike Hopkins, Manager, Air Quality Modeling and Planning Section, Ohio EPA.

MH/
\wp\policy\natlime

Attachment

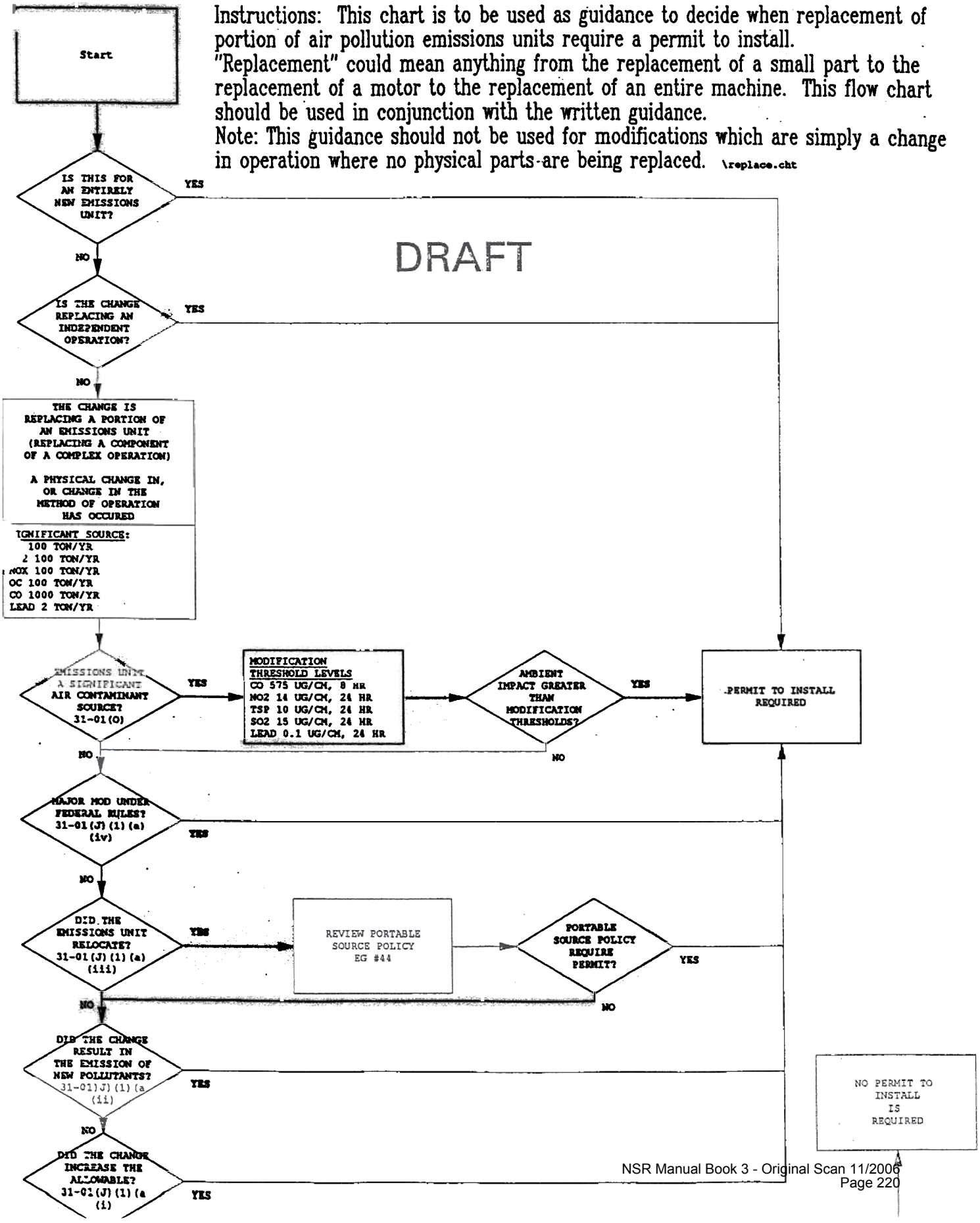
Distribution:

All DO/LAA Air Unit Supervisors
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Tom Rigo, DAPC
Jim Braun, DAPC
Misty Parsons, DAPC
Alan Lloyd, DAPC
Jeanne Mallett, OEPA Legal
DAPC Air Lines
DAPC BBS

Ohio EPA DAPC Replacement Guidance Flow Chart

Instructions: This chart is to be used as guidance to decide when replacement of portion of air pollution emissions units require a permit to install. "Replacement" could mean anything from the replacement of a small part to the replacement of a motor to the replacement of an entire machine. This flow chart should be used in conjunction with the written guidance.

Note: This guidance should not be used for modifications which are simply a change in operation where no physical parts are being replaced. \replace.cht



8/7/94 - Marty, Jim, Alan, please review this and prepare comments. Lee will need to prepare guidance for NSR

cc Marty Parsons
Jim Bikash
Alan Lloyd

Attorney General
Lee Fisher

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MEMORANDUM

Bob Hodanbosi, OEPA/DAPC
Jim Orlemann, OEPA/DAPC
Tom Rigo, OEPA/DAPC
Jeanne Mallett, OEPA/Legal

FROM: **Christopher Korleski, Air Program Supervisor, EES**

DATE: **June 9, 1994**

National Lime & Stone Company/Review of Decision

It is the opinion of the Supreme Court, as stated in the syllabus of the opinion, that:

> Like-kind replacement of a piece of equipment used in manufacturing operations involving emission of an air contaminant does not constitute "the installation of a new source of air pollutants" within the meaning of OAC Rule 3745-31-02(A).

68 Ohio St. 3d at 377. Stated somewhat differently, the Court stated that:

> A like-kind replacement of a piece of equipment that is a component of a complex manufacturing operation involving the emission of an air contaminant does not constitute "the installation of a new source of air pollutants" within the meaning of OAC Rule 3745-31-02(A).

Id.

Additionally, the Supreme Court stated:

> In considering the parties contentions, the trial court determined that Ohio Administrative Code 3745-31-02(A) does not govern the *replacement* of any air contaminant source, but rather requires a PTI only for the *installation* of a new source of air contaminants or the *modification* of an air contaminant source. The trial court further concluded that the term "replacement" could easily have been included in the rules, but, since it was not, the doctrine of *expressio unius est exclusio alterius* applies. We agree. (underlining added).

Id. at pp. 381-2.

A. Free-standing sources v. "Components of Complex Manufacturing Operations"

The Supreme Court does not expressly hold that the like-kind replacement of a source of air contaminants is not an installation, but rather that the replacement of a "piece of equipment that is a component of a complex manufacturing operation involving the emission of an air contaminant" does not constitute installation. The majority did not look at the definition of "air contaminant source" nor look at the issue of whether or not it was an "air contaminant source" which was actually replaced. Rather, without much explanation, and without addressing the issue of whether or not the replaced mill was an air contaminant source, the Court simply became fixated on the concept that there had been a replacement of a piece of equipment that was a component of a complex manufacturing operation. Implicitly, the Court seems to treat the entire facility as a source and not as a combination of several individual air contaminant sources. Further, the Court provided no elucidation of the concept of a "complex manufacturing operation".

Based on the Court's focus on "complex manufacturing operation", Ohio EPA could perhaps make a distinction between sources which are pieces of equipment that are components of complex manufacturing operations, and sources which are more of a "free-standing" (my term), discrete, and separable nature. Based on this distinction, Ohio EPA could potentially argue that a like-kind replacement of some sort of "free-standing" source would, even under the Supreme Court's opinion, still require a PTI prior to installation. However, if the Agency attempts to impose PTI liability when such a "free-standing" source is replaced, the business entity will likely argue that such a construction is an overly-semantic one and that the economic and business efficiency principles underlying the Supreme Court's decision should apply whenever there is a like-kind replacement of a source,

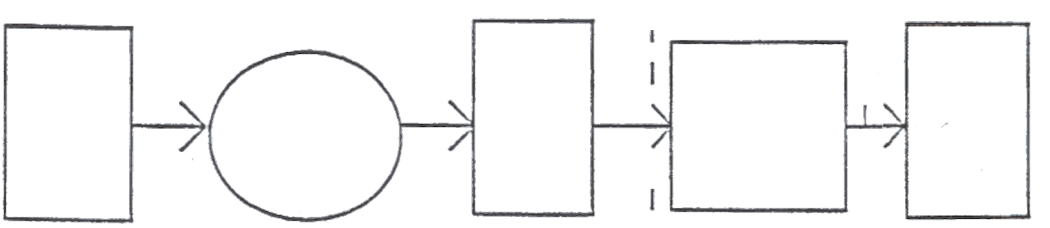
regardless of whether it is "free-standing" or a "component source". Additionally, such an entity would surely focus on the Supreme Court's express assertion on pages 381-2 of the opinion that the concept of "replacement" simply does not fall within the definition of installation within 31-02(A). Since that rule interpretation would apply regardless of whether it was a free-standing source or a component source, the entity would have a good argument that a PTI was not required. Further, I wonder if there are many such "free-standing" sources and if in fact most businesses could credibly argue that their sources are "components" of a complex manufacturing operation.

B. Like-Kind Replacement

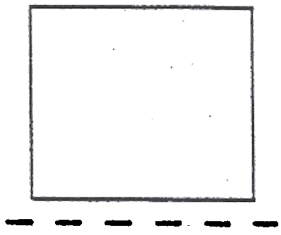
The most important concept in the decision is the Supreme Court's use of the phrases "like-kind replacement" and "replacement". First, as noted above, the Court expressly stated that it views "replacement" as being different from "installation". However, by focusing on "like-kind" replacement, the Court seems to be suggesting that a "replacement" only occurs if the replacement device is of a "like-kind" to its predecessor. The question arises: What exactly is "like-kind" replacement? Under the facts of this particular case, the replacement piece of equipment was not exactly identical with its predecessor. Indeed, on page 378 of the Opinion, the Court noted that the replacement mill differed from the prior mill, although the Court emphasized that the differences were "only" in terms of the number and size of the rollers and grinding ring. The Court, on page 381 of the Opinion, however, seems to have concluded that the new mill was "virtually identical" with the prior mill. At any rate, it seems that in interpreting the applicability of the decision in a given case, the Agency must closely compare any replacement source with its predecessor and focus on the degree of similarity. Potential factors to be considered could include the source's function, dimensions, rated capacity, potential to emit, actual emissions, types of pollutants emitted, etc.

In thinking about this issue of what constitutes "like-kind" replacement, I thought it would be helpful to set forth a number of hypotheticals in order to focus the Agency's thinking on this matter. First, imagine the following two general scenarios:

SCENARIO A: Complex Manufacturing Operations



SCENARIO B: Free-Standing Source



Whether the source in question is a "component" source or a "free-standing" source, as diagrammatically represented above, I believe the following hypotheticals will illustrate the issues which the Agency must consider in determining if there has been a like-kind replacement such that no PTI is required pursuant to the language of the decision.

For purposes of the following hypotheticals, assume that there is a business entity of some sort that intends to replace the air contaminant source which is bounded by the dotted line. Let's assume that the existing source has potential emissions of particulate matter of 50 tons per year, allowable emissions of 30 tons per year and actual emissions of 25 tons per year. Let's assume the existing source is manufactured by X-brand, is blue in color, and consists of three rotating interior components known as widgits. Under the following scenarios, the question to keep in mind is whether or not a like-kind replacement has occurred.

Hypothetical A:

Assume that the existing source, as described above, is replaced by a source that is manufactured by the same company, is the same color, has the same kind and amounts of interior widgits and has the same potential to emit particulate matter. Further, assume that the source will be operated in the same manner as the predecessor source and that there will not be a change in actual emissions.

Evaluation:

This would appear to be an "identical" source, and it appears that the installation of this source would not, pursuant to the decision, require the application for and issuance of a PTI. This presupposes, however, that the entity would operate this replacement source at the same level of actual emissions, and that there would be no need to consider whether or not the allowable emissions were going to change.

Hypothetical B:

Hypothetical B raises the question of what would happen in the event

the entity installed the physically identical source described under Hypothetical A, but increased its actual emissions from the source to such a level that they exceeded the existing allowable emissions. Under such a scenario, several questions are raised. First, what would be the legal effect of increasing actual emissions to a level greater than allowable emissions? Second, assuming the source had been operating pursuant to a PTO wherein the allowables were expressed, there would be a violation of the PTO. Third, since the emissions from the replacement source were greater than those from the predecessor source, it could be argued that this in fact was not a "like-kind" replacement, i.e., because the replacement source was contributing emissions at a greater level than the predecessor source, this did not simply constitute a replacement of one identical and identically-operated source for another. While, from an environmental standpoint, it makes sense to look at the actual (or potential) emissions from a source in determining whether or not it is like-kind, please note that there is no basis for such a distinction in the Supreme Court's opinion, as the Supreme court did not address emission levels at all. It appears that in using the phrase "like-kind", the Court was focusing on the physical structure of the replacement source and not its resultant emissions. Nevertheless, I believe it makes sense for the Agency to view the potential and actual amounts and types of emissions from the new source as the fundamental criteria in determining whether or not a "like-kind" replacement has occurred.

Hypothetical C:

Let's assume the replacement source is not "virtually identical" to the prior source. Perhaps it is made by a different manufacturer, perhaps it uses a slightly different technology, or perhaps its internal workings are rearranged differently. The question is, does this constitute a like-kind replacement? Again, I think the Agency should look at any changes in emissions emanating from the replacement source. If there is an increase in potential or actual emissions such that the replacement source was exceeding its existing permit limitation or if there is a needed change in the allowable emissions it could be argued that this is not a like-kind replacement, and that therefore a PTI is necessary. (This hypothetical, like Hypothetical B, raises the question of whether a "modification" has occured such that a PTI would be required regardless of whether a "like-kind replacement" had occurred.

Hypothetical D:

However, what if the replacement source resulted in similar or less emissions than its predecessor source? Again, let's assume that the replacement source is not virtually identical in some physical respect. Nevertheless, despite some physical difference in the source, if the source has the same potential to emit and the same actual emissions as the predecessor source, and in fact there are not exceedances of the allowable emissions which were applicable to the predecessor source, then this does seem like a "like-kind" replacement of the

predecessor source. Consequently, under such a scenario, there would seem to be little reason to argue that a PTI was required. Alternatively, what if the replacement source actually resulted in lower emissions than those emitted by the predecessor source? In this hypothetical, both the emissions and the physical makeup of the source are different and it could be argued, on both these levels, that this is not a like-kind replacement. Nevertheless, because emissions are fewer, the business entity could argue that no PTI is required because the Agency's primary concern, i.e., increased emissions, was not applicable.

If the Agency agrees that the most fundamental component in determining whether a source is a "like-kind" replacement is the actual (or potential) emissions that will result therefrom, as opposed to its manufacturer, superficial appearance, internal workings, etc., then it appears a fundamental problem arises, i.e., how does the Agency know whether or not the source is in fact a like-kind replacement until it reviews a PTI application (which the entity will not even submit if the entity believes it is a like-kind replacement)? Does this approach create a scenario whereby the Agency wants a PTI application, but in a given instance may conclude that there has been like-kind replacement, and therefore, no actual PTI must be issued? Such an approach would conflict with industries' likely interpretation that if it meets the definition of like-kind replacement, as industry defines it (whatever that may be), no application need be submitted in the first place. It would appear that the Agency is going to have to put regulated entities on notice as to what it believes a like-kind replacement is and give industry some sort of notice. Otherwise, we will have the "chicken and egg" problem described above.

In looking at this issue as a whole, I believe it is important for Ohio EPA to consider whether the emissions that will actually enter the ambient air as a result of the Agency not being able to apply BAT to replacement sources are a serious threat to the maintenance or attainment of the ambient air quality standards. Assuming that "like-kind replacement" is synonymous with installing replacement sources which contribute emissions equal to those emitted by the predecessor source, can the Agency live with such replacement sources being installed without BAT?

Finally, I should point out that the Supreme Court's opinion is not a model of clarity, and that the Court did not appear to anticipate or be concerned about the difficulty the Agency would have in construing and interpreting the opinion. Consequently, given this lack of clarity (and some differences of opinion even in this Office alone about the meaning and effect of the opinion) it is impossible to simply tell you "what to do"on a generalized basis. Instead, it is my hope that this memo will serve to clarify the issues which I feel the Agency must consider in light of the decision and your environmental objectives. We remain willing to work

with you and provide you with counsel as you deal with the decision on a case-by-case basis, which is, I expect, the way in which the opinion will actually be implemented.

cc: Jack Van Kley, Chief, EES
Peggy Malone, AAG, EES
Gary Cox, AAG, EES
Chris Walker. AAG. EES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

RECEIVED
DEC 10 1999

DEC 06 1999

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

RE: **New Web Address and On-line Data Entry for the RACT/BACT/LAER CLEARINGHOUSE (RBLC)**

The RBLC will be moving to a new Web address during the Christmas/New Years Holidays. If you currently have the RBLC Web site bookmarked, you need to be aware of this change. If you use the old address after the change you will get an error message because the old RBLC server will be off line. After the change, go to the Clean Air Technology Center (CATC) Web at < http://www.epa.gov/ttn/catc/ > to access the RBLC. Just click on the RBLC graphic at the bottom center of the CATC Home Page and you will go directly to the new RBLC address. You can either continue to access the RBLC Web through the CATC or you can bookmark the new RBLC Web site once you get there.

This move also will initiate some changes to the RBLC. One important change is the ability to enter data on the RBLC Web. Because this is a new data entry system, a new security system is required. To be able to enter data on the RBLC Web, your agency must submit a letter designating the person authorized to enter data. **Both new candidates and those who had been authorized to enter data under the old on-line Bulletin Board System (BBS) must submit a new authorization from their agency.** The authorization letter must be signed by the candidates supervisor, program manager, or agency director, and must be on agency letterhead. The letter must indicate the actual name of the person that will be entering data, and a password (8 or more alpha-numeric characters, case sensitive). For your convenience, this information may be submitted on the attached form. The completed form should be attached to your agencies authorization letter. Only authorized individuals will be allowed to enter and edit RBLC data for a specific agency on the RBLC Web. Send authorization letters to:

Mr. Joe Steigerwald (MD-12)
RACT/BACT/LAER Clearinghouse
U.S. EPA
RTP, NC 27711

If you have questions concerning this matter, call Joe Steigerwald at (919) 541-2736.

Have a great holiday season.

Bob Blaszczak
Clean Air Technology Center Program Manager

Enclosure

Internet Address (URL) • http://www.epa.gov
Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 25% Postconsumer)

RACT/BACT/LAER Clearinghouse (RBLC)

To: Primary State/Local Contacts;

The Reasonably Available Control Technology (RACT) / Best Available Control Technology (BACT) / Lowest Achievable Control Technology (LAER) Clearinghouse Information System (RBLC) is moving to the World Wide Web (WWW) and closing the RBLC site on the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) Bulletin Board System (BBS). The TTN and RBLC BBS sites closed on November 12th, 1999. The significance of this is that authorized State/local agency users could directly input and change their RBLC determinations only through the RBLC BBS site. When the BBS site was closed this function was lost. However, do not despair! The new RBLC Web site will allow direct input and update capability to authorized State/local agency users.

The new RBLC Web will allow direct entry and update capability for State, local, and Regional air pollution control agencies. In order to directly enter and/or update data in the RBLC database your agency must designate the person who will enter the data and complete the lower portion of this form and return it to the Clearinghouse. Please note that the submittal of RBLC data summary forms will remain as an alternative to the direct entry of data; however, all agencies are encouraged to directly enter their determinations into the Clearinghouse.

To access the RBLC Web site go to <http://www.epa.gov/ttn/catc/> and click on the icon of the computer with RBLC on it's screen.

Please type or print the name, telephone number, and agency name of the person that will have update authority for the RBLC Web.

Name: _____ Telephone Number: _____

Agency Name: _____

Signature and Date: _____

Authorized RBLC Web updaters will need a RBLC Edit password. The password may be any combination of at least 8 alphanumeric characters. Controlling access to this password is very important because whoever uses this password may enter and/or alter your agency's RBLC data. Please enter the RBLC Edit password the authorized user will use here (remember, this will be case sensitive):

Authorized RBLC Edit Password: _____

Please sign and date this form and forward it to your supervisor. Please ask your supervisor to enter his or her name and telephone number and to sign and date this form.

Supervisor's Name (please print): _____

Supervisor's Signature and Date: _____

When completed, please return this form to: Mr. Joseph Steigerwald
RBLC
US EPA, MD-12
Research Triangle Park, NC 27711

Route ~~Bosty~~ ~~Alan~~, ~~Sarah~~, [redacted] 2 Aerif Bookish

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAR 05 1999

RECEIVED
MAR 12 1999

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

**STATE, LOCAL AND REGIONAL OFFICE
NEW SOURCE REVIEW - RACT/BACT/LAER CLEARINGHOUSE
PROGRAM CONTACTS**

Once again, it is time to finalize this year's (1999) edition of the RACT/BACT/LAER Clearinghouse (RBLC). You are requested to submit any new determinations not previously submitted to the Clearinghouse by May 1, 1999. You are encouraged to submit source specific RACT determinations and/or determinations not covered by existing EPA Control Technique Guidelines (CTG's) along with your BACT/LAER determinations. The RACT determinations which are covered by and consistent with EPA developed CTG's are not being requested since they would only duplicate the control levels specified as RACT in the CTG's. The non-CTG RACT rules may be entered directly in the RBLC Rule Data Base. Remember, Section 173(d) of the 1990 Clean Air Act requires that States submit LAER permit determinations to the RBLC.

Instructions for completing the "RACT/BACT/LAER DETERMINATION INPUT FORM" sheet are enclosed. The instructions include a copy of the input form. Please use the enclosed version of the form and discard previous outdated versions. Please refer to the current edition of the RBLC User's Manual for additional information as required. If you still need help completing the form or have any questions concerning the RBLC, contact me at (919) 541-2736. Copies of the data submittal forms and instructions are also available on the RBLC World Wide Web (WWW) site.

As an alternative to submitting forms, your agency can submit additions in two electronic formats. First, data may be entered directly into the RBLC data base while on-line with the RBLC Bulletin Board System (BBS) on the Technology Transfer Network (TTN) if your agency has a user authorized to enter information directly into the RBLC data base. Second, you may use the standalone version of RBLC on your PC and submit your determinations on a diskette. (See the enclosures for more information on this alternative.) The RBLC is currently working

on updating the data input system to support entering RBLC determinations directly from the Web. If everything goes as planned, authorized users will be able to enter their agency's new determinations using the Web sometime in the Fall of 1999. Once this capability is available, the RBLC will notify authorized users of its availability.

Completed forms must be submitted to:

RBLC, ITG, ITPID
U.S. EPA
MD-12
Research Triangle Park, NC 27711

The RBLC staff will be making a concerted effort to improve quality control for data entering the system, but we need your help. Please take the time to read the instructions and properly complete all applicable items on the determination input form. There have been a number of questions on the input forms in the past. The instructions enclosed address most of these. One critical item is the process type code. It is critical that you clearly indicate the process name and process type code. If these are not correct, vague or misleading, it will be extremely difficult to identify relevant data when searching the data base. Use the "note" portion of the form to clarify your determination, especially if the source falls into one of the "other" categories which are included as catch-alls under most process type category headings. Another area of change this year involves New Source Review (NSR) information. The RBLC is currently revising its data base structure to include NSR data elements. This effort is currently scheduled to be complete in the Fall of 1999. The RBLC will be sending out additional information on these changes and their effect on data entry requirements later this summer. Please stay tuned.

The 1999 document will include all new determinations submitted to the RBLC from June 1998 through May 1999. To assist each agency, a summary that lists the number of determinations that each State or EPA Region has submitted during the period 10/97 through 9/98 has been enclosed.

I have also enclosed a copy of the letter from Bob Blaszczak to the RBLC State and Local Agency contacts sent with last year's annual request for new RBLC determinations that will hopefully serve to remind users of the initiative started last year to make the data in the RBLC more comprehensive. Please take the time to read it over one more time.

Thank you for your cooperation.

Sincerely,

Joe Steigerwald
RACT/BACT/LAER Clearinghouse

6 Enclosures

Enclosure 1

Submissions to RBLC by EPA Region and State for the Period October 1, 1997 through September 30, 1998.

EPA Region	State (number submitted)	Total
1	CT(1), ME(2), RI(1)	4
2	NY(1), PR(3)	4
3	DE(2), VA(2), PA(5)	9
4	AL(14), FL(1), SC(2), TN(1)	18
5	IN(5), MI(1), MN(3), OH(1)	10
6	NM(8), LA(4)	12
7	IA(2), MO(38)	40
8	CO(12), MT(2), ND(2), WY(18)	34
9	CA(53)	53
10	OR(3)	3
Grand Total		187

Enclosure 2

Clean Air Technology Center (CATC)

RACT/BACT/LAER Clearinghouse (RBLC)

March 3, 1998

TO: State and Local Agency RBLC Contacts/Representatives

The RBLC has a new initiative and we need your help. The initiative is to make the RBLC data base complete, comprehensive and up to date. Many facilities have received permits that require BACT, LAER, or achieved precedent setting emission reductions, but are not reported in the RBLC database. The RBLC database is required by the Federal Clean Air Act and is maintained for your convenience and use, as well as for industry and consultants, to aid in preparing and reviewing permit applications. Your cooperation in submitting information to the Clearinghouse for these and other relevant determinations is requested.

You should note that Section 173(d) of the Clean Air Act requires State and local agencies to submit to the RBLC information on Lowest Achievable Emission Rate (LAER) determinations pursuant to State Implementation Plan (SIP) nonattainment area requirements. Proposed Federal Regulations regarding Prevention of Significant Air Quality Deterioration (PSD) would impose a similar requirement for Best Available Control Technology (BACT) determinations. Although submittal of Reasonably Available Control Technology (RACT) determinations is not required by statute or regulation at this time, sharing your key RACT determinations and rules with other State and local agencies through the Clearinghouse is encouraged. Note that the RBLC's regulation data base offers a single data entry opportunity for RACT requirements in lieu of multiple entries for sources subject to the same RACT rule.

We also are aware that emission sources may implement precedent setting levels of pollution prevention or control to avoid applicability of BACT and LAER new source review (NSR)

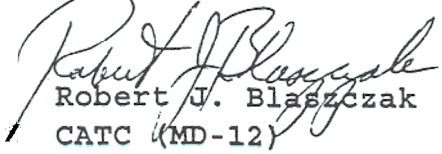
permitting requirements. Although these sources may not have triggered a formal major NSR process, they may have achieved or demonstrated the lowest emission rate for a particular type of source. Since information on this type of air pollution prevention or control achievement is critical to BACT/LAER decision making across the United States, we encourage you to submit information on these precedent setting achievements, even if the source was not subject to formal NSR permit processes.

I have enclosed an RBLC data input form with instructions (Appendix E) for your convenience. Information also can be submitted electronically by using the RBLC Standalone Editor or directly on-line. The Standalone Editor is a program that simulates the Clearinghouse and runs on your personal computer. It generates electronic data files that can be submitted on a floppy disk or by E-Mail. The program can be downloaded from the CATC Internet World Wide Web Page (CATC Web) at < http://www.epa.gov/ttn/catc >. You can also access the new RBLC Web from the CATC Web home page. The RBLC Web is a fully functional web site that provides complete access to RBLC data.

On-line data entry is a little more complicated. It allows a designated person from your agency to enter data directly to the RBLC transient data base. Currently this can be accomplished by accessing the old RBLC electronic bulletin board system (BBS) through a direct telephone modem connection or through a Telnet connection on the Internet. If you are interested in direct on-line data entry, please contact Joe Steigerwald at (919) 541-2736. Note that we are considering the possibility of on-line data entry directly on the World Wide Web and would appreciate receiving your agency's opinion regarding the need for this service.

Thank you for your cooperation. For your information, I have enclosed a copy of the new CATC brochure. The CATC has replaced the Control Technology Center (CTC) and includes the RBLC. If you have any questions concerning this matter, please contact me at the above address or call (919) 541-5432.

Sincerely,



Robert J. Blaszczak
CATC (MD-12)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAR 05 1999

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MAR 12 1999
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AND STANDARDS

STATE, LOCAL AND REGIONAL OFFICE
NEW SOURCE REVIEW - RACT/BACT/LAER CLEARINGHOUSE
PROGRAM CONTACTS

Once again, it is time to finalize this year's (1999) edition of the RACT/BACT/LAER Clearinghouse (RBLC). You are requested to submit any new determinations not previously submitted to the Clearinghouse by May 1, 1999. You are encouraged to submit source specific RACT determinations and/or determinations not covered by existing EPA Control Technique Guidelines (CTG's) along with your BACT/LAER determinations. The RACT determinations which are covered by and consistent with EPA developed CTG's are not being requested since they would only duplicate the control levels specified as RACT in the CTG's. The non-CTG RACT rules may be entered directly in the RBLC Rule Data Base. Remember, Section 173(d) of the 1990 Clean Air Act requires that States submit LAER permit determinations to the RBLC.

Instructions for completing the "RACT/BACT/LAER DETERMINATION INPUT FORM" sheet are enclosed. The instructions include a copy of the input form. Please use the enclosed version of the form and discard previous outdated versions. Please refer to the current edition of the RBLC User's Manual for additional information as required. If you still need help completing the form or have any questions concerning the RBLC, contact me at (919) 541-2736. Copies of the data submittal forms and instructions are also available on the RBLC World Wide Web (WWW) site.

As an alternative to submitting forms, your agency can submit additions in two electronic formats. First, data may be entered directly into the RBLC data base while on-line with the RBLC Bulletin Board System (BBS) on the Technology Transfer Network (TTN) if your agency has a user authorized to enter information directly into the RBLC data base. Second, you may use the standalone version of RBLC on your PC and submit your determinations on a diskette. (See the enclosures for more information on this alternative.) The RBLC is currently working

Enclosure 3

OBSOLETE

INSTRUCTIONS FOR COMPLETING RACT/BACT/LAER CLEARINGHOUSE

INPUT FORM

1. Company Name/Site Location: Insert name and address of the proposed facility. The address should be the location of the proposed facility, not the address of the parent company, unless they are the same.

2. Determination Made by: Designate the permitting agency and the person to whom telephone requests should be directed. This should be the person most capable of responding to factual questions about the permit decision. Please include the area code with the phone number.

3. Permit/File Number: This should be the identification number assigned by the agency that issued the permit.

4. ID Numbers and Codes: Fill-in the requested AIRS identification number, if available, and the SIC code.

5. Scheduling Information: Permitting scheduling dates stored include:

   - receipt of application (estimated or actual)
   - final permit issued (estimated or actual)
   - start-up operation (estimated or actual)
   - compliance verification (estimated or actual

   Please enter all of the scheduling information available.

6 Facility Notes: This section is for the completion or elaboration of any of the above items where space was a problem. Also, any information that you feel other agencies should know about this determination should appear here. Notes are typically used for the following:

   * More than one permit number
   * More detail on a particular process
   * More than one contact person
   * Further explanation regarding the designation of a source as new or modified
   * Further explanation of the emission limit or the support documentation associated with setting the limit (i.e., limit based on design or stack test)

7. Process Description: List all processes subject to this permit by name (e.g., kiln, boiler) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard has been specified. Use additional pages as necessary. Additional information on a process may be placed in the Process Notes section.

   Process name or process equipment should be listed using one of the process categories listed in Appendix C (Detailed Listing of Proposed Process Categories). A descriptor may be added behind the generic category name. For example,

   Boiler, coal-fired, 3 each
   Kiln, 3 each
   Conveyors, coal/limestone
   Furnace, arc
   Boiler, recovery
   Boiler, power
   Engines, gas-fired

8. Process Type Code: A code assigned to each process (see Appendix B) used to categorize determinations.

9. SCC Code: This code is the standard source classification for processes used throughout the Office of Air at EPA.

10. Throughput Capacity: Indicate the maximum design capacity of the unit. Use the same units of measure used in the NSPS to describe the size of a source. Wherever possible, use the list of standardized abbreviations for process and emission limit - Appendix D.

11 Compliance Verification: This series of fields allows you to enter a yes or no response to the following questions:

   - Compliance verified?
   - Method of confirmation:
     Stack testing?
     Other testing?
     Inspection?
     Calculations?

   You may also enter a narrative description of other types of confirmation methods.

12. Process Notes: This field should contain any additional information on the process being permitted.

13. Pollutant(s) Emitted: Make an entry for each pollutant or parameter for which a control requirement or other restraint

has been specified (PM, SO_2 CO_2, NO_2, opacity, or others). Use a separate block for each entry, and identify the pollutant and provide its Chemical Abstracts (CAS) number. Use the following standard abbreviations for these common pollutants whenever possible:

PM	Particulate Matter
SO_2	Sulfur Dioxide
NO_2	Nitrogen Oxides
CO	Carbon Monoxide
VOC	Volatile Organic Compounds
VE	Visible Emissions
TRS	Total Reduced Sulfur
F	Fluoride
Be	Beryllium
H_2S	Hydrogen Sulfide
Hg	Mercury
VC	Vinyl Chloride

Abbreviations for other pollutants are listed in Appendix D, along with CAS numbers.

14. Emission Limit(s): For consistency and ease of comparison, list the emission limit or rate in the units of measure listed in Appendix C or those used in AP-42. Wherever possible use the list of standard abbreviations (Appendix D).

There are multiple emission limits in the Clearinghouse, they are:

Primary emission limit and units: The primary emission limit listed in the permit.

Alternate emission limit and units: If provided on the permit, these numbers represent any alternate emission measurements which the facility may make.

Standardized limit and units: This limit allows comparison with other similar determinations in the RBLC. Standard units are provided for certain process types (see Appendix D) so that users can compare the entries in this field to determine the most stringent limits.

The base-line limit is no longer used in the RBLC data base

15. Emission Type: A one-character field indicating whether the emission is fugitive, point-source, or area-source.

16 Pollution Reduction Ranking Information: Two pieces of information are requested: The number of options examined and the rank of the option selected. The "rank" is the number of the option selected when the options are ordered according to the performance of the system. Number 1 would be the best controlled system, number 2 would be the next best, etc.

Regulatory Requirements Associated with Limit (Basis of Limit): Indicate the regulatory requirement that precipitated establishing the limit presented, i.e., BACT-PSD, BACT-Other, LAER, MACT, RACT, GACT, NSPS, NESHAP, or Other. Do not list such items as stack test, design or others. These items generally represent the supporting information that may have been used to document or establish the given limit. Such items should be included in the Notes section.

To facilitate the identification of limits use the following abbreviations:

- BACT-PSD (Prevention of Significant Deterioration)
- BACT-Other (regulated by State/local rules, not PSD)
- LAER (Lowest Available Control Technology)
- MACT (Maximum Achievable Control Technology)
- RACT (Reasonably Available Control Technology)
- GACT (Generally Available Control Technology)
- NSPS (New Source Performance Standards)
- NESHAP (National Emission Standards for Hazardous Air Pollutants)
- Other

18 Pollution Reduction Method Description: Describe the specific pollution prevention techniques and add-on equipment used to achieve the permitted emission limits. Specify "NONE" if no controls are feasible. Pollution prevention techniques include operational modifications, limits in the type and amount of raw materials used, limits on throughput or hours of operation, maintenance requirements, equipment specifications, or other limitations. Typical add-on equipment includes ESP, fabric filter, etc. Information in this section may be supplemented under the "Notes" section.

Please note that the RBLC no longer has separate fields for equipment manufacturer and model number. Place this information, if you have it, in the notes.

Overall Efficiency %: Enter the overall system pollution reduction efficiency, consisting of capture (hoods, ductwork, etc.) and collection (control device) efficiency.

Any breakdown of efficiencies for capture or collection individually should be shown under "Notes." For P2, indicate the overall effectiveness of the P2 methods.

20. Cost Data: Pollution Reduction costs include

- Capital cost of control equipment
- Annual operation and maintenance cost for all control methods
- Annualized cost (amortized capital cost + annual operation & maintenance costs)
- Cost effectiveness in dollars per ton (annualized cost/tons of pollutant removed)
- Year of the dollar used in cost calculations
- Cost verified by the permitting agency (yes or no)

When you have completed the form, mail it to the following address:

RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

ENCLOSURE

to: RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

Date Submitted

RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

Facility Information

Company Name: _____

Facility Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Permitting Agency: _____

Agency Contact: _____

Telephone Number: _____

Permit Number: _____

AIRS Facility Number: _____

EPA ID Number: _____

SIC Code: _____

Public Hearing Held? Y N

The Source is: New Modified (circle one)

Scheduling Information:	Date	(circle one)
Received Application:	/ /	Estimated/Actual
Final Permit Issued:	/ /	Estimated/Actual
Start Up Operation:	/ /	Estimated/Actual
Compliance Verification:	/ /	Estimated/Actual

Facility Notes: _____

Facility Notes (continued): _____

☐ Notes Continued on a Separate Page?

Process Information

Process Description: _____

RBLC Process Code: _____

SCC Code: _____

Throughput Capacity/Size: _____

Compliance Verified? Y N

By What Method? (circle those that apply):

Stack Test? Y N Calculation? Y N

Other Test? Y N Other Method? _____

Inspection? Y N _____

Process Notes : _____

Pollutant Information

Source Name: _____ Permit Number: _____

Process Description: _____ RBLC Process Code: _____

Pollutant Name: _____

CAS Number: _____

Emission Limit: Primary: _____

Alternative: _____

RBLC Std.: _____

Emission Type? (circle one): area point fugitive

No. of Pollution Reduction Options Examined: _____

Rank of Pollution Reduction Option Selected: _____

Basis of Limit (circle one): BACT-PSD BACT-Other
LAER MACT GACT RACT
NSPS NESHAPS OTHER

Pollution Reduction Method Description:

☐ Pollution Prevention (P2) ☐ Both P2 and Add-on
☐ Add-on Control Device ☐ No Controls Feasible

Pollution Prevention/Add-on Control Equipment Description: _____

_____

_____

Overall % Efficiency: _____

Cost Info: Capital Costs: _____

O & M Costs: _____

Annualized Costs: _____

Cost Effectiveness: _____

Costs are in _____ (year) dollars. Costs verified by Agency? Y N

Pollutant Name: _____

CAS Number: _____

Emission Limit: Primary: _____

Alternative: _____

RBLC Std.: _____

Emission Type? (circle one): area point fugitive

No. of Pollution Reduction Options Examined: _____

Rank of Pollution Reduction Option Selected: _____

Basis of Limit (circle one): BACT-PSD BACT-Other
LAER MACT GACT RACT
NSPS NESHAPS OTHER

Pollution Reduction Method Description:

☐ Pollution Prevention (P2) ☐ Both P2 and Add-on
☐ Add-on Control Device ☐ No Controls Feasible

Pollution Prevention/Add-on Control Equipment Description: _____

_____

_____

Overall % Efficiency: _____

Cost Info: Capital Costs: _____

O & M Costs: _____

Annualized Costs: _____

Cost Effectiveness: _____

Costs are in _____ (year) dollars. Costs verified by Agency? Y N

ENCLOSURE 5

USER'S MANUAL FOR THE RBLC DATA BASE

Part 5 -- Editing Information Online in the RBLC Data Base

Upon entering the RBLC information system you may choose to Browse, Query, or Edit. The first screen that you see is shown in Figure 5.1. This section of the RBLC User's Manual describes the Edit option. To choose Edit from the Main menu, simply press <E>. As with the Query section of the system, you must press the Enter key after each menu selection.

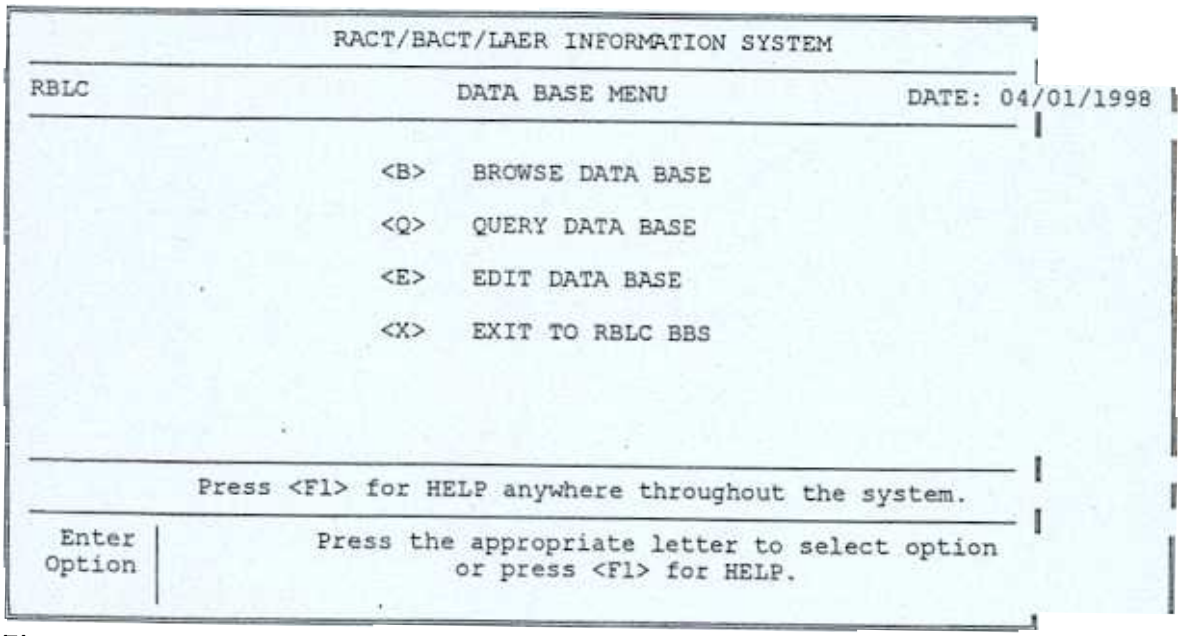


Figure 5.1 - RBLC Main Menu

It is important to note that the RBLC data base has an enhanced HELP system to provide assistance at any point during an edit session. When you press F1 to access HELP, the HELP system explains the screen you are currently viewing. HELP is context-sensitive, so that you do not have to scroll through long lists of values in order to find the one appropriate to your situation.

After you select Edit from the Main menu, the system asks you for a password (see Figure 5.2). In order to add or edit any information in the RBLC data base, you must have a valid TTN user ID and RBLC password. For information on obtaining a user ID see Part 1 of this User's Manual.

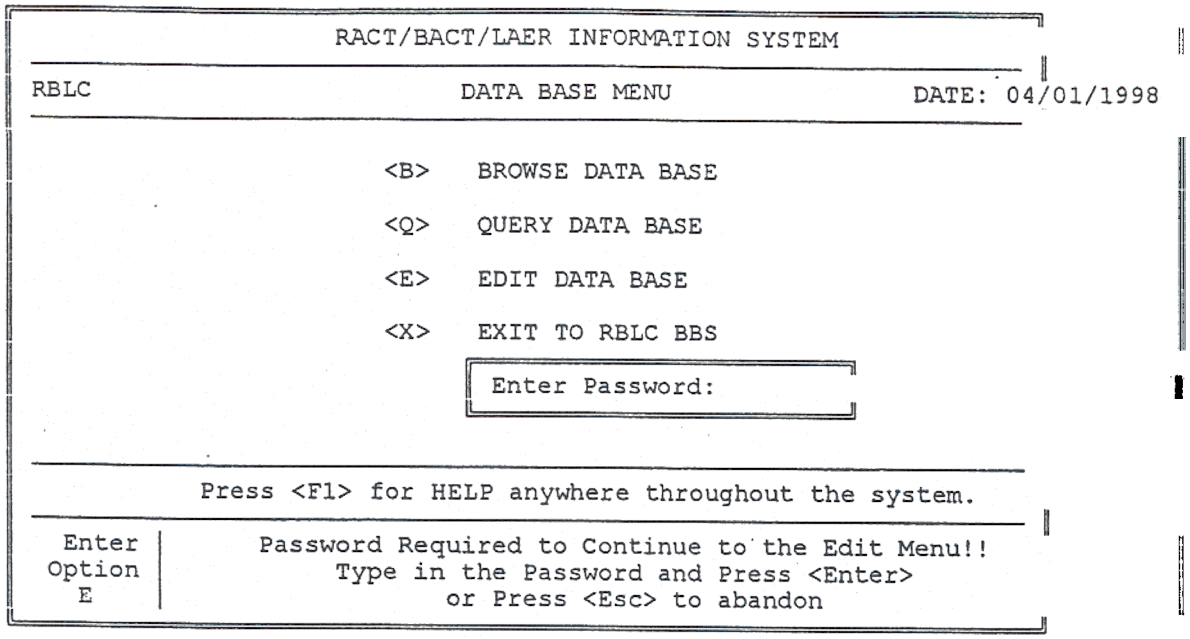


Figure 5.2 - Password Entry Box

Following the prompt to enter a password, you should enter your authorized password. Based on this password, you have access to specific determinations in both the transient and permanent RBLC data bases. If you enter an invalid password, the system displays a warning message and denies you entry into the Edit module (see Figure 5.3).

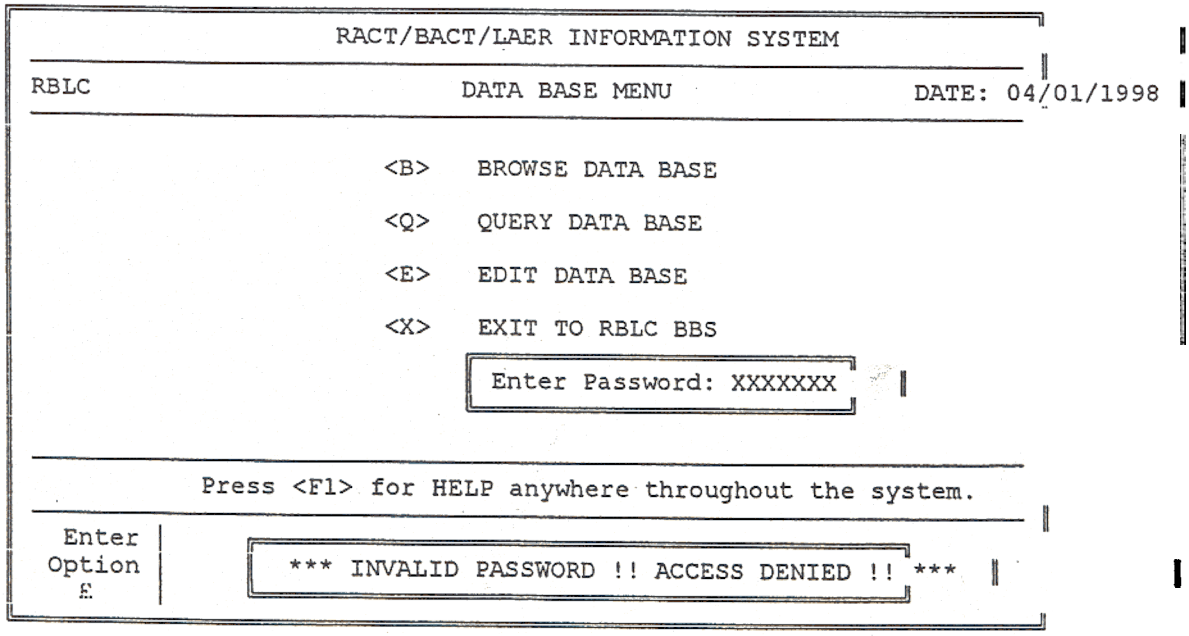


Figure 5.3 - Invalid Password Entered Into RBLC

After you have entered a valid password, the system displays the Record Selection Menu (see Figure 5.4). This menu allows you to select which records to update. The <L> option takes you to the facility list screen that displays the RBLC IDs and company names you are authorized to update.

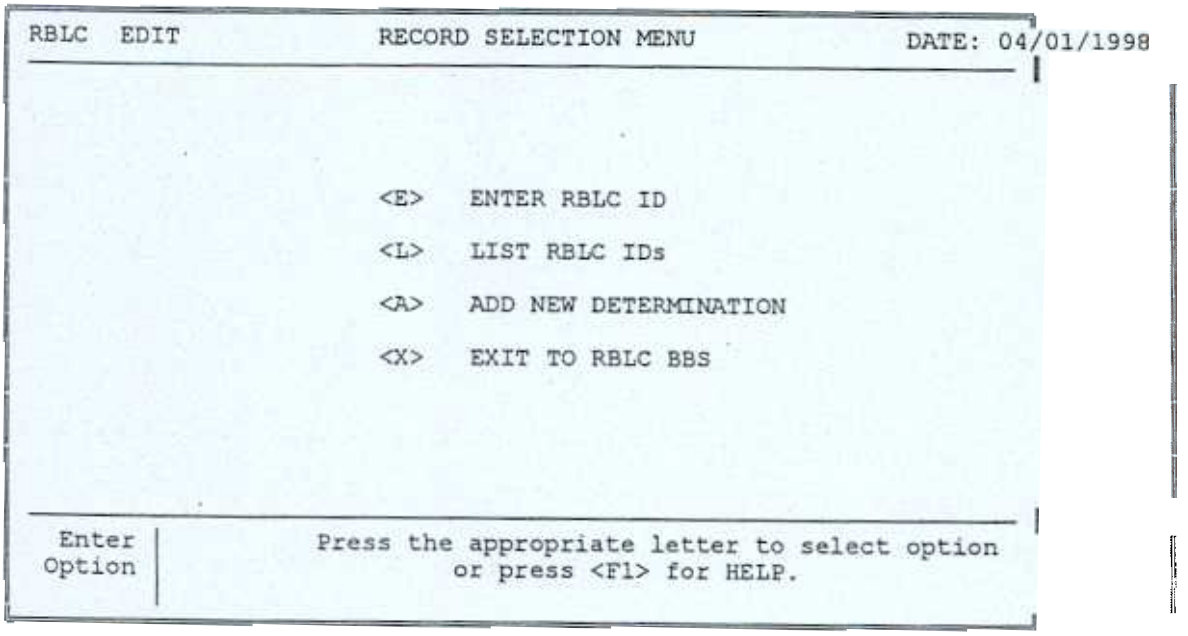


Figure 5.4 - Record Selection Menu

Throughout this section of the User's Manual we will refer to determinations in three ways: new, edited, and old. *New* indicates a determination that does not exist in the master data base. It has been recently entered into the RBLC information system and has not been promoted. *Edited* indicates a determination that exists in the master data base, has recently been edited, and the current copy resides in the transient data base. *Old* indicates a determination that exists *only* in the master data base. No edits exist for this record in the transient data base.

At the Record Selection Menu you have several options. As mentioned earlier, the <L> option stake you directly to a facility listing (similar to the list seen in the List Facilities View Screen). From this listing you may choose to edit one of the facilities on the list.

Another option is <E> Enter RBLC ID. If you choose this option, the system displays a pop-up box and prompts you to enter the RBLC ID of the record which you would like to update (Figure 5.5). If you do not have authority to update the records for the RBLC ID entered, the system displays a warning message, and you are denied access (Figure 5.6). Alternately, if you enter a RBLC ID that does not exist, the system displays an error message (Figure 5.7).

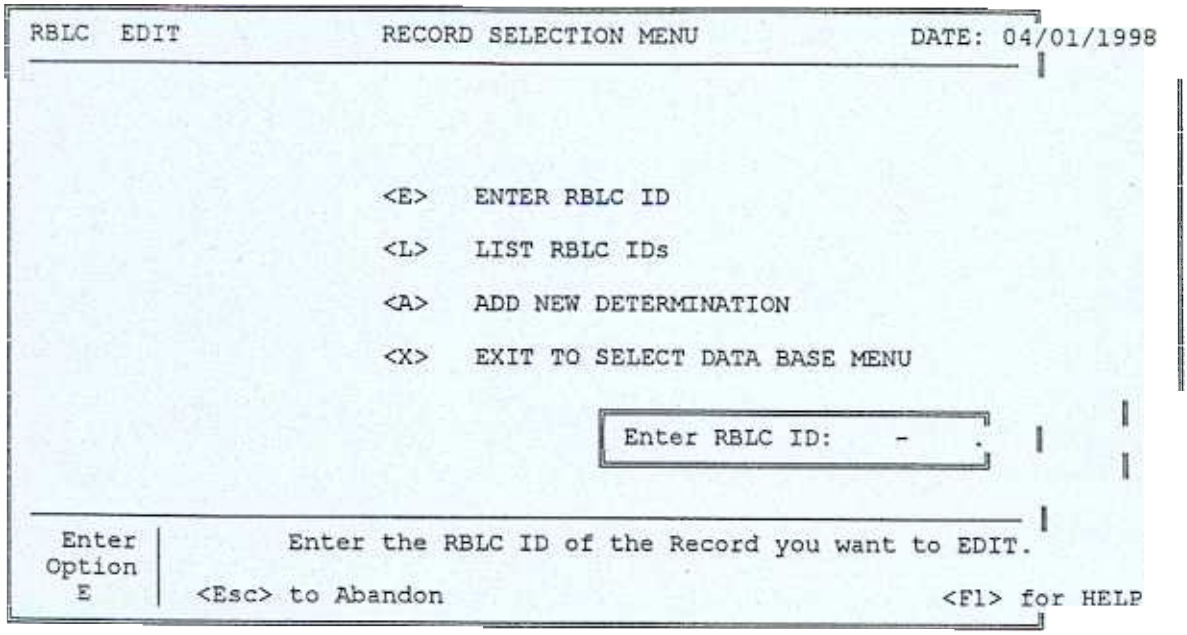


Figure 5.5 - Enter RBLC ID

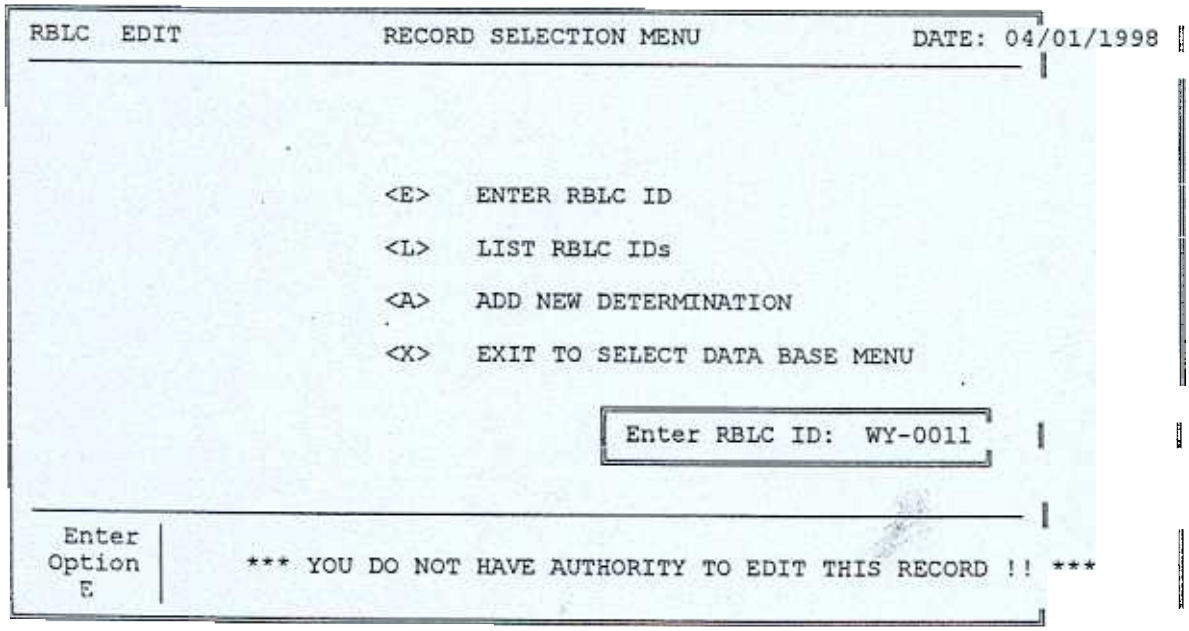


Figure 5.6 - Edit Access Denied

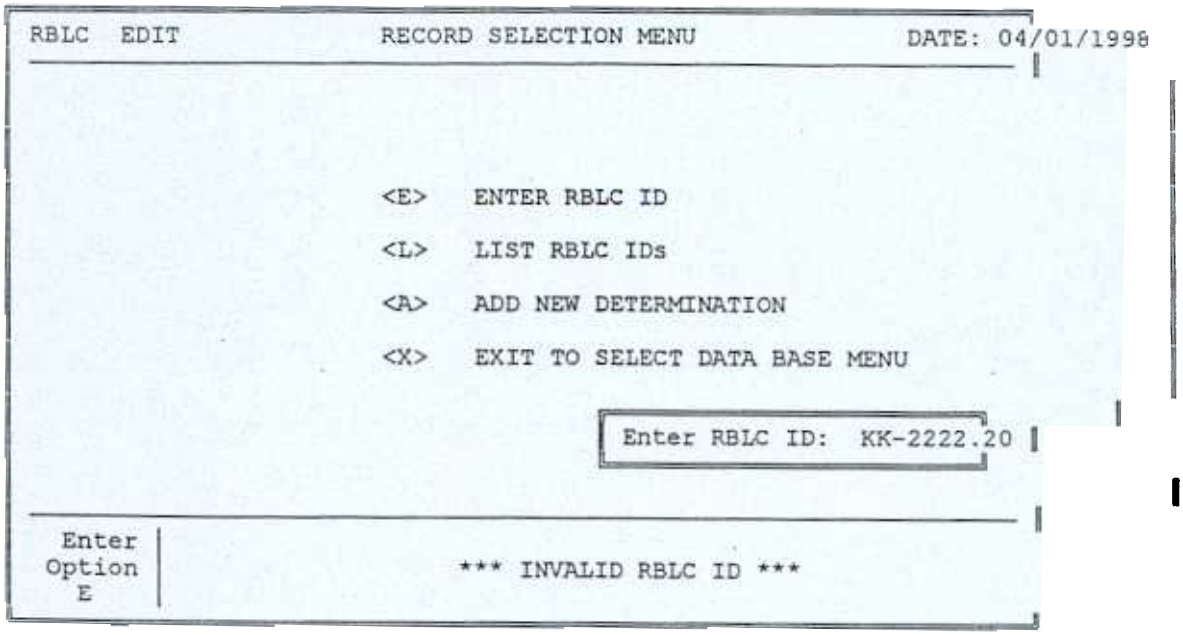


Figure 5.7 - Invalid RBLC ID

Choose <A> Add New Determination to input new information. The system assigns a unique RBLC ID to the determination based on your agency affiliation and displays a data entry screen. If you are associated with an EPA regional office or other agency that may have authority for multiple jurisdictions, the system prompts you for the state abbreviation of the state in which the facility is located (Figure 5.8). Using this information, the system assigns a RBLC ID to the determination and displays a screen onto which you can enter information. For information on adding a new determination, see Adding New Determinations to the Data Base later in this section.

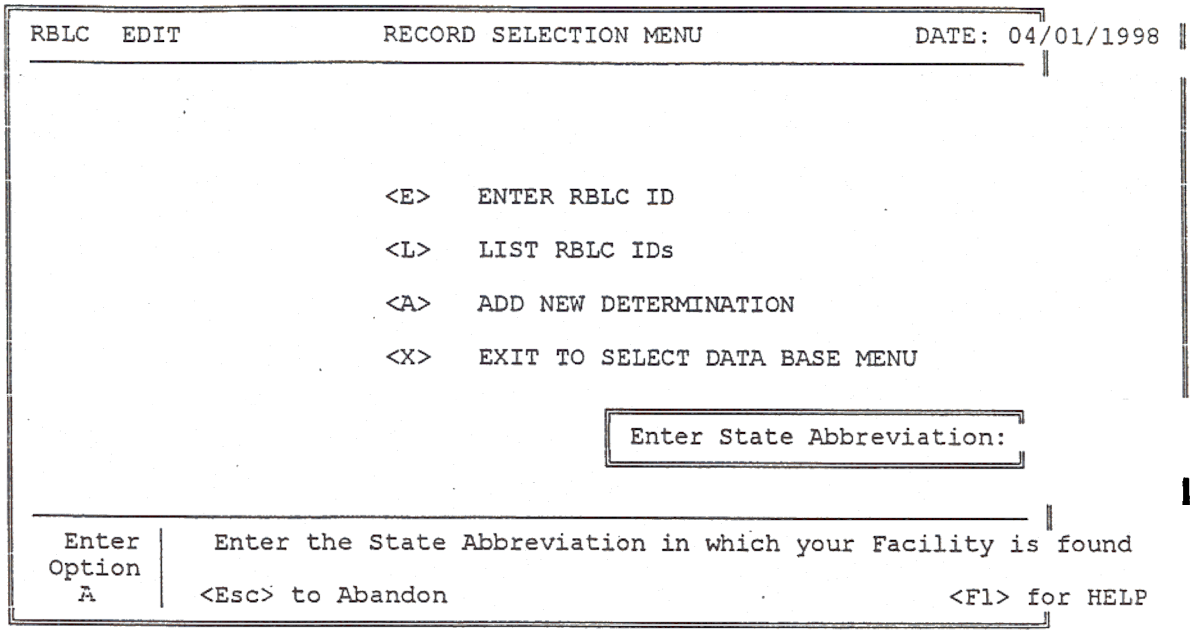


Figure 5.8 - Add New Facility Selected

Editing the Data Base

Editing the data base allows you to track the progress of your determinations, enter new information, or correct any mistakes you may find in your determinations.

After you choose <L> List RBLC IDs at the Record Selection Menu, the system presents you with a list of the facilities which you are authorized to edit (Figure 5.9). The list identifies the records you are authorized to update, and then displays the RBLC ID and facility name for each record, in order by facility name. Any new or edited determinations listed here have a letter displayed to the left of the RBLC ID that describes the status of the record. If no letter is displayed, then the determination is old.

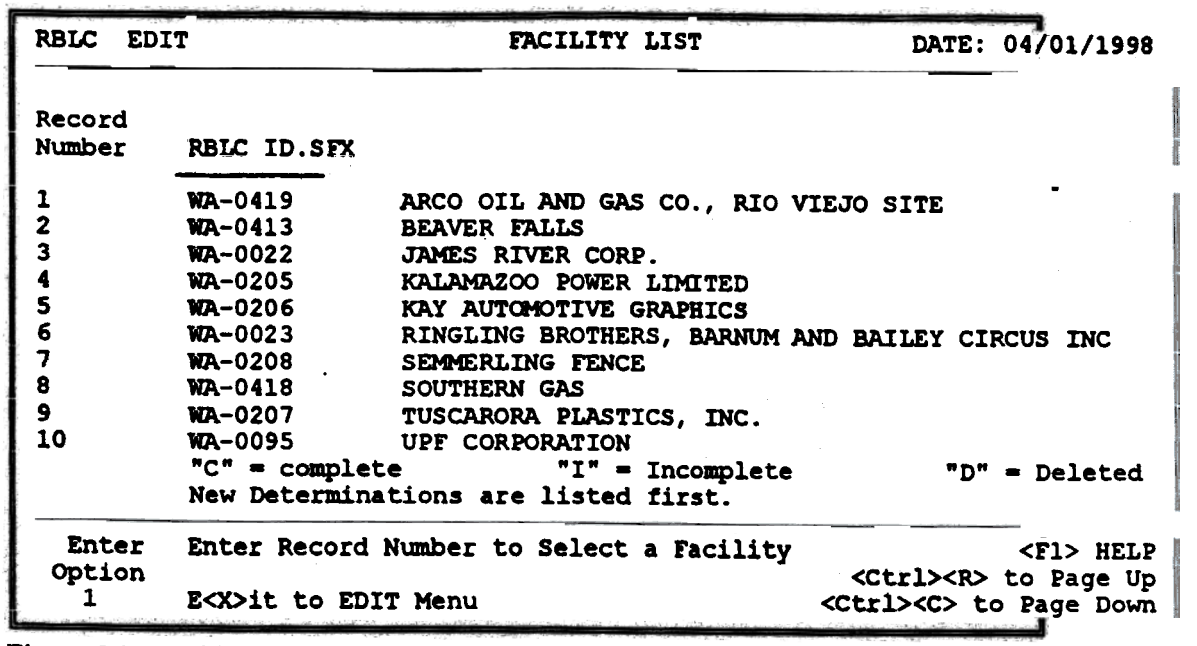
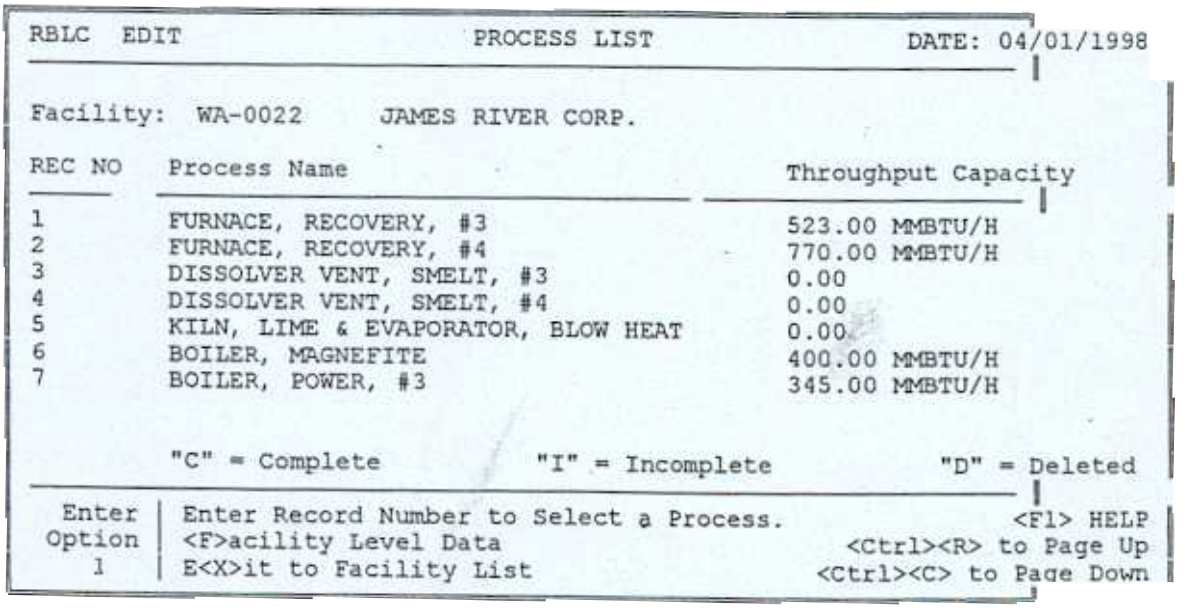


Figure 5.9 - Facility List

From the list presented, you may choose the facility to edit. In this case, let's say you decide to edit WA-0022. You enter the appropriate record number, in this case (3), and the system displays the process list for that particular facility. Figure 5.10 shows this process list. Selecting <E> Enter RBLC ID at the Record Selection Menu brings you directly to the process list.



At the process list, you must know whether you are editing facility level information, process level information, or pollutant level information. To determine which level your data is, see Part 2 of this User's Manual. A very common area of editing is scheduling information, which is used for tracking the progress of a determination and permit; this information is stored at the facility level.

Although it is possible to edit almost all of the information for a determination, it is important to note two areas in which editing is restricted. First, it is possible to edit process information for a determination, but it is not possible to *add* a process to or to delete a process or pollutant from an existing determination. For tracking purposes, it is necessary for any new processes to be added as part of a *new* determination. In this case, you must choose <A> Add New Facility at the Record Selection Menu and reenter the facility information and the information for the new process.

Agency Codes and Agency Names are the second area in which the edit function is restricted. You cannot change these fields once they have been entered into the data base. If a determination has an error or if an agency name is changed due to reorganization, please contact the RBLC System Administrator at (919) 541-2736. He or she has the authority to make this change for you.

The last area where editing is restricted is the RBLC ID (and suffix where applicable). Because this information is system-generated, it is never entered or edited by you.

If you choose <F> Facility Level Data at the Process List, the system displays the facility level information as seen in Figure 5.11. You can choose to edit or delete the data or view the notes.

The 'complete' or 'incomplete' indicator displayed in the upper right corner of the screen (see Figure 5.12) tells the RBLC System Administrator (SA) whether the determination is complete and ready to be moved to the RBLC permanent data base. All new determinations are initially marked 'incomplete' until the quality assurance (QA) review is conducted. This indicator is toggled to 'complete' if the determination passes the QA review. You cannot change this indicator. Periodically, the RBLC SA will review the determinations in the transient data base which have been marked 'complete'. If all of the required fields are complete, the RBLC SA will promote the determination to the permanent RBLC data base. Alternatively, if the RBLC SA decides that the determination is not complete, he or she will toggle it back to incomplete and send a notice to the person authorized to edit the determination. For information about the required fields, see Adding New Determinations to the Data Base later in this section.

```
RBLC  EDIT                        FACILITY  DATA                    DATE: 04/01/1998

WA-0022     JAMES RIVER CORP.
ADDR: 1000 COMPUTER CIRCLE                  CITY: CAMAS
COUNTY: WAKE                                  ST: WA  ZIP: 27621          REG: 10

                                                                    ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT             UPDATED: 01/31/1992
CONTACT:  ALAN BUTLER                                                   Est/Act Date
  PHONE:  (206)649-7103                                        APPL RCPT: ACT 04/04/1985
PERMIT/FILE #: PSD-88-3 & DE-88-360 MODIFICAT PERMIT ISSUE: ACT 09/26/1991
   SIC:                                                          START-UP: ACT 07/01/1990
AIRS ID:                                                     COMPL VERIFY: ACT 03/01/1990
FACILITY NOTES:




  Enter   <E>dit Facility     <D>elete Facility                        <F1> HELP
 Option   Exit to <F>acility List                                <Ctrl><R> to Page Up
          E<X>it to Process List    View <N>otes              <Ctrl><C> to Page Down
```

Figure 5.11 - Facility Data Screen

```
RBLC  EDIT                        FACILITY  DATA                    DATE: 04/01/1998

WA-0022     JAMES RIVER CORP.                                                COMPLETE
ADDR: 1000 COMPUTER CIRCLE                  CITY: CAMAS
COUNTY: WAKE                                  ST: WA  ZIP: 27621          REG: 10

                                                                    ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT             UPDATED: 01/31/1992
CONTACT:  ALAN BUTLER                                                   Est/Act Date
  PHONE:  (206)649-7103                                        APPL RCPT: ACT 04/04/1985
PERMIT/FILE #: PSD-88-3 & DE-88-360 MODIFICAT PERMIT ISSUE: ACT 09/26/1991
   SIC:                                                          START-UP: ACT 07/01/1990
AIRS ID:                                                     COMPL VERIFY: ACT 03/01/1990
FACILITY NOTES:




  Enter   <E>dit Facility     <D>elete Facility                        <F1> HELP
 Option   Exit to <F>acility List                                <Ctrl><R> to Page Up
          E<X>it to Process List    Edit <N>otes              <Ctrl><C> to Page Down
```

Figure 5.12 - Record Flagged as Complete

If you choose to <E> Edit Facility at the Facility Data screen, the system displays all facility level information for the determination. All fields that may be edited are highlighted on screen. See

Figure 5.13. You must press the Enter key to move the cursor to the field(s) that you would like to edit and type in the new information. If you have questions regarding valid information for a field, press F1 for HELP. The RBLC HELP system is context-sensitive and provides information for this particular field. To edit the notes, choose <N> Edit Notes at the Facility Data screen.

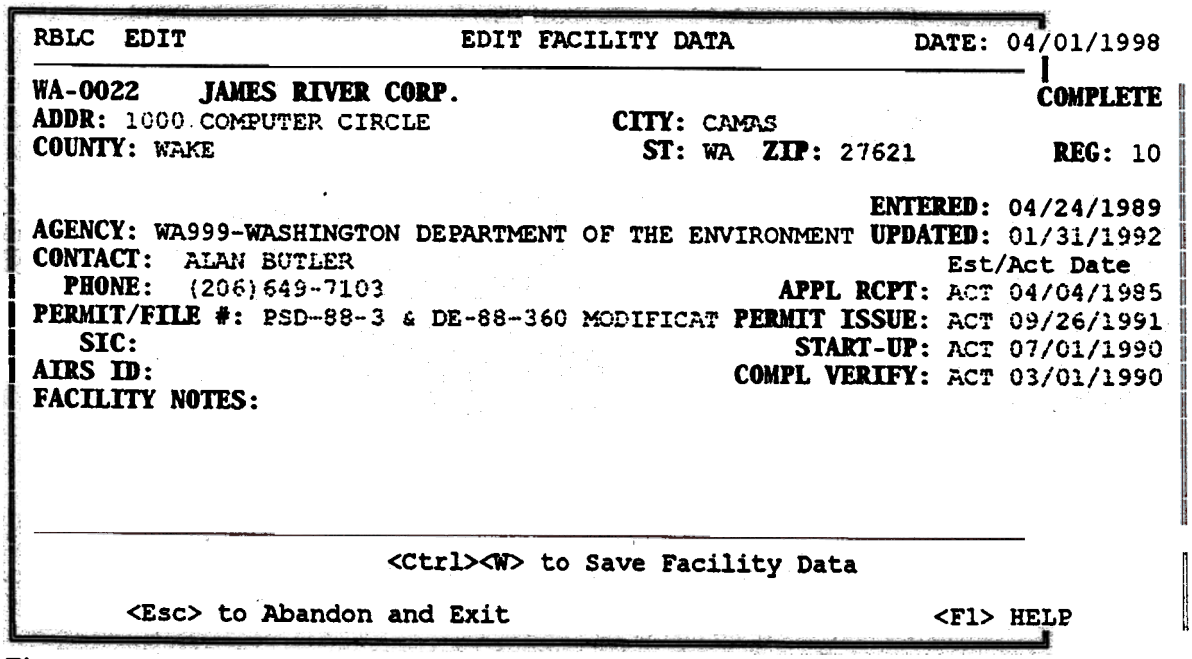


Figure 5.13 - Edit Option Selected from Facility Data Screen (Figure 5.11)

After you input all the facility information, the system validates the information in key fields. You must enter a non-blank facility name and specify "New/Mod" for the determination. The data can be saved if the information in each field is in the proper format, i.e. dates before the present date in certain date fields, specific numeric ranges in numeric fields.

Another option which you may choose at the Facility Data screen (Figure 5.11) is to <D> Delete Facility. This option allows the facility data and any processes and pollutants associated with the facility to be deleted from the transient data base (see Figure 5.14).

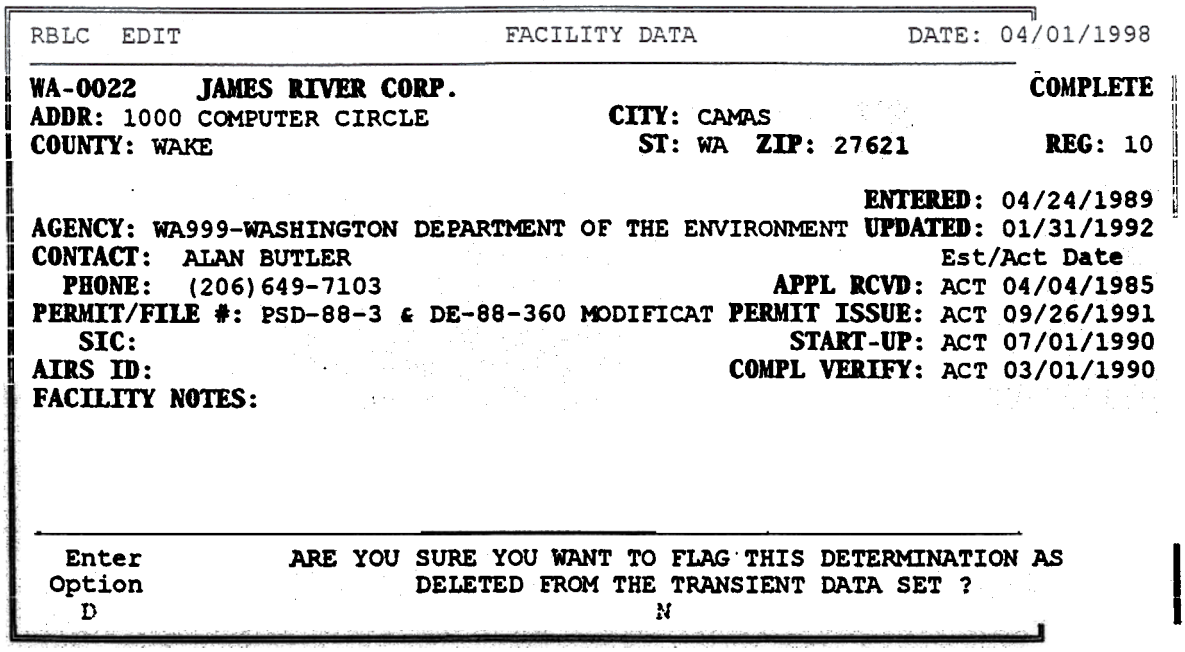


Figure 5.14 - Delete Option Selected from Facility Data Screen

Selecting to delete a determination from the transient data base actually *flags* all the records for that determination as deleted. You can still see the determination but cannot edit it. The word "DELETED" appears in the upper right corner of the screen. For edited determinations, you can choose to copy the original data from the master data base to the transient data base instead of flagging the determination as deleted. Any deleted records are permanently removed from the transient data base when records are promoted to the master data base. If you have chosen to delete a determination in error, you may *un*delete. This simply removes the flags from each record and the records can be edited as before. Note that only new or edited determinations may be deleted/undeleted.

Using the current example of the James River Corporation, you have now viewed the facility list, chosen the first facility, and edited the facility level information. Now it is time to edit the process level information. After saving the changes to the facility level information, choose <X> to return to the Process List. You may now E<X>it to Facility List or enter a record number to select a process. See Figure 5.10 to review the process list. Assume that you want to edit information for the first process, Furnace, Recovery, #3. Press the Enter key to select process number one. The system displays the Pollutant List for the process (see Figure 5.15). At this screen, you may choose to edit the process data or view the information for a specific pollutant, or add a new pollutant to this process. Figure 5.16 displays the screen which you would see after choosing <P> Process Data. At this screen, you may choose to return to a previous screen, <E> Edit Process information, or <D> Delete Process information.

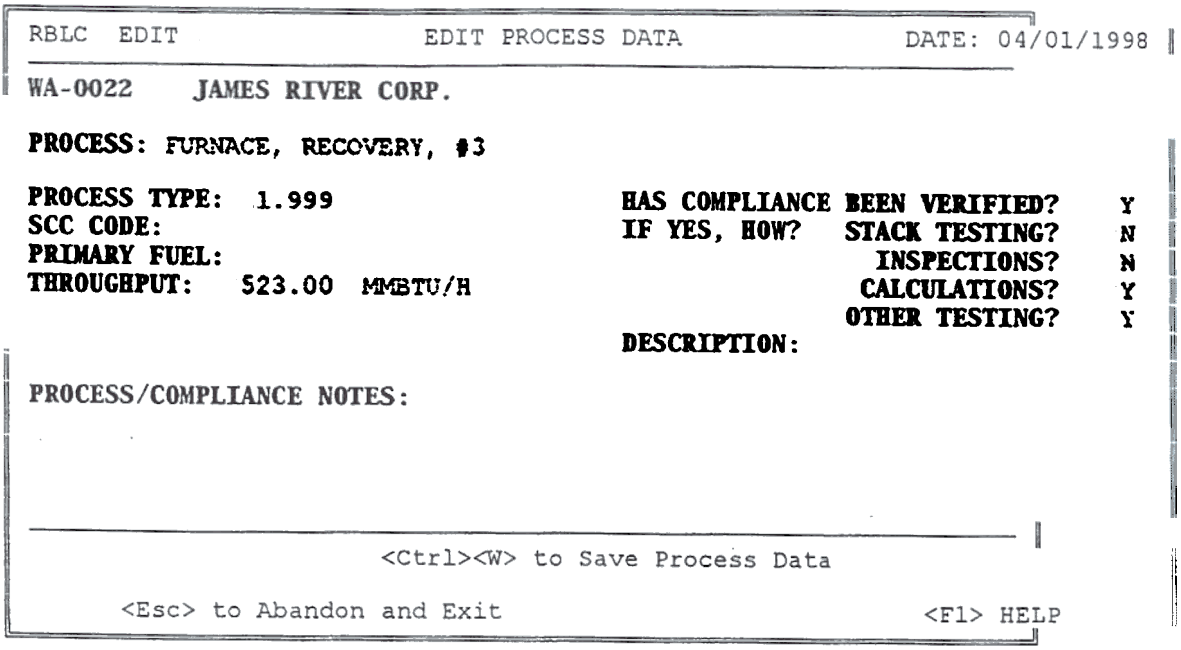


Figure 5.17 - Edit Process Screen, fields to be edited will be highlighted

Deleting a process from a new determination flags the process record and all the associated pollutant records, just the same as deleting from the facility level. For edited determinations, the original process and pollutant data from the master data base is copied to the transient data base. Undeleting a process works exactly the same at the process level as it does at the facility level.

Remember, only new or edited determinations may be deleted/undeleted.

To edit pollutant information, follow the same steps as you did to edit facility and process level information. First, you must choose a pollutant from the Pollutant List. Then the system displays the Pollutant Data screen (see Figure 5.18). At this point, you may choose to <D> Delete Pollutant or <E> Edit Pollutant information. If you choose to edit the information, the Edit Pollutant screen appears with the appropriate fields highlighted (see Figure 5.19). As with facility and process level information, you can access HELP at any point while editing pollutant data by pressing F1.

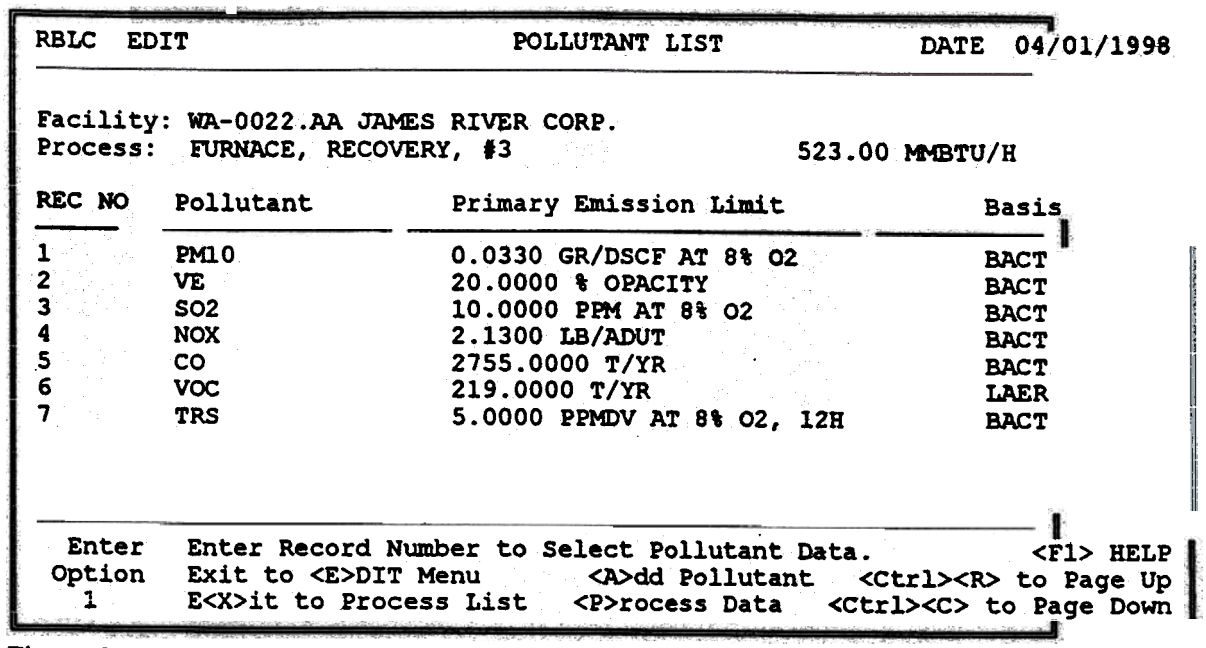


Figure 5.15 - Pollutant List

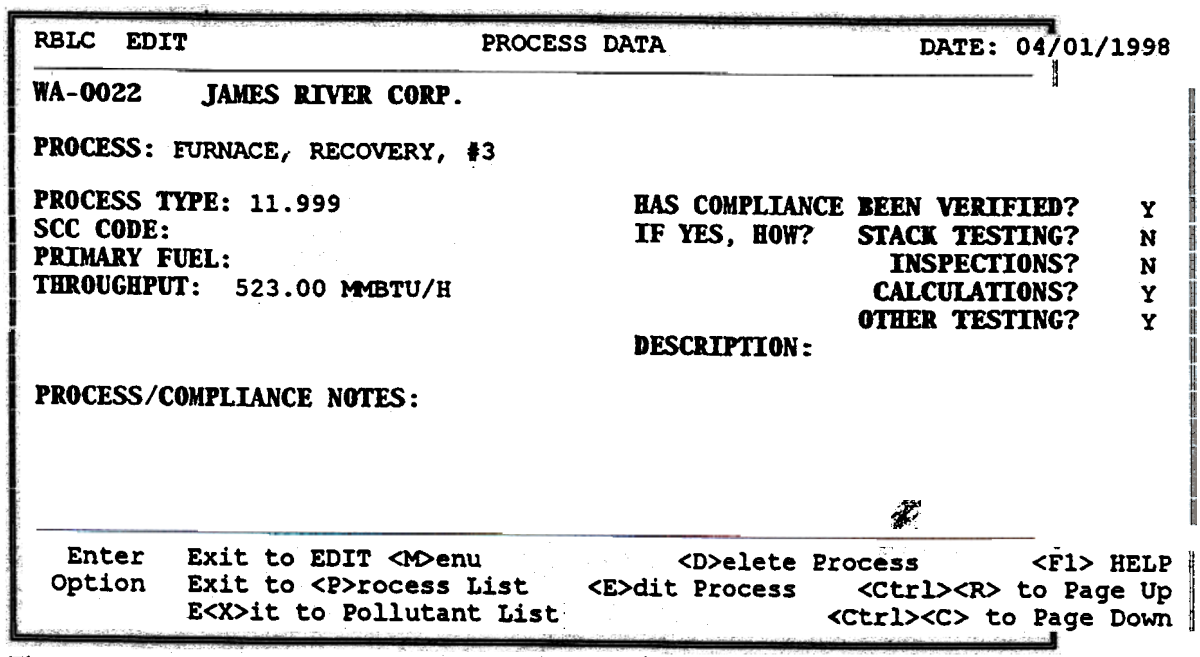


Figure 5.16 - Process Data Screen, user may now choose to edit information

Figure 5.17 displays the screen used to edit process information (RBLC highlights all fields that may be edited). As with the facility information, you may press F1 to access HELP at any point while editing process information.

```
RBLC  EDIT                        POLLUTANT DATA                    DATE: 04/01/1998

WA-0022     JAMES RIVER CORP.
PROCESS:    FURNACE, RECOVERY, #3                        523.00 MMBTU/H
POLLUTANT: PM10                      CAS NUMBER:
POLLUTION PREVENTION/ADD-ON CONTROL EQUIP/BOTH/NO CONTROLS FEASIBLE:  A
POLL. PREVENT./ADD-ON    ESP W/HEAT RECOVERY SCRUBBER
          DESCRIPTION:

NUMBER OF CONTROL OPTIONS CONSIDERED:  0  RANK OF OPTION SELECTED:  0
EMISSION LIMITS:
      PRIMARY:        0.0330 GR/DSCF AT 8% O2          BASIS:  BACT
    ALTERNATE:      328.0000 T/YR                  % EFFICIENCY:   99.500
 STANDARDIZED:        0.0000                      EMISSION TYPE:  P

COST DATA:          VERIFIED BY AGENCY: N  YEAR USED IN COST ESTIMATES:
    CAP COST OF CONTROL EQUIP: $       0.00    ANNUALIZED COST: $       0.00
    O/M COST OF CONTROL EQUIP: $       0.00 COST EFFECTVNS. $/TON       0.00

  Enter   Exit to EDIT <M>enu                              <D>elete Pollutant
 Option   Exit to <P>rocess List   <E>dit Pollutant   <Ctrl><R> to Page Up
          E<X>it to Pollutant List     <F1> HELP     <Ctrl><C> to Page Down
```

Figure 5.18 - Pollutant Data Screen

```
RBLC  EDIT                     EDIT POLLUTANT DATA                 DATE: 04/01/1998

WA-0022     JAMES RIVER CORP.
PROCESS:    FURNACE, RECOVERY, #3                        523.00 MMBTU/H
POLLUTANT: PM10                      CAS NUMBER:
POLLUTION PREVENTION/ADD-ON CONTROL EQUIP/BOTH/NO CONTROLS FEASIBLE:  A
POLL. PREVENT./ADD-ON    ESP W/HEAT RECOVERY SCRUBBER
          DESCRIPTION:

NUMBER OF CONTROL OPTIONS CONSIDERED:  0  RANK OF OPTION SELECTED:  0
EMISSION LIMITS:
      PRIMARY:        0.0330 GR/DSCF AT 8% O2          BASIS:  BACT
    ALTERNATE:      328.0000 T/YR                  % EFFICIENCY:   99.500
 STANDARDIZED:        0.0000                      EMISSION TYPE:  P

COST DATA:          VERIFIED BY AGENCY: N  YEAR USED IN COST ESTIMATES:
    CAP COST OF CONTROL EQUIP: $       0.00    ANNUALIZED COST: $       0.00
    O/M COST OF CONTROL EQUIP: $       0.00 COST EFFECTVNS. $/TON       0.00

                  <Ctrl><W> to Save Pollutant Data

    <Esc> to Abandon and Exit                                  <F1> HELP
```

Figure 5.19 - Edit Pollutant Screen

You may continue to edit processes and pollutants for a facility determination until all edits are complete. Once the edit process is complete for the first determination, exit to the Facility List.

At that point, you may choose to E<X>it to Edit Menu or select another facility for which you have update authorization. If you were editing an individual RBLC ID, the E<X>it option from the process list returns you to the Edit menu.

Adding New Determinations to the Data Base

At the Record Selection Menu (Figure 5.4), you may choose to <A> Add New Determination to the RBLC data base. Using this information, the system will assign a unique RBLC ID to the new determination.

The information for the determination does not have to be complete in order to add a determination to the RBLC data base. You can use the system as a tracking tool while a determination or permit is being developed. The scheduling data, stored at the facility level in the RBLC data base, is designed specifically as a tracking aid for air pollution control personnel.

Although the information for a determination does not have to be complete, the RBLC does have certain restrictions with regard to minimum information. For each RBLC determination, you must input at least one process and one pollutant. Only six fields are needed to save the new determination: facility name, NEW/MOD status, process name, process type code, pollutant name, and control method code.

The RBLC also has certain restrictions with regard to information required for a determination to be considered as complete and eligible for promotion to the permanent RBLC data base. Data for most of the searchable fields must be entered before a determination will be promoted. These restrictions help insure that searches will be productive and that the data base contains information that is helpful to most users. Complete determinations must have data for the following RBLC required fields:

Facility name
SIC code
Permit number
Permit issued date
Process name
Process type code
SCC code
Pollutant name
CAS number
Control method code
Control method description
Basis for limit
Overall percent efficiency
Emission type

On-line help is available for Standard Industrial Classification (SIC) codes. SIC and Source Classification Codes (SCC) are available for downloading from the RBLC BBS, in either a dBASE III+ file format or as ASCII text. If you do not have access to this or any other source for these codes, for each process, provide a description of the specific process, including fuel, capacity, and product as appropriate. CAS numbers are not required for generic pollutants such as VOC or PM. If no controls are feasible, enter "N" as the control method code. You do not need to provide a description.

Also, you should not input information until you are certain that you have listed all processes for the facility. You cannot add processes to an existing facility determination. If, for example, a facility makes a modification and adds a process, you must reenter all facility information and add the process information to this new RBLC determination.

Once the system has assigned a unique RBLC ID to the facility, you are ready to input the information for the determination. Remember, the system has context-sensitive HELP throughout the Add process. If you do not understand the type of information that the system requires, just press F1 to view an appropriate HELP screen.

After choosing to add a new facility at the Record Selection Menu, the system will prompt you whether a determination exists from which it should copy facility information. Often, several determinations exist for one facility. You can copy the facility information to the new determination. If you answer 'yes' to the prompt to copy information, the system will ask for a RBLC ID. From this ID, it will copy the information into the Add Facility screen.

After receiving an answer, 'yes' or 'no', the system will display the Add Facility screen with or without the copied information (see Figure 5.20). Note the new RBLC ID in the upper left-hand corner. Unless facility information was copied, all fields on this screen are blank except the following:

State abbreviation
U.S. EPA region
Date of determination entry (current date)
Agency Code and Name
Date of last update (current date)

Enter all facility information for the determination and save the information. The system will provide a message stating that you must now enter process data for the facility (Figure 5.21).

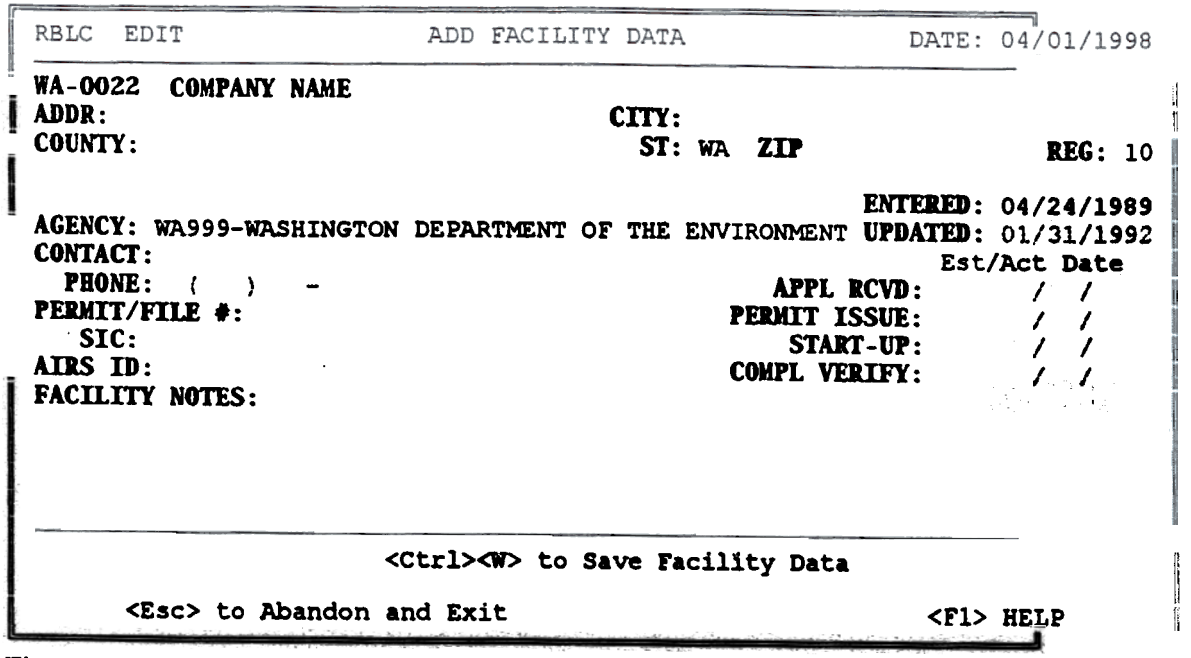


Figure 5.20 - Add Facility Screen

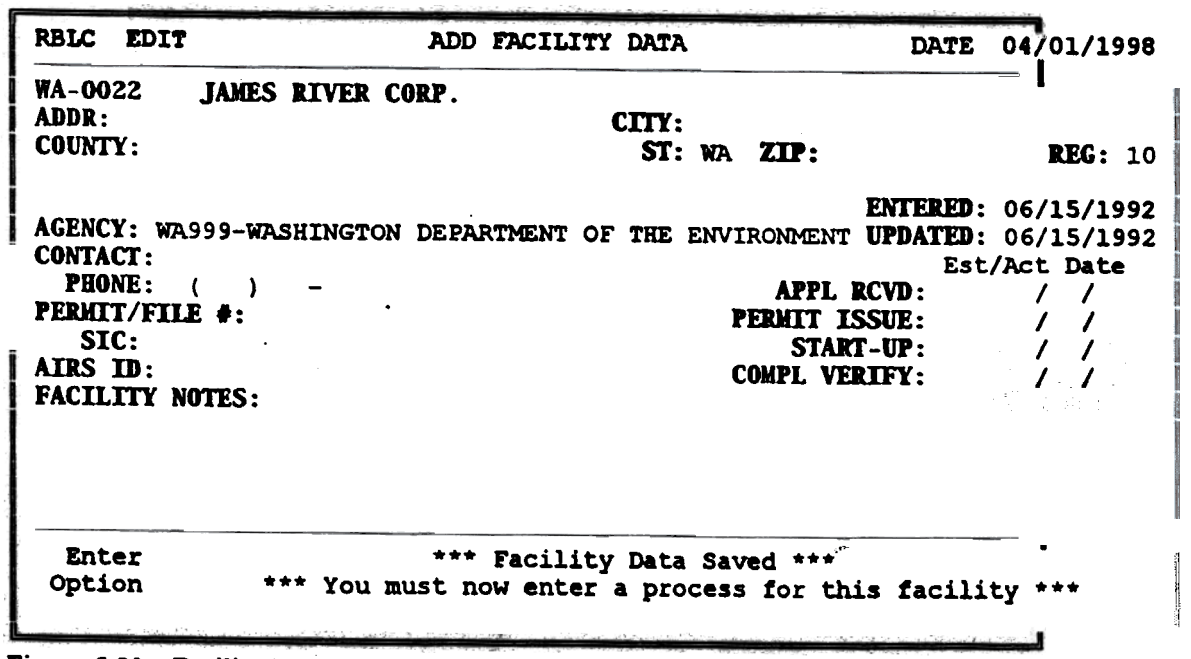


Figure 5.21 - Facility Data Saved, the user must enter process data.

The next screen that you will see is the Add Process screen (Figure 5.22). You can enter the process data for the first process. If you press <Esc>, a message will ask you if you want to start

over with a new process or quit the entire add procedure. If you choose to quit, the system will delete the facility data and return you to the Record Selection Menu screen. Again, F1 will provide HELP at any point while adding process information. After the process data is input and saved, the system will prompt you to enter the pollutant data (see Figure 5.23).

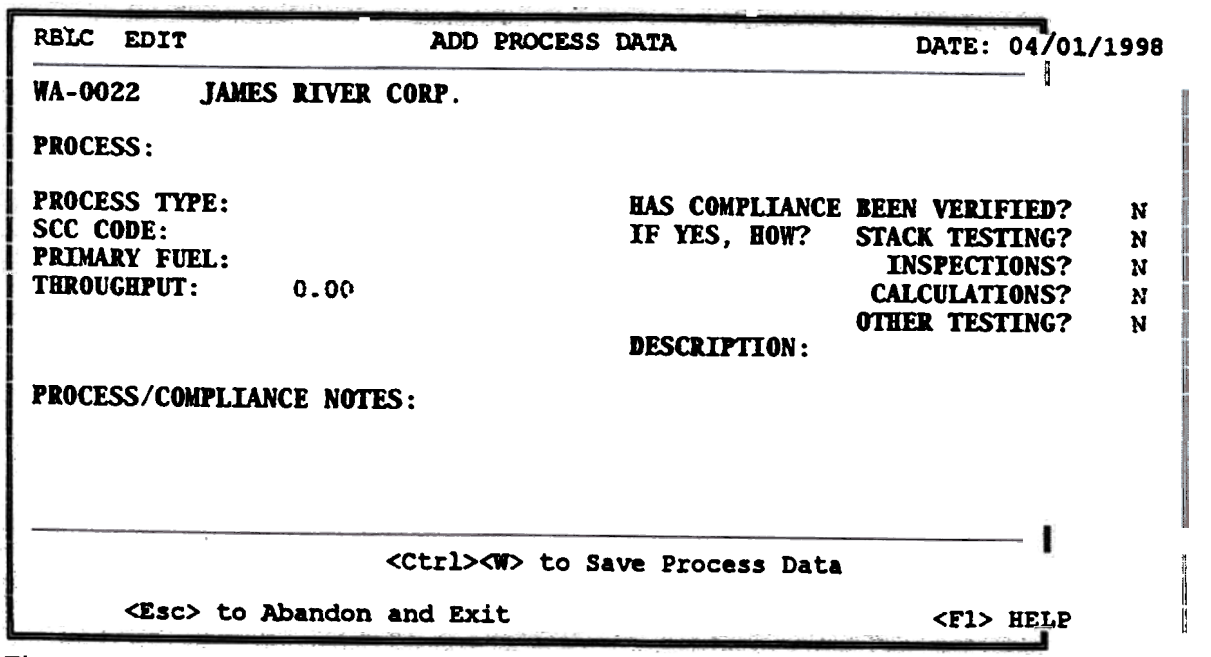


Figure 5.22 - Add Process Screen

The final screen that you will see is the Add Pollutant screen (Figure 5.24). You can enter the pollutant data for the first process. If you press <Esc>, a message will ask you if you want to start over with a new pollutant or quit the entire add procedure. If you choose to quit, the system will delete the facility data and process data and return you to the Record Selection Menu screen. Again, F1 will provide HELP at any point while adding pollutant information.

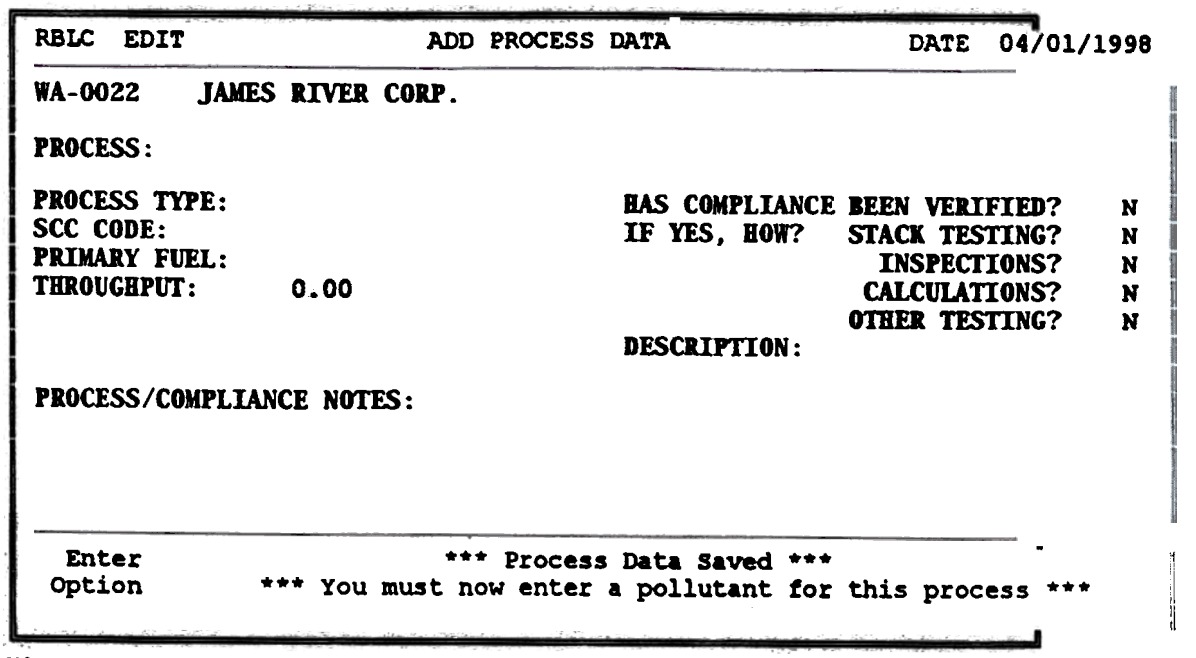


Figure 5.23 - Process Data Saved, the user must enter the pollutant data.

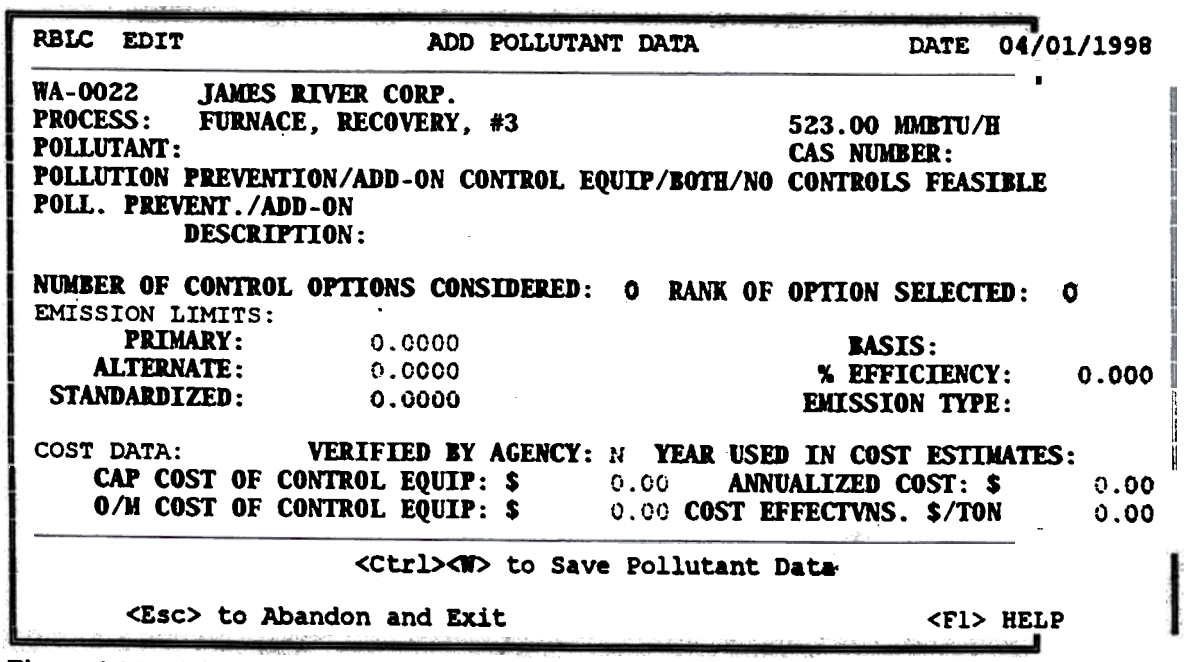


Figure 5.24 - Add Pollutant Screen

Once the pollutant data is input and saved, the system allows you to enter another pollutant or enter another process with its associated pollutants. Be sure to enter all processes for the

determination, because you cannot add a process to an existing determination. You can, however, add pollutants to processes in existing determinations. The system exits to the Record Selection menu when you do not want to add any more processes or pollutants.

At the Record Selection menu, you can enter additional new determinations or edit any existing determinations for your agency. If necessary, you can also edit new or edited determinations and delete them. Your additions and changes remain in the RBLC transient data base until the RBLC System Administrator reviews the data for accuracy and completeness. Use the Query module and select the transient data base if you want to download your new determinations. The free-format download format lets you see all of the data you entered. This report also shows you how your data stands with regard to promotion to the permanent RBLC data base because an asterisk (*) appears next to each required field in the free-format report.

Information may be submitted to the RBLC by filling out an Input form and mailing it to the RBLC SYSOP. If you would prefer to enter information this way, you may download the Input form in PDF format from the CATC Products section of the CATC web site. You may also obtain Input forms by calling the RBLC SYSOP, Joe Steigerwald at (919) 541-2736. Be sure that you are using the most recent version of the input form, because the data fields used in the RBLC data base change. If you are using an out-of-date form, you may be missing required information or trying to provide information that is no longer stored in the data base. The following instructions explain how to complete the Input form and how to submit it.

INSTRUCTIONS FOR COMPLETING RACT/BACT/LAER CLEARINGHOUSE

INPUT FORM

1 Company Name/Site Location: Insert name and address of the proposed facility. The address should be the location of the proposed facility not the address of the parent company unless they are the same.

2. Determination Made by: Designate the permitting agency and the person to whom telephone requests should be directed. This should be the person most capable of responding to factual questions about the permit decision. Please include the area code with the phone number.

3. Permit/File Number: This should be the identification number assigned by the agency that issued the permit.

4. ID Numbers and Codes: Fill-in the requested AIRS identification number, if available, and the SIC code.

5. Scheduling Information: Permitting scheduling dates stored include:

- receipt of application (estimated or actual)
- final permit issued (estimated or actual)
- start-up operation (estimated or actual)
- compliance verification (estimated or actual)

Please enter all of the scheduling information available.

6. Permit Parameters: List all processes subject to this permit by name (e.g., kiln, boiler) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard has been specified. Use additional pages as necessary.

Process name or process equipment should be listed using one of the process categories listed in Appendix C (Detailed Listing of Proposed Process Categories). A descriptor may be added behind the generic category name. For example,

Boiler, coal-fired, 3 each
Kiln, 3 each
Conveyors, coal/limestone
Furnace, arc
Boiler, recovery
Boiler, power
Engines, gas-fired

7. Process Type Code: A code assigned to each process (see Appendix B) used to categorize determinations.

8. SCC Code: This code is the standard source classification for processes used throughout the Office of Air at EPA.

9. Throughput Capacity: Indicate the maximum design capacity of the unit. Use the same units of measure used in the NSPS to describe the size of a source. Wherever possible, use the list of standardized abbreviations for process and emission limit - Appendix D.

10. Compliance Verification: This series of fields allows you to enter a yes or no response to the following questions:

- Compliance verified?
- Method of confirmation:
  - Stack testing?
  - Other testing?
  - Inspection?
  - Calculations?

You may also enter a narrative description of other types of confirmation methods.

11. Pollutant(s) Emitted: make an entry for each pollutant or parameter for which a control requirement or other restraint has been specified (PM, SO_2 CO_2, NO_2, opacity, or others). Use a separate block for each entry, and identify the pollutant and provide its Chemical Abstracts (CAS) number. Use the following standard abbreviations for these common pollutants whenever possible:

PM	Particulate Matter
SO_2	Sulfur Dioxide
NO_2	Nitrogen Oxides

CO	Carbon Monoxide
VOC	Volatile Organic Compounds
VE	Visible Emissions
TRS	Total Reduced Sulfur
F	Fluoride
Be	Beryllium
H_2S	Hydrogen Sulfide
Hg	Mercury
VC	Vinyl Chloride

Abbreviations for other pollutants are listed in Appendix D, along with CAS numbers.

12. Emission Limit(s): For consistency and ease of comparison, list the emission limit or rate in the units of measure listed in Appendix C or those used in AP-42. Wherever possible use the list of standard abbreviations (Appendix D).

There are multiple emission limits in the Clearinghouse, they are:

Primary emission limit and units: The primary emission limit listed in the permit.

Alternate emission limit and units: If provided on the permit, these numbers represent any alternate emission measurements which the facility may make.

Standardized limit and units: This limit allows comparison with other similar determinations in the RBLC. Standard units are provided for certain process types (see Appendix D) so that users can compare the entries in this field to determine the most stringent limits.

The base-line limit is no longer used in the RBLC data base.

13. Type of Emission Controlled: A one-character field indicating whether the emission is fugitive, point-source, or area-source.

14. Control Option Ranking Information: Two pieces of information are requested: The number of control options examined and the rank of the control option selected. The "rank" is the number of the control option selected when the options are ordered according to the performance of the control system. Number 1 would be the best control system, number 2 would be the next best, etc.

15. Regulatory Requirements Associated with Limit: Indicate the regulatory requirement that precipitated establishing the limit presented, i.e., BACT-PSD, BACT-Other, LAER, MACT, RACT, GACT, NSPS, NESHAP, or Other. Do not list such items as stack test, design or others. These items generally represent the supporting information that may have been used to document or establish the given limit. Such items should be included in the notes section.

To facilitate the identification of limits use the following abbreviations:

- BACT-PSD (Prevention of Significant Deterioration)
- BACT-Other (regulated by state/local rules, not PSD)
- LAER (lowest Available Control Technology)
- MACT (Maximum Achievable Control Technology)
- RACT (Reasonably Available Control Technology)
- GACT (Generally Available Control Technology)
- NSPS (New source Performance Standards)
- NESHAP (National Emission Standards for Hazardous Air Pollutants)
- Other

16. Control Method Description: Describe the specific pollution prevention techniques and add-on equipment used to achieve the permitted emission limits. Specify "NONE" if no controls are feasible. Pollution prevention techniques include operational modifications, limits in the type and amount of raw materials used, limits on throughout or hours of operation, maintenance requirements, equipment specifications, or other limitations. Typical add-on equipment includes ESP, fabric filter, etc. Information in this section may be supplemented under the "Notes" section.

Please note that the RBLC no longer has separate fields for equipment manufacturer and model number. Place this information, if you have it, in the notes.

17. Overall Efficiency %: Enter the overall system efficiency, consisting of capture (hoods, ductwork, etc.) and collection (control device) efficiency. Any breakdown of efficiencies for capture or collection individually should be shown under "Notes."

18. Cost Data: Control costs include:

- Capital cost of control equipment
- Annual operation and maintenance cost for all control methods
- Annualized cost (amortized capital cost + annual operation & maintenance costs)
- Cost effectiveness in dollars per ton (annualized cost/tons of pollutant removed)
- Year of the dollar used in cost calculations
- Cost verified by the permitting agency (yes or no)

19. Notes: This section is for the completion or elaboration of any of the above items where space was a problem. Also, any information that you feel other agencies should know about this determination should appear here. Notes are typically used for the following:

* More than one permit number
* More detail on a particular process
* More than one contact person
* Further explanation regarding the designation of a source as new or modified
* Further explanation of the emission limit or the support documentation associated with setting the limit (i.e., limit based on design or stack test)

When you have completed the form, mail it to the following address:

RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

ENCLOSURE 6

USER'S MANUAL FOR THE RBLC DATA BASE

Part 6 -- Using the Standalone Editor

The on-line Edit option described in the previous section allows designated users to enter and update their agencies' RACT/BACT/LAER control technology determinations directly, rather than mailing input forms to EPA Headquarters for subsequent entry or correction. Now the PC-based Editor simplifies the process even further. While the on-line version of the RBLC data base allows users to share the latest determination information in a timely manner, on-line data entry has some drawbacks. On-line access requires a communication path, whether a modem and direct dial or an Internet connection, and response time may seem slow as RBLC users compete with other users accessing the growing number of applications on the TTN. To get around these drawbacks, the CATC has developed a standalone version of the RBLC Edit module for entering ***new*** determinations only.

The PC-based Editor is available to any users authorized to input determinations for their agency. All you need is a PC with a hard drive. Obtain a copy of the system by downloading it from the Products section of the CATC web site. Follow the straightforward installation procedure, and you are ready to use the standalone Editor. After entering new determinations with the Editor, forward the data to the RBLC for inclusion on the TTN. As with on-line submittals, the data is initially placed into a searchable transient data base where quality assurance procedures are performed. Once the data is checked, it is promoted into the current RBLC data base. The on-line Edit option gives you access to any of your agency's current entries on the RBLC BBS.

Installing the Editor

The RBLC Editor is an independently executable program designed to run on an IBM-compatible PC. (The system was not designed to operate on a LAN). No special software licenses are required. To run the RBLC Editor, you need an IBM-compatible PC with a hard drive that has at least 2 Mbyte free disk space. (The system itself uses about 1 Mbyte, and you should have around 1 Mbyte for your data files). You also should have the latest versions of the file compression programs PKZIP and PKUNZIP (version 2.04G). You can find these programs on the TTN in the System Utilities section. The editor runs fine under DOS, Windows 3.x, or Windows 95.

The quickest way to get started with the Editor is to download a compressed version of it from the RBLC web site (or the BBS). To install the download version of the system, follow these steps.

1 Download the file for the standalone editor from the documents section of RBLC web site. On the RBLC BBS, the file name is `RBLCEDIT.ZIP`.

2. On your hard drive, create a directory named \RBLC.

3. Change your working directory to \RBLC and decompress the ZIP file, using PKUNZIP.

4. Copy the file RBLCEDIT.BAT to your root directory. This batch file lets you run the RBLC Editor without modifying your path. It also sets an environment variable needed by the Editor.

5. If you do not already have a copy of the latest version of PKZIP, download this file from the TTN System Utilities menu. Place the file PKZIP.EXE in the \RBLC directory or in a directory that is part of your path.

6. To run the RBLC Editor, type RBLCEDIT at the DOS prompt.

Using the Editor to Build Your Data Base

The standalone PC-based Editor works in much the same way as the on-line RBLC data entry module available on the TTN to authorized users. When you have completed the data entry (remember, only new determinations can be entered using the standalone Editor), you e-mail (or mail) your data files to EPA for inclusion in the on-line RBLC data base.

To use the Editor, type "RBLCEDIT" from the DOS prompt on your PC (or execute the file RBLCEDIT.BAT in the directory you created). An introductory screen appears followed by the Main menu (Figure 6.1). The Main menu has options to edit determinations, generate a report file from the data, and prepare data files for uploading. If you have any questions about what to enter, press <F1> for context-sensitive help.

Begin by selecting the <B> option to add one or more new determinations to your data base. When you choose this option, the facility list appears (Figure 6.2).

Enter the record number to edit a previously entered determination that you want to update. You can select one or more determinations from this list to edit. Select <Z> to delete ALL of the determinations in your data base. Use this option if you want to start over or if you have already forwarded your data to the RBLC System Administrator.

The options at the Edit menu work like their counterparts in the on-line Edit module. For details on how to add or modify determinations with the RBLC Editor, refer to Part 5 of this User's Manual. Be sure to look at the submittal form and instructions for completing it. This form may assist you in preparing your data for input.

This list displays all determinations currently in your PC data base. If you have not entered any determinations into your data base yet, the system forces you to add a facility before displaying

the facility list. You can add or change facilities from the facility list. To delete a facility, you must move to the facility data screen.

```
RBLC EDITOR                          MAIN MENU                    DATE: 04/01/1998


                    <B>   EDIT RBLC DATA BASE

                    <R>   CREATE REPORT FROM DATA BASE

                    <F>   PREPARE FILES FOR UPLOADING

                    <X>   EXIT TO DOS


  Enter  |        Press the appropriate letter to select option
 Option  |                or press <F1> for HELP.
```

Figure 6.1 - Editor Main Menu

```
RBLC EDIT                          FACILITY LIST                  DATE: 04/01/1998

Record
Number     RBLC ID       Facility Name
------     -------       -------------------------------------------------

1      I   VA-0003       QUEBECOR PRINTING RICHMOND
2      C   VA-0002       ROANOKE ELECTRIC STEEL CORPORATION
3      I   VA-0001       VPI & STATE UNIVERSITY
4      I   VA-0004       VPI POWER PLANT




                  "C" = Complete      "I" = Incomplete      "D" = Deleted

  Enter  | Enter Record Number to Edit a Facility.                    <F1> HELP
 Option  | <A>dd a New Facility                          <Ctrl><R> to Page Up
   1     | E<X>it to MAIN Menu  <Z>ap All Facilities <Ctrl><C> to Page Down
```

Figure 6.2 - Facility List

Select <A> to add a new determination. When you add a determination, the standalone Editor assigns a temporary RBLC ID. Use these IDs if you want to update determinations entered on your local PC. **Permanent RBLC IDs will be assigned by the RBLC System Administrator when your data is added to the on-line data base.**

Make as many additions or changes as you like with the RBLC Editor. You can even add processes (something you cannot do on the RBLC BBS). All data is local to your PC until you transfer your files to the RBLC System Administrator. **Please note that you cannot use the standalone editor to edit determinations previously entered into the on-line RBLC data base.**

Creating a Report from Your Data Base

The Report option lets you create an ASCII text file of your data that you can print if you want a hard copy of your data. Of course, you could also wait until your determinations are added to the on-line data base, and then use one of the Query download formats to get a formatted copy of your data. When you select the <R> option from the Main menu, the Report menu appears (Figure 6.3).

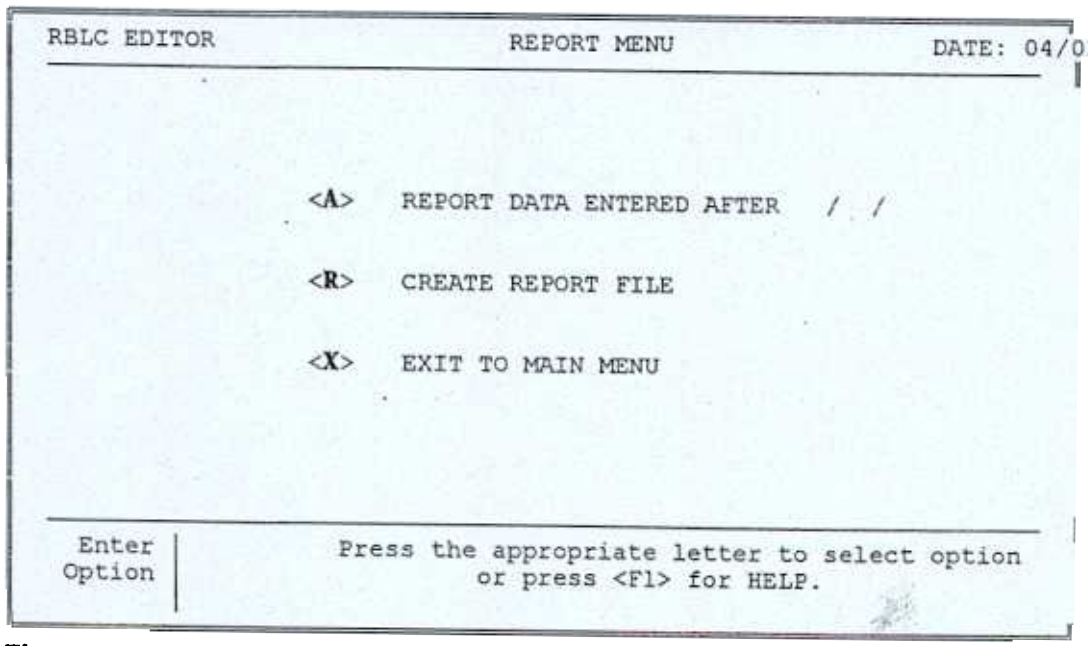


Figure 6.3 - Report Menu

The Report menu gives you a choice of reporting all or only part of your data. The program uses the date you first added a determination to your data base in deciding whether or not to include an individual determination in the report. When you select <A> from the Report menu to enter a beginning date for your report, the cursor moves to the date field on the menu (Figure 6.4). Enter

any date in a MM/DD/YYYY format. The report will contain only the records entered on or after this date. If you want to report all your determinations, you do not need to specify a date.

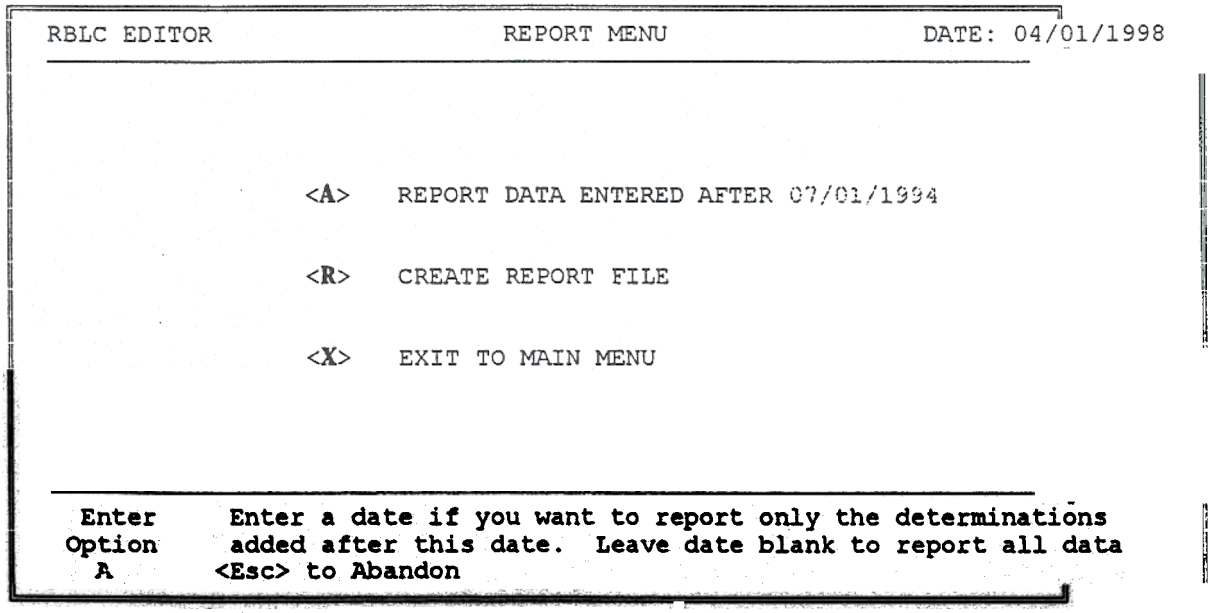


Figure 6.4 - Entering a Date for a Partial Report

The system displays the number of determinations that were added on or after the specified date (Figure 6.5). If this is not the number of records you want, select <A> again and enter a different date. Press <Ctrl-Y> when you are in the date field to erase the date you had previously entered if you decide to report all the data.

To create a formatted report of your determinations, select <R> from the Report menu. This option creates an ASCII text file in the same format as the Freeform download format available in the on-line Query module. A pop-up box appears for you to enter a file name for the TXT report file. After you have specified a file name, the system generates the report, displaying a status counter at the bottom of the screen (Figure 6.6) as it writes the report. When the report is complete, the display changes to show the name of your file.

The report generator creates the file in the directory with the other files for the Editor. Follow your normal procedures for printing an ASCII text file.

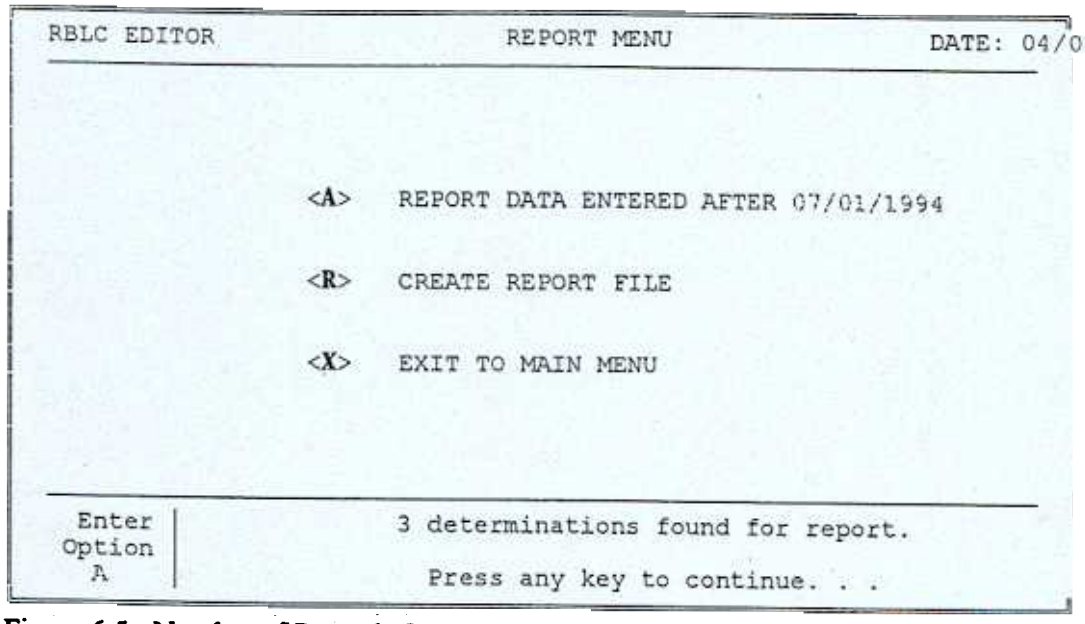


Figure 6.5 - Number of Records for Report Display

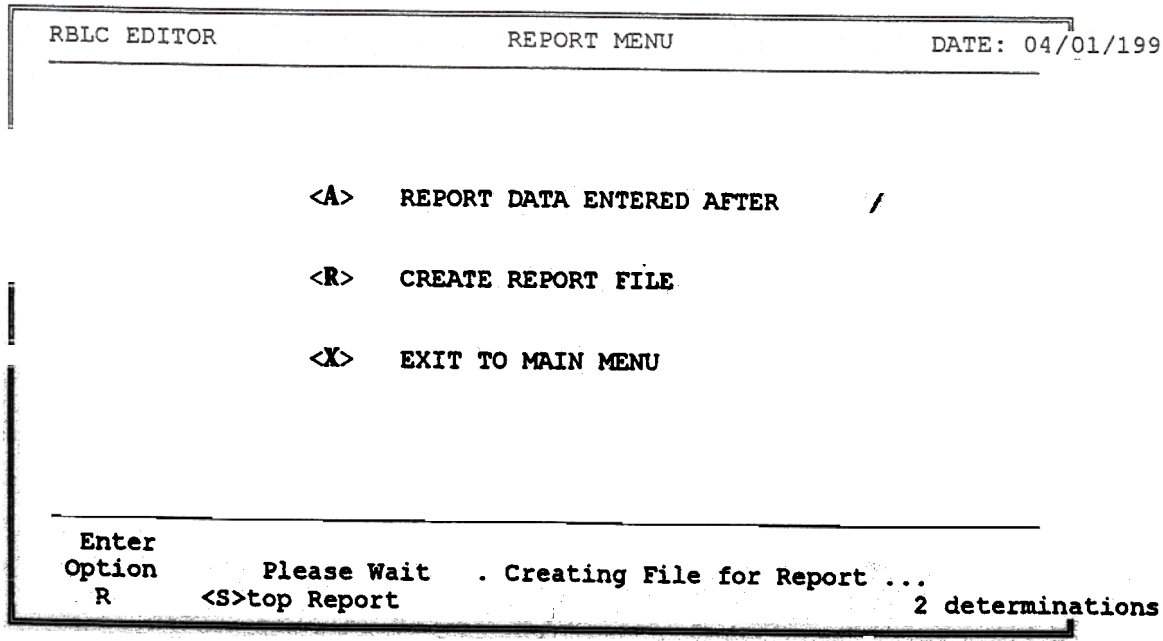


Figure 6.6 - Report Status Message

Compressing Your Data

The Editor stores your new control technology determinations in DBF data base files on your PC's hard drive. When you are finished editing the data, you should return the data to EPA for inclusion in the on-line RBLC data base. To simplify the process of transferring your data to the RBLC, the Editor includes a command to compress your data files into a single ZIP file.

From the Main menu, select the <F> option to prepare your files for uploading to EPA. When the system prompts you (Figure 6.7), enter any valid DOS file name for the ZIP file that you want to hold the compressed version of your data base. After you specify a file name, the system goes to DOS, runs PKZIP to create a ZIP file with your data base files, and returns to the Main menu. The compression software `PKZIP.EXE` must be on your hard drive in the `\RBLC` directory or accessible via your path statement for this option to work.

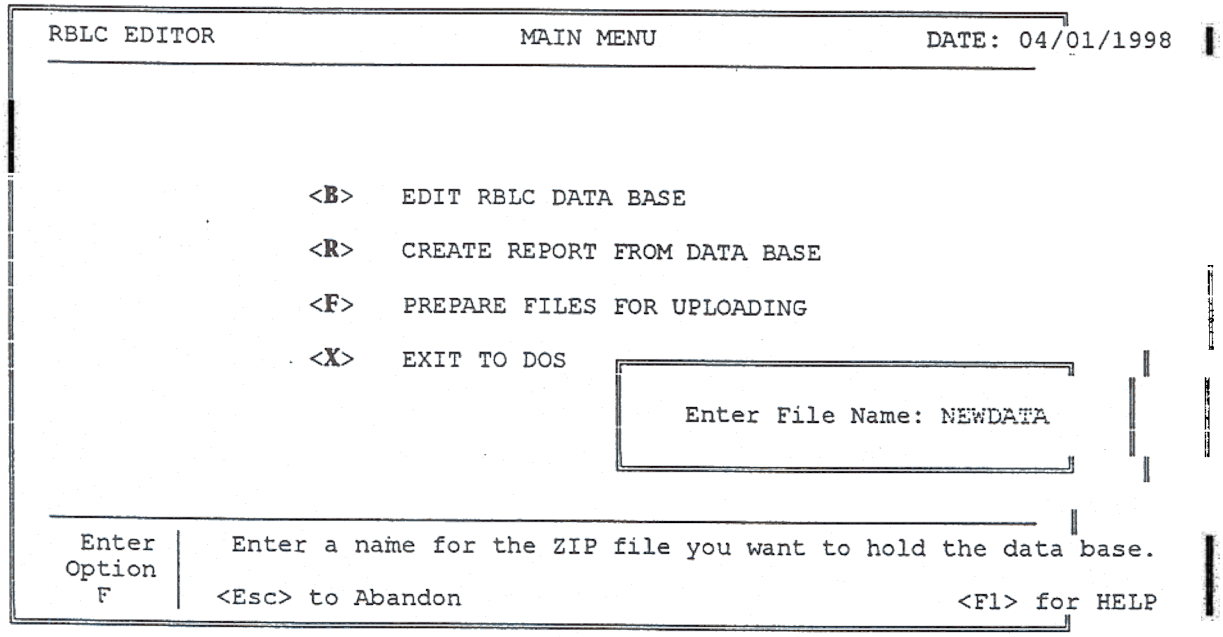


Figure 6.7 - File Name Prompt Box

The system displays a warning message if you use a file name that already exists and prompts you to confirm overwriting the file with that same name (Figure 6.8). If you do not want to write over the existing file, answer "N" and specify a different file name. Answer "Y" if you want the Editor to write over the existing file.

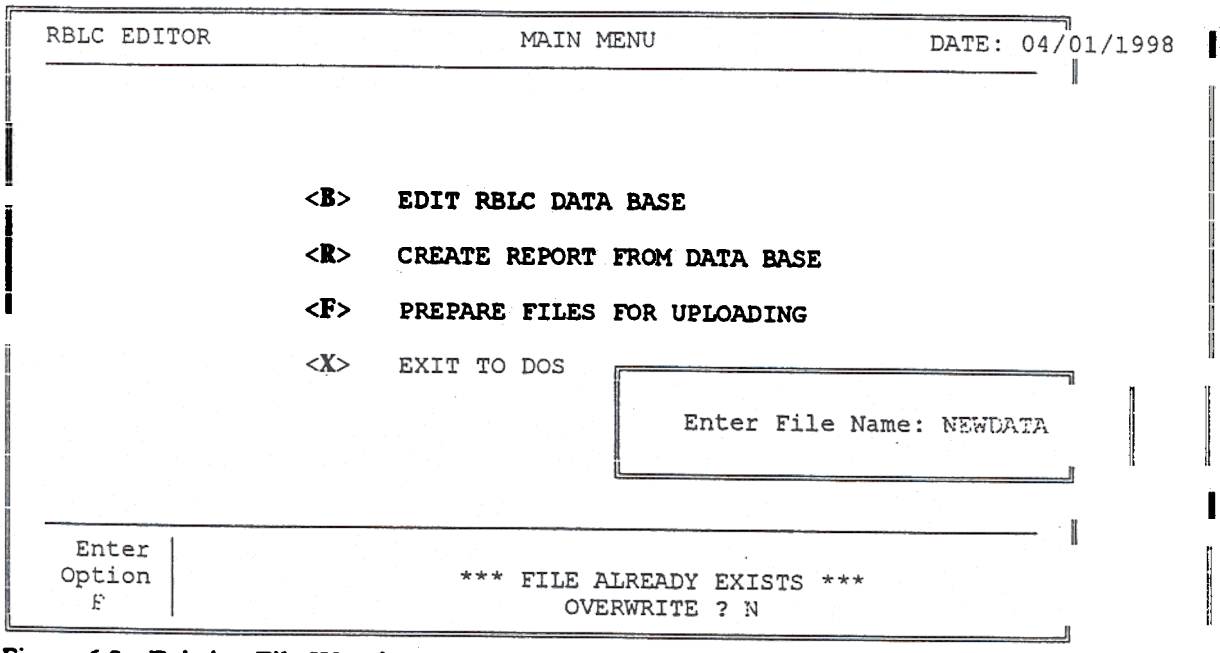


Figure 6.8 - Existing File Warning

After you have specified a name for the compressed file, the system goes to DOS and runs PKZIP to create a ZIP file with your data base files. The system displays a status message when it is finished and returns to the Main menu. If you have any problems using the <F> option, you can exit from the Editor and compress your data files directly at the DOS prompt. Change to the directory that contains the Editor and type:

```
PKZIP filename USR*.DBF
```

where filename is any valid DOS file name. PKZIP will automatically add the .ZIP extension to the file name.

Transferring Your Determinations to the RBLC

Periodically, you should send your determinations to the RBLC System Administrator for review and inclusion in the RBLC transient data base on the BBS. You can either e-mail the data files to the TTN or copy them to a diskette and mail it to EPA. The RBLC System Administrator will review the determinations for accuracy and completeness and then add your data to the on-line data base.

You can e-mail your compressed data by attaching the ZIP file to an e-mail message to Joe Steigerwald, the RBLC System Administrator. Follow the appropriate procedures for your Internet mail program. Be sure to include your phone number in the body of the message, in case there are any questions about your submittal.

Send your e-mail address to the following address:

steigerwald.joe@epamail.epa.gov

TTN BBS users can upload compressed data by enclosing the ZIP file in a BBS e-mail message to the RBLC System Administrator. Follow these steps:

1. Select E-mail from the TTN BBS.

2. Choose <L> to send mail.

3. Specify `Joe Steigerwald` as the user who the message is to. You can type either uppercase or lowercase letters.

4. Enter a brief subject for the message, for example: `RBLC Determination`.

5. Confirm that the To: and Subj: fields are correct. If they are not, answer N and reenter the correct information.

6. Answer N to "Submit Prepared Msg Text(Y/N)?" and Y to "Use Full Screen Editor(Y/N)?" (Figure 6.9).

```
To: JOE STEIGERWALD
Subj: RBLC DETERMINATION
Is this correct(Y/N)? Y

Submit Prepared Msg Text(Y/N)? N
Use Full Screen Editor(Y/N)? Y
```

Figure 6.9 - BBS E-mail Prompts

7. Type your message, being sure to include your phone number. Press <Esc> to exit the Full Screen Editor when you are done entering the message text.

8. From the command prompt line displayed at the bottom of the screen, select <F> to enclose a file with your message. Confirm your choice and enter the file name (Figure 6.10). Follow the procedures for uploading a file with your communication software.

```
<L>ist, <V>iew, <E>dit, <R>cpt, <F>ile, <Q>uit, <S>end, or <H>elp? F

Enclose a file with this message(Y/N)? Y
Enter 1-12 char full file name: newdata.zip

File Name: newdata.zip
 Protocol: XMODEM

Ready to receive:
(Ctrl-X to abort)
```

Figure 6.10 - Enclosing a File with a BBS Message

9. When you have successfully uploaded your file, the system displays the file name and the command line prompt at the bottom of the screen. Select <S> to send the message.

If you do not have easy access to e-mail or the TTN BBS, you can copy the ZIP file to a diskette and mail it to:

Joe Steigerwald
RBLC, MD-12
U.S. Environmental Protection Agency
Research Triangle Park, NC, 27711

When your data is received at EPA, the RBLC System Administrator reviews it to make certain that all of the needed data files are there. Then your determination is assigned a permanent RBLC ID and added to the Transient data base. You are notified via mail that your determinations are on-line and what their RBLC IDs are. At this time, you will also be sent a QA/QC report that details any deficiencies in your submittal. Use the on-line Edit option to correct any problems with the new determinations.

S/L Directors, BC's Title V NSR

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

RECEIVED
MAR 28 1994
AIR AND RADIATION DIVISION
U.S. EPA, REGION V

MAR 22 1994

MEMORANDUM

SUBJECT: Identification of Candidates for Best Available Control Technology (BACT) Determinations

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

This memorandum addresses an issue which has been raised to me, most recently by the American Forest & Paper Association, concerning the roles of the Environmental Protection Agency's (EPA's) various offices in the identification of potential control options for consideration in the determination of BACT for prevention of significant deterioration purposes.

In broad overview, the initial responsibility for identifying candidate control options for consideration as BACT usually lies with the applicant, and the permitting authority may suggest certain additional options for consideration. The permitting authority independently reviews the applicant's proposal to assess its adequacy. Thus, ultimately, the permitting authority decides, on a case-by-case basis, what emissions limitation constitutes BACT. Any individual or representative of a public, private, or government organization or agency has the right to bring to the permitting agency's attention information on control options or technologies for consideration in BACT analyses. So long as the applicable

administrative procedures are followed, the permitting authority is at liberty to confer with any individual, organization, or agency at any time during the review process, regarding technical information on possible BACT candidates.

Applicants are responsible for considering all relevant data available to them, including recent new source review (NSR) permits, maximum achievable control technology (MACT) and reasonably available control technology (RACT) requirements, compliance with new source performance standards (NSPS), recent source-specific State implementation plan (SIP) requirements and negotiated settlement agreements to the extent the information is publicly available.

As you are aware, EPA has created a repository for such information called the RACT/BACT/LAER Clearinghouse (RBLC) which is run by the Emissions Standards Division. In the past, States only have voluntarily submitted BACT decisions to the RBLC [submission of lowest achievable emission rate (LAER) determinations is mandatory]. As a result, the Clearinghouse is currently not a complete data base. Consistent with recent recommendations to EPA by the NSR Reform Subcommittee of the Clean Air Act Advisory Committee, the EPA is considering more actively encouraging States, and Federal offices in some cases, to submit relevant control technology information to the RBLC. Indications are that the quality and quantity of data are improving. We are also planning to develop a bulletin board to publicize state-of-the-art technology applications and innovative approaches to controlling emissions.

As part of their oversight of State NSR programs, Regional Offices have the primary responsibility within EPA to assist permitting authorities in obtaining and analyzing all data relevant to a BACT decision. The Regions are also primarily responsible for initiating enforcement action in those instances where a State has not issued the necessary permit or has issued a permit that does not conform to legal requirements.

In terms of the Office of Air Quality Planning and Standards' involvement in the BACT process, the Air Quality Management Division is responsible for development of regulations, policies and guidance regarding BACT, including procedural requirements, evaluation criteria and review of innovative control technology waivers. The Stationary Source Compliance Division has the lead in enforcement and compliance issues associated with BACT. The Technical Support Division works to develop and improve emissions test methods for standards development and compliance, and develops emission factors for industrial processes, which may be used in BACT analyses. The

Emissions Standards Division, in addition to operating and maintaining the RBLC, develops NSPS and MACT standards, and writes control technology guidelines and alternative control technology documents, all of which may generate information on potential BACT candidates.

In summary, I would like to reiterate that the BACT determination is the responsibility of the permitting authority with jurisdiction over a particular permit application. However, any person, regardless of the office they work for (including EPA staff), has the right to provide a permitting authority with technical information on the availability or function of a control option or technology, or other information that is relevant to a BACT determination. This information includes the existence of any emissions limits or technology requirements that are included in publicly-available documents (i.e., permits, SIP's, enforcement settlements). Appropriate offices within EPA have an affirmative responsibility to assist in this effort. The EPA encourages anyone with information that they believe should be considered in a BACT analysis to bring this information to the attention of the permitting agency as early in the application review process as possible.

I hope this memorandum clarifies any concerns or issues regarding the input of relevant technical or policy information into a State or local permitting authority's BACT determination process. Please distribute copies of this memorandum to the respective permitting agencies in your Region. If you have further questions regarding these issues, please feel free to contact me, or have your staff contact David Solomon, Chief, New Source Review Section, at (919) 541-5375.

cc: Air Branch Chief, Regions I-X
G. Foote, OGC
J. Rasnic, SSCD
J. Domike, OECM
B. Jordan, ESD
B. Kellam TSD
K. Berry
E. Lillis
D. Solomon
D. Crumpler

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

OBSOLETE

2 MAR 1989

MEMORANDUM

SUBJECT: Supplement to BACT/LAER Clearinghouse

FROM: Bob Blaszak
Control Technology Center

TO: See Addressees

In a few short months EPA will publish the 4th (1989) Supplement to the "BACT/LAER Clearinghouse - A Compilation of Control Technology Determinations." To be included in the 1989 Supplement, your determinations must be submitted to me by no latter than April 28, 1989.

To facilitate your submittal, a copy of the BACT/LAER determination form is attached. Note that the BACT/LAER Clearinghouse contact has changed. Old, dated forms are still being used and are being misdirected because they are being mailed to former Clearinghouse contacts. Please avoid delays in entering your data into the BACT/LAER Information System (BLIS) by using the attached form and mailing it to the address indicated in the upper left-hand corner of the form.

Improvements to BLIS are now being considered which should improve its accessibility and usefulness. These improvements include a user-friendly, menu-driven user access system and inclusion of performance verification data. If you would like to comment on these proposed improvements, suggest additional improvements and/or tell us about problems you have experienced with BLIS, you can send your comments to me at the address indicated on the enclosed form or call (919) 541-5432 or (FTS) 629-5432.

Remember to get your BACT/LAER determinations in as soon as possible. If you have any questions concerning the BACT/LAER Clearinghouse or BLIS, please call me at the number indicated above.

Thank you.

Attachment

Addressees
BACT/LAER Clearinghouse Contacts
at State and Local Air Pollution Control Agencies
EPA Regional Offices

Mail to:

Source Code

Date of This Report

BACT/LAER For New/Modified Source:

Date of Permit Issuance: _____

Permit No.: _____

Date of Estimated Start-up: _____

Determination Made By: _____ (Agency)

(Person Directly Knowledgeable About Permit) (Phone)

Permit Parameters: (List all processes subject to this permit)	Maximum Design Capacity	* Pollutant Regulated	Emission limit(s) units of emissions/ units of input	** Reg. reqmts. assoc. w/limit	Control equipment of process modification description	Efficiency %

Notes: _____

*Use the following abbreviations wherever possible: PM=particulate matter, SO_2=sulfur dioxide, NO_x=nitrogen oxides, CO=carbon monoxide, VOC=volatile organic compounds, VE=visible emission, TRS=total reduced sulfur, F=fluoride, Be=beryllium, H_2S=hydrogen sulfide, Hg=mercury, VC=vinyl chloride.

**Please use the following abbreviation: B=BACT, L=LAER, N=NSPS, H=NESHAP, A=NAAQS or PSD constraints, S=SIP, R=RACT, U=Unregulated.

Page __ of __

F-5

on updating the data input system to support entering RBLC determinations directly from the Web. If everything goes as planned, authorized users will be able to enter their agency's new determinations using the Web sometime in the Fall of 1999. Once this capability is available, the RBLC will notify authorized users of its availability.

Completed forms must be submitted to:

RBLC, ITG, ITPID
U.S. EPA
MD-12
Research Triangle Park, NC 27711

The RBLC staff will be making a concerted effort to improve quality control for data entering the system, but we need your help. Please take the time to read the instructions and properly complete all applicable items on the determination input form. There have been a number of questions on the input forms in the past. The instructions enclosed address most of these. One critical item is the process type code. It is critical that you clearly indicate the process name and process type code. If these are not correct, vague or misleading, it will be extremely difficult to identify relevant data when searching the data base. Use the "note" portion of the form to clarify your determination, especially if the source falls into one of the "other" categories which are included as catch-alls under most process type category headings. Another area of change this year involves New Source Review (NSR) information. The RBLC is currently revising its data base structure to include NSR data elements. This effort is currently scheduled to be complete in the Fall of 1999. The RBLC will be sending out additional information on these changes and their effect on data entry requirements later this summer. Please stay tuned.

The 1999 document will include all new determinations submitted to the RBLC from June 1998 through May 1999. To assist each agency, a summary that lists the number of determinations that each State or EPA Region has submitted during the period 10/97 through 9/98 has been enclosed.

I have also enclosed a copy of the letter from Bob Blaszczak to the RBLC State and Local Agency contacts sent with last year's annual request for new RBLC determinations that will hopefully serve to remind users of the initiative started last year to make the data in the RBLC more comprehensive. Please take the time to read it over one more time.

Thank you for your cooperation.

Sincerely,

Joe Steigerwald
RACT/BACT/LAER Clearinghouse

6 Enclosures

Enclosure 1

Submissions to RBLC by EPA Region and State for the Period October 1, 1997 through September 30, 1998.

EPA Region	State (number submitted)	Total
1	CT(1), ME(2), RI(1)	4
2	NY(1), PR(3)	4
3	DE(2), VA(2), PA(5)	9
4	AL(14), FL(1), SC(2), TN(1)	18
5	IN(5), MI(1), MN(3), OH(1)	10
6	NM(8), LA(4)	12
7	IA(2), MO(38)	40
8	CO(12), MT(2), ND(2), WY(18)	34
9	CA(53)	53
10	OR(3)	3
Grand Total		187

OEPA inter-office communication

to: Distribution date: February 2, 1994

from: Mike Hopkins, AQM&P and Clara Dailey, PMU

subject: Permitting of sources under PTI Registration status

After receiving the first Registration PTI worksheets, we have found that there are a few areas that need clarification. We want to provide you with further guidance on how to determine if a source qualifies for Registration status, as well as how the worksheet should be submitted to Central Office.

Several important things to consider when Registration is requested are:

The source must emit less than 5 tons/year of uncontrolled, potential emissions to qualify for Registration. A source can have control and receive Registration, but we must still decide on the basis of the uncontrolled emission rate. This amount is per source, and not per permit. Also, a source can have up to 5 tons of each pollutant, not the total of all pollutants.

No NSPS sources can be placed on Registration status. This includes storage tanks.

NESHAP or hazardous air pollutant sources that USEPA has promulgated a standard for cannot be placed on Registration.

Sources that are installed or that began construction prior to October 8, 1993 cannot be placed on Registration status; this status did not exist at that time, therefore, a PTI is required.

ORC 3745.11(J) states that for sources installed after July 1, 1993, the PTI fee will be doubled to received a permit issued after January 1, 1994. This is for all PTI's and Registration PTI's. Therefore, for sources qualifying for Registration that have been installed (or began construction) after October 8, 1993, but have not received any permit, the fee doubles for those permits issued after January 1, 1994, so please figure the fee appropriately.

There are several things that Central Office needs with the Registration worksheets:

If a source is subject to the Air Toxics Policy, please include a New Source Review Coding Form so that a toxic review can be performed, or send us a copy of the modeling if you do it.

When submitting PTI Registration forms, please include all calculations for controlled and uncontrolled emissions, verifying that the source emits less than 5 tons/year uncontrolled. Also, include a short note as to the source of the numbers used in the calculations. For example, if a number is obtained from a manufacturer, include a note off to the side stating that this number came from the manufacturer. This should be done for all PTI's.

The construction status is important, so make sure that you include the date on the worksheet when construction began, if already started. The installation schedule for each source should be included with the Registration package, just like it should be for a PTI worksheet.

When Registration status is requested, but you determine that a source cannot be placed on a Registration PTI, you should notify the source as soon as possible. We only have 60 days to notify the applicant if Registration is not applicable, and Central Office has received some Registration worksheets that must be full PTI's very close to the 60 day deadline. We want to emphasize that you must review these early on to determine if they qualify for Registration or not.

When we have noticed any registration worksheets submitted that should really be PTI's, we have generally changed the worksheet and processed the paperwork as a PTI, and notified the field office.

There are pollutants (other than VOC, PM, SO2 and NOx) that are not listed in the rule that are emitted alone or in combination with other listed pollutants from a source. Central Office is reviewing the rule to determine if a source should be placed on Registration in these cases, and what the cutoffs should be for these pollutants to allow Registration. For CO, the determination at this time is that if a source emits less than 5 TPY of CO, it can be placed on Registration, otherwise it needs a PTI. Sources emitting ozone are not to be placed on Registration.

And finally, please fill out your forms as expeditiously as possible. Your cooperation is greatly appreciated.

MH/CD/MP/SG

Distribution

Don Cavote, CDO
Doug Seamen, Cleveland
Jerry Garro, Akron
John Paul, RAPCA
Bruce Blankenship, Canton
Dennis Bush, NEDO
Don Walden, Portsmouth
Jim Braun, AQM&P
Misty Parsons, AQM&P
Tom Rigo, F.O.
Judy Zimomra, Cleveland
Fred Klingelhafer, SEDO
Phil Henrichs, SWDO
Gerry Rich, NWDO
Harold Strohmeyer, NOVAA
Barry Burton, Cincinnati
Don Moline, Toledo
Alan Lloyd, AQM&P
Sara Geary, PMU

Ohio EPA
Division of Air Pollution Control

inter-office communication

To: Central and District Offices DAPC Staff, Local Air Agencies

From: Bob Hodanbosi, Chief

Subject: Small Business Assistance Program

Date: April 27, 1995

The Small Business Stationary Source Technical and Environmental Compliance As Program authorized under Section 507 of the 1990 Clean Air Act Amendments was to help small businesses that lack the technical or financial capabilities to requirements. Ohio's program is now underway and I want to explain the progra and how its function relates to other parts of the Division of Air Pollution C program has three elements:

- The **Small Business Assistance Program** managed by the Division of Air Poll Control will provide technical assistance on such compliance issues as ap requirements, permitting, and alternative compliance methods. The progra have employees in Central Office and will expand to include staff located parts of Ohio so they are more accessible by smaller businesses throughou The supervisor for this program is Rick Carleski. Rick comes from the ai in the Northwest District Office.

- The **Small Business Ombudsman** will be located at the Ohio Air Quality Development Authority. Mark Shanahan has been named as the Small Busines Ombudsman. The Ombudsman's office will serve as an advocate for small bu and will perform outreach to the small business community. The Ombudsman will administer the Small Business Assistance Fund to provide financial a small businesses in their purchase of air pollution control equipment.

- The **Compliance Assistance Panel** will be comprised of members selected by General Assembly, the Governor and Ohio EPA. The panel's function is to broad oversight for the technical assistance and ombudsman programs. App to this panel are forthcoming.

In the Amendments, Congress gave its own definition of a small business that i assistance under the program. An eligible small business is a stationary sour

- Is owned or operated by a person employing 100 or fewer individuals;

- Is a small business concern as defined in the Small Business Act;

- Is not a major stationary source as defined in Titles I and III of the Cl Amendments;

- Does not emit 50 tons per year of any regulated pollutant; and

- Emits fewer than 75 tons per year of all regulated pollutants

Legislative authority for Ohio's SBAP was granted in Senate Bill 153, the law authorized our Title V program. One key feature of Ohio's program is that it confidentiality to small businesses seeking help under the program. This conf serve as an incentive to those businesses that ordinarily would be reluctant t compliance issues for fear of enforcement. This confidentiality does not gran from enforcement actions taken as a result of routine or complaint-driven insp

1. The SBAP will keep confidential information regarding violations detected program, including names and locations of businesses. As required by U.S program will provide emissions data and general statistical information s types of noncompliance being encountered, costs of compliance, etc. The also conduct follow-up audits to determine the extent to which the progra compliance among participating industries.

2 DAPC's enforcement program is not prohibited from taking action against s businesses who are receiving SBAP assistance. However, considering that and local air agency staff are granted enforcement discretions, the enfor program may consider a company's good faith efforts to achieve compliance participating in the SBAP as a mitigating factor in determining the appro enforcement response or civil penalty.

The SBAP will act independently of our enforcement program. The purpose of confidentiality is not to circumvent or hinder enforcement. As much as possib eliminate any inconsistencies in the messages and compliance advice between SB permit staff. For this reason, I do expect that SBAP staff will from time to compliance issues with engineering staff. It is important for us to present a message to our customers.

Similarly, some of you may be asked to review written materials for technical hope you will support the SBAP staff in this and other endeavors as the progra in the weeks ahead.

BH/klu

cc Don Schregardus, Director
All Deputy Directors
All Division and District Office Chiefs
Department of Development

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

OFFICE OF ENFORCEMENT

MEMORANDUM

DATE: December 18, 1978

SUBJECT: Interpretation of "Constructed" as it Applies to Activities Undertaken Prior to Issuance of a PSD Permit

FROM: Director Division of Stationary Source Enforcement

TO: Enforcement Division Directors Regions I-X

Air and Hazardous Materials Division Directors Regions I-X

The issue addressed in this memorandum is where on the continuum from planning to operation of a major emitting facility does a company or other entity violate the PSD regulations if it has not yet received a PSD permit. (It is assumed here that such a permit is required by the PSD regulations.) This question has arisen several times in particular cases and general guidance now appears necessary.

The statute and regulations do not answer this question. The Clean Air Act states simply that, "[n]o major emitting facility ... may be constructed ... unless - (1) a permit has been issued ... [and various other conditions have been satisfied]." Section 165(a). Similarly, the PSD regulations state that, "[n]o major stationary source or major modification shall be constructed unless the [various PSD requirements are met]." 40 CFR 52.21(i)(1), 43 FR 26406. "Construction" is defined in the regulations as "fabrication, erection, installation, or modification of a source. " 40 CFR 52.21(b) (7), 43 FR 26404. This accords with Section 169 (2) (C) of the Act, but it does not explicitly answer the question posed above. To our knowledge, the legislative history of the Act does not treat this issue. Thus the term "constructed" seems to be open to further interpretation by EPA.

Commencement of construction is quite specifically defined in both Section 169(2)(A) of the Clean Air Act and 40 CFR 52.21(b)(8), 43 FR 26404. However, that definition is for the purpose of deciding the threshold question of the applicability of the PSD regulations. Therefore, we are not bound by it in deciding what activities may be conducted prior to receiving a necessary PSD permit.

DSSE's response to date has been that the permitting authority should make the determination on a case-by-case basis, after considering all the facts of the individual situation. For example, we said that site clearing might be inappropriate for a source proposed to be constructed in a heavily forested Class I area, but permissible for a source proposed to be constructed on a junk-strewn lot in a heavily industrialized Class III area.

After consulting with the Office of General Counsel, we are now amending this policy in order to minimize the administrative burden on the permitting authority and to adopt what we believe now to be the better legal interpretation. The new policy is that certain limited activities will be allowed in all cases. These allowable activities are planning, ordering of equipment and materials, site-clearing, grading, and on-site storage of equipment and materials. Any activities undertaken prior to issuance of a PSD permit would, of course, be solely at the owner's or operator's risk. That is, even if considerable expense were incurred in site-clearing and purchasing equipment, for example, there would no guarantee that a PSD permit would be forthcoming. All on-site activities of a permanent nature aimed at completing a PSD source for which a permit has yet to be obtained are prohibited under all circumstances. These prohibited activities include installation of building supports and foundations, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature.

The new policy has several advantages. First, it will be easy to administer, since case-by-case determinations will not be required. Moreover, it assures national consistency and permits no abuse of discretion. Finally, it appears to be the most legally correct position. The policy has the undeniable disadvantage of allowing a good deal of

activity at sites which may be highly susceptible to environmental impact. We feel that on balance, however, the advantages of the policy outweigh the disadvantage.

If you any questions, please feel free to contact David Rochlin of my staff, at 755-2542.

Edward E. Reich

cc: Peter Wyckoff, OGC
Richard Rhoades, OAQPS
Linda Murphy, Region I
Ken Eng, Region II
Jim Sydnor, Region III
Winston Smith, Region IV
Steve Rothblatt, Region V
Don Harvey, Region VI
Bob Chanslor, Region VII
Dave Joseph, Region VIII
Bill Wick, Region IX
Mike Johnston, Region X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 25 1999

REPLY TO THE ATTENTION OF
AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: DaimlerChrysler Corporation
Toledo, Ohio Facility

Dear Mr. Hodanbosi:

Enclosed is a copy of a Notice of Violation issued this date by the United States Environmental Protection Agency to DaimlerChrysler Corporation, Toledo, Ohio, for DaimlerChrysler Corporation's violations of Section 165 of the Clean Air Act ("CAA" or "Act") and 40 C.F.R. § 52.21. This Notice of Violation has been issued pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1).

Specifically, DaimlerChrysler Corporation is in violation of Section 165(a) of the Act, and 40 C.F.R. § 52.21 for failing to obtain an effective Prevention of Significant Deterioration ("PSD") permit prior to beginning actual construction of a major emitting facility.

Section 113 of the CAA authorizes the commencement of an enforcement action 30 days following the date of issuance of the Notice of Violation. It is our hope that this Notice of Violation will substantially aid efforts to obtain immediate compliance with the CAA.

Sincerely yours,

Margaret M. Guerriero, Acting Director
Air and Radiation Division

Enclosure

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

cc: William J. Garber, Acting Manager
City of Toledo
Division of Environmental Services

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 25 1999

REPLY TO THE ATTENTION OF

AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Roy Attard, Supervisor,
Advance Facilities Building Construction,
Assembly Manufacturing Engineering
DaimlerChrysler Corporation
1000 Jeep Parkway
Toledo, Ohio 43657

Dear Mr. Attard:

The enclosed Notice of Violation is issued this date pursuant to Section 113(a)(1) of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(a)(1), to notify DaimlerChrysler Corporation that the Administrator of the United States Environmental Protection Agency ("U.S. EPA") finds DaimlerChrysler Corporation's Toledo Facility to be in violation of Section 165 of the Clean Air Act and 40 C.F.R. § 52.21.

Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), authorizes the Administrator to initiate an enforcement action 30 days following the date of issuance of this Notice of Violation. U.S. EPA's enforcement options include the issuance of an administrative order requiring compliance with the CAA, an administrative order pursuing penalties, or the commencement of civil or criminal actions. In addition, Section 306 of the CAA, 42 U.S.C. § 7606, provides that facilities in noncompliance with the CAA may become ineligible for Federal contracts, grants or loans.

U.S. EPA is offering DaimlerChrysler Corporation an opportunity for a conference to discuss the violations that are the subject of this Notice. The conference will afford DaimlerChrysler Corporation an opportunity to present information bearing on the findings of violation and on the nature of the violations.

The U.S. EPA contacts in this matter are Yasmine Wadia and Reginald Pallesen. Please contact Ms. Wadia at (312) 886-4035 or Mr. Pallesen at (312) 886-0555 to request a conference. Such a request should be made as soon as possible, but not later than 10 days from receipt of this Notice. Any conference must be held within 30 days from receipt of this Notice.

Sincerely yours,

Margaret M. Guerriero, Acting Director
Air and Radiation Division

Enclosure

cc: Patrick M. Raher, Partner
Hogan & Hartson L.L.P.

William J. Garber, Acting Manager
City of Toledo
Division of Environmental Services

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
DaimlerChrysler Corporation	)	**NOTICE OF VIOLATION**
Toledo, Ohio	)	**EPA-5-99-OH-40**
	)	
Proceedings Pursuant to the	)	
Section 113 of the Clean Air Act,	)	
42 U.S.C. § 7413	)	

STATUTORY AUTHORITY

The United States Environmental Protection Agency (U.S. EPA) is issuing this Notice of Violation pursuant to Section 113(a)(1) of the Clean Air Act ("Act"), 42 U.S.C. § 7413(a)(1). You are hereby notified that the Administrator of the United States Environmental Protection Agency, by authority duly delegated to the undersigned, finds DaimlerChrysler Corporation, Toledo, Ohio, to be in violation of Part C of the Act and 40 C.F.R. § 52.21. Specifically, DaimlerChrysler Corporation is in violation of Section 165(a) of the Act and the Ohio State Implementation Plan at 40 C.F.R. § 52.21 for failing to obtain an effective Prevention of Significant Deterioration ("PSD") permit prior to beginning actual construction of a major emitting facility.

STATUTORY AND REGULATORY AUTHORITY

1. Section 110 of the Act, 42 U.S.C. § 7410, requires States to adopt, and submit to the U.S. EPA for approval, State Implementation Plans ("SIPs") providing for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards ("NAAQS") promulgated by U.S. EPA pursuant to Section 109 of the Act, 42 U.S.C. § 7409.

2. Part C of the Act, 42 U.S.C. § 7470-7491, requires the Administrator to promulgate regulations to prevent the significant deterioration of air quality in areas designated as attainment or unclassifiable in accordance with Section 107(d) of the Act, 42 U.S.C. § 7407(d). In accordance with the Act, the Administrator promulgated regulations at 40 C.F.R. § 51.166 setting forth SIP approval requirements for the prevention of significant deterioration of air quality.

3. Section 161 of the Act, 42 U.S.C. § 7471, and 40 C.F.R. § 51.166(a)(1) require the States to submit SIPs containing emission limitations and other measures necessary to prevent the significant deterioration of air

quality. Pursuant to Section 110(a) of the Act, 42 U.S.C. § 7410(a), the Administrator determined the Ohio SIP did not satisfy the measures required to ensure the prevention of significant deterioration of air quality. As a result, the Administrator disapproved the PSD portion of the Ohio SIP, 40 C.F.R. § 52.1884(a).

4. In accordance with Section 110(c) of the Act, 42 U.S.C. § 7410(c) and 40 C.F.R. § 52.21(a), the Administrator incorporated the provisions of 40 C.F.R. § 52.21(b) through (w) [PSD Regulations] as part of the Ohio SIP, 40 C.F.R. § 52.1884(b).

5. "Major stationary source" is defined at 40 C.F.R. § 52.21(b)(1)(i) as, among other things, any chemical process plant that emits or has the potential to emit, 100 tons per year of any air pollutant subject to regulation under the act.

6. "Major modification" is defined at 40 C.F.R. § 52.21(b)(2)(i) as "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 subject to regulation under the Act."

7. "Construction" is defined at 40 C.F.R. § 52.21(b)(8) as "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions."

8. "Begin actual construction" is defined at 40 C.F.R. § 52.21(b)(11) as "initiation of physical onsite construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those onsite activities other than preparatory activities which mark the initiation of the change."

9. "Significant" is defined at 40 C.F.R. § 52.21(b)(23)(i) as "net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates" including but not limited to: "100 tons per year (TPY) CO, 40 TPY of NO_x, 40 TPY of SO_2, 25 TPY of Particulate Matter and 40 tpy of volatile organic compounds for Ozone."

10. 40 C.F.R. § 52.21(i) states "no stationary source or modification to which the requirements of paragraphs (j) through (r) of this section shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements."

11. Section 165(a) of the Act states, *inter alia*, that no major emitting facility may be constructed or modified unless a permit has been issued in accordance with requirements of Part C of the Act.

12. The issuance and effective dates for a PSD permit are regulated under 40 C.F.R. § 124.15.

13. 40 C.F.R. § 124.15(a) states, "After the close of the public comment period under § 124.10 on a draft permit, the Regional Administrator shall issue a final permit decision..." Pursuant to this requirement, the Ohio Environmental Protection Agency ("Ohio EPA") issued a Permit to Install to Chrysler Corporation on June 26, 1998.

14. 40 C.F.R. § 124.15(b)(1) states, "A final permit decision... shall become effective thirty (30) days after the service of notice of the decision unless... a later effective date is specified in the decision..."

15. 40 C.F.R. § 124.20(d) states, "Whenever a party or interested person has the right or is required to act within a prescribed period after the service of notice or other paper upon him or her by mail, 3 days shall be added to the prescribed time."

16. The Permit to Install issued to Chrysler Corporation by Ohio EPA on June 26, 1998 states under the PSD requirements section, "In accordance with 40 C.F.R. 124.15, 124.19, and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice..."

17. 40 C.F.R. § 52.21(r) provides, *inter alia*, that any owner or operator of a source subject to the PSD regulations who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

18. 40 C.F.R. § 52.23 provides, *inter alia*, that failure to comply with any provisions of 40 C.F.R. Part 52, or with any approved regulatory provision of a SIP or with any permit condition, or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated into the SIP, subjects the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and

subject to enforcement action under Section 113 of the Act.

FACTUAL BACKGROUND

19. DaimlerChrysler Corporation is located at 1000 Jeep Parkway, Toledo, Ohio in Lucas County.

20. DaimlerChrysler Corporation operates a motor vehicle assembly plant.

21. Lucas County is an area presently classified as attainment or unclassifiable for all criteria pollutants, with the exception of SO_2. 40 C.F.R. Subpart B, § 81.336.

22. On June 26, 1998, OEPA issued a PSD permit to Chrysler Corporation for the construction of the New Toledo Assembly Plant. OEPA issued a Citizen Advisory noticing issuance of the PSD permit by mail on June 30, 1998. Therefore, pursuant to the regulations and the terms of the PSD permit, the PSD permit was not effective until August 3, 1998, 33 days after OEPA mailed the Citizen Advisory was mailed to commentors.

23. On June 16, 1998, Chrysler Corporation initiated construction of storm water sewers.

24. On July 27, 1998, Chrysler Corporation initiated construction of sanitary sewers

FINDINGS OF VIOLATION

25. By installing storm water sewers and sanitary sewers at the site of the New Toledo Assembly Plant prior to August 3, 1998, Chrysler Corporation (now DaimlerChrysler) began actual construction of the motor vehicle assembly plant prior to the effective date of its PSD permit, in violation of Section 165(a)(1) of the Act and the Ohio State Implementation Plan at 40 C.F.R. § 52.21(i)

NOTICE OF VIOLATION

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Ohio and DaimlerChrysler Corporation that the facility described above is in violation of Section 165(a) of the Act, and the Ohio State Implementation Plan at 40 C.F.R. § 52.21, as set forth in this Notice of Violation.

8/24/99
Date

Margaret M. Guerriero, Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

Re: Notice of Violation at DaimlerChrysler Corporation, **Toledo, Ohio**

I, Loretta Shaffer, do hereby certify that a Notice of Violation Pursuant to the Clean Air Act was sent by Certified Mail, Return Receipt Requested, to:

Mr. Roy Attard, Supervisor,
Advance Facilities Building Construction,
Assembly Manufacturing Engineering
DaimlerChrysler Corporation
1000 Jeep Parkway
Toledo, Ohio 43657

I, Loretta Shaffer, certify that a copy of the Notice of Violation Pursuant to the Clean Air Act was sent by first class mail to:

Patrick M. Raher, Partner
Hogan & Hartson, L.L.P.
Columbia Square
555 Thirteenth Street, NW
Washington D.C. 20004-1109

William J. Garber, Acting Manager
City of Toledo
Division of Environmental Services
348 South Erie
Toledo, Ohio 43602

and

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

on the 26th day of August, 1999.

Loretta Shaffer

Loretta Shaffer, Secretary
AECAB (MN/OH)

P140 895 437
Certified Mail Article Number

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

DEC 13 1995

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mr. Charles W. Williams
Commissioner, Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155-4194

Dear Mr. Williams:

This is in response to your September 27, 1995 letter to Carol Browner requesting clarification from the United States Environmental Protection Agency (EPA) concerning the scope of construction-related activities that may occur prior to issuance of a Prevention of Significant Deterioration (PSD) permit under the Federal regulations at 40 CFR 52.21, which are also incorporated into Minnesota's rules. Your letter requests the EPA's interpretation on four related issues that are addressed below. The EPA's policy on most of the issue; is explained in the attached memorandum of March 28, 1986 entitled "Construction Activities Prior to Issuance of a PSD Permit with Respect to Begin Actual Construction" from Edward E. Reich, Director, EPA's Stationary Source Compliance Division (March 1986 Memo).

First, Minnesota interprets the Federal PSD regulation to allow an applicant to enter into binding agreements or contractual obligations prior to receiving a PSD permit. The PSD regulations at 40 CFR 52.21(i)(1) require an applicable source to obtain a PSD permit before it may "begin actual construction.' The PSD rules at 40 CFR 52.21(b)(11) define "begin actual construction" as the " -initiation of physical on-site construction activities on an emissions unit which are of a permanent nature.... With respect to a change in the method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change." Since entering into binding agreements or contractual obligations is not prohibited under this definition, the EPA agrees with the Minnesota view that these activities are allowed under the Federal PSD rules prior to obtaining a PSD permit. We also agree that the owner or operator who chooses to undertake

these activities prior to obtaining the required PSD permit does so at its-own risk that a permit may not be issued or may not contain the terms the applicant desires.

Second, Minnesota interprets the Federal PSD rules to not prohibit site clearing activities prior to receiving a PSD permit, but that there is a prohibition on beginning construction activities that are of a permanent nature. The EPA agrees with Minnesota that site clearing and grading are not prohibited by this definition. Allowed preconstruction activities would also include ordering materials and temporary storage on site (see March 1986 memorandum).

Prohibited (permanent and/or preparatory) preconstruction activities under 40 CFR 52.21(b)(i)(1) and (b)(11) would include any construction that is costly, significantly alters the site, and/or permanent in nature. This would include, but is not limited to: (1) excavating, blasting, removing rock and soil, and. backfilling, and (2) installing footings, foundations, permanent storage structures, pipe, and retaining walls. See May 13, 1993 memorandum from John Rasnic to Region III, "Construction Activities at Georgia Pacific"(GP memo); see also November 4, 1993 memorandum from Dave Howekamp to Region IX, "Preconstruction Review and Construction Activities Prior to Permit Issuance."

As explained in the GP memo (and those preceding), absent a prohibition on any costly, significant or permanent preconstruction, affected sources could defeat the preconstruction requirement or its enforcement by making a costly, substantial, and/or permanent investment and later argue that retrofitting of PSD requirements or a denial of the permit would unreasonably interfere with their investment.

Further, it is EPA's longstanding policy that section 52.21(i) reasonably prohibits any preconstruction "intended to accommodate" an "emissions unit" or which is an "integral part of the source or modification." This is supported by the definition of "emissions unit" at 52.21(b)(7), which "means any part of a stationary source which emits or would have the potential to emit any pollutant . . . " (see March 1986 memo). The meaning of "intended to accommodate" was also discussed in the GP memo which states: "[i]f the construction activity is an integral part of the PSD source or modification, the source must obtain a PSD permit prior to construction. In other words, if the construction would not serve in accordance with its original intent except for inclusion of the emissions unit, such construction is prohibited prior to obtaining a PSD permit."

Finally, you have asked whether there is flexibility under the Clean Air Act (Act) or rules to allow construction of footings for emissions units without a PSD permit in cold weather States such as Minnesota. EPA's general view is that such an exemption is not authorized under the Act or the Federal PSD rules. Historically, foreseeable circumstances such as a short construction season have been factored into the design, planning, and permitting of any affected construction project. However, the EPA believes that Minnesota has raised legitimate concerns. As a part of the NSR Reform, such concerns were raised and considered, but no agreement was reached on specific changes to the NSR rules. EPA intends to ask the NSR Reform Subcommittee to consider again rule reforms that would address possible extenuating circumstances under which certain limited construction-related activities could take place prior to receipt of a final permit. In the interim, I encourage the State to continue its discussions with the Regional Office to develop a solution, within the current rules, that considers EPA's concerns about allowing certain construction-related activities prior*to receipt of a PSD permit. Specifically, should a source request to establish footings prior to cold weather without receiving the required PSD permit, the EPA may be willing to discuss compliance options, consistent with the'rules.

I hope this letter clarifies EPA's interpretation of the Federal PSD rules regarding permissible activities prior to obtaining a PSD permit. If you have any questions concerning the application or enforcement of the PSD rules, you may contact Ron Van Mersbergen of EPA Region 5 at (312) 886-6056.

Sincerely,

John S. Seitz
Director
Office of Air Quality Planning
and Standards

Enclosures

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MEMO # 14.8

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

OFFICE OF
AIR AND RADIATION

MAR 28 1986

SUBJECT: Construction Activities Prior to Issuance of a PSD Permit with Respect to "Begin Actual Construction"

FROM: Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Robert R. DeSpain, Chief
Air Programs Branch, Region VIII

This memorandum addresses the interpretation of "begin actual construction" as it refers to construction activities which may occur, or are prohibited prior to issuance of a PSD permit under 40 CFR 52.21(i). The Control Programs Development Division of OAQPS, the Office of General Counsel, and the Air Enforcement Division of the Office of Enforcement and Compliance Monitoring were consulted in the development of this memorandum, and all three offices concur with its content.

Section 165(a) of the Clean Air Act states that "[n]o major emitting facility...may be constructed...unless - (1) a permit has been issued... [and various other requirements are satisfied]." Section 165 requirements, then, apply to major emitting facilities, i.e. major stationary sources. However, the PSD regulations at Section 52.21(i) (1) state that, "[n]o stationary source or modification... shall begin actual construction without a permit which states that the stationary source or modification... [has met various requirements]." The term "begin actual construction" at Section 52.21(b) (11) in the PSD regulations refers to "construction activities on an emissions unit." Emissions unit is defined at Section 52.21 (b)(7) as "...any part of a stationary source which emits or would have the potential to emit any pollutant subject

to regulation under the Act." Therefore, although applicability of PSD is determined on a source-wide basis, it may become necessary to distinguish the emissions unit from the major stationary source or modification in order to determine at what point in construction planning or construction activities a PSD permit is required.

The question of what type of construction activities may be conducted prior to issuance of a PSD permit has been covered by EPA policy for many years. On December 18, 1978 EPA issued policy addressing this issue. That memorandum specified that certain limited activities would be allowed, such as planning, ordering of equipment and material, site-clearing, grading, and on-site storage of equipment and materials. Any of these activities, if undertaken prior to issuance of a PSD permit, would be at the risk of the owner or operator. All on-site activities of a permanent nature aimed at completing a PSD source (including, but not limited to, installation of building supports and foundations, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature) are prohibited until the permit is obtained, under all circumstances. This December 1978 policy defines the type of construction activities allowed at a PSD-affected source prior to issuance of a PSD

permit.

Since section 52.21 (i) (1) specifies that a source may not begin actual construction (on an emissions unit) until a PSD permit is obtained by that source, and "begin actual construction" at Section 52.21 (b) (11) refers to the emissions unit, it is necessary to clarify the definition of emissions unit. "Emission unit" as defined at Section 52.21 (b) (7) refers not only to units which emit pollutants subject to review under PSD, but to any part of the source which emits a pollutant subject to regulation under the Clean Air Act. By definition then, any part of a PSD source which would emit any pollutant subject to regulation under the Act is considered an emissions unit, even if that particular unit is not subject to PSD review. The emissions unit would include any installations necessary to accommodate that unit. Therefore, before issuance of the PSD permit, construction is prohibited on any emissions unit or on any installation designed to accommodate the emissions unit. If the emissions unit (including any accommodating installation) is an integral part of the

source or modification (i.e. the source or modification would not serve in accordance with its original intent, except for inclusion of the emissions unit), the PSD permit must be obtained before construction on the entire source commences.

The policy statement from 1978 reflects the current policy on the types of construction activities which are prohibited, or may occur at risk to the owner prior to issuance of a PSD permit. Language changes in the regulations after this guidance was issued did not alter EPA's interpretation of what a source may do prior to obtaining a PSD permit.

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

Edward E. Reich

cc: Kirt Cox, OAQPS
Gregory Foote, OGC
Douglas A. Johns, DOJ
Judith Katz, OECM
Tim Osag, Region VIII
NSR Regional Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
76 Hawthorne Street
San Francisco, Ca. 94105-3901

November 4, 1993

MEMORANDUM

SUBJECT: Preconstruction Review and Cons

FROM: Dave Howekamp
Director
Air and Toxics Division

TO: See Below

This memorandum reiterates EPA's longstanding interpretation concerning the range of construction related activities that lawfully may occur prior to the issuance of a permit to construct or modify a facility or emissions unit.

The Clean Air Act mandates a preconstruction review program for sources subject to Prevention of Significant Deterioration (PSD) (§ 165) and New Source Review (NSR) (§§ 172 and 173) requirements. In addition, under § 110(a)(2)(c), State and local agencies are required to include in their State Implementation Plans preconstruction review programs necessary to assure that construction of any new or modified source is consistent with attainment of the National Ambient Air Quality Standards. To fulfill this requirement, most District rules require that any person building any article, machine, or contrivance which may cause the issuance of air contaminants shall obtain authorization for such construction prior to beginning actual construction.

Preconstruction review is a necessary precursor to engineering and public review processes. As a result of this process, the permitting authority may require installation of air pollution control or monitoring equipment that was not initially provided for in the design process. Thus, the pre-construction review process is mandated both to ensure that Clean Air Act requirements are met and to help sources avoid costly construction changes.

The question of what type of preliminary site activities may be conducted prior to permit issuance was addressed by EPA policy memoranda. on December 18, 1979, March 28, 1986 and May 13, 1993. These memoranda explain that certain limited activities that do not represent an irrevocable commitment to the project would be allowed, such as planning, ordering of equipment and materials, site clearing, grading, and on-site temporary storage of equipment and materials. Any of these activities, if undertaken prior to issuance of a permit, would be at the risk of the owner or operator.

In contrast, all on-site activities of a permanent nature aimed at completing construction or of the source including but not limited to installation of building supports and foundations, paving. laying of underground pipe work, construction of any permanent storage structure, and activities of a similar nature are prohibited until after the permit is issued and effective, under all circumstances.

In addition, EPA has long maintained that in order to meet legal requirements, permits to construct must require enforceable emission limitations. Limiting the potential to emit of a stationary source is of primary importance in establishing whether a new or modified source is major and thus subject to PSD or NSR requirements. For any limit or condition to be a legitimate restriction on potential to emit, that limit or condition must be federally enforceable. Such conditions and limitations ensure that:

- a source that has the potential to emit in amounts that would constitute a major source or major is restricted from doing so in a manner that is federally enforceable;
- all contemporaneous emissions increases and decreases am creditable and federally-enforceable; and
- where appropriate, emissions offsets transactions are documented clearly and offsets are real, creditable, quantifiable, permanent, and federally-enforceable.

We are committed to working with you to ensure that sources participate in the preconstruction review process and obtain permits with federally enforceable emission limitations prior to beginning actual construction (as defined at 40 CFR 51.165 (a)(l)(xv), 51.166 (b)(11), and 52.21 (b)(11)). If you have any questions or would like copies of the memoranda mentioned above, please contact Jennifer Fox of my staff at 415-744-1257.

Addressees:
All Region IX Air Agency Directors
All Region IX New Source Review Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460 OFFICE OF AIR AND RADIATION

MEMORANANDUM

SUBJECT: Construction Activities at Georgia Pacific

FROM: John B. Rasnic, Director Stationary Source Compliance Office of Air Quality Planning and Standards

TO: Bernard E. Turlinski,
Chief Air Enforcement Branch
Region III

This is in response to your memorandum dated April 27, 1993, requesting a written opinion about the applicability of the Prevention of Significant Deterioration (PSD) regulations to certain Georgia-Pacific activities at a site in West Virginia. We also have a copy of the inquiry dated march 29, 1993 to you from Georgia-Pacific. As discussed below, this office concludes that the activities as described by Georgia-Pacific in its letter are construction activities prohibited prior to the issuance of a PSD permit.

Section 165(a) of the Clean Air Act states that u[nlo major emitting facility ... may be constructed ... unless - (1) a permit has been issued... [and various other requirements satisfied]." Section 52.21(i)(1) specifies that a source may not begin actual construction until the source obtains a PSD permit. The regulations and several memoranda specifically state that "begin actual construction means initiation of physical on-site construction activities ... which are of a permanent nature." A memorandum dated December 18, 1978 from Edward Reich, Director of the Stationary Source Compliance Division, "Interpretation of "Constructed" as it applies to Activities Undertaken Prior to Issuance of a PSD Permit," specifically states that all on-site activities of a permanent nature aimed at completing a PSD source for which a permit has yet to be obtained are prohibited under all circumstances. A memorandum dated March 28, 1986 from Edward Reich, to Robert DeSpain of Region VIII, "Construction Activities Prior to Issuance of a PSD Permit with Respect to "Begin Actual Construction," clarifies such prohibited activities to include any emissions unit or installation necessary to accommodate the PSD source. If the construction activity is an integral part of the 2 PSD source or modification, the source must obtain a PSD permit. In other words, if the construction prior to such construction would not serve in accordance with its original. intent except for inclusion of the emissions unit, such construction is prohibited prior to obtaining a PSD permit.

In a memorandum dated October 10, 1978 from Edward Reich to Thomas Devine of Region I, "Source Construction Prior to Issuance of a PSD Permit," EPA referred to equity arguments in addition to the statutory and regulatory basis for prohibiting construction on a source prior to issuance of a PSD permit. Any activities undertaken prior to the issuance of a PSD permit, although solely at the owner's or operator's risk, should minimize or avoid any equity arguments at a later time that the permit should be

issued. The memorandum stated that the permitting authority would be placed in a very difficult position when denying issuance of a permit when it results in a completed portion of a project having to remain idle. Therefore, activities of a permanent nature that also contribute to such equity arguments (such as they are an integral part of the PSD source, activities that are very costly or would result in significant irrevocable loss to the owner,) are prohibited construction activities prior to the issuance of a PSD permit.

In the letter to Region III, Georgia-Pacific stated that it blasted rock and removed rock and soil to create a pit 40 feet wide by 230 feet long by 35 feet deep in connection with the construction of an oriented strand board (OSB) plant. Georgia-Pacific requested to be allowed to complete what it describes as "preparatory" activities by constructing a retaining wall and backfill some of the press pit.

Your office agrees that construction of a retaining wall involves more than preparatory activities under 40 C.F.R. SS52.21(b)(11). Although the memorandum from Edward Reich dated December 18, 1978 distinguished activities of a preparatory nature from those of a permanent nature, our policy also focusses on the relation of the activity to the PSD source. Construction of a retaining wall is considered an activity under "begin actual construction" because it is of a permanent nature. The excavation is also permanent and is an integral part of the PSD source.

The PSD regulations prohibit any construction activities that are of a permanent nature related to the specific project for which a PSD permit is needed, as opposed to general construction activities not related to the emissions unit(s) in question, prior to the receipt of a construction permit. This standard prohibits activities affecting the property in a permanent way that the of constructing the regulated project. Site clearing and grading are in general relatively inexpensive and couid be used for a 3 variety of possible construction-related activities. Moreover, even if site clearing and grading were not followed by any construction, it normally would not represent a significant economic loss to the owner or change in use of the property. Accordingly, such activities generally are not considered permanent activities related to the specific project. The excavation activities in this case, on the other hand, are costly, they significantly alter the site, are an integral part of the overall construction project, and are clearly of a permanent nature. Consequently, these activities are within the meaning of "begin actual construction."

Therefore, we agree with your opinion that construction of the retaining wall is a prohibited activity. In addition, we believe that the excavation is a prohibited activity, as well. If you have any questions regarding this matter, please contact Clara Poffenberger at 703 308-8709.

Attachments

cc: Julie Domike, OE

Greg Foote, OGC
David Solomon, AQMD

Laxmi Kesari, SSCD
Charles McPhedran, ORC, Region III

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Georgia-Pacific Applicability Determination

DATE: 4-27-93

FROM: Bernard E. Turlinski, Chief
Air Enforcement Branch

TO: John B. Rasnic, Director
Stationary Source Compliance Division

On April 5, 1993, Region III received an inquiry from Georgia-Pacific Corporation about the applicability of the Prevention of Significant Deterioration regulations to certain Georgia-Pacific activities at a site in West Virginia. This memorandum requests a written opinion from your office about the applicability of the PSD regulations to these activities.

As detailed in Georgia-Pacific's letter, Georgia-Pacific has dug a pit 40 feet wide by 230 feet long by 35 feet deep in preparation for the construction of an OSB plant. Excavating this hole involved blasting and removing rock, as well as soil, and some grading and filling. Georgia-Pacific now proposes to build a retaining wall in order to backfill an additional part of the excavated area. Before proceeding, Georgia-Pacific has requested an EPA opinion about the applicability of PSD.

Based on Region III's reading of the PSD regulations and a memorandum dated March 28, 1986, this situation presents a close question regarding PSD applicability. Earlier EPA policy referenced in the March 28, 1986 memorandum indicates that site clearing and grading do not represent "beginning actual construction" for PSD purposes. However, construction of the retaining wall seems to involve more than merely preparatory activities under 40 C.F.R. § 52.21(b)(11).

Supporting materials on this question have already been forwarded to Clara Poffenberger of your office. Please provide a written applicability determination at your earliest convenience. If you have any questions regarding this matter, please contact Charles McPhedran, Assistant Regional Counsel, at (215) 597-8451.

Georgia-Pacific Corporation
Wood Products
Manufacturing Division
P.O. Box 105603
Atlanta, Georgia 30348
Telephone (404) 521-4000

March 29, 1993

RECEIVED

APR 0 5 1993

AIR ENFORCEMENT BRANCH
EPA Region III

Mr. Bernard E. Turlinski
Enforcement Branch Chief
Mail Code 3AT20
U. S. EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107

Dear Mr. Turlinski:

Georgia-Pacific Corporation is working through the state of West Virginia Department of Environmental Protection in an effort to obtain a PSD permit for an OSB plant which we plan to construct within the state.

To date, we have cleared the site and completed a portion of the grading and filling work. As part of this site development work, we blasted rock and removed it, along with the other soil, from the area where the press pit will ultimately be constructed. Because of the size of the pit (approximately 40 feet wide by 230 feet long by 35 feet deep), plus the additional material that had to be removed to maintain acceptable slopes on the side walls, we have ended up with a tremendous hole.

Now, in order to complete this phase of the site work, we plan to install a retaining wall within the press pit area that will allow us to backfill that portion of the excavation that will be outside the actual press pit area. Backfill will be placed and compacted in 1 foot "lifts" up to sub-grade, plus an additional 3 to 4 feet. This "over-fill" will be used to pre-load the filled area below, and will remain in place for 3 to 6 months or until all settlement has ceased. This pre-loading will prevent settlement of the building foundations that will ultimately be placed in this filled area.

If this back filling is not completed in 1993, the whole project will be delayed by about 6 months. Based on the monitoring schedules and the anticipated time required for review of the permit application, we expect to receive our permit about the first of January, 1994. However, since the ground can freeze to a depth of 1 to 2 feet, in this part of the country, this fill work could not be done during the winter months. We would, therefore, be forced to wait until the spring of 1994 to begin. Since it will take about 1 1/2 to 2 months to do the back-filling, and an additional 3 to 6 months must be allowed for the settling to take place, the delay could easily add 6 months to the overall length of the job.

We realize that there is a possibility that the site we have selected for this plant cannot be permitted, and that we are at some risk in proceeding with the planned work. We are willing to take this risk, but we are not willing to risk a possible NOV from EPA for beginning actual construction without a permit. We have reviewed the regulations and the "guidance" covering the type of work that is allowed, prior to receiving a permit, and we do not believe that the work outlined above is in violation of the either the letter or the intent of the law. However, before we proceed, we need confirmation from your office that our interpretation is correct. Please advise.

If you have any questions, please give me a call at 404/521-5078.

Sincerely,

A. T. Johnson
Manager of Engineering
Building Products Engineering
GEORGIA-PACIFIC CORPORATION

ATJ:scp

cc: Mr. R. L. Burns
Mr. R. H. Jordan
Mr. A. F. Hodges
Mr. L. P. E. Otwell

The purpose of this memo is to provide guidance on soi and water cleanup projects which involve 'ssions to the air.

Ohio Administrative Code rule 3745-31-02 states that "no person shall cause, permit, or allow the installation of a new source of air pollutants ... without first obtaining a permit to install from the Director." Since soil remediation projects typically involve the vaporization of a hydrocarbon into the ambient air, this type of operation would normally require a permit.

Depending on the size and/or method of the remedial project, either a permit to install (PTI) or a letter of approval will be required. If a cleanup is expected to take longer than 18 months then the person or company is required to submit a PTI application to the appropriate local or district office. The appropriate field or district office is determined according to the county the cleanup site is located (see attachment). The process of obtaining this type of PTI takes approximately 2-4 months. If the remedial project is expected to take less than 18 months and the emissions are determined to be insignificant then Ohio Administrative Code (OAC) rule 3745-31-03 (A)(2) can apply. This rule allows any air contaminant source associated with the clean up of a spill or leaking underground storage tank to be exempted from the requirement of obtaining a PTI.

In order to apply for this exemption and receive a letter of approval, the Ohio EPA requires companies to supply the appropriate field office with the following information:

1. A description of the site.

2. The location of the site.

3. The nature and type of contamination.

   A description of vapor extraction system/liquid stripping system, etc.

~~5.~~ An estimate of the emission of benzene, toluene, ethylbenzene, and xylene (BTEX) in ppm by volume, lbs/hour, and tons/year. (Or other hydrocarbon emissions for non-gasoline extractions.)

6. A description and cost of the vapor control equipment (95% control is generally expected unless emissions are anticipated to be under 15 lb/day of BTEX).

   An estimate of how long the system will need to be in operation.

The Ohio EPA reserves the right to require companies to apply for air pollution permits for remediation projects.

If you have any further questions, please call the field or district office and ask for the air permitting engineer which handles the county in which the clean up site is located.

MR/mmc

DRAFT COPY
SUBJECT TO REVISION
OHIO EPA

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

Donald R. Schregardus
Director

January, 1994

Dear Interested Party:

Ohio EPA's extensive review of the disputed issues surrounding thermal treatment of petroleum contaminated soil (PCS) is complete. I am writing to inform you that the Agency will resume review of applications for stationary units that treat PCS, subject to a number of requirements imposed in response to citizens' concerns.

Operators of stationary PCS thermal treatment facilities will be required to conduct more extensive testing of the soil they treat. All soil samples must be processed by an independent laboratory, instead of by the thermal treatment facility itself. Soil must be tested at its site of origin, and after treatment to insure adequate removal of contaminants. In addition, Ohio EPA may randomly collect samples of incoming soil.

A "manifest" system of shipping documentation will be created to track shipments of contaminated soil from their point of origin to the treatment facility. This system, similar to the one used for hazardous wastes, will help to insure that only petroleum contaminated soil is accepted for treatment.

The above controls will be more effective than background checks in ensuring that thermal treatment units operate in compliance. Ohio EPA will not seek to impose background check requirements on owners and operators of PCS treatment facilities.

Stationary facilities may be subject to additional permitting requirements under water pollution control regulations. These requirements would specify how the operator must prevent precipitation from picking up contaminants and carrying them off-site.

The Agency will impose standard conditions in permits for stationary treatment units, as we have for mobile units. While I prefer mobile treatment as a solution that deals with the problem in place, not all sites can accommodate a mobile unit. The requirements detailed above and in the attached Reponse to Comments will help to minimize the potential for negative environmental impact from stationary thermal treatment units.

I appreciate the involvement of all those who participated in discussing appropriate regulatory controls for PCS thermal treatment. Through reasoned debate and the willingness to share your time and suggestions, we have a regulatory approach that provides greater environmental protection. Ohio has 15,000 leaking underground storage tanks, and hundreds of tons of soil to treat. Left untreated, petroleum contamination can enter groundwater and threaten drinking water supplies. The controls you have helped to devise will allow safer treatment of this contaminated soil. Thank you for your efforts on behalf of Ohio's environment.

Sincerely,

Donald R. Schregardus
Director

Technology Issues

Determining the Best Available Technology (BAT) for treating petroleum contaminated soil; Alternative technologies that do not involve burning or incineration; Potential for using no technology other than evaporation

There is no single Best Available Technology that can be applied to every case of PCS. The Agency does not choose to limit one technology to remediate soil when several methods can accomplish the same result. Additionally, some of the technologies are not always an option due to site specific characteristics.

Currently, there are four treatment methods for PCS. Each of the following methods can create air emissions in addition to other environmental concerns. All treatment methods are better options than landfilling or leaving contaminated soil in the ground.

Land farming: This method involves spreading soil over an open area, allowing contaminants to be released into the air. If not properly contained, rainwater runoff could cause additional problems.

Soil vapor extraction: This method involves venting air in the soil to remove vapors which may be controlled or vented to the air. As soil is cleaned to acceptable levels, it normally remains in the ground at the original location. At some locations due to site characteristics, soil vapor extraction is not cost effective or feasible. This process also releases contaminants into the air.

Bioremediation: This method involves putting microorganisms, water and oxygen in the soil to break down contaminants. Volatile petroleum contaminants are then released into the air. If not contained, rainwater could run off or leach into the ground. Not all sites are suitable for Bioremediation.

Thermal Treatment: This method involves heating soil to 350-700 degrees Fahrenheit. It is often referred to as thermal desorption to differentiate from incineration because combustion is an aspect of incineration. There is no combustion in thermal treatment, however, contaminants are separated from the soil and released into air pollution control equipment to minimize emissions being released into the air.

Higher temperatures to ensure 99% destruction efficiency

Ninety-nine percent destruction efficiency is required for all thermal treatment soil units. Stack tests will be required for all facilities, including facilities that are currently operating. This degree of efficiency can be achieved over a range of temperatures.

Permitting Issues

Background Checks on all owners and operators of facilities handling contaminated soil

Ohio EPA is not requiring background checks on owners and operators of PCS treatment facilities. Instead, Ohio EPA has placed a significant amount of regulatory controls and check points in the remediation process to eliminate the potential for adverse impacts to health and the environment. Ohio EPA has determined that additional testing and verification by an independent laboratory, as well as a soil delivery manifest system, will be the most effective method to ensure compliance. If the agency discovers a a PCS treatment facility burning anything other than PCS, the director will take immediate steps to shut the facility down.

Comprehensive review consisting of input from Ohio EPA's air, solid waste, and water programs

Ohio EPA has conducted a comprehensive review of mobile and stationary thermal treatment units with input from the air, hazardous waste, solid waste, and water programs. The Agency has determined the Division of Air Pollution Control will be the primary division to review thermal treatment operations which will address air emissions and other operational requirements (See Sample Permit, Attachment 1). PCS storage piles will be inspected by county health departments with an approved solid waste program. If the potential exists for a wastewater or surface water discharge from a facility, the permit application will go through an additional review by the Division of Surface Water. The Division of Surface Water may require the applicant to obtain a discharge permit.

Rationale for permitting facilities that pollute the air as an answer to eliminating a potential pollution problem affecting ground water

Leaking underground storage tanks release petroleum contaminants into the soil, potentially affecting ground water. Petroleum contaminants also are released into the air if soil is left untreated. Ohio EPA views this type of unmonitored release as more threatening to the environment than a properly operated soil treatment facility. Ohio EPA encourages alternative technologies for treating PCS as opposed to landfilling.

Permitting portable facilities as opposed to stationary

Not all sites can physically accommodate a mobile PCS treatment unit. Ohio EPA has determined that both stationary and portable units are viable alternatives in remediating PCS.

Authority of Solid Waste Districts to regulate, monitor and oversee

Permitting, inspections, complaints and facility compliance will fall within Ohio EPA jurisdiction. The State Fire Marshal's Office Bureau of Underground Storage Tank Regulation (BUSTR) can now grant permission for soil from a BUSTR site to be moved to a portable treatment unit. County health departments that have an approved solid waste program also will assist Ohio EPA in inspecting PCS storage piles. Ohio EPA has determined that this degree of oversight will be more than adequate to ensure protection of public health and the environment.

Variation in allowable temperatures in the rotary drum from permit to permit; Standardization of permits

Thermal treatment units are designed to operate effectively over a range of temperatures. Operating temperature and other factors such as air flow rate, soil processing rate and contamination levels are taken into consideration in calculating potential emissions from the treatment unit. All of these areas are reviewed by Ohio EPA to determine if the proposal is acceptable and meets BAT. It is possible for two separate applications with varying technologies to both meet BAT and have different operating temperatures. All thermal treatment units will be required to achieve 99% destruction efficiency. Other aspects of the permit (i.e. terms and conditions, emission limits, and facility design) will also be standardized. (See Attachment 1)

Permission for these types of facilities to burn contaminants other than what is contained in PCS, such as hazardous waste

Ohio EPA will not permit PCS thermal treatment units to burn hazardous waste.

Determining what the public wants included in the permit before issuing a draft permit

Ohio EPA has spent one year gathering input from both citizens and the regulated community on PCS thermal treatment facilities. When Ohio EPA receives a permit application for a stationary unit, the Agency will send out a news release acknowledging receipt of the application(s). Ohio EPA will place a copy of that application in the library closest to the proposed location and will consider any written comments prior to issuance of a draft.

Allowing a new owner to pick up the application process where the previous applicant left off

Section 3704.03 part F of the Ohio Revised Code states that air permits-to-install (PTI) are transferable. When this situation occurs, the new applicant must re-submit all changes resulting from the transfer. If the technology and proposed site remains the same, the new applicant may pick up where the previous applicant left off. It is not a wise use of the Agency's resources to repeat the review process if the only change is the name on the application.

Capacity Issues

Documentation that these types of facilities are actually needed

BUSTR's records indicate there are over 15,000 leaking underground storage tank sites averaging about three tanks per site, and 30-50 cubic yards of soil per site. PCS treatment facilities will also take PCS from rail yards, feed lots and other industrial sites where gasoline has contaminated the soil.

Number of Soil burners and their location

(See Attachment 2)

Testing and inspection issues

Self-policing nature of, monitoring and reporting

Self-monitoring, record-keeping and reporting provide much more extensive information on compliance than can be obtained from periodic inspections. Self-monitoring and record-keeping also shift some of the economic responsibility from Ohio EPA to the regulated community. It also provides a mechanism for educating the regulated community about compliance requirements. This self-policing nature that facilities are required to employ has increased the level of attention devoted to environmental compliance. As a result, some companies have begun to improve production efficiency and implement pollution prevention strategies.

In addition, soil testing will be performed by independent laboratories. Performance testing is witnessed and reviewed by Ohio EPA. Regular inspections will also be conducted by Ohio EPA.

Additional random soil testing conducted by Ohio EPA

Ohio EPA plans to conduct random soil sampling to ensure the facility is not taking anything other than PCS.

Ensuring companies are not falsifying information regarding soil contents

Ohio EPA will require the use of strict testing protocol to assure PCS treatment units receive only PCS. Ohio EPA is requiring soil to be tested prior to entrance to the facility and after remediation to ensure safe processing of PCS. All tests must be verified by an independent laboratory. Facilities must also keep track of the paperwork verifying origin and sampling results of the soil. A delivery manifest identifying the soil must arrive with each load. These documents will be checked by Ohio EPA during inspections. Ohio EPA may also conduct a random soil sampling to ensure companies are not falsifying information.

Adequacy of Ohio EPA enforcement

Ohio EPA's Special Investigations Section works in conjunction with the Attorney General's Office (AGO) Bureau of Criminal Investigation to document criminal violations of Ohio's environmental laws. In 1992, Ohio EPA collected over $8 million in penalties resulting from environmental violations. If violators refuse to enter into a consent decree or if the actions constitute a flagrant violation, Ohio EPA refers these offenders to the AGO. The AGO's environmental enforcement section is one of the largest in the country. Ohio is regarded as a national leader in seeking criminal prosecutions against environmental violators.

Testing of every load of PCS to be burned

Before accepting soil for treatment, the origin of the soil and the results of testing conducted during the site cleanup are verified. This ensures that the soil is non-hazardous PCS and that the contamination levels of the soil do not exceed permit limits. The facility may then proceed with the remediation process. All soil sample results must be certified by an independent laboratory.

More frequent stack testing

Stack tests are done during the initial permitting of a facility and may be conducted upon the renewal of a permit-to-operate (PTO). These tests are conducted under worst case conditions, and the units operating parameters are measured, along with emissions testing, to determine compliance with air permit limits. After the initial parameters are set, Ohio EPA can also determine whether the facility is operating within those parameters by reviewing operational records and monitoring equipment.

If Ohio EPA determines at any given time that a facility's operational parameters need to be reassessed, Ohio EPA may request that the facility conduct additional stack tests.

Scope of inspections beyond file reviews

A typical Ohio EPA inspection of a PCS treatment facility includes checking the facility's entire operations in accordance with the terms and conditions of the permit. These inspections may be announced or unannounced by Ohio EPA. During these inspections, Ohio EPA evaluates the facility's methods for soil sampling and verification. The inspector also looks at how the soil is stored and handled to ensure there are no fugitive emissions. Air monitoring and temperature devices are also checked to ensure emission limits are being met. Additionally, random soil sampling may be conducted.

Public Involvement Issues

Proactive participation with local public; Mechanism for complete disclosure of a company; Notification of local health departments and local media upon receipt of an application; Evaluation period upon receipt of an application; Lack of local environmental advisory boards

Ohio EPA places high priority on public participation and recognizes the significant level of interest in PCS treatment facilities. Upon receipt of an application for a stationary PCS facility, the Agency will notify media, legislators, local elected officials, environmental groups and the local and county health departments to acknowledge receipt of the application. Ohio EPA will also place a copy of that application in the local library closest to the proposed location. Ohio EPA will consider any written comments prior to issuance of a draft. If requested, the Agency will hold a public information session and/or hearing to answer questions and accept comments. Ohio EPA believes advisory groups provide a positive mechanism for exchange of information and ideas for all types of facilities. Typically, local officials or environmental groups coordinate this type of panel and Ohio EPA serves as a group member.

Siting Issues

Proximity to residences, schools and rivers; Location over aquifers or in a flood plain

Ohio EPA will not permit a facility to operate in a flood plain.

Other siting issues regarding proximity to residences and schools should be addressed through local zoning. During the permit review process, Ohio EPA determines whether the proposed source complies with the National Ambient Air Quality Standards and Ohio's Air Toxics Policy. These standards are set to be protective of public health no matter what type of development is in the area.

Public Health Issues

Effects of lead from these facilities on children

PCS from leaking underground storage tanks typically do not contain high levels of lead. Actually, higher levels of lead have been found in farm soils than found in PCS. However, when required for non-BUSTR sites, PCS is tested for lead before it is accepted at a facility to be remediated. If the levels found in PCS exceed 50 parts per million, it is considered a hazardous waste and will be sent off-site to be treated and disposed.

Facilities impact on public health

Ohio EPA has determined properly constructed and operated PCS treatment facilities do not pose a significant risk to public health and the environment, however, the Agency has added additional requirements to reduce any potential threats that may occur.

Flammability and Volatility of PCS fumes

The petroleum content in PCS is rarely sufficient to make it flammable or volatile.

Surface Water runoff from PCS piles

The Agency will require stationary PCS storage and treatment areas to be housed. Also, PCS must be stored on a concrete or impervious surface to protect against ground water contamination. If there is a potential for wastewater discharge, or surface water runoff, the facility is required to apply and obtain an appropriate discharge permit in accordance with Ohio Revised Code chapter 6111. (See Attachment 3)

Prevention of contamination of soil with petroleum products

See Attachment 4, BUSTR's fact sheet

Disposal of the residues from the burning process

The residue from the PCS treatment process is essentially clean soil. This residue, like the soil, will have to be tested prior to reuse.

Out of state waste

(See Attachment 5)

Funding for health departments to provide additional oversight

County health departments with approved solid waste programs currently provide additional oversight by inspecting the handling and storage of PCS.

[NAME]
Application No
Page 2 of _
[DATE]

DRAFT

STATIONARY THERMAL UNITS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the

Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application and a $15 application fee must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this

period of operation is to fulfull the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for _____ located in _____ County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
P001	_____ton/hour Soil Remediation/ Recycle Plant	*	3745-31-05 3745-15-07 3745-17-07 3745-17-11 3745-21-07	**
P002	Soil Storage Building	See additional terms and conditions	3745-31-05 3745-15-07 3745-17-08	lbs/hr VOC lbs/hr PM
F001	Roadways and Parking Areas	See additional terms and conditions	3745-31-05 3745-15-07 3745-17-08	lbs/hr PM

*Use a fabric filter to control particulate emission (control efficiency no less than 99.0%) and an afterburner to destruct organic compound emission (destruction efficiency no less than 99.0%).

**Minimum particulate emission control efficiency: 99.0% and

maximum particulate emission 0.04 grain/dscf or ____ lb/hr. Minimum organic compound destruction efficiency: 99.0% and maximum organic compound emission __lb/hr. No objectionable odor. No greater than 5 percent opacity. Maximum _____ lb NO_x/hr, ____ lb CO/hr, _____ lb SO_2/hr, and ___ lb lead/hr.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	
OC	
NO_x	
SO_2	
CO	
Lead	

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than two years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Cleveland Air Pollution Control, 1925 St. Clair, Cleveland, Ohio 44114.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

Materials Acceptable for Treatment

1. The purpose of this permit is to allow the treatment of soils contaminated with hydrocarbons, provided they are not hazardous materials subject to RCRA requirements.

   Only soils and aggregate contaminated with virgin (nonrecycled) petroleum products shall be treated in the process, which includes only:

   a. No. 1 fuel oil
   b. No. 2 fuel oil
   c. No. 4 fuel oil
   d. No. 6 fuel oil
   e. gasoline
   f. jet fuel
   g. diesel fuel
   h. airplane fuel
   i. kerosene

   Soils contaminated with any other petroleum type products or fuels will require either Ohio EPA evaluation and approval or a permit to install.

Operating Requirements and Allowable Emissions

1. The primary treatment unit (volatilizer) shall be operated at a minimum temperature of ____ degrees Fahrenheit*.
   *depends upon design type of the unit; as stack tested

2. Particulate matter emissions from the stack shall not exceed 0.04 grain/dscf or ____ pounds per hour*. Opacity of visible emissions coming from the stack shall be limited to 5 percent maximum.
   *will vary in permits due to specific treatment unit

3. This facility shall continuously monitor and record the temperature of the exhaust from both the volatilizer and the

thermal oxidizer serving this source. The temperature records shall be retained in this facility's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director during normal business hours.

An outlet temperature of not less than ___* degrees Fahrenheit shall be maintained for the exhaust gases from the thermal oxidizer. The primary treatment unit shall not be operated unless the baghouse and the afterburner are fully functional and the afterburner is at a temperature of ____ degrees Fahrenheit.
*will vary depending upon the unit (minimum of 1450 degrees)

4. All emissions from the volatilizer must pass through the fabric filter then the thermal oxidizer and remain in the oxidizer chamber for a minimum of one (1) second (at a minimum temperature of ____ degrees Fahrenheit) before exiting the chamber.

5. **The oxidizer shall have an organic compound destruction efficiency of 99.0% at worst case conditions. The maximum emissions from the source shall not exceed . _ pounds per hour* of organic compounds.**
***will vary in permits due to specific treatment unit**

6. **The throughput of the contaminated soil shall not exceed tons per day*.**
***depends upon unit and amount applied for**

7. **The organic compound concentration of the contaminated soil shall not exceed _____ percent by weight of contaminated soil or _____ ppb*.**
***depends upon application and allowable emissions amounts**

8. Either propane or natural gas may be used as fuel in the volatilizer and the thermal oxidizer. If the facility wants to use other types of fuel rather than the ones specified hereto, a new permit to install will be required.

9. This facility shall have calibrated scales capable of weighing the amount of soil charged to the volatilizer on an hourly basis.

Soil Sampling, Testing and Documentation

1. Sampling at the generating site, before receipt of soil.

BUSTR Site Requirements

When remediating petroleum contaminated soil from a site which is regulated by the State Fire Marshal - Bureau of Underground

Storage Tank Regulation (BUSTR), this facility shall ensure that soil sampling is performed and the result obtained before accepting or remediating the soil. A representative sample(s) shall be analyzed and the results certified by an independent laboratory for organic compounds. Sampling and analysis shall be conducted in accordance with BUSTR's Soil Policy and requirements. BUSTR required site sampling shall fulfill this requirement.

Non-BUSTR Site Requirements

When remediating contaminated soil that does not originate at a site regulated by BUSTR, this facility shall:

a. require that sampling of the soil from the contaminated site be performed, either by this permit holder or by the generator of the soil, before accepting or remediating the soil. A representative sample(s) shall be analyzed and the results certified by an independent laboratory for organic compounds, and any heavy metal, halogenated organic compound or hazardous waste constituents above normal soil background levels, before it is received on site. Sampling and analysis shall be in accordance with BUSTR's Policy for organic compounds and Ohio EPA and/or USEPA policy or requirements for the other contaminants.

b. either certify and demonstrate the following, or require that the material generator certify and provide documenation which demonstrates that the soil:

   i. does not contain a listed Hazardous Waste;
   ii. is not hazardous by characteristic as defined by Ohio EPA or USEPA; and
   iii. is not regulated under TSCA.

   This certification must be in writing and must include a statement that, to the best of their knowledge, the soil conforms to this criteria.

The facility shall possess a copy of the laboratory analysis and certification (if required above) for each shipment received, and maintain it on file and readily accessable to any Ohio EPA or BUSTR representative for a period of three years.

2. Sampling upon receipt of soil

This facility shall obtain a composite sample of the soil from each separate contaminated site upon arrival. The composite sample shall consist of, at a minimum, three combined sub-samples collected from the incomming loads. The sample shall be held for a period of six months, and be available for

analysis if required by Ohio EPA.

3. Sampling of remediated soil.

This facility shall obtain daily composite samples of the soil after being remediated. The composite samples shall be analyzed and certified by an independent laboratory. The results shall include testing for benzene, toluene, ethylbenzene, xylene, and organic compounds, in accordance with the Ohio EPA PCS Policy (PP 01 03 200).

If the soil contamination level is above the levels in the Ohio EPA PCS Policy, the soil would be regulated as solid waste and should be treated or disposed of in accordance with the Ohio EPA Solid Waste regulations. If the soil contamination level meets the PCS Policy criteria, the soil may be managed as a non-regulated material.

4. Delivery Manifest (or Bill of Ladding) Certification.

The soil generator must certify to the driver of the delivery vehicle, on the manifest, that the material is non-hazardous as defined by Ohio EPA or USEPA. The driver must certify on the manifest upon delivery, that this material was received from the generator and that it is unchanged from the time of receipt. If the soil is at any time owned or possessed by any intermediate party, they must certify in writing (on the manifest or a certification document) that the soil remains unchanged from initial receipt.

5. The delivery manifest, soil certification and documentation shall be verified before unloading.

6. Records must be kept that include copies of the following:

a. soil analysis results;
b. the delivery manifest;
c. soil certification and documentation (if required).

These records must be maintained for a period of not less than three years and shall be made available to any authorized Ohio EPA representative during normal business hours.

The Quarterly Report required below under Recordkeeping and Reporting, number 3, shall include a statement as to whether these records are being maintained.

Performance Testing

1. The permittee shall conduct, or have conducted, performance testing on the air contaminant source within 90 days of start up in accordance with procedures approved by the Ohio

Environmental Protection Agency. Two copies of the written reports describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or his authorized representative, of the Ohio Environmental Protection Agency shall be allowed to witness the tests, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

a. A completed Intent to Test form shall be submitted to _____(field office with jurisdiction). This notice shall be submitted ten days before the scheduled performance test date.

b. Two copies of the test results shall be submitted within 30 days after the completion of the performance test to _____.

c. Tests shall be performed for the following source(s) and pollutant(s):

Source	Pollutant(s)
P001	OC, PM and Pb

A test shall be conducted to determine the overall destruction efficiency of the thermal oxidizer based on simultaneous measurements of inlet and outlet concentrations of organic material as determined by U.S. EPA method 25.

Tests for both the uncontrolled and controlled emissions of particulate will be conducted.

During testing the company shall record the following process parameters:

soil feed rate;
volatilizer rotary velocity;
volatilizer temperatures (inlet/outlet);
gas flow rate;
baghouse pressure drop;
thermal oxidizer temperature;
stack exit temperature;
gas velocity; and
moisture content.

Fugitive Dust and Housekeeping

1. Fugitive Dust from the process.

Fugitive dust from this process shall be controlled by use of covered conveyors and wet suppression at drop points into and out of the process. Visible emissions from the conveying and handling of soil shall not exceed ten percent opacity as a three minute average.

All soil transferred to the any elevated storage bins shall contain sufficient moisture so as to minimize or eliminate visible emissions of fugitive dust. During the loading of the soil conveyor, if one is utilized, the drop height of the front-end loader shall be minimized in order to minimize or eliminate the visible emissions of fugitive dust.

The area beneath and around the processing unit shall be kept clean from either contaminated or processed material as much as possible.

2. Contaminated Soil Storage

In order to control runoff, potential odors, fugitive dust and VOC emissions, a permanent structure or enclosure shall be used to contain the contaminated soil. This structure shall be completely enclosed. The inside air shall be sufficiently vented to a 99 percent efficient VOC control device or exhausted to the remediation unit control device. There shall be no other vents or openings to the outside air, except for soil entry and exit points and necessary doors, which shall be designed to minimize fugitive VOC's and kept closed when not in use.

3. Clean Soil Storage

A permanent structure shall be used to store clean remediated soil if possible. In lieu of a permanent structure, soil may be stored in a material storage pile, provided that appropriate fugitive dust control measures are employed and deamed acceptable to Ohio EPA upon inspection. There shall be no visible particulate emissions from the material storage pile except for a period of time not to exceed one minute during any sixty-minute observation period.

All soil storage piles shall contain sufficient moisture so as to minimize or eliminate visible emissions caused by wind erosion.

During the unloading onto or removal from the soil storage piles, the drop height of the front-end loader shall be minimized in order to minimize or eliminate visible emissions

of fugitive dust

4. Roadways and Parking Areas.

There shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty minute observation period from the paved areas. There shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty minute observation period, for the unpaved areas.

The roadways and parking areas shall be treated with water or any other dust suppressant in order to minimize or eliminate at all times visible emissions of fugitive dust generated by vehicular traffic. Frequency of application shall be as needed. This term and conditions shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.

Any material carried off of the source owner's property and deposited onto the city streets by the vehicular traffic or by erosion by water, etc., shall be promptly removed and deposed of properly in such manner so as to minimize or prevent resuspension.

A maximum speed limit of fifteen (15) miles per hour shall be posted and enforced on the property.

Open bodied vehicles transporting materials likely to be come airborne shall be covered at all times.

5. Runoff of Water.

Discharge or runoff of contaminated water from this facility shall not occur, unless specifically allowed by this permit or by another Ohio EPA or federal permit, when one is required.

Recordkeeping and Reporting

1. This facility shall submit reports which provide the following information for each period during which the thermal oxidizer exhaust gas temperatures fall below ____ degrees Fahrenheit:

   a. the date of the excursion;
   b. the time interval over which the excursion occurred;
   c. the temperature values during the excursion;
   d. the cause(s) for the excursion; and
   e. the corrective action which has been or will be taken to prevent similar excursions in the future.

   The reports shall be submitted to _____ (field office).

2. Daily records shall be kept for:

   a. total hours of operation;
   b. total fuel consumed;
   c. weight of the contaminated soil charged to the rotary volatilizer, on an hourly and daily basis;
   d. the total organic compound concentration of the contaminated soil in weight percent;
   e. temperature of the volatilizer and afterburner.

   These records shall be retained in this facility's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director of the Ohio Environmental Protection Agency during normal business hours.

3. Quarterly reports, by calendar quarter, shall be submitted to _____(field office), by no later than the end of the month following the quarters end, which summarize the following:

   a. the above daily records;
   b. the results of any samples from sites analyzed for heavy metals, halogenated organic compounds, or hazardous waste;
   c. the total number of soil analysis results on file for each type of sample required during the period.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	Distribution via e-mail (DO/laa Supervisors)
from:	Mike Hopkins and Mike Ahern, DAPC Central Office
subject:	Changed/Expanded Guidance for Synthetic Minor Permits To Install using the new PTI Format
date:	April 7, 1999

Questions were raised during the recent PTI training on how/what format Synthetic Minor Permits should be processed. At the time of the training we thought the Synthetic Minor PTIs should be in the Title V format. However, after hearing some of the questions, and considering the matter further, we have concluded that, the only time a Title V format PTI will be used is when either the current/future status of the facility will be/remain subject to Title V (even after the Synthetic Minor PTI is issued) or a new facility will be subject to Title V (even after the Synthetic Minor PTI is issued).

In deciding which format to use ask yourself the following two questions:

1) What will be the potential to emit status of the facility for each regulated pollutant once the PTI is issued?

2) Does the PTE exceed any of the major source thresholds pursuant to the Title V requirements (as identified in OAC Chapter 3745-77 and identified by example in Engineering Guide 61)?

If you answer yes to question 2, use the Title V format PTI template.

NOTE FOR MODIFICATIONS: If you are processing a PTI modification (either administrative or pursuant to OAC Chapter 3745-31) for an emissions unit located at a Title V facility, you do not need to change the structure of the permit to fit the Title V format. You may choose to keep the structure in the "old" format if you wish or you may decide to change the format to the Title V structure.

We hope this change/expansion in guidance does not cause undue hardship. This guidance is being sent via e-mail in order to expedite dissemination of this information. Please pass this guidance on to anyone who you feel may benefit from it.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: LAA Directors, DO Air Unit Suprvs., DAPC Sec. Mgrs

from: Tom Rigo

subject: Synthetic Minor Permit Guidance Document

date: November 30, 1994

Please find attached a copy of the recent guidance document that has been prepared for distribution. Please make copies of this document for your permit staff and have them available for distribution if requested from the regulated community. A copy of this document is also on the DAPC BBS. Further, we have extended the date to 12/30/94 (received by this date) for a complete synthetic minor permit application, if the entity does not want to file a 1994 fee emission report (due by 4/15/95).

I would like to thank Jim Braun for his valuable assistance with the development of this guidance document.

Please give me a call at 4-3626 should you have any questions or comments.

cc: Jim Braun, DAPC
Jeanne Mallett, Legal
Bob Hodanbosi, DAPC
Permit Advisory Group
PAG Drafting Committee

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

Donald R. Schregardus
Director

November 30,1994

RE: Limiting Potential to Emit to Avoid Title V Permitting Guidance Document

To Whom It May Concern:

The purpose of this document is to notify your company that there are options that may be available to your facility to avoid being subject to the Title V Operating Permit program. Title V applicability is based on a facility's potential to emit - assuming each emission unit at the facility operates 24 hours per day and 365 days per year at their maximum operating conditions. It is acknowledged that actual operating conditions are typically less than the maximum potential conditions. Consequently, U.S. EPA has provided an avenue to obtain **federally enforceable** permit conditions which restrict a facility's potential to emit below Title V applicability levels. This practice has commonly been referred to in the State of Ohio as a Synthetic Minor permit (obtained through the Permit to Install process - for new sources used to avoid federal major source new source review permitting requirements).

Currently, the only way an existing facility can obtain federally enforceable permit conditions (if not previously obtained) is through the allowance in Ohio Administrative Code (OAC) Rule 3745-31-02(A)(2). This allowance provides an existing facility the opportunity to apply for a Permit to Install to voluntarily limit the allowable air contaminant emissions from the source.

However, Ohio EPA is anticipating that we will have final approval from U.S. EPA on December 27, 1994 to issue Federally Enforceable State Operating Permits (FESOP's) in accordance with OAC Rule 3745-35-07 (attached). USEPA published their intent to approve Ohio's program in the 10/25/94 *Federal Register*. Unless adverse comments are submitted to USEPA, Ohio's FESOP program will be final on 12/27/94. Ohio EPA is recommending that existing facilities utilize the FESOP's program to obtain certain federally enforceable permit conditions to avoid Title V. You need to submit these permit applications to us as soon as possible. Even though we can not officially issue the draft permit until December 27, 1994, Ohio EPA staff can review and have those permits ready for issuance.

This letter serves to stress the importance of evaluating air emissions generated by your facility (based on the potential to emit) in connection with your existing permits. The Title V

applicability thresholds (potential to emit) for the hazardous air pollutants (HAP's) is 10 tons per year (tpy) for any single HAP and 25 tpy for any combination of HAP's. For any regulated air pollutant as defined in OAC rule 3745-77-01 [e.g. volatile organic compounds (VOC), nitric oxides (NO_x), sulfur dioxide (SO_2), particulate matter (PM), carbon monoxide (CO), etc.], the Title V applicability threshold (potential to emit) is 100 tpy.

If your facility has the potential to emit one or more of the pollutants noted above which exceed the Title V applicability thresholds, then your facility will either have to apply for a Title V permit or (if possible and desired) apply for an Ohio EPA permit to operate or Ohio EPA permit to install (if a new source) to obtain federally enforceable permit conditions to restrict your potential to emit to below the Title V major threshold. It is also possible utilizing Findings and Orders to establish federally enforceable conditions.

Since the first deadline for Title V application submittal will likely occur by mid-1995, it is recommended that you submit your application to restrict your potential to emit as soon as possible - it will take at least several months to process the application (synthetic minor applications will be given top priority in OEPA's review process).

One of the main requirements to insure federal enforceability is that the permit must be issued as a draft permit to allow for a thirty day public comment period (this also provides time for U.S. EPA to have the opportunity to comment) before we can issue the permit as a final action.

In order to obtain a permit which will restrict your potential to emit your company must submit the following:

1. A cover letter requesting the voluntary restriction of your potential to emit through the establishment of federally enforceable permit conditions.

2. The appropriate applications will need to be submitted for each emission unit which requires federally enforceable permit conditions. This paperwork is the same as if you were applying for a permit. An application form can be obtained from your district office (DO) or local air agency (LAA) representative.

3. Submit a potential to emit analysis that includes calculations which accurately identify the potential to emit of your facility for the pollutant(s) of concern. Also, describe in this analysis your suggested restrictions that proves that your facility would not be required to submit a

Title V application. See the example potential to emit analysis provided. Be sure to include in your calculations how all of the proposed restricted emission units and non-restricted emission units potential to emit were derived. Provide the method of emission estimation used. For example: U.S. EPA AP-42 emission factors; stack test data; mass balance; process data; etc..

Note, you may choose (optional) to submit your potential to emit analysis for other pollutants that you do not believe require federally enforceable permit restrictions. By submitting this additional analysis it will ensure that the Agency concurs with your estimates.

4. Provide recommended limitations for the permit to restrict emissions that are federally enforceable. Such permit conditions should be in the form of compliance procedures and/or operation, production, and emission limitations supplied for each emission unit to be limited at the facility.

5. An explanation of how compliance with the proposed restrictions will be demonstrated on both an initial and ongoing basis. These restrictions should be designed so that an inspector on any given day (or greater time period up to a month if daily is technically or economically infeasible) can establish that the restricted potential to emit will not exceed the major classification threshold. Ohio EPA recommends the rolling 365-day restriction option. For more information, see the "Limiting Potential to Emit" attachment.

6. A description of what record keeping will be utilized to verify compliance. Clearly explain what records of the operating parameters are being kept and how these records can be used to verify compliance with the proposed permit limitations. Also, a statement requiring that the records be retained for a minimum of three years.

7 Updated information and diagrams describing any changes from data and information in the current application on file with our agency.

8. Must provide for affected emission units a short-term (e.g., hourly, daily) limit (this should be an existing limit) on emissions for the pollutants that restrictions are being requested. This normally would be established by an OEPA rule (e.g., OAC Chapter 3745-21 for VOC, OAC 3745-18 for SO_2, OAC Chapter 3745-17 for PM, etc.) or a best available technology emission limit under a permit to install (PTI).

If you find that an existing short-term limit does not already exist for the subject source, contact your DO or LAA representative for assistance.

Note, it is **not** necessary that this short-term emission limit calculated out for an entire year at maximum operating rate restricts the emission unit to below the major classification threshold level. It normally will be the short-term production and/or operational restrictions that ensures the facility's emissions are maintained below the major classification threshold.

All of this information will need to be submitted to the appropriate District Office (DO) or Local Air Agency (LAA) in your area.

One final warning... Please think carefully about any new restrictions you are agreeing to. Can you live with these restrictions for the foreseeable future? Can you comply with these restrictions? In order to get these restrictions lifted in the future, you may have to go through a lengthy new source review permitting process. This could delay future expansion, so research these issues carefully before making your request to accept these restrictions. Obviously, Title V permitting is complicated and time consuming. However, you will find that it is a much better option than voluntarily accepting restrictions that your company can **not** live with.

If you have any questions regarding the information in this letter, please contact the designated DO or LAA in your area.

Please review the attached information for additional clarification of what is required to ensure federal enforceability of permit conditions.

Sincerely,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control
TGR/JB/attachments FESCVLT & FESOP2

Limiting Potential to Emit

Existing facilities will need to examine current permits and rules to determine potential to emit. Items that can be considered for restricting the potential to emit include: OAC rule limits (if federally approved); federal rules (PSD, NSPS, etc.); existing PTI's with federally enforceable restrictions, and any Findings & Orders which have been federally approved as a SIP revision. Note: A federally enforceable restriction in a PTI has to be a restriction with adequate recordkeeping and reporting that restricts your facility below the major pollutant threshold. Also, this PTI had to be issued as a draft initially (which allowed for public and USEPA comment) before the final PTI was issued. You may want to have the appropriate DO or LAA confirm that you currently have a federally enforceable PTI restriction.

If none of the above apply, then the potential to emit must be calculated assuming the emission unit operates 24 hours per day and 365 days per year at the maximum operating capacity.

There are essentially two methods to use to restrict emissions: **production & operational** restrictions. Production limits are restrictions on the amount of final product which can be manufactured at a source. Operational limits are all other restrictions on the manner in which a source is operated, 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.

U.S. EPA will only accept short term restrictions to ensure federal enforceability. The restriction cannot be longer than monthly unless we establish a rolling 365 day or rolling monthly restriction. If a monthly rolling restriction is preferred, you must prove that daily records are technically infeasible or economically unreasonable. A strict daily, weekly or monthly restriction will also be accepted. The U.S. EPA prefers strict limitations in the permits. For example, a coating usage restriction of X gallons per day; XX gals/week; or XXX gals/month. As noted, we could also restrict the source to XXXX gallons per rolling 365 day period. The rolling limitation would require the company to calculate daily the amount of coatings used in addition to the previous 364 days. If your company has not maintained these types of records in the past, then it will be necessary to have different restrictions in the initial year of the permit to demonstrate compliance on a short-term (e.g., monthly) basis to establish your synthetic minor status. See actual permit examples 1, 2, and 3.

Example Problems

1. Coating Operation

The existing permit has the following limits specified: 5 lbs VOC/gal.; 40 lbs VOC/hr (at maximum operating conditions); 80 tons VOC per year. The coating operation is not subject to any limitations in the Ohio Administrative Code rules; not subject to any federal limitations; and there is no add-on control equipment utilized. This permit would not be considered to be federally enforceable, and hence the company would be subject to the Title V requirements. The reason is that the potential to emit would have to be calculated as follows:

40 lbs/hr x 24 hrs/day x 365 days/year x ton/2000 lbs = 175.2 tpy

In order to restrict the potential to emit, the company would have to apply for a Federally Enforceable State Operating Permit (FESOP). For example, the company could request that the source be restricted to the use of no more than 2,667 gallons per month, with the appropriate record keeping [daily, weekly, or monthly] and reporting requirements.

2,667 gal/mon x 5 lbs VOC/gal x 12 mon/yr x ton/2000 lbs = 80 tpy
[This value for a criteria pollutant can be designed up to 99 tpy. However, the closer to the major threshold you design your restriction results in less room for error and greater scrutiny by the Agencies (OEPA and USEPA).]

**Please note that Hazardous Air Pollutants (HAPS) have not been evaluated in this example, and should be examined if applicable.

2. Rock Crushing Operation

The existing permit contains the following: OAC Rule limit of 69 lbs PM/hr (uncontrolled limit based on maximum process weight rate of 500 tons per hour); controlled by baghouse; 30.2 tpy PM. The source is not subject to any federal rules, and the permit was not issued draft to allow for the 30 day public comment period. The company would be subject to Title V since the permit does not contain terms and conditions which are federally enforceable. The potential to emit would be calculated as follows:

69 lbs/hr x 24 hrs/day x 365 days/yr x ton/2000 lbs = 302 tpy PM

The company would have to apply for a FESOP in order to restrict the potential to emit to reflect actual operating conditions. In this case the company would have to specify capture and control efficiencies for the baghouse. For instance 100% capture and 90% control. In addition, the company would have to either specify monitoring of the baghouse efficiency (e.g. pressure drop across the baghouse; regular inspection of the bags), or install a continuous emission monitor. The permit would also contain appropriate record keeping and reporting requirements. The new potential would be calculated as follows:

overall control efficiency - 1 x .9 = 90%

69 lbs/hr x 24 hrs/day x 365 days/yr x ton/2000 lbs x (1 - 0.9)
= 30.2 tpy

*****Please note that any restrictions which you apply for, you must be comfortable that your company will be able to comply with those restrictions.**

Potential to Emit Analysis

For the sake of brevity, the following analyses assumes that no add-on pollution controls are employed and the emission units are not subject to any federal standards (i.e. NESHAPS, NSPS). The emission limits specified are either established federally enforceable BAT limits or OAC rule limits.

METAL WORKING FACILITY
CURRENT POTENTIAL TO EMIT

24 hrs/day x 365 days/yr x ton/2000 lbs. = 4.38

UNIT	DESCRIPTION	PERMIT LIMIT	POTENTIAL
	Drilling & Grinding	2 lbs PM/hr x 4.38	8.76 tpy PM
P002	Shredding	19.2 lbs PM/hr x 4.38	84.1 tpy PM
P003	Forming	19.2 lbs PM/hr x 4.38	84.1 tpy PM
	9 MMBtu/hr Boiler - using natural gas	0.18 lbs PM/hr x 4.38	0.79 tpy PM
		0.9 lbs NOx/hr x 4.38	3.9 tpy NOx
		0.19 lbs CO/hr x 4.38	0.83 tpy CO

	PM	NOx	CO
	8.76 tpy	3.9 tpy	0.83 tpy
	84.1 tpy		
	84.1 tpy		
	0.79 tpy		
TOTALS	177.75 tpy	3.9 tpy	0.83 tpy

PROPOSED RESTRICTED POTENTIAL TO EMIT

The company submits a FESOP application to request federally enforceable conditions to restrict the hours of operation for emission units P002 and P003. The company proposes a restriction of 4000 hour per rolling 365 day period per emission unit.

4000 hrs/yr x ton/2000 lbs 2

UNIT	DESCRIPTION	PERMIT LIMIT	NEW POTENTIAL
	Drilling & Grinding	2 lbs PM/hr x 4.38	8.76 tpy PM
	Shredding	19.2 lbs PM/hr x 2	38.4 tpy PM
P003	Forming	19.2 lbs PM/hr x 2	38.4 tpy PM
B001	9 MMBtu/hr Boiler - using natural gas	0.18 lbs PM/hr x 4.38 0.9 lbs NOx/hr x 4.38 0.19 lbs CO/hr x 4.38	0.79 tpy PM 3.9 tpy NOx 0.83 tpy CO

PM	NOx	CO
8.76	3.9	0.83
38.4		
38.4		
0.79		
TOTALS 86.35	3.9	0.83

**Please note that we only evaluated PM, NOx, and CO for the boiler - again this was done for the sake of brevity as we are certain that emissions of the other pollutants generated by the boiler would be negligible. Depending on your situation, the other pollutants should be evaluated as well.

Actual Examples of Federally Enforceable Restrictions Contained In OEPA Permits To Install

Note: These examples are for restrictions necessary to avoid more complicated federal New Source Review permits (i.e., PSD or Offset permits). Therefore, some of the criteria and major classification thresholds are different than the restrictions required for avoiding Title V permitting. However, the actual establishment of requirements to restrict an entity's potential to emit involves the same concepts.

Example 1

This is an example of a steel making facility which obtained federally enforceable restrictions on several emission units. Specifically, this provides an example of production restrictions based on a 365-day rolling average. It also provides an example of interim first year restrictions until enough data is obtained to determine compliance on a 365-day rolling average basis.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

Short-term limit

1. The 613 MMBTU/hr maximum heat input, natural gas-fired walking beam furnace (P065) covered by this Permit to Install No. 13-237C is limited to a maximum of 0.02 pounds of particulate per million BTU Heat Input (0.02 lb/MMBTU) and a maximum Nitrogen Oxides (NO_x) limitation of the lesser of 1.2 times the actual rate as determined by testing and 0.4 lb/MMBTU.

Operational restriction

2. The walking beam furnace (P065) shall be limited to a maximum of 2200 million cubic feet of natural gas used per rolling 365 day period. The facility shall maintain records indicating the daily amount of natural gas consumed, the calculated rolling 365 day total amount of gas used and the amount of steel processed in this walking beam furnace. In order to ensure federal enforceability, for the first twelve calendar months of operation, shall not exceed the following usage limits for the specific time period.

1st year operational restrictions until the rolling 365-day average period is known

Month	Total Allowable Usage
1	183.3 million cubic feet
1,2	366.7 million cubic feet
1-3	550.0 million cubic feet
1-4	733.3 million cubic feet
1-5	916.7 million cubic feet
1-6	100.0 million cubic feet
1-7	283.3 million cubic feet
1-8	466.7 million cubic feet
1-9	1650.0 million cubic feet
1-10	1833.3 million cubic feet
1-11	2016.7 million cubic feet
1-12	2200.0 million cubic feet

Recordkeeping and reporting requirements

After the first twelve months of operation, shall conform with the limitations and reporting requirements of this condition. Quarterly reports summarizing this data and an indication of any exceedances of the gas usage limitation shall be submitted to Cleveland Division of Air Pollution Control.

Short-term emission limit

3 The 440 tons/hr double strand, continuous steel slab casting operation (P066), covered by this Permit to Install No. 13-2370 is equipped with a water spray system to capture all visible emissions

generated at the torch cut-off area. It is located at the No. 1 BOF Area and is limited to a maximum particulate emission rate of 0.14 pounds per hour (lb/hr) and a maximum visible emission of 5% (five percent) opacity, six minute average, in any exhaust gases from this operation.

4. The ladel metallurgy refining process (P067) covered by this Permit to Install No. 13-2370 consists of addition/injection of alloying materials and electric arc reheating of molten steel. This process is equipped with a baghouse control system which shall be operated at sufficient volume flow rate to capture visible emissions generated by this process to achieve a maximum particulate emission rate of 0.0052 grains per dry standard cubic foot of exhaust gas (gr/dscf), 4.51 lb/hr and a maximum visible emissions of 5% opacity, six minute average in the control device outlet and in any fugitive emissions that result from this process. The process shall be equipped with a continuous differential pressure monitor with recorder across the baghouse. Differential pressure will be monitored at each module as well. Temperature will also be monitored for each module and the fan bearings. The record from the pressure monitor will be kept for two years and available for inspection by the agency.

produciton restriction

5. Steel feed to the new continuous caster (P066) under this permit shall be restricted to a maximum of 2.36 million tons of steel per rolling 365 day period. Compliance shall be determined by the rolling 365 day total with every day setting a separate 365 day period that must achieve production compliance. The facility shall maintain records indicating the daily amount of steel fed to the caster and the calculated rolling 365 day total amount of steel fed to the caster. In order to insure federal enforceability, for the first twelve calendar months of operation, shall not exceed the following production levels.

1st year production restrictions until the rolling 365-day average period is known

Month	Production
1	0.196 million tons
1,2	0.393 million tons
1-3	0.590 million tons
1-4	0.787 million tons
1-5	0.983 million tons
1-6	1.180 million tons
1-7	1.377 million tons
1-8	1.573 million tons
1-9	1.770 million tons
1-10	1.967 million tons

Month	Production
1-11	2.163 million tons
1-12	2.36 million tons

After the first twelve months of operation, shall conform with the limitations and reporting requirements of this condition. Quarterly reports summarizing this data and an indication of any exceedances of the steel production limitation shall be submitted to Cleveland Division of Air Pollution Control.

6. Within 180 days of commencement of production from these new facilities the 613 MMBTU/hr natural gas-fired walking beam furnace (P065), the 44C Tons/hr double strand continuous steel slab casting operation (P066) and the ladle metallurgy refining process (P067), shal permanently remove from service (or permanently cease operation of) the following existing sources:

East Side Soaking Pits 1318001613 P014 through P018, inclusive),

West Side Soaking Pits (1318000078 P014 through P022, inclusive),

C-2 Blast Furnace 1318001613 P901 and dedicated stoves,

C-3 Blast Furnace 1318000078 P902) and dedicated stoves,

No. 1 BOF Teeming Process 1318000078 F011),

No. 1 Coke Plant (1318001613 B901, B902, B903 and B904)

In the event of an emergency, after the closure of the soaking pits is permitted to pour hot metal into ingot molds. These ingots cannot be placed in the soaking pits, but must be shipped off-site or used as scrap

7. Upon initiation of operation of the continuous caster, will limi coke production at the No. 2 coke plant to 596,136 tons per rolling 12 month period. Compliance will be determined from the first month and shall include the previous 12 month period. The facility shall maintain records indicating the monthly amount of coke produced and the calculate rolling 12 month total amount of coke produced. Quarterly reports summarizing this data and an indication of exceedances of the coke production limitation shall be submitted to the Cleveland Division of Air Pollution Control.

Example 2

This example is for a coating operation which maintains daily records on the amount of VOC content in coatings that was applied. Again, compliance is maintained on a 365-day rolling average basis for annual amount of VOC content of coatings applied. Also, recordkeeping and reporting requirements are established for demonstrating that the control device is performing as designed. In addition, the interim first year restrictions are provided until enough data is obtained to determine compliance on a 365-day rolling average basis.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. This permit to install is for a 61" Faustel coater (F-2) including a reverse roll coating station/drying oven, unwind, windup and accessory equipment It is controlled by a Hirt Combustion Engineering Inc. Thermal Oxidizer.

2. shall operate this source so that VOC emissions do not exceed (a) 0.2 Kg of VOC per Kg of coating solids applied as calculated on a weighted average basis for one calendar month or (b) a 90 percent overall VOC reduction as calculated over a calendar month or the percent overall VOC reduction specified in 60.443(b) as calculated over a calendar month

3. shall install, operate, and maintain a thermal oxidizer on this source which has an overall VOC destruction efficiency of at least 98% by weight (100% capture efficiency and 98% destruction efficiency). The thermal oxidizer shall be designed and operated according to good engineering practice and manufacturer's specifications.

4. may apply water-based coatings (emulsions) to the extent that the VOC emissions do not exceed (a) the limit specified in paragraph 2a above , and b, 2.6 lbs of VOC per gallon of coating applied. The thermal oxidizer need not be used when emulsions are being applied.

Short term emission limits

5. shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the thermal oxidizer's exhause gases. Avery shall record all 3-hour periods (during actual coating operations) during which the average temperature of the device is more then 28°C (50°F) below the average temperature of the device during the most recent performance testing complying with the requirements of this permit.

6. shall conduct performance testing for VOC emissions as required by the NSPS at 40 CFR Part 60.444.

7 shall conduct efficiency testing on the thermal oxidizer system. US EPA Reference Method 25 (if VOC concentrations in the outle are expected to be greater than 50 ppm) or an equivalent method acceptable to Ohio EPA must be used.

8. shall conduct capture efficiency testing using US EPA Method 204.

9. The 4-way safety bypass must be closed to the atmosphere during all operations and all associated safety mechanisms and switches must be properly maintained according to good engineering practices.

Annual emissions limit production restriction on a 365-day rolling average basis

10. The annual emissions from this source shall be limited to 39 tons of VOC per year. To accomplish this, shall limit coating usage such that the annual VOC content of the coatings applied is no more than 1.95(tons per rolling 365 day period. In order to ensure federal enforceability during the first 12 months of operation shall not exceed th(following cumulative monthly usage restrictions:

1st year restrictions until enough data is known to establish compliance on a 365-day rolling average production limit.

Month	Tons of VOC Applied*
1	246
1&2	467
1-3	663
1-4	834
1-5	980
1-6	1,126
1-7	1,272
1-8	1,418
1-9	1,564
1-10	1,710
1-11	1,830
1-12	1,950

* Based upon VOC content and amount of coatings (before control). Thereafter, shall recalculate daily the annual VOC content of th(coatings applied. Each day shall start a new 365 day period.

Recordkeeping requirements

11. shall maintain the following daily records:

a. for the solvent based surface coatings employed in this source:

i. A log or record of the operating time for the capture (collection) system, control device, monitoring equipment, and the associated coating line; and

Recordkeeping and reporting of the add-on control device

ii. For the termal oxidizer, all 3-hour periods (during actual coating operations) during which the average temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion temperature of the device during the most recent performance test that demonstrated that the source was in compliance.

b. for the water based surface coatings employed in this source:

i. The name and identification number of each coating, as applied; and

ii. The mass of VOC per volume of each coating (excluding water and exempt solvents), as applied.

c. the total tons of VOC applied (for the first year of this permit) should be shown as the cumulative monthly usage starting with the first month after the effective date of this permit, and for subsequent years it should be shown as the rolling annual average recalculated each day.

These daily records, as well as any supporting coating analyses and computations, shall be retained in the company's files for a period of not less than three years and shall be made available to the Director or any authorized representative for review during normal business hours.

Reporting requirements

The daily records shall be summarized monthly and reported to the Northeast District Office on a quarterly basis. The reports shall be submitted by April 30, July 31, October 31, and January 31 of each year for the previous three calendar months. shall notify the Ohio EPA, Northeast District Office, as soon as possible, but no later than 45 days after the exceedance occurs, of any daily record that shows that the daily volume weighted VOC content exceeds the applicable emission limitation, the cause of the exceedance, and any corrective action taken to prevent its reoccurrence.

SYNTHETIC MONOR DETERMINATION

A. Source Description: has proposed to install a new pressure-sensitive adhesive coater (K002) at their Hardy Rd. plant. Emissions will be limited to 2.6 lbs of VOC per gallon of coating applied, minus water as well as the NSPS, Subpar RR limit of 0.2 Kg of VOC per Kg of coating solids applied. Emissions will be controlled by a thermal oxidizer.

B. Facility Emissions and Attainment Status: Lake County is a non-attainment area fo ozone. The existing facility emissions are limited by PTI #02-3702 to 39 tons of VOC per year.

C New source Emissions: Potential emissions from the coater will not exceed 100 tons/yr of VOC. has proposed (in order to keep the total facility emissions below 100 tons per year so that future expansions will not be subject t NSR) to restrict emissions the annual VOC content of the coatings applied to less than 1,950 tons/yr by accepting monthly cumulative emission limitations such tha the emissions will not exceed 39 tons/yr of VOC. Due to the wide variety of coatings and products and the unpredictable nature of the operation, this will be tracked and enforced through daily recordkeeping and quarterly reporting of coatin usage and emissions.

D. Conclusions: The installation of K002 with emission limitations will result in emissions of 39 tons/yr of VOC. Since this is less than 100 tons/yr, the Emission Offset Policy (Federal New Source Review) for ozone (VOC) will not apply.

Example 3

This example provides limiting the potential to emit for 3 diesel-fired internal combustion engines (to generate power) by limiting annual operating hours utilizing a 12-month rolling average. In addition, the interim first year restrictions are provided until enough data is obtained to determine compliance on a 12-month rolling average basis.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	7.49
SO_2	8.88
VOC	8.88
NO_x	99.96
CO	23.70

CONSTRUCTION STATUS

The Akron Air Pollution Control shall be notified in writing as to (a) the constructior starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: B001, B002, B003.

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to Akron Air Pollution Control, 177 South Broadway, Akron, Ohio 44308.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Akron Air Pollution Control, 177 South Broadway, Akron, Ohio 44308.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Instal application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. PTI 16-1366 is for the installation of three (3) Caterpillar stationary internal combustion engines (sources B001, B002, B003) model 3516, which will be used to produce standby electric power. Each engine has a maximum output rating of 1800 Kw and can burn a maximum of 124.7 gallons per hour of #2 diesel fuel oil. Maximum input to each engine is 17.02 MMBTU/hr.

B. In accordance with the BAT requirements of OAC Rule 3745-31-05, air emissions from each source shall not exceed the following:

1 particulate matter: 0.25 pound per million BTU actual heat input and 4.3 pounds per hour;

2. sulfur dioxide: 0.3 pound per million BTU actual heat input and 5.1 pounds per hour;

3. carbon monoxide: 0.80 pound per million BTU actual heat input and 13.61 pounds per hour;

4. volatile organic compounds (VOC): 0.30 pounds per million BTU actual heat input and 5.1 pounds per hour;

Short-term NO_x emission requirement

5. oxides of nitrogen: 10.14 grams per horsepower-hour and 57.4 pounds per hour; and

6. visible particulate emissions shall not exceed 5% opacity on a six minute average except for a one hour period during the startup of the engine. Visible particulate emissions during this one hour period shall not exceed 20% opacity on a six minute average.

C. Operating Limitations & Recordkeeping Requirements

lling 12-month average restrictions

1 Sources B001, B002, B003 each shall be limited to operating 1161 hours per rolling 12 month period. In addition, each engine shall be limited to burning 144,777 gallons of diesel fuel oil over a rolling twelve month average with each month setting a separate 12 month period.

For recordkeeping purposes

2. Each engine shall be equipped with a timer.

3. The facility shall maintain monthly records which lists the following information for each source:

Recordkeeping requirements

(a) the source number;

(b) the total gallons of fuel consumed per source for that month and the previous 12 month period; and

(c) the total hours of operation per source, for that month and the previous 12 month period.

Record retention

These records shall be maintained in a bound log book at the facility and/o at the facility's headquarters for a minimum of three years and shall be made available to representatives of the Ohio EPA upon request during normal business hours.

4. In order to ensure federal enforceability, for the first twelve calendar months of operation, shall not exceed the operating levels specified in Table I.

Table I

1st year interim requirements until enough data is known to comply with the 12-month rolling average

Month	Hours of Operation*			Gallons of Fuel Oil Burned*		
	B001	B002	B003	B001	B002	B003
1	97	97	97	12,065	12,065	12,065
2	194	194	194	24,130	24,130	24,130
3	291	291	291	36,195	36,195	36,195
4	388	388	388	48,260	48,260	48,260
5	485	485	485	60,325	60,325	60,325
6	582	582	582	72,390	72,390	72,390
7	679	679	679	84,455	84,455	84,455
8	776	776	776	96,520	96,520	96,520
9	873	873	873	108,585	108,585	108,585
10	970	970	970	120,650	120,650	120,650
11	1067	1067	1067	132,715	132,715	132,715
12	1161	1161	1161	144,777	144,777	144,777

* total accumulative

These records, as well as any supporting analyses and computations, shall be retained on file at the facility's headquarters for a period of not less than three years. All records shall be made available to any authorized representative of the Director of the Ohio EPA for review during normal business hours.

D. Fuel Sampling

1. Periodic fuel sampling and analysis (at a minimum, annually) shall be done in accordance with 40 CFR, Part 60, "Appendix A", Method 19, or the appropriate ASTM methods, or equivalent methods as approved by the director of the Ohio EPA. In lieu of performing on-site sampling, representative fuel analyses performed by fuel suppliers may be acceptable This procedure must be done at least on an annual basis. The

representative sulfur dioxide emission rate from any sample shall be calculated using the formula in OAC Rule 3745-18-04 (F)(2) Measurement Methods and Procedures. The results of these analyses must be maintained in the facility's files for a period of not less than three years.

E. Reporting requirements

1 shall submit quarterly reports to the Akron Regional Air Quality Management Disitrict which summarize the following information for sources B001, B002, B003 for each month in the quarter:

(a) hours of operation per month;

rolling twelve month total of operating hours;

gallons of diesel fuel oil burned per month; and

rolling twelve month total of diesel fuel oil burned

The reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June, and July through September, respectively).

2. shall immediately notify the Akron Regional Air Quality Management District of any exceedance of the hours of operation and the amount of fuel oil burned in accordance with the restrictions of this permit. In adition, the company shall submit an annual report documenting the above exceedance(s) of the hours of operation and the amount of fuel oil burned in accordance with the restrictions of this permit.

For each excursion, the company shall also provide the following additional information:

(a) the cause of the excursion; and

the action that has been taken to correct the violation and prevent futher occurrences.

The report shall be submitted by February 15 of each year and shall cover the previous 12 month period. If no exceedance(s) occurred, a report stating that fact is still required.

3. All reports are to be submitted to the Akron Regional Quality Management District, 177 South Broadway, Akron, Ohio 44308.

Permit to Install #16-1366

SYNTHETIC MINOR DERERMINATION

A. Source Description:

has proposed to install three (3) diesel-fired stationary internal combustion engines (B001, B002, B003) for standby electric generation.

B. Facility Emissions and Attainment Status:

is a new installation located in the city of Wadsworth, Medina County. Medina County is non-attainment for ozone.

C. New Source Emissions:

Potential emissions from each of the three sources are 251.4 tons per year of NOx based on 8,760 hours per year. Total facility emissions would be 754.2 tons per year. has proposed to limit operation to 1,161 hours per rolling 12-month period for each source. In addition, each engine will be limited to burning 144,777 gallons of diesel fuel oil over a rolling 12-month period.

D. Conclusion:

The installation of B001, B002, and B003 with operating restrictions of 1,161 hours and 144,777 gallons fuel oil per rolling 12-month period per source will result in facility emissions of 99.96 tons per year. Since this is less than 100 tons per year, will not be considered a major source and will not be subject to the Emission Offset Policy.

Giao Nguyen
7/1/94

OAC 3745-35-07 **Federally enforceable limitations on potential to emit.**

(A) For purposes of this rule, "potential to emit" means the maximum capacity of a stationary source to emit any federally regulated air pollutant, as defined in paragraph (DD) of rule 3745-77-01 of the Administrative Code, under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit a federally regulated air 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 is enforceable by the administrator as defined in paragraph (B) of rule 3745-77-01 of the Administrative Code. The term does not alter or affect the use of this term for any other purposes under the Clean Air Act, or the term "capacity factor" as used in Title IV of the Clean Air Act, as amended, or the regulations promulgated thereunder.

(B) Federally enforceable limitations on the potential to emit of a source may be established through any of the following mechanisms:

(1) Terms and conditions of a final permit to install issued by the director under Chapter 3745-31 of the Administrative Code;

(2) Terms and conditions of a final permit to operate issued under this chapter, provided that only those terms and conditions necessary to limit the potential to emit of the source and expressly designated as federally enforceable shall be federally enforceable, and provided further that the permit was first issued as a draft or proposed action with an opportunity for public comment under rule 3745-47-05 of the Administrative Code. With concurrent notice and opportunity for comment given to the administrator of the United States environmental protection agency region 5. During the public comment period, IF the administrator objects that the terms and conditions of the permit to operate are not federally enforceable the director shall not issue the permit to operate until such objection has been resolved; or

(3) Rules or orders of the director that are submitted to and approved by the administrator as revisions to the state implementation plan under sections 110 and 112 (l) of the Clean Air Act, as amended.

Upon the request of the owner or operator of a stationary source, any of the mechanisms provided in paragraphs (B)(1), (B)(2), or (B)(3) of this rule shall allow for trading of emissions increases and decreases among emission units located at the same source that is consistent with the Clean Air Act for the purpose of complying with a federally enforceable cap on the potential to emit of the source. Such limitations shall ensure that the

trades are quantifiable and enforceable and require seven-day advance notification to the appropriate Ohio EPA district office or delegated local air agency.

(C) In order to be federally enforceable, a limitation must:

(1 Specify an annual limit on emissions from the source;

(2) Specify a short-term limit on emissions for each pollutant to be restricted, and specify a short-term limit on production or operation, provided that for purposes of this rule, acceptable short-term limitations on production or operation shall include but not be limited to a thirty day average or three hundred and sixty-five day rolling average limitation computed each calendar day; and

(3) Specify adequate and enforceable methods for establishing compliance with the annual and short-term limits, using methods from 40 CFR 60 Appendix A or 40 CFR 51 Appendix M where appropriate; and

(4) Be no less stringent than any federally applicable requirement to which the source is subject.

(D) Approval of this rule by the administrator is a prerequisite of federal enforceability of limitations under paragraph (B)(2) of this rule.

Effective: November 18, 1994

Certification: *(signed by Donald R Schregardus, Director)*

November 3, 1994
Date

Promulgated under: Revised Code Chapter 119
Rule Amplifies: R.C. 3704.03
R.C. 3704.036
Prior Effective Date: 4/20/94

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: LAA Directors, DO Air Unit Supervisors

from: Clara Dailey, Jim Orlemann

subject: Synthetic Minor Permit Package Guidance

date: December 8, 1994

From this day forward, any PTI/PTO modifications, PACNs, or Renewal Notices associated with making a facility a synthetic minor rather than a Title V facility must have one of the enclosed pink sheets attached to the front of the information package. This is so we can easily recognize each request and make it our priority. Also, please include in the package:

a copy of the potential to emit analysis from the facility;

a summary of the synthetic minor determination similar to the example in the guidance document dated 11/30/94; and

(c the modification, PACN, or renewal notice, and associated terms and conditions.

Please note that the terms and conditions must clearly identify all of the federally enforceable requirements of the permit, including any monitoring, recordkeeping, and reporting requirements associated with an emission limitation or operational restriction. This can be accomplished by including a separate term and condition that reads as follows:

The following requirements of this permit to operate are federally enforceable requirements:

(a)
(b)
etc

(actually restate each requirement or refer to the special term and condition (STC) that specifies the requirement)

Finally, if you wish, when you forward an information package to the Central Office for processing, you may include a diskette containing the STC's or E-mail the STC's to Jim Orlemann, address

FESOP

for

SYNTHETIC MINORS

*LAA/DO Permit Engineer*_____

*LAA/DO Office Phone No.*_____

Date Request Received from Company

*Date Package Forwarded to CO*_____

*CO Engineer*_____

*Date Package Received by CO*_____

*Date CO Review Complete*_____

*Result of Review*_____

From: Jim Braun (JBRAUN)
To: TRIGO, JORLEMAN, CDAILEY
Date: Tuesday, December 13, 1994 11:50 am
Subject: FESOP's

Tom, Jim, & Clara:

Dan Schiltz from Canton asked the following questions & would appreciate some guidance:

1. What terms and conditions should be specifically designated as federally enforceable? He would like some examples of when terms and conditions only address State requirements.

2. Is the FESOP going to be a brand new permit? Or is it a modification to their existing permit? They can modify an existing permit with new terms and conditions, using the program that we mailed on Dec. 8, 1994 from Jim O. and Clara.

3. What needs to be done for the change from T - status to A - status? To change from T to A, using the PACN that is x'ed out on lines 1-2-3, complete 4,5,and 6 attach new terms and conditions, and attach the cherry cover following the directions sent on the Dec 8 memo.

4. Should terms and conditions be written for each emission unit separately? On permits to operate, yes, because they are still a permit for each emission unit.

5. Dan would appreciate clarification of item (c) from the December 8 memo from Clara & Jim. Item (c) addressed the modification, PACN, or renewal notice, and associated terms and conditions. For PTO's there is three ways to try to put an emission unit into synthetic minor, if it is first issue, you can use the pacn, cherry cover and the appropriate terms and conditions, if it is in the renewal program and they request synthetic minor than same as PACN. If they have an effective PTO and they request a synthetic minor than you modify by using the modification form, one for each emission unit, cherry cover and the new terms and conditions etc.

Thanks for your guidance. Please let me know if you need any clarification of the questions noted above.

SYNTHETIC MINOR DETERMINATION

A. Source Description: RJF International Corporation has proposed to install a new 54" vinyl wallcovering laminating, one color printer, top coating and embossing line (K011).

B. Facility Emissions and Attainment Status: RJF International is a major stationary source. Washington County is designated as attainment county for ozone.

C. New Source Emissions: Source allowable emission are 1 lb. V.O.C. per lb. ink solids as determined by NSPS Subpart FFF. The permit to install will contain terms and conditions to limit RJF International Corp. to 11,667 gallons of coatings per month and the coating shall not exceed .54 pounds V.O.C. per gallon.

D. Conclusions: The terms and conditions in the permit to install will limit K011 to 11,667 gallons of coating per month and the coating shall not exceed .54 pounds V.O.C. per gallon. RJF International Corp. shall maintain a monthly record of the total coating material usage and V.O.C. emissions for each month as well as for the consecutive twelve month period. Quarterly reports will be required to assure compliance. The facility will emit less than the significant emission rate in 40 CFR 52.21(b)(23) for V.O.C.'s. Therefore, the source will not be subject to Prevention of Significant Deterioration (PSD) review.

ALLIED-SIGNAL INC., ENGINEERED MATERIALS
NETTING CALCULATIONS AND SYNTHETIC MINOR DETERMINATION

A. Source Description: Allied-Signal, Inc. has proposed to install one (1) 80 x 10^6 Btu/hour fluidized bed boiler (FBB) with continuous limestone injection, preheat, associated storage tanks for liquid fuels, and fugitive dust sources (storage piles, conveying and handling) for solid fuels.

B. Facility Emissions and Air Quality Designation: Allied-Signal is one of the 28 source categories in the Prevention of Significant Deterioration (PSD) regulations. The facility would be considered a major for sulfur dioxide and nitrogen dioxide and a minor for other criteria pollutants. The location is nonattainment for particulate matter (PM) and attainment for all other pollutants.

C. Existing Source Credit: Allied-Signal intends to construct the FBB to replace the existing steam generation units. However, the existing boilers will not be abandoned but will be used on a stand-by basis for burning coal tars when the FBB is not operational and to provide supplemental heat, burning natural gas, when the FBB is operational. Allied-Signal intends to limit fuel usage in boilers B001-B004 to natural gas with a maximum heat input not to exceed 7.08 x 10^9 Btu/month. Natural gas consumption will increase above these levels if the FBB operates at less than maximum allowed capacity. The following is a summary of the actual emissions from boilers B001-B004 for 1986 and 1987.

Pollutant	Tons/Year
Total Suspended Particulates (TSP)	5.4
Particulate matter less than 10 microns (PM_{10})	5.4
Sulfur dioxide (SO_2)	115.9
Oxides of nitrogen (NO_x)	126.6
Carbon monoxide (CO)	6.4
Volatile organic compounds (VOC)	1.5

D. New Source Emissions: Allied-Signal will restrict fuel usage in the FBB and Preheat to maximum Btu content not to exceed 4.32 x 10^{10} Btu/month. Allied-Signal will continue to operate boilers B001-B004 on natural gas only while operating the FBB. Natural gas usage in boilers B001-B004 will not exceed 7.08 x 10^9 Btu/month.

FBB and Preheat

Pollutant	Best Available Technology (BAT) Emission Limit	Btu/Month	Tons/Year
	0.03 lb/10^6 Btu	4.32 x 10^{10}	7.76
PM_{10}	0.03 lb/10^6 Btu	4.32 x 10^{10}	7.76
SO_2	0.60 lb/10^6 Btu	4.32 x 10^{10}	155.25
NO_x	0.60 lb/10^6 Btu	4.32 x 10^{10}	155.25
CO	0.31 lb/10^6 Btu	4.32 x 10^{10}	80.21
		4.32 x 10^{10}	10.87

In order to ensure that PSD is not triggered, emissions from the facility must not exceed 155.8 tons per year of SO_2 and 166.5 tons per year of NO_x. The facility will be limited to a combination of operating rate restrictions for the new and existing boilers.

Boilers B001-B004

Pollutant	Emission Limit	Fuel Restriction/ Maximum Btu/Month (Natural Gas)	Tons/Year
	0.02 lb/10^6 Btu	7.08 x 10^9	0.93
PM_{10}	0.02 lb/10^6 Btu	7.08 x 10^9	0.93
SO_2	0.60 lb/10^6 Ft^3 (AP-42)	7.08 x 10^9	0.03
NO_x	140.00 lbs/10^6 Ft^3 (AP-42)	7.08 x 10^9	5.95
CO	35.00 lbs/10^6 Ft^3 (AP-42)	7.08 x 10^9	1.49
VOC	5.80 lbs/10^6 Ft^3 (AP-42)	7.08 x 10^9	0.25

Storage Tanks

Pollutant	Tons/Year
VOC	8.70

Fugitive Dust Sources

Pollutant	Tons/Year
TSP	8.10
PM_{10}	4.40

Contemperaneous Emissions

The facility has not had contemperaneous emissions increases for NO_x and/or SO_2 within the last five (5) years.

Total New Source Emissions

Pollutant	Tons/Year
	17.89
PM_{10}	13.69
SO_2	155.28
NO_x	161.20
CO	81.70
	20.77

E. Emissions Increases and Decreases: New source emissions minus emissions from B001-B004 for 1986 and 1987:

TSP	17.89 - 5.40	= 12.49 tons/year
PM_{10}	13.69 - 5.40	= 8.29 tons/year
SO_2	155.28 - 115.90	= 39.38 tons/year
NO_x	161.20 - 126.60	= 34.60 tons/year
CO	81.70 - 6.40	= 75.30 tons/year
VOC	20.77 - 1.50	= 19.27 tons/year

F Conclusions: Limiting the new FBB to a maximum fuel usage not to exceed a Btu content of 5.17×10^{11} Btu/year, and boilers B001-B004 to a maximum fuel usage for natural gas only not to exceed a Btu content of 8.5×10^{10} Btu/year, will result in a net increase of emissions, but less than the significant levels for PSD review. Therefore, the new sources have "netted out" of PSD review.

FEB 23 1989

UPDATED 02/10/89

LTV STEEL COMPANY
NETTING CALCULATIONS

A. Source Description: The LTV Steel Company proposes to install a 173 MM BTU/Hr [Maximum Heat Input] Natural Gas-Fired Controlled Atmosphere Continuous Steel Strip Annealing Line to replace an existing 157 MM BTU/Hr [Maximum Heat Input] Natural Gas-Fired Box Annealing Furnace (P-951).

B. Facility Emissions/Attainment Status: The LTV Steel Company is a major stationary source for Nitrogen Oxides (NOx) and Carbon Monoxides (CO). Cuyahoga County is classifed as attainment for Nitrogen Oxides and non-attainment for Carbon Monoxide.

C. Existing Source Credit: The LTV Steel Company will remove the existing gas-fired box annealing furnace (13-18-00-1613 P053) in addition to previously shutdown (in 1986) boilers (13-18-00-0078 B002 & B003). The actual emissions from this furnace for 1986/1987 and the boilers for 1985 (the last full year of operation) are:

Source	Emissions (tons per year) NOx	CO
	129.5	9.4
B002 & B003	115.2	65.6

D. Contemporaneous Emissions Increases and Decreases: With the removal of 13-18-00-1613 P053 and previously shutdown sources 13-18-00-0078 B002 & B003 in addition to no Permits to Install for any NOx or CO emitting source issued to this company since January 1, 1984, the net changes in emissions at the facility are as follows:

174 TPY 129.5 TPY 115.2 TPY = (70.7 TPY)

CO: 17.4 TPY - 9.4 TPY 65.6 TPY = (57.6 TPY)

E. Conclusions: The installation of the new continuous steel strip annealing line and the removal of the existing box annealing furnace coupled with the previously shutdown boilers will result in a net decrease in facility emissions of 70.7 TPY of NOx emissions and 57.6 TPY of CO emissions. Therefore, the new continuous annealing line has "netted out" of Prevention of Significant Deterioration review for NOx emissions and Emission Offsets for CO emissions.

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

June 3, 1994

Mr. Valdas V. Adamkus
Regional Administrator
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Dear Mr. Adamkus:

On March 8, 1994, U.S. EPA proposed to disapprove the State of Ohio's New Source Review State Implementation Plan (SIP). On May 3, 1994, U.S. EPA granted Ohio's request for an extension of the public comment period on this proposal to June 3, 1994. We appreciate the additional time granted for us to prepare a response.

After reviewing the Federal Register notice, we believe that U.S EPA has made serious errors in the review of the state plan for new sources. The Ohio EPA has presented U.S. EPA a fully approveable New Source Review SIP that relies on the Clean Air Act and federal regulations. There can be no better foundation for a SIP submittal.

Attached are detailed comments related to the proposed disapproval. Please contact Robert Hodanbosi if you have any questions on this submittal.

Sincerely,

Donald R. Schregardus
Director

RH/MH/
\ioc\nsrstatu.let

cc: Mike Hopkins, DAPC
Jim Braun, DAPC
Misty Parsons, DAPC
Alan Lloyd, DAPC

NSR SIP Submittal - Discussion of Comments

USEPA Comment: *Submittal does not address requirements that applied prior the 1990 CAAA. (see Sept 8, 1993 FR - 58 FR 47211). Generally, by incorporating Appendix S by reference it is deficient because of the deficiencies of Appendix S. Appendix S allows exemptions from offset requirements for resource recovery facilities and temporary sources.*

Response: These deficiencies were addressed in Ohio's response to the comments. Generally, because all Ohio permits must be issued in compliance with State and Federal laws (including the Clean Air Act Amendments of 1990), we have developed guidance which states that the exemptions for resource recovery facilities, etc. contained in Appendix S do not apply because Federal law does not allow the exemption. Because we require permits to be in compliance with Federal law, the exemptions contained in the Appendix S guidelines do not apply.

USEPA Comment: *Appendix S is not explicit in requiring annual, actual emissions offsets. Part D, section 173(c) requires that Ohio clarify that this requirement applies.*

Response: We agree that Appendix S is not explicit in requiring annual, actual

emissions offsets. Ohio has, however, had a policy which requires annual, actual emissions offsets for some time. The plan that we submitted to USEPA included the requirement to use actual emissions as offsets. It says in part "...all sources subject to the nonattainment requirements must secure actual emissions reductions in order for the application to be approvable."

USEPA Comment: *USEPA's review indicated that the statement of permitting criteria does not provide adequate specificity and clarity of criteria by which detailed implementation decisions would be made. No definition of offset ratio is provided, and so it is unclear what averaging time applies, whether offsets are to reflect allowable or actual emissions, whether all emission increases must be offset (e.g. fugitive and secondary emissions), where the offsets must occur, and whether interpollutant offsets are permissible. The statement also does not explicitly state that either VOC or NOx offsets are required.*

Response: These requirements are all contained and specified in either federal rules, the Clean Air Act Amendments of 1990 or in Ohio EPA policy.

USEPA Comment: *The CAAA itself does not explicitly define "major new source" and does not specify major modification thresholds.*

Response: This is correct. Our current rules also do not define "major new source". However, "major stationary source" is very well defined in Appendix S and "new source" is defined in our existing rules. Since our current rules require compliance with Appendix S except where State or Federal law is more stringent, and there is no other State or Federal rule applicable to non attainment areas which defines Appendix S, then the Appendix S definition becomes applicable.

USEPA Comment: *It is not clear whether Ohio intends this apparent reduction from 100 to 40 tons per year of the threshold of source sizes at which major modification trigger new source review requirements.*

Response: The major modification remains the same as in Appendix S. Ohio does not intend to change this threshold.

USEPA Comment: *The statement of permitting criteria does not address many of the questions that would arise in imposing the identified requirements.*

Response: We believe that with our existing legal authority requiring compliance with all applicable rules and laws and requiring compliance with Appendix S (whichever is more stringent), the requirements are well defined. This has been demonstrated by the history of our existing program. Appendix S has been used

extensively in the past to make these determinations and this has resulted in a non attainment permitting program which follows known USEPA guidance, rules and policy.

Ohio EPA is prohibited by state regulation from issuing a permit that does not comply with applicable law. Regardless of the deficiencies in U.S. EPA regulations, Ohio EPA cannot issue a permit to install for a source which violates federal law. Ohio Administrative Code (OAC) 3745-31-05(A) states in part "The director shall issue a permit to install...if he determines that the installation...will...Not result in a violation of any applicable laws, including but not limited to:". The rule goes on to list the Clean Air Act and the Appendix S of Part 51. This rule is unambiguous. Ohio EPA must comply with federal statutes in the issuance of a Permit to Install.

U.S. EPA had expressed a concern about certain items that were identified in the Clean Air Act as part of the review of new sources which were not identified in either state or federal rules. Ohio EPA proposed a policy that includes these additional federal requirements. The policy was issued in proposed format and a public hearing was held on the document. After a review of the comments, Ohio EPA submitted that policy as part of the State Implementation Plan. No mention of this is made in the proposed disapproval. The current approach at Ohio EPA has been successful for the past twenty years in the review of new sources. With the

current regulatory structure, Ohio EPA can modify the requirements for the approval of new sources as soon as the new requirements are issued. If Ohio EPA must incorporate all of the various federal rules, sources in Ohio would need to wait until Ohio EPA changes the rules to receive the benefit of the new standards.

USEPA Comment: *... generally regulations are necessary to define the precise obligations of affected individuals and the precise criteria by which relevant decisions (e.g determinations of compliance) will be made. The proper adoption of clearly defined criteria for making relevant decisions is essential to support these decisions. Therefore, in the absence of exhaustively detailed statutes, the adoption of detailed regulations is essential for successful program implementation.*

Response: It is our belief that the existing statutes, and existing regulations are of sufficient detail to precisely define the requirements that must be met. The Clean Air Act Amendments of 1990 are clearly the most detailed of any of the past amendments. For instance, the offset ratios defined in the CAAA precisely define the minimum ratios required in each non attainment area. Any regulations which we would promulgate would simply mirror those ratios. Why have those requirements listed in two areas (the CAAA and Ohio rules) when we already have the legal authority to enforce the CAAA?

USEPA Comment: *... the statement of permitting criteria lacks the specificity, the regulatory standing, and the assurance of being enforceable that are needed to satisfy the Clean Air Act requirements.*

Response: The requirements of the CAAA are clearly enforceable via existing Ohio regulations.

USEPA's Summary: *USEPA's review indicates that Ohio's submittal does not clearly establish the specific criteria by which judgements in new source permitting will be made. Furthermore, by relying not on properly adopted regulations but rather on a general regulatory provision (requiring compliance with the Clean Air Act) in conjunction with a statement of permitting criteria, the State has failed to follow proper procedures to become authorized to impose specific, detailed permit conditions in accordance with the Clean Air Act requirements. In addition, the existing regulations exempt two types of sources which may not be exempted under applicable USEPA regulations.*

Response: USEPA has the opportunity to approve a new source review SIP that provides for full compliance with the Clean Air Act. Instead, USEPA is proposing to disapprove a workable plan and instead force the state to adopt a large number

of rules that will only mimic the federal law. This is not the case of a state failing to enforce the federal requirements. Quite the contrary, instead, Ohio can immediately enforce federal requirements. Instead of proposing to disapprove the Ohio SIP, USEPA should be using the Ohio EPA rules as a model of efficiency for other states.

MH/

\ioc\nsrstatu.02

Mike 4

OHIO CHAMBER OF COMMERCE

Ohio's business advocate since 1893

35 East Gay Street • Columbus, OH 43215-3181 • (614) 228-4201 • FAX (614) 228-6403

June 2, 1994

CC: JIM BRAUN
PHIL PARSONS
ALAN LLOYD

William L. MacDowell
U.S. Environmental Protection Agency
Air & Radiation Division (AR-17)
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

Re: Proposed Disapproval of Ohio Part D New Source Review Submittal-59 F.R. 10349-52 (March 4, 1994)

Dear Mr. MacDowell:

The following comments are submitted by the Ohio Chamber of Commerce on behalf of its 3,800 member businesses in response to U.S. EPA's proposed disapproval of Ohio's plan to implement the nonattainment new source review (NSR) requirements added by the Clean Air Act Amendments of 1990. U.S. EPA's proposed disapproval was published in the Federal Register on March 4, 1994, 59 F.R. at 10349-52. We respectfully submit that U.S. EPA should approve rather than disapprove Ohio's program for preconstruction review and permitting of proposed major new and modified sources to be located in nonattainment areas.

One reason given for U.S. EPA's proposed disapproval of Ohio's NSR submittal is that Ohio's "statement of permitting criteria does not provide adequate specificity and clarity of criteria by which detailed implementation decisions would be made." 59 F.R. at 10340, col. 3. The Ohio submittal, however, incorporates the exact same "specificity and clarity of criteria" as federal law. See OAC 3745-31-05(A) (no permit to install can be issued unless it complies with all applicable requirements of the Clean Air Act and regulations adopted thereunder). If "specificity and clarity of criteria" were lacking, it would be a federal law, not an Ohio law, problem, but in fact it is not a problem at all. In reality, federal law is sufficiently specific and clear to make implementation decisions in this regard. In any event, lack of specificity or clarity of criteria for decision making is not a valid basis for disapproval of a State submission that on its face meets all the requirements of federal law.

The other vague reason given for U.S. EPA's proposed disapproval of Ohio's NSR submittal is a philosophical one, that Ohio is relying upon "existing Ohio statutes and regulation which already require that the provisions of the amended Clean Air Act be met" rather than adopting new, more specific regulations. 59 F.R. at 10351, col.2. Ohio's obligation, however is to implement the requirements of the

Chairman
ROBERT W. MINOR
Of Counsel
Vorys, Sater, Seymour & Pease
Columbus

Treasurer
ALLEN C. WADDLE
Senior Vice President
National City Corporation
Cleveland

President
ANDREW E. DOEHREL
Ohio Chamber of Commerce
Columbus

Chairman-Elect
R. EMMETT BOYLE
President, Chairman & CEO
Ormet Corporation
Hannibal

Clean Air Act. U.S. EPA acknowledges that Ohio's Part D NSR submittal does so:

> Ohio notes that its Rule 3745-31-05 requires that permits to install shall be issued only if the construction and operation will "not result in a violation of any applicable laws," which is defined to include the Clean Air Act including any amendments. 59 F.R. at 10341, col.2.

It is not Ohio's obligation to provide some abstract degree of specificity where, as here, Ohio's submission includes enforceable regulations that clearly incorporate each and every applicable requirement of federal law.

U.S. EPA has threatened to impose sanctions pursuant to section 179(b) of the Clean Air Act (highway funding restrictions and a requirement for two-for-one offsets) if the proposed disapproval of Ohio's Part D NSR submittal is finalized. This threat of sanctions is totally inappropriate where, as here, Ohio's submittal meets the requirements of federal law and the proposed disapproval is based upon a difference of philosophy that is extraneous to the approval criteria in the Clean Air Act.

For the foregoing reasons, we urge U.S. EPA's prompt approval of Ohio's August 20, 1993 Part D NSR submittal.

Sincerely,

Kelly R. Kinder
Director of Energy and Environment

cc: Ohio Congressional Delegation
Governor George V. Voinovich
Donald Schregardus, Director, Ohio EPA
Robert Hodanbosi, Ohio EPA

4. Label claims "for prevention of" or "to prevent" should be replaced with "as an aid in the control of" or, "to aid in the control of."

5. Labeling should carry a warning pertaining to the development of resistant organisms.

6. Dosage levels recommended in the labeling are low.

FDA concurs with the NAS/NRC DESI evaluation.

The NAS/NRC evaluation concerns the drug's safety and effectiveness to the treated animal. It does not concern the safety for food use of treated animals.

Veterinary Service, Inc., filed a supplement which reflected compliance with the results of the NAS/NRC DESI review and FDA's conclusions based on that review.

Veterinary Service, Inc., filed an additional supplement to revise the tolerances for residues of streptomycin in the uncooked, edible tissues of chickens, swine, and calves to 2.0 ppm in kidney and 0.5 ppm in all other tissues. The current tolerance of zero is an outmoded expression of an intent to regulate residues at the sensitivity of the existing analytical method. The revised tolerances are supported by available toxicological data relating to streptomycin.

The supplements are approved as of August 5, 1993, and the regulations are amended in 21 CFR 520.2158a and 21 CFR 556.610 to reflect the approvals. The basis for approval is discussed in the freedom of information summary.

In accordance with the freedom of information provisions of part 20 (21 CFR part 20) and § 514.11(e)(2)(ii) (21 CFR 514.11(e)(2)(ii)), a summary of safety and effectiveness data and information submitted to support approval of this application may be seen in the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857, between 9 a.m. and 4 p.m., Monday through Friday.

Under section 512(c)(2)(F)(iii) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b(c)(2)(F)(iii)), these approvals do not qualify for an exclusivity period because the supplements do not contain reports of new clinical or field investigations (other than bioequivalence or residue studies) and, in the case of food-producing animals, human food safety studies (other than bioequivalence or residue studies) essential to approval of the supplements and conducted or sponsored by the applicant.

The agency has carefully considered the potential environmental effects of this action. FDA has concluded that the action will not have a significant impact on the human environment, and that an environmental impact statement is not required. The agency's finding of no significant impact and the evidence supporting that finding, contained in an environmental assessment, may be seen in the Dockets Management Branch (address above) between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects

21 CFR Part 520

Animal drugs.

21 CFR Part 556

Animal drugs, Foods.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, 21 CFR parts 520 and 556 are amended as follows:

PART 520—ORAL DOSAGE FORM NEW ANIMAL DRUGS

1. The authority citation for 21 CFR part 520 continues to read as follows:

Authority: Sec. 512 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b).

2. Section 520.2158a is amended by removing paragraph (d)(3), and by revising paragraphs (d)(1) and (d)(2) to read as follows:

§ 520.2158a Streptomycin sulfate oral solution.

* * * * *

(d) * * *

(1) *Calves and swine*—(i) *Amount.* 10 to 15 milligrams per pound (mg/pound) of body weight (1.0 to 1.5 grams per gallon).

(ii) *Indications for use.* Treatment of bacterial enteritis caused by *Escherichia coli* and *Salmonella* spp. susceptible to streptomycin.

(iii) *Limitations.* Calves: Do not administer for more than 5 days. Swine: Do not administer for more than 4 days. Prepare fresh solution daily. Calves: Withdraw 2 days before slaughter. As sole source of streptomycin. Warning: Certain strains of bacteria may develop a tolerance for streptomycin. Consult a veterinarian or animal pathologist for diagnosis.

(2) *Chickens*—(i) *Amount.* 10 to 15 mg/pound of body weight (0.6 to 0.9 grams per gallon).

(ii) *Indications for use.* Treatment of nonspecific infectious enteritis caused by organisms susceptible to streptomycin.

(iii) *Limitations.* Chickens: Do not administer for more than 5 days. Withdraw 4 days before slaughter. Do not administer to chickens producing eggs for human consumption. Prepare fresh solution daily. As sole source of streptomycin. Warning: Certain strains of bacteria may develop a tolerance for streptomycin. Consult a veterinarian or animal pathologist for diagnosis.

PART 556—TOLERANCES FOR RESIDUES OF NEW ANIMAL DRUGS IN FOOD

3. The authority citation for 21 CFR part 556 continues to read as follows:

Authority: Secs. 402, 512, 701 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342, 360b, 371).

4. Section 556.610 is revised to read as follows:

§ 556.610 Streptomycin.

Tolerances are established for residues of streptomycin in uncooked, edible tissues of chickens, swine, and calves of 2.0 parts per million (ppm) in kidney and 0.5 ppm in other tissues.

Dated: August 31, 1993.

Robert C. Livingston,

Director, Office of New Animal Drug Evaluation, Center for Veterinary Medicine.

[FR Doc. 93-21797 Filed 9-7-93; 8:45 am]

BILLING CODE 4160-01-F

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[OH4-1-5062; FRL-4701-2]

Approval and Promulgation of Air Quality Implementation Plans; Ohio

AGENCY: U.S. Environmental Protection Agency (U.S. EPA).

ACTION: Final rulemaking.

SUMMARY: U.S. EPA is today announcing limited approval of a revision to the Ohio New Source Review (NSR) State Implementation Plan (SIP). This approval relates to the State's revised NSR regulations, which were developed to satisfy U.S. EPA's earlier conditional approval of Ohio's Part D NSR Program.

U.S. EPA's action is based upon a revision request which was submitted to satisfy the requirements of Part D of the Clean Air Act (CAA). As a result of this action, the original condition of approval of the State's NSR program at 40 CFR 52.1879(e) is removed.

U.S. EPA has evaluated the proposed revision to the plan and is granting limited approval under Sections 110(k)(3) and 301(a) of the Clean Air Act, as amended in 1990. Even though there are two new deficiencies relating to offsets requirements in the plan, U.S.

EPA is approving the plan because it is substantially better than the underlying October 31, 1980, Ohio NSR plan.

EFFECTIVE DATES: This action will be effective November 8, 1993, unless notice is received by October 8, 1993, that someone wishes to submit adverse or critical comments. If the effective date is delayed, timely notice will be published in the Federal Register.

ADDRESSES: Copies of the SIP revision, and other materials relating to this rulemaking are available for inspection at the following address: (It is recommended that you telephone Maggie Greene, at (312) 886-6088, before visiting the Region 5 Office.) U.S. Environmental Protection Agency, Air Enforcement Branch, 77 W. Jackson Boulevard, Chicago, Illinois 60604.

Written comments should be sent to: William L. MacDowell, Chief, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, 77 W. Jackson Boulevard, Chicago, Illinois 60604.

Copies of this revision to the Ohio SIP are available for inspection at: U.S. Environmental Protection Agency, Jerry Kurtzweg (ANR-443), 401 M Street SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Maggie Greene, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 886-6088.

SUPPLEMENTARY INFORMATION: In 1977 the Clean Air Act was amended to address, *inter alia*, the continued nonattainment of the National Ambient Air Quality Standards (NAAQS) found in certain areas of the United States. Part D of the Act set forth the SIP requirements for nonattainment areas. Part D includes Section 173, which governs the review and issuance of construction permits for new and modified sources in nonattainment areas. The Clean Air Act Amendments of 1990 also require the States to revise their SIPs to provide approvable nonattainment area New Source Review plans. Requirements for approvable Part D SIPs are described in a "General Preamble for Part D rulemakings published at 44 FR 20372 (April 4, 1979), 44 FR 38583 (July 2, 1979), 44 FR 50371 (August 28, 1979), 44 FR 53761 (September 17, 1979), and 44 FR 67182 (November 23, 1979). The requirements for SIP revisions mandated by the Clean Air Act Amendments of 1990 are set forth in the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990." 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992), Appendix D.

On July 25, 1980, and September 25, 1980, Ohio submitted its NSR plan designed to meet the requirements of Part D. After review and public comment, U.S. EPA conditionally approved this plan on October 31, 1980 (codification corrected on December 17, 1980 at 45 FR 82927). (For more detail on "conditional approvals" see 44 FR 38583 (July 2, 1979) and 44 FR 67182 (November 23, 1979).) The conditional approval (40 CFR 52.1879(a)) required the State to submit a Part D NSR plan which refined the criteria under which permits were to be issued and assured that the requirements of Section 172 (b)(11) (Section 173(a)(5) of the 1990 Amendments enacted on November 15, 1990) and Section 173 were met.

On October 4, 1982, and January 24, 1983, the Ohio Environmental Protection Agency (OEPA) submitted revisions to the Ohio Administrative Code (OAC), Rules 3745-31-01 through 3745-31-08, to satisfy the October 31, 1980, conditional approval of Ohio's Part D NSR plan. Additional clarification was submitted on June 30, 1987, and October 28, 1987. Ohio's revised NSR rule essentially incorporates the Federal NSR provisions at 40 CFR Part 51, Appendix S, as the Ohio NSR plan. The Ohio Rule meets the requirements of U.S. EPA's conditional approval of Ohio's earlier Part D NSR plan for all source categories in Ohio, except for temporary emission sources and resource recovery facilities.

Two provisions of Ohio's NSR plan (OAC Rule 3745-31-01 (H)(1)(b) and (M)) are not required by U.S. EPA's NSR rules, and they are not included as part of this SIP revision. Also, the current Appendix S differs from Ohio's original Part D NSR plan in that it uses a "plantwide" definition of source which U.S. EPA approves without restriction.[1]

Prior to the passage of the Clean Air Act, U.S. EPA imposed certain restrictions on the adoption of a plantwide definition of source for nonattainment areas with an inadequate SIP. See J. Potter, "Plantwide Definition of Major Stationary Sources for Air Pollution" (February 27, 1987). However, with passage of the Clean Air Act Amendments of 1990, Congress has mandated a new set of attainment strategies and given areas new deadlines to eliminate NAAQS violations. In addition, while the existence of U.S. EPA's plantwide definition was well known by 1990, nothing in the Clean Air Act Amendments overturns U.S. EPA's position on this issue. To the contrary, several new nonattainment provisions employ a plantwide source definition. See, *e.g.*, CAA section 182(c)(6). For this reason, U.S. EPA finds that the Ohio plantwide source definition may be approved without any restrictions.

U.S. EPA evaluated Ohio's revised plan with respect to the Agency's Part D NSR policy applicable at that time and found that the plan was approvable. Since the State had yet to submit and receive approval of an attainment demonstration for the relevant areas, U.S. EPA did not rely on any reductions from the operation of the new NSR programs in an approved attainment demonstration[2]. This rulemaking includes approval of a plantwide definition of source for Ohio in accordance with U.S. EPA's 1987 action, inasmuch as the State has shown that it is making and will continue to make

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[1] On October 14, 1987, the U.S. EPA revised the NSR regulations in 40 CFR part 51 to give States the option of accepting the "plantwide" definition of stationary source in nonattainment areas (46 FR 50766). This definition provides that only physical or operational changes that result in a net increase in emissions at the entire plant require a NSR permit. For example, if a plant increases emissions at one piece of process equipment but reduced emissions by the same amount at another piece of process equipment at the plant, then there would be no net increase in emissions at the plant and therefore no "modification" to the "source." The plantwide definition is in contrast to the so-called "dual" definition (or a definitional construction like that in the 1979 offset ruling (44 FR 3274) which has much the same effect as the dual definition): under the dual definition, the emissions increases from physical or operational changes at an individual piece of process equipment are exempt without regard to offsetting reductions elsewhere at the plant.

In the October 14, 1987, Federal Register notice, U.S. EPA set forth its rationale for allowing use of the plantwide definition (46 FR 50766-69). In the Agency's view, allowing use of the plantwide definition was a reasonable accommodation of the conflicting goals of Part D of the Act: reasonable further progress (RFP) and timely attainment of the NAAQS versus maximum State flexibility and economic growth.

In 1984, the Supreme Court upheld U.S. EPA's position as a reasonable accommodation of the conflicting purposes of Part D of the Act within U.S. EPA's broad discretion, *Chevron U.S.A., Inc.* v. *NRDC, Inc.*, 467 U.S. 837. Specifically, the Court agreed that the plantwide definition is fully consistent with the Act's goal of maximizing State flexibility and allowing reasonable economic growth. Likewise, the Court recognized that U.S. EPA had advanced a reasonable explanation for its conclusion that the plantwide definition serves the Act's environmental objectives as well. 467 U.S. at 863.

[2] U.S. EPA ruled that a State wishing to accept a plantwide definition generally has complete discretion to do so, and if set only one restriction on that discretion. If a State had specifically projected emission reductions from its NSR program as a result of a dual or similar definition and had relied on those reductions in an attainment strategy that U.S. EPA later approved, then the State needed to revise its attainment strategy as necessary to accommodate reduced NSR permitting under the plantwide definition (46 FR 50767 Col. 2, 50769 Col. 1).

reasonable efforts to adopt and submit the necessary additional SIP revisions.

U.S. EPA reevaluated Ohio's rule in relationship to the current 40 CFR part 51 Subpart I (formerly 40 CFR 51.18). As stated before, Ohio's NSR rule essentially incorporates the Federal NSR provisions in 40 CFR part 51, Appendix S. However, U.S. EPA has determined that Appendix S as incorporated by Ohio is deficient with respect to certain of the requirements in Subpart I and the current requirements of the Clean Air Act. U.S. EPA's review of the Ohio NSR regulation's effectiveness identified the following regulation deficiencies:

1. Appendix S exempts for resource recovery facilities from offset requirements, whereas Section 173 of the Clean Air Act and 40 CFR 51.165 do not provide for such exemption.

2. Appendix S exempts temporary sources from obtaining offsets, whereas Section 173 of the Clean Air Act and 40 CFR 51.165 do not provide for such an exemption.

In addition, it should be pointed out that Appendix S as proposed by Ohio is not as explicit as the current regulations in Subpart I (or the underlying statutory provisions of Part D of the Clean Air Act) in requiring that emissions offsets meet Reasonable Further Progress (RFP) requirements by providing actual emissions reductions. Section IV.C. of Appendix S, as amended in 1979 (44 FR 3274), explicitly requires offsets only on a short-term (i.e., pounds per hour) basis, although it also provides for annual offsets (expressed, e.g., in tons per year) "if necessary to carry out the intent of this Ruling."

However, the current U.S. EPA regulations governing approval of NSR programs, which were adopted in 1980, require that emission offsets necessary to demonstrate RFP be based in all cases on "actual emissions." See 40 CFR 51.165 (a)(3)(i)((A), 51.165 (a)(xii)(B) (45 FR 52676). Accordingly, it is U.S. EPA's position that in those areas which have still not attained the NAAQS despite the passage of the statutory deadline, the overall intent of Appendix S, to insure that major new sources and major modifications result in RFP, cannot be satisfactorily met unless all such sources obtain federally enforceable actual offsets as necessary to provide annual emission reductions as required by current U.S. EPA regulations. Thus, U.S. EPA interprets Appendix S, Section IV.B. to require, in all instances, that federally enforceable actual emissions offsets be obtained as a condition of any permit purporting to satisfy the requirements of Part D of the Act. This interpretation is hereby made an express part of today's approval of Ohio's NSR SIP, which must be met by all permits issued by Ohio pursuant to U.S. EPA's approval of the State's NSR program.

The Clean Air Act Amendments of 1990 impose additional NSR requirements for certain types of nonattainment areas. These changes include for example, in ozone nonattainment areas, decreased source thresholds and increased offset ratios and the extension of NSR requirements to certain Nitrogen Oxides sources. See Sections 182(a)-(f). The SIP changes submitted by Ohio and approved today were submitted prior to the passage of the Clean Air Act Amendments of 1990 and were not intended to satisfy the Amendments' new NSR requirements. For this reason, today's approval of Ohio's NSR SIP does not relieve Ohio of its responsibility to submit additional nonattainment NSR SIP revisions in accordance with the deadlines Congress established in Title I of the Act.

Final Action: U.S. EPA is today granting limited approval of the revision to Ohio's NSR SIP. U.S. EPA is approving the revision to the regulations in the SIP because the revised regulations are a substantial enhancement of the existing SIP. However, the approval is "limited" in the sense that U.S. EPA is not granting full approval of the NSR SIP as meeting Part D requirements. Ohio's NSR regulations are deficient, in that they exempt resource recovery facilities and temporary sources from offset requirements. Nevertheless, U.S. EPA is not today taking action to disapprove Ohio's NSR SIP. Ohio has made a submittal with respect to NSR regulations to meet the requirements of the Clean Air Act Amendments of 1990 (CAAA). That submittal is under review. U.S. EPA will require that any regulations intended to satisfy those CAAA requirements shall also address the deficiencies identified here. Therefore, U.S. EPA intends to complete action on the approvability of Ohio's NSR SIP when it takes action on the NSR regulations submitted to satisfy the 1990 CAAA requirements.

Because U.S. EPA considers today's action noncontroversial and routine, we are approving it today without prior proposal. The action will become effective on November 8, 1993. However, if we receive notice by October 8, 1993, that someone wishes to submit critical comments, then U.S. EPA will publish: (1) A notice that withdraws the action, and (2) a notice that begins a new rulemaking by proposing the action and establishing a comment period.

Nothing in this action should be construed as permitting, allowing or establishing a precedent for any future request for revision to any SIP. Each request for revision to the SIP shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

Under the Regulatory Flexibility Act, 5 U.S.C. Section 600 et. seq., U.S. EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities. 5 U.S.C. 603 and 604. Alternatively, U.S. EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

SIP approvals under Sections 110 and 103, and subchapter I, Part D of the CAA do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP-approval does not impose any new requirements, I certify that it does not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-State relationship under the CAA, preparation of a regulatory flexibility analysis would constitute Federal inquiry into the economic reasonableness of a State action. The CAA forbids U.S. EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.* v. *U.S. EPA.*, 427 U.S. 246, 256–66 (S. Ct. 1976); 42 U.S.C. 7410(a)(2).

U.S. EPA has reviewed this request for revision of the SIP for conformance with the provisions of the 1990 Amendments enacted on November 15, 1990. These Amendments require extensive changes to nonattainment SIPs for new source permitting. The Agency has set forth the new NSR requirements in the General Preamble to Title I and is preparing a rulemaking incorporating these requirements into Federal regulations. As has been discussed, U.S. EPA's actions today do not in any way relieve Ohio of the new requirements for NSR SIP submittals imposed by the 1990 Amendments.

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

Under Section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 8, 1993. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial

review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see Section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Air pollution control, Environmental protection, Incorporation by reference, Ozone, Sulfur oxides, Nitrogen dioxide, Lead, Particulate matter, Carbon monoxide, Hydrocarbons.

Note: Incorporation by reference of the State Implementation Plan for the State of Ohio was approved by the Director of the Federal Register on July 1, 1982.

Dated: August 24, 1993.

Carol M. Browner,

Administrator.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

2. Section 52.1870 is amended by adding paragraph (c)(83) to read as follows:

§ 52.1870 Identification of plan.

* * * * *

(c) * * *

(83) On October 4, 1982, and January 24, 1983, the Ohio Environmental Protection Agency (OEPA) submitted revisions to the Ohio Administrative Code (OAC) Chapter 3745–31–01 through 3745–31–08 to satisfy the New Source Review conditional approval of October 31, 1980 (45 FR 72119). U.S. EPA is granting limited approval of the revision to Ohio's New Source Review State Implementation Plan (SIP) because the revised regulations strengthen the SIP.

(i) Incorporation by reference.

(A) OAC Rule 3745–31 through 3745–31–03—Permits to Install New Sources of Pollution (Adopted June 30, 1982, effective August 15, 1982), as found in the State of Ohio Environmental Protection Agency Laws and Regulations.

(ii) Additional material.

(A) A June 30, 1987, letter from OEPA certified that the State did not rely upon additional reductions through the offset policy to attain or maintain the National Ambient Air Quality Standards.

§ 52.1879 [Amended]

3. Section 52.1879 is amended by removing paragraph (e).

[FR Doc. 93–21783 Filed 9–7–93; 8:45 am]

BILLING CODE 6560–50–F

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40 CFR Part 180

[OPP–300252A; FRL–4628–8]

RIN No. 2070–AB78

Acetic Acid and Sodium Diacetate; Revocation of Tolerances

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This document revokes the exemptions from the requirement of a tolerance for residues resulting from postharvest use as a fungicide, as follows: (1) all raw agricultural commodities (RACs) listed in 40 CFR 180.1029 for residues of acetic acid; and (2) certain RACs listed in 40 CFR 180.1058 for residues of sodium diacetate. EPA is initiating this action because all registered uses of acetic acid and sodium diacetate on these commodities have been canceled.

EFFECTIVE DATE: This regulation becomes effective September 8, 1993.

ADDRESSES: Written objections, identified by document control number, [OPP-300252A], may be submitted to: Hearing Clerk (A-110), Environmental Protection Agency, Rm. 3708, 401 M St., SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: By mail: Jim Downing, Registration Division (H-7505W), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: 6th Floor, Crystal Station I, 2800 Crystal Drive, Arlington, VA 22202, (703)-308-8319.

SUPPLEMENTARY INFORMATION: EPA issued a proposed rule in the Federal Register of August 12, 1992 (57 FR 36046), which proposed revoking exemptions from the requirement of a tolerance established under section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, for residues of acetic acid and sodium diacetate resulting from postharvest use of these chemicals as fungicides, as follows: (1) acetic acid in or on the RACs alfalfa, barley grain, Bermuda grass, bluegrass, brome grass, clover, corn grain, cowpea hay, fescue hay, lespedeza, lupines, oat grain, orchard grass, peanut hay, peavine hay, rye grass, sorghum grain, soybean hay, sudan grass, timothy, vetch hay, and wheat grain listed in 40 CFR 180.1029; and (2) sodium diacetate in or on the RACs barley grain, cowpea hay, fescue hay, lespedeza hay, lupines, peanut hay, peavine hay, soybean hay, vetch hay, and wheat grain listed in 40 CFR 180.1058.

EPA's decision to revoke these exemptions from the requirement of a tolerance for acetic acid and sodium diacetate was based on the fact that before February 1991, all registrations under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of pesticide products ingredients that were registered for these uses on food or animal feed commodities were canceled. In the case of acetic acid these registrations were canceled for failure by affected registrants to respond to a January 1987 generic data call-in, and also for nonpayment of required annual pesticide registration maintenance fees. In the case of sodium diacetate, these registrations were canceled for nonpayment of required annual pesticide registration maintenance fees.

No significant comments or requests for referral to an advisory committee were received in response to the proposed rule.

Therefore, based on the information considered by EPA and discussed in detail in the August 12, 1992 proposal and in this final rule, EPA is hereby revoking the exemptions from the requirement of a tolerance listed in 40 CFR 180.1029 for acetic acid since acetic acid is no longer registered in the U.S. as a pesticide-active ingredient for use on any food or animal feed commodities. EPA is hereby revoking the exemptions from the requirement of a tolerance listed in 40 CFR 180.1058 for sodium diacetate since sodium diacetate also is no longer registered as an active ingredient for use on any food or animal feed commodities, except alfalfa, clover, field corn, grasses, oats sorghum, and timothy.

The registered postharvest applications of acetic acid and sodium diacetate to livestock feed crops were primarily within farm facilities so there was limited environmental exposure. Exposure to aquatic environments from runoff would have resulted only in short-term pH changes that would have been counteracted by the natural buffering capacity of the water. Thus, there is no anticipation of a residue problem due to environmental contamination. Consequently, no action levels will be recommended to replace the acetic acid and sodium diacetate exemptions upon their revocation.

Any person adversely affected by this regulation may, within 30 days after publication of this document in the Federal Register, file written objections

From: Tom Rigo
To: Cesar Zapata; CURT MARSHALL; Dale Aleman; Dennis Bush; Don Waltermeyer; Frank J. Markunas; Frank.Stoy@does.hamilton-co.org; Fred Klingelhafer; Harry.Schwietering@does.hamilton-co.org; Isaac Robinson; John Curtin; Karen Granata; Mark Vilem; Michael.Kramer@does.hamilton-co.org; Mike Riggleman; Phil Hinrichs; Phillip_thompson@epa.ohio.gov; Ron Hancher; Samir Araj; Tim Wilson
Date: 4/6/00 8:02AM
Subject: Title V Transitional Minor Sources Guidance - IMPORTANT !!!

A common question is raised with respect to transitional sources that I provided the answer and request that you distribute this question and answer to all your permit review staff.

Question: Do all the Title V transitional minor sources (facilities with potential to emit above the Title V major threshold but the actual emissions for the pollutants for which they are major are greater than or equal to 20% of the major threshold but less than 50% of the threshold) have to be issued a FESOP permit by December 31, 2000?

Answer: It depends on when the transition facility applied for a FESOP permit. If the DO/LAA received the FESOP application on or before the federal Title V permit application filing deadline September 29, 1996, then the transitional facility can continue to lawfully operate under the Title V application shield until the FESOP permit has been issued. If the transition facility did not apply by the federal deadline, then it is necessary to have the FESOP permit **issued final** by the transitional policy deadline of December 31, 2000 in order for the source to continue to lawfully operate.

Please feel free to contact me, should you have any questions. Thanks. Tom

CC: Bob Hodanbosi ; Cindy Dewulf ; Jeanne Mallett; Jim Orlemann ; Mike Hopkins

AQM&P Section
Permits To Install for Title 5 Synthetic Minors

We have received a few PTIs from field offices recently that have appeared to be Title 5 Synthetic Minors. They contained operating restrictions, and were marked "preliminary" on the standard terms worksheet page, which means the field office wants the PTI issued as a draft. However, some of these worksheets were not accompanied by a Synthetic Minor write-up. Others have needed minor changes to ensure that the terms are federally enforceable.

It has recently been established that the procedure for making a source minor for Title 5 purposes through the PTI process includes three main things:

Synthetic Minor write-up is needed
The PTI must be issued draft
The PTI must have federally enforceable conditions

These federally enforceable conditions are typically the same as those that have been used in Synthetic Minor PTIs in recent years.

In addition, the normal method for making a source a Title 5 minor is now through the state PTO. If you receive a PTI application to restrict potential emissions, you can go ahead and process it. However, you should be advising companies that any future requests should be done through the PTI process. Of course, a PTI should be used for any new source. Please keep this in mind when a facility wants to be a Title 5 minor.

If any of the District or Local staff have questions about these new procedures, please contact one of the Central Office PTI review staff. Thanks for your cooperation.

February 3, 1997

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
1800 WaterMark Drive
Columbus, Ohio 43215

Dear Mr. Hodanbosi:

This letter is in follow-up to the conference call between our offices on December 18, 1996 in which we discussed questions your office had regarding Title V and other permitting issues. We hope that this letter clarifies these issues and provides you with the necessary support to continue the Title V implementation process.

You asked whether visible emission limits for stacks and fugitive dust are federally enforceable. Rule 3745-17-07 of the Ohio Administrative Code (OAC) sets those limitations. USEPA approved this rule on May 27, 1994 at 59 FR 27464. The rule, as part of the State Implementation Plan (SIP), provides for the implementation, maintenance, and enforcement of National Ambient Air Quality Standards (NAAQS), and is therefore federally enforceable. As federal requirements, these limits must be included in the state/federal portion of the Title V permit. The start-up and shutdown temperatures for electrostatic precipitators (ESPs) and baghouses at which certain facilities may be exempted from the opacity limits are the same in both the OAC and in the SIP. Opacity limits are not meant as a backup for mass emission limits; like mass emission limits, they are individually enforceable.

You brought to our attention that some sources have proposed that periodic emission testing done every two and a half to five years is sufficient to fulfill the requirement for a monitoring program in an operating permit. As stated in the January 10, 1997 letter from Region 5 to your office, 40 CFR 70.6(a)(3) specifies the standard monitoring and related record keeping and reporting requirements that each Title V permit must contain. The letter states that this rule, known as the gap-filling provision, requires each permit to contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, if the underlying applicable requirements do not otherwise specify such monitoring. Therefore, if the underlying applicable requirements, such as construction permit conditions or SIP requirements, do not contain adequate monitoring, record keeping, and reporting provisions sufficient to provide such reliable data, the State must add such provisions in the Title V permit, and these provisions must be located in the federally enforceable section of the permit. Emission testing performed every few years does not yield adequate data to represent the source's ongoing compliance with the permit, and is therefore not an acceptable monitoring program. The Compliance Assurance Monitoring (CAM) rule that is under consideration may set the guidelines for major sources and some non-major sources, but Section 70.6(a)(3) exists independent of that rule as a Title V program requirement.

You asked how the Phase I acid rain provisions should be handled within Title V permits. It would be sufficient to reference the Phase I permit in the General Terms and Conditions section of the Title V permit. The following language is an example of how the Phase I permit can be referenced: "This unit is also subject to an EPA-issued Phase I permit effective through December 31, 1999. The acid rain requirements specified in this permit are in addition to, and do not supersede, those set forth in the Phase I permit."

Finally, you asked whether conditions in an OEPA construction permit that were meant to be only state-enforceable can be segregated from the section of a Title V permit that is both federally and state-enforceable. The Ohio SIP provides that all conditions of a construction permit are federally enforceable. However, OEPA may remove the federal enforceability from construction permit conditions with a permit revision and issue the Title V permit simultaneously, using the same public notice, if special procedures are followed. Unless construction permits clarify which of their conditions are not federally enforceable, all of the conditions will be considered to be federally enforceable except for the tons-per-year limits.

In addition, as with the tons-per-year limits, if OEPA can justify that any such specific permit conditions arise from only state-enforceable requirements, and no federal requirements, as discussed in the following paragraph, those conditions may be segregated out and placed in the state-enforceable portion of the Title V permit. A written record should be kept of such justification, and provided to USEPA with any such permit.

Segregating the enforceability of construction permit conditions in a Title V permit is allowable if the conditions being declared as only state-enforceable are: (1) not based on SIP requirements; (2) not used in the construction permit to limit the source's potential to emit (PTE) for reasons such as netting or offsets; and (3) not New Source Review (NSR) permit requirements whose applicability has expired. A statement should be added in the legal basis section of the Title V permit that clarifies that the state requirements are only state-enforceable even if they exist in the construction permit.

We appreciate your bringing your questions to us, and value our continued communication and cooperation. We are looking forward to our next conference call in February. If you have any further questions concerning these issues, please call Kaushal Gupta, of my staff, at (312) 886-6803.

Sincerely yours,

/s/

Cheryl Newton, Chief
Permits and Grants Section

QUESTIONS FOR THE 12/18 CONFERENCE CALL WITH USEPA CONCERNING TITLE V PERMITTING

1. WHAT IS USEPA'S POSITION CONCERNING THE ENFORCEABILITY OF THE STACK AND FUGITIVE VISIBLE EMISSION LIMITS IN OAC RULE 3745-17-07? SHOULD THESE LIMITS BE PLACED ON THE STATE/FEDERAL OR STATE ONLY SIDE OF THE TITLE V PERMIT?

2. SOME FACILITIES HAVE SERIOUSLY PROPOSED THAT THEIR PERIODIC EMISSION TESTING (ONCE EVERY 2.5 OR 5 YEARS) IS SUFFICIENT TO FULFILL THE REQUIREMENT FOR A MONITORING PROGRAM FOR THE APPLICABLE REQUIREMENT. DOES THE USEPA VIEW PERIODIC EMISSION TESTING AS AN ACCEPTABLE "MONITORING" PROGRAM?

3. DOES THE USEPA CONSIDER THE TEMPERATURE LIMITS FOR THE STARTUP AND SHUTDOWN OF ESPs AND BAGHOUSES TO BE FEDERALLY ENFORCEABLE? ON WHICH SIDE OF THE PERMIT SHOULD THESE OPERATIONAL RESTRICTIONS BE PLACED?

4. HOW DOES USEPA EXPECT THE ACID RAIN PROVISIONS TO BE HANDLED WITHIN THE TITLE V PERMITS? IS THE REFERENCE WITHIN THE GTCs SUFFICIENT?

5. WE HAVE DETERMINED THAT TONS/YEAR LIMITS IN A DRAFT/FINAL PTI ARE NOT FEDERALLY ENFORCEABLE. ARE THERE ANY OTHER PARTS OF A DRAFT/FINAL PTI THAT THE USEPA WOULD CONSIDER TO BE NOT ENFORCEABLE?

6. AS A RESULT OF OUR MEETING LAST WEEK WITH DAVE KEE, GEORGE CZERNIAK, AND BILL MACDOWELL, WILL REGION 5 BE ISSUING ANY CLARIFYING GUIDANCE TO THE STATES CONCERNING THE NEED TO SPECIFY, IF REASONABLE, MONITORING, RECORDKEEPING, AND REPORTING (MR&R) REQUIREMENTS FOR AN "APPLICABLE REQUIREMENT" THAT DOES NOT HAVE RULE-BASED MR&R REQUIREMENTS?

legal basis section of the Title V permit that clarifies that the state requirements are only state-enforceable even if they exist in the construction permit.

We appreciate your bringing your questions to us, and value our continued communication and cooperation. We are looking forward to our next conference call in February. If you have any further questions concerning these issues, please call Kaushal Gupta, of my staff, at (312) 886-6803.

Sincerely yours,

Cheryl Newton, Chief
Permits and Grants Section

Ohio EPA
Division of Air Pollution Control

Title V Permit Program Briefing

To: Distribution

From: Tom Rigo and Mike Hopkins

Date: July 27,1994 and updated December 28, 1994

The purpose of this briefing is to provide several questions asked of DAPC staff regarding the Ohio Title V program. Hopefully, this will lead to more consistent advise provided to the regulated community statewide. Should you have any questions to be addressed in future briefings, please send them to us. Also, provide what you believe is the answer to the question.

1) For applicability purposes, do you only include potential PM_{10} emissions or do you consider potential emissions for total suspended particulate (PM or TSP) to establish whether or not your facility is a 100 TPY major source for particulate?

   You are to base Title V applicability determination on TSP. TSP is a "regulated pollutant" since TSP standards have been established in the federal New Source Performance Standards.

2) Does a source operation that meets the definition of a NSPS category or NESHAP category have to include their fugitive emissions for that source operation as required by category if the source is not subject to the NSPS or NESHAP requirement (i.e., was built before the federal rule was in effect)?

   After consultation with USEPA, the source operation that is included in a definition of the NSPS or NESHAP categories is required to include fugitive emissions even though the source might not have to comply with the particular NSPS or NESHAP standard because of an applicability date, etc.

3 Does a facility that emits methane or ethane have to report these emissions as organic compounds?

   Since methane and ethane can be emitted in large quantities and are not regulated under OAC Chapter 21, DAPC has determined that it will process fee reports at this time which do not include methane and ethane emissions. Our policy may change in the future, if methane or ethane emissions standards are adopted by a future federal or State

air pollution control law or regulation

4) If an emission unit has limitations that go beyond the SIP that result from a BAT determination in a PTI, are these federally enforceable to take advantage when determining the potential to emit?

If the PTI that established a BAT beyond the SIP allowable was issued as a direct final, then the BAT is not federally enforceable and the emission unit can only take credit for control up to the SIP requirements. If the PTI was issued as a draft then final, DAPC considers those limiting conditions (operational and/or hourly emissions limits) to be federally enforceable. Note: Effective immediately, for all future PTI's, federally enforceable conditions for evaluating Title V applicability, be prepared in accordance with the current federal policy which are reflected in OAC rule 3745-35-07 as adopted on 4/4/94.

5) Can "bottlenecks" in productions, physical limitations, or seasonal operation be considered when calculating the potential to emit?

Generally, a facility can not consider these types of limitations unless they establish federally enforceable conditions in a State permit. However, potential to emit under certain circumstances can be bizarre. A strict interpretation can have extremely small air emitting facilities subject to the program. Therefore, common sense needs to be used. If a company actually emits very small quantities of emissions (less than 5 tons for any regulated non-HAP or less than a ton for any HAP, and less than 10 tons of all air emissions from the entire facility), then it is appropriate for the small emitting facility to account for physical limitations, seasonal operation, or production bottlenecks to determine its potential emissions. In the future, Ohio EPA intends to promulgate rules for these small emitting facilities which would restrict most of these entities potential to emit by rule which would clearly be federally enforceable.

6) What is the emission cap for the six month 1993 emissions reporting period?

The law provides an emissions cap of 4000 tons per year per pollutant. However, DAPC recognizes that for only the first reporting period, we have a period of only six months not twelve. Since we have this unique circumstance for this initial reporting period, DAPC has decided to evaluate these reports with an emissions cap of half the value provided in the law. Even though this decision negatively effects the

potential revenue to the Agency, we believe it is the appropriate decision given the shorter reporting period.

7) What is the appropriate method for calculating potential emissions, for VOC's and/or OC's from a coating line employing equipment such as spray guns. Since theoretically it is possible to continuously spray coating, should this be how "potential to emit" for these operations be determined?

"Potential to emit" for the purpose of determining Title V applicability for coating operations should be quantified in accordance with methods and procedures described in Engineering Guide #45. A copy of Engineering Guide #45 is available on the DAPC Bulletin Board System that you may download for reference.

Note: The acceptable procedure for quantifying potential "hazardous air pollutants" (HAP) emissions will be addressed in the near future under a separate "Interim Engineering Guide"

8) When should Ohio industry expect USEPA to approve Ohio's Title V program?

Ohio just recently (7/20/94) revised its submission of the Title V program to USEPA. Ohio believes that this revised program submission (which includes all the final approved rules and statutes) should be complete and fully approvable. As you may know Ohio's program goes into effect once full approval of the program is determined by USEPA. USEPA staff have indicated that it will take a year from the revised program submission for USEPA to review the program. If this is correct, we can expect approval of the program no earlier than July 22, 1995. Ohio EPA is working with USEPA to possibly delay the effective date of their expected full approval until the beginning of the federal fiscal year (October 1, 1995). Again as more precise dates are known this information will be made available on the DAPC Bulletin Board System. (updated 12/28/94)

9) When can Ohio industry plan to have available the "data entry module" (DEM) for the Title V permit application?

Ohio EPA is working very diligently with the contractor (American Management Systems) to complete the development of the DEM. This DEM is expected to be piloted by 8-10 companies in Spring 1995. The DEM should be available on the BBS <u>for testing purposes only</u> for anyone who wishes to pilot and provide Ohio EPA with feedback in May 1995. Once a precise schedule is known this informations will be

provided on the DAPC Bulletin Board Service. By June 1995, we plan to have the DEM available for those companies which would like to have a headstart with completing the Title V permit application. (updated 12/28/94)

Additional questions 12/28/94

The Ohio EPA is planning on requiring Title V applications to be submitted electronically. The companies preparing Title V applications need printed copies to route within their company for review. Will the Title V software allow the printing of a copy of the Title V application?

Yes. The software will have this capability to print all aspects of the Title V application including the emission category forms. The system will also print the fee emission report forms and the emission statement forms.

How should trace quantities of Hazardous Air Pollutants (HAP) be identified and quantified? For instance trace quantities (<0.1%) of HAPs are present in coating manufacturer's raw material but are not listed on any material safety data sheets (MSDS). With analytical capabilities at the ppb level, trace quantities of many HAP solvents will be in industrial grade solvents.

You should make a worse case estimate of the amount of HAPs in your coatings or material. If this estimate shows that the maximum amount of these HAPs is negligible compared to the HAPs threshold levels (10 tons/year for each HAP and 25 tons per year for combined HAPs), then that is all you have to do. You can submit the data to support you conclusion that you do not trigger the HAPs threshold.

If your evaluation of emissions shows that it is possible to exceed the threshold levels, then you should either get more information on the composition of the coatings from the supplier or you should do your own testing on the components of the coatings.

If you are a Title V facility and you have emission units with trace quantities of HAP's, these emission units would be considered insignificant for HAP's if the total potential HAP's for the emission unit is less than one ton.

12) Will maximum available control technology (MACT) early reduction commitments be applicable requirements?

Yes. These requirements are commitments made by companies to give them more time to comply with a proposed MACT

standard

13) How many tons per year can we put on a grandfathered (pre 1974 construction) reasonable available control technology (RACT) emissions unit?

Emissions units installed before 1974 are not required to obtain permits to install (unless they are modified). As such, they typically don't have ton per year limits established. Instead, they typically have a short term limit established through existing Ohio rules (RACT). The annual emissions from these emissions units are only limited by the maximum capacity of the emissions unit. This can result in very large federally enforceable potential emissions.

If your actual emissions for your facility is under the Title V thresholds, then you can avoid Title V requirements by requesting restrictions on your potential emissions. This is done by requesting the issuance of a permit which restrict your operations and thereby restricts your potential emissions. This process is called a synthetic minor permit. Instructions on how to do this are contained in separate guidance from the Ohio EPA. This guidance is available on the DAPC Bulletin Board System.

Are best available technology (BAT) requirements from Ohio EPA permits to install federally enforceable for emissions units which would otherwise be exempt under Ohio's new permits rule (e.g. throughput limits, operating hour limits, record-keeping requirements)?

The Ohio permit rules and Ohio law were modified in late-1993 and early-1994 to add many small emissions unit exemptions and de minimis exemptions. Under these exemptions, no permit to install or permit to operate is required today. However, in the past, these emissions units needed permits. BAT limits established under these permits are federally enforceable if the permit to install was issued as a draft permit. If this is true, then these limits are federally enforceable.

Note: Under these exemptions provided by Ohio law, these small emission units emissions must be counted towards Title V applicability. Also, if you are a Title V facility, these exempt emission units must be listed as insignificant activities on your Title V application. See question # 19 for additional information.

Would Ohio EPA oppose legislative action which would revoke permits for small emissions units now exempt from Ohio

permit rules?

Yes. Ohio EPA sees no advantage in this kind of legislation. Most of these emissions units are on registration status which requires no action by facilities to maintain. For those on permit status (for which a BAT has not been established that limits the emission unit to under the 10 lbs/day cutoff), facilities do not need to renew the permits. Instead, when the permit comes up for renewal, they must notify the Ohio EPA that their emissions unit qualifies for the exemption. At that time, the Ohio EPA will revoke the permit.

Do we need to make a roof drawing of all our vents and stacks?

You are not required to submit a roof drawing with your Title V application. All that will be necessary is for you to provide process flow diagrams for each emissions unit. You will have several different software options to prepare the process flow diagrams.

Do we calculate particulate matter less than 10 microns (PM_{10}) or total particulate matter (PM)?

This depends on the regulations which apply to your emissions unit. In most cases, you will need to do PM. But in some cases you will need to include the fraction which is PM_{10}. See question # 1 for more detail.

If your emissions unit is an new source performance standard (NSPS) type emissions unit, but is not NSPS because of the date it was built or because it is lower than the thresholds listed in the NSPS, do you count fugitive emissions when determining if you are a major source?

Yes. If the emissions unit is a NSPS type emissions unit, then you must count fugitives. See question # 2 for more detail.

19) Do "de minimis" emissions units, as described by OAC 3745-15-04, need to be listed in the Title V permit application under "Insignificant Activities"?

Yes. Ohio law was modified under Substitute House Bill number 715 to make this clear and consistent with Federal law.

20) If an emission is a volatile organic compound, but also a HAP, will enhanced monitoring be established only once the

MACT is established or will it be required for Title V application?

It is USEPA's intention to include monitoring requirements in each MACT that will be sufficient to meet the enhanced monitoring requirements. Once the MACT has been established and is issued, you will need to include the monitoring requirements in your Title V application. If the MACT has not yet been developed, then you don't need to include enhanced monitoring requirements in with your Title V application.

When are the bills going to be sent out for the Fee Emission reports that were filed in June, 1994?

Most of these invoices for those who have filed electronically should be sent out late-December, 1994 through January, 1995. Those facilities that filed a hard copy report should have already received their invoice. For further information you can contact Ron Schultz at (614) 644-3621.

Where can I find examples of operating scenarios?

Ohio EPA has additional guidance on synthetic minors which includes some examples. This can be retrieved from the Ohio EPA BBS. The DEM instruction manual will provide several additional examples. Note, that well written permits should negate the need for detailing operating scenarios in order to allow for reasonable operational flexibility.

If a facility has more than one industrial grouping or standard industrial code (SIC) and only one group has enough emissions to be a major, can the other group be exempt from Title V application?

In most cases, the answer would be no. If the two groups are not completely independent then they would be considered one Title V source. In some cases, if they are completely independent operations (automobile manufacturing and furniture manufacturing, for instance), then they would be considered separate for Title V purposes. These questions should be discussed in detail with your Ohio EPA representative. Further, DAPC is currently working on written guidance that should clarify USEPA's past interpretation of these issues as they relate to federal new source permitting [identical facility (major stationary source) definition provided in the Title V legislation]. This guidance should be available on the DAPC Bulletin Board System by late-January 1995.

24) Why must federal applicable requirements be written exactly as stated in applicable regulations? Why can't we reference by rule number along with the date of rule cited? It appears Ohio EPA Starship will download federal applicable Ohio EPA rules. What about downloading federal regulations such as NSPS or NESHAPS?

Enough detail of the federally applicable requirement is necessary to establish the current SIP requirement. For example the SIP requirement may not relate to the most current OAC requirement. A computer program will be available with the DEM (STARSHIP) that will be very helpful. Also cut and paste will be possible from this product that will allow for a complete description of the applicable requirement with minimal time spent on keying in the answer. The federal requirements are not available for downloading with the initial STARSHIP. Title V facilities will be responsible for understanding which federal requirements are applicable to their facility. Past OEPA permits should provide most of those federal requirements.

Will there be an expanded list of insignificant emissions units and activities? The costs and effort to quantify emissions from all minor activities would be significant.

Yes. Ohio EPA will develop an engineering guide to publish certain activities that are so small (e.g., laser jet printers, aerosol spray paint cans, xerox machines, white out bottles, etc.) that we do not expect them to be quantified and reported as insignificant activities on a Title V application. This guide will be available by May 1995.

How should a facility determine the potential to emit for HAPS?

Generally, this has to be done on a case-by-case basis. In the example of painting operations, HAPs limits would be based on VOC limits assuming all VOC is one or more HAP and assuming the VOC limits are federally enforceable. This would be true unless specific HAPs limits were listed in a permit. USEPA is expected to provide more guidance in this area.. Absent this federal guidance, DAPC will be preparing guidance prior to the implementation of the Title V program.

27) Are Emergency Episode Plans (under OAC rule 3745-25) applicable requirements?

Yes. Emergency Episode Plans are plans which go into effect

in the case of an air pollution episode where it is necessary for facilities to cut back to reduce emissions. Facilities which qualify for these plans must have them in place in order to be in compliance when they file their Title V application. You will need to work with the appropriate DO/LAA representative to either update or establish these plans.

28) How is the Ohio EPA communicating with its districts in regard to facilitating plants which desire to pursue synthetic minor status, and therefore, have several PTI's (or PTO's) to submit. For example, the federally enforceable limits will be based on the maximum emissions stated when there isn't a SIP provision? Can the EPA and the facility discuss monitoring options prior to the permit issuance?

The Ohio EPA has provided training to the District and Local staff concerning synthetic minors and Title V. It is recommended that facilities desiring synthetic minors talk to their field representative about their situation before applying for the permits. Field representatives can give guidance on the best method of restricting potential emissions to avoid Title V. They can also discuss the monitoring or record keeping that will be needed. Further, synthetic minor permitting guidance is available on the DAPC Bulletin Board System.

29) If a facility wants to avoid Title V by restricting their potential emissions, should they use the permit to install process or the permit to operate process?

It is recommended that facilities use the permit to operate process. The only time this is not recommended is if the facility discovers emissions units which should have had a permit to install but didn't or they wish to restrict an emission unit which has not been constructed yet. In this case, a permit to install should be processed.

30) Is there going to be a help line to help Ohio industry with the Title V rules once they are approved?

You will be able to get guidance from the field offices. Also, OEPA central office will have a help line established when you find that sufficient information was not available at the appropriate DO/LAA. We will also continue to prepare hand out material, give presentations, and prepare material for the Ohio EPA bulletin board system. Further, a training video is planned with the distribution of STARSHIP to provide an excellent training tool for operating the electronic application software.

31 Does a facility which becomes a synthetic minor need to do any reporting to demonstrate this status? In other words, how will the Ohio EPA know that a given facility is a synthetic minor facility and, therefore, doesn't need to apply for a Title V permit or pay the Title V fees?

Chapter 3745-78 requires the larger non-Title V facilities to report their potential emissions every two years to establish that they are not Title V. We recommend that your company share its potential to emit analysis with the appropriate DO/LAA. This should minimize the risk of an inadvertent mistake.

32) Is it true that synthetic minors are not required to file the annual Fee Emission Report?

Facilities which are synthetic minors do not need to pay the Title V fees and, therefore, don't need to file the Title V Fee Emission Report. These facilities will need to file every two years a report on the actual emissions for the prior two years in order to pay the non-Title V emission fees established in ORC 3745.11(D). This initial report will not be due until April 15, 1996 for calendar years 1994 and 1995.

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Summary of the Final Federal Emissions Trading Policy Statement

Arlene R. Borowsky and Howard M. Ellis
Enviroplan, Inc.
West Orange, New Jersey

EPA's Emissions Trading Policy Statement describes emissions trading and sets out general principles for evaluating emission trades under the Clean Air Act and applicable federal regulations. EPA's concept of emissions trading will allow industry and states more flexibility in meeting National Ambient Air Quality Standards at a lower cost of compliance. This paper is directed to those concerned with using emissions trading to achieve greater flexibility and reduce the costs of complying with air pollution emission standards.

On December 4, 1986, EPA published its Emissions Trading Policy Statement in final form.[1] This policy describes emissions trading and sets out general principles for evaluating emission trades under the Clean Air Act and applicable federal regulations. The final policy replaces the original 1979 Bubble Policy[2] and revises the 1982 Interim Emissions Trading Policy.[3]

EPA's concept of emissions trading will allow industry and states more flexibility in meeting National Ambient Air Quality Standards at a lower cost of compliance. However, to ensure environmental progress, EPA has incorporated in the final Emissions Trading Policy numerous clarifications and more stringent requirements compared to earlier versions of the policy. The following summary of this regulation is intended as a convenient reference. The full text of the Emissions Trading Policy (ETP) should be consulted for specific applications.

The ETP is summarized in eight parts:

1. Air pollutants covered under the ETP.
2. Sources that can use the ETP.
3. Ways in which sources can use the ETP.
4. Definition of emission reduction credits.
5. Definition of baseline emissions.
6. Use of emission reduction credits in bubbles, netting, and offsets.
7. Ambient tests.
8. State generic trading rules.

Definitions of acronyms are as follows:

BACT	Best Available Control Technology
ERCs	Emission Reduction Credits
LAER	Lowest Achievable Emission Rate
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIP	State Implementation Plan
VOC	Volatile Organic Compounds

1. Air Pollutants Covered under the Emissions Trading Policy

- All air pollutants for which there are NAAQS.
- Hazardous air pollutants listed or proposed for listing under Section 112 of the Clean Air Act.

2. Sources that Can Use the Emissions Trading Policy

- All existing sources in attainment and nonattainment areas.
- Major new stationary sources in attainment and nonattainment areas.

3. Ways in which Sources Can Use the Emissions Trading Policy

- *Bubbles* for existing sources seeking less costly emission controls. Emission increases are allowed from one group of sources that are more costly to control in return for emission decreases from another group of sources that are less costly to control.
- *Netting* for modifications at existing plants. A modification at an existing plant is exempt from certain preconstruction permit requirements if there is no net emission increase or any such increase is smaller than specified significance levels. By netting out, the modification is not considered "major" and is not subject to PSD or other preconstruction permit requirements for major modifications.
- *Offsets* for planned new sources or major modifications in attainment and nonattainment areas. In nonattainment areas, a planned new source can obtain adequate emission offsets from existing sources to show progress in attaining the NAAQS. In attainment areas, new sources or modifications can use emission offsets to demonstrate protection of PSD increments, NAAQS, or visibility in a Federal Class I area.
- *Banking* for firms that want to store emission reduction credits for later use in bubble, offset, or netting transactions.

4. Definition of Emission Reduction Credits Eligible for Use in Trading

- An ERC is an emission reduction that is surplus, enforceable, quantifiable, and permanent.
- ERCs are surplus emission reductions not currently required by law. They are emission reductions below the baseline emissions required for attainment and maintenance of the NAAQS, or emission reductions below the applicable emission standards for new sources.
- Emission reductions not generally eligible for use as ERCs are reductions made prior to the application for banking or trading, reductions made before the date of the PSD baseline for attainment areas, and reductions

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meteorological data and a refined dispersion model must be used.

Level III. Full air quality modeling of all surrounding sources is required if there is a net increase above baseline emissions or if the trade will produce a significant air quality impact. Five years of meteorology and a refined dispersion model must be used, but the geographical area to be modeled can be limited.

8. State Generic Trading Rules

- Use of ERCs under state generic rules approved by EPA will not require individual SIP revisions.
- State generic trading rules will apply only to trades where there is no net increase above baseline emissions.
- States may adopt alternate generic trading rules that assure attainment and maintenance of the NAAQS.

References

1. U.S. EPA, "Emissions Trading Policy Statement," 51 FR 233, 12/4/86.
2. U.S. EPA, "Bubble Policy," 44 FR 71779, 12/11/79.
3. U.S. EPA, "Emissions Trading Policy Statement," 47 FR 15076, 4/7/82.

Ms. Borowsky is a senior scientist and Dr. Ellis is president of Enviroplan, Inc., 59 Main Street, West Orange, NJ 07052.

(2)

Federal Register

Thursday
December 4, 1986

Part III

Environmental Protection Agency

Emissions Trading Policy Statement; General Principles for Creation, Banking and Use of Emission Reduction Credits; Final Policy Statement and Accompanying Technical Issues Document

ENVIRONMENTAL PROTECTION AGENCY

[FRL-3085-8]

Emissions Trading Policy Statement; General Principles for Creation, Banking and Use of Emission Reduction Credits

AGENCY: Environmental Protection Agency.

ACTION: Final policy statement and accompanying technical issues document.

SUMMARY: This Policy Statement replaces the original bubble policy (44 FR 71779, December 11, 1979) and makes final revisions in an Interim Emissions Trading Policy which was published April 7, 1982 (47 FR 15076) and on which further comments were requested August 31, 1983 (48 FR 39580).

The policy describes emissions trading and sets out general principles EPA will use to evaluate emissions trades under the Clean Air Act and applicable federal regulations. Emissions trading includes bubbles, netting, and offsets, as well as banking (storage) of emission reduction credits (ERCs) for future use. These alternatives do not alter overall air quality requirements; they give states and industry more flexibility to meet those requirements. EPA endorses emissions trading and encourages its sound use by states and industry to help meet the goals of the Clean Air Act more quickly and inexpensively.

However, EPA also recognizes that without strict accounting practices and other safeguards, emissions trades may cause potential environmental harm. Accordingly, this policy provides more explicit guidance on baselines and related tests for environmental equivalence and environmental progress. It includes numerous tightenings and clarifications meant to assure the future environmental integrity of bubbles and other trading transactions.

Among other general steps, the policy states that the lower of actual or allowable emissions must usually be used as the baseline for emissions trades. Divergences from this baseline will be allowed only where the state or applicant shows that any potential increase in actual emissions will not jeopardize National Ambient Air Quality Standards (NAAQS), PSD increments or visibility protection.

General showings to this effect may be made only by establishing that allowable values were clearly incorporated in or assumed by an approved demonstration of attainment or maintenance. Specific showings to this effect may be made only in narrow circumstances described in the accompanying Technical Issues Document.

Other general matters addressed and significantly clarified by this policy include requirements for air quality modeling and approvable state generic bubble rules, additional enforcement safeguards, and additional safeguards related to bubbles involving pollutants listed, regulated or proposed to be regulated under Section 112 of the Act.

This policy also sets forth new, tighter requirements for bubbles in primary nonattainment areas which require but lack approved demonstrations that national ambient standards for healthy air will be attained. In addition to requiring lowest-of-actual-SIP allowable-or-RACT-allowable emissions baselines in these areas, use of past shutdowns, curtailments or other reductions which occurred before application for credit is essentially eliminated, and a further reduction of at least 20 percent beyond the baseline is required. Broadly speaking, sources may secure bubble credit in these areas only if claimed reductions meet these baseline and further reduction requirements; were reasonably, objectively elicited by the opportunity to trade; and are accompanied by state assurances that the trade is consistent with the state's efforts to attain the ambient air quality standard. EPA will approve bubbles which meet these requirements because they are consistent with the attainment needs of these areas and will yield a net air quality benefit. Such bubbles can produce economic savings and environmental improvement at the same time.

The policy announced today does not constitute final action of the Agency within the meaning of section 307(b) of the Clean Air Act, and therefore is not judicially reviewable. Rather, it establishes general guidance on approvable voluntary trades. EPA will implement this guidance in later rulemaking actions that will be judicially reviewable. Applicants for emissions trades remain free, following publication of today's notice, to advance the appropriateness of different trading requirements in the context of rulemaking actions on their individual trades.

EFFECTIVE DATE: This Policy Statement is effective December 4, 1986.

FOR FURTHER INFORMATION CONTACT: Inquiries regarding the general implementation of this policy may be directed to: Barry Gilbert, Office of Air Quality Planning and Standards (MD-15), Research Triangle Park, NC 27711, (919) 541-5516.

Inquiries regarding specific applications to use this policy may be directed to the appropriate EPA Regional Office (see Appendix A of the Technical Issues Document)

Inquiries regarding the development and basis of this policy may be directed to: Barry Elman, Regulatory Reform Staff (PM-223), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 382-2727

SUPPLEMENTARY INFORMATION: Under Executive Order 12291, EPA must judge whether this action is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. This action is not major because it establishes policies, as opposed to regulations, and can substantially reduce the costs of complying with the Clean Air Act

This Policy Statement was submitted to the Office of Management and Budget for review. Any comments from OMB to EPA are available for public inspection in Docket C-81-2. Pursuant to U.S.C. 605(b), I hereby certify that this action will not have a significant economic impact on a substantial number of small entities. As a policy designed to allow firms flexibility to meet previously established regulatory requirements, it will impose no burdens on either small or large entities.

The contents of today's preamble are indicated in the following outline. The outline is followed by the preamble itself, and then by the Policy Statement and accompanying Technical Issues Document.

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PREAMBLE—EMISSIONS TRADING POLICY STATEMENT

I. Introduction

Today's policy makes final the Agency's prior guidance on general principles for creating, storing (banking) and using emission reduction credits in trading actions under the Clean Air Act. This preamble responds to written comments EPA received on major issues raised by its proposed emissions trading policy statement (47 FR 15076, April 7, 1982) and subsequent request for further comment (48 FY 39580, August 31, 1983). It also explains the Agency's principal decisions on these issues.

Today's notice is the primary source of EPA guidance on existing-source bubbles, state generic bubble rules, and emission reduction banking. It replaces the original bubble policy (44 FR 71779, December 11, 1979) as well as the proposed emissions trading policy statement, which was effective April 7, 1982 as interim guidance. The notice addresses how emission reduction credits (ERCs)—the currency of trading—may be used for bubbles, as well as for netting or offsets. Netting and offsets are part of emissions trading, but are governed by EPA and state regulations for new source review.[1]

Nothing in today's notice alters EPA new source review requirements or exempts owners or operators of stationary sources from compliance with applicable preconstruction permit regulations in accord with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27 and 52.28. Interested parties should, however, be aware that bubble trades are not subject to preconstruction review or regulations where these trades do not involve construction, reconstruction, or modification or a source within the meaning of those terms in the regulations listed above.

The policy announced today does not constitute final action of the Agency within the meaning of section 307(b) of the Clean Air Act, and therefore is not judicially reviewable. Rather, it establishes general guidance for reviewing and approving voluntarily submitted trades. EPA will implement this guidance in later rulemaking actions that will be judicially reviewable. Applicants for emissions trades remain free, following publication of today's notice, to advance the appropriateness of different trading requirements in the context of rulemaking actions on their individual trades.

Under today's notice, EPA continues to authorize use of bubbles, banks, and generic bubble rules in all areas of the country, and provides for the fair and prompt processing of bubble applications which have been pending before EPA under the 1982 policy. However, based on experience under the 1982 policy, and in order to ensure the environmental integrity of future emissions trades, today's notice significantly tightens requirements applicable to certain trading actions, particularly existing-source bubbles in primary nonattainment areas which require but lack demonstrations of attainment. It also clarifies approval criteria in ways which should make review and approval of environmentally-sound trades more rapid and predictable. Among other safeguards or safeguarding clarifications, it requires that:

- Bubbles may no longer result in any increase in applicable net baseline emissions in any area, whether attainment or nonattainment, except under stringent conditions which assure that ambient equivalence will nevertheless be achieved;[2]
- Baselines for sources participating in a bubble in any area must take into account all three factors relevant to total emissions (i.e., emission rate, capacity utilization, and hours of operation) in order to provide an accurate accounting of emissions before and after the trade;

[1] See, e.g., 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27 and 52.28.

On November 7, 1986, EPA restructured CFR Part 51 and renumbered many of that Part's sections (51 FR 40656). Because most readers will be more familiar with prior designations, today's notice contains citations based on the organization of Part 51 as it existed before this restructuring. Interested parties may use Appendix F of today's Technical Issues Document to convert today's Part 51 citations to the corresponding new ones.

[2] This change constitutes a significantly more stringent definition of what may be considered a bubble under the Emissions Trading Policy. Specific ambient tests which must be met to qualify for an exception from this restriction can be found in the Technical Issues Document, Section III.A. Actions which may no longer be treated as bubbles under today's notice must be processed under general EPA criteria applicable to SIP revisions.

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• Bubbles in primary nonattainment areas needing but lacking approved demonstrations of attainment must use the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline, as described below, for each source involved in the trade;

• Bubbles in primary nonattainment areas needing but lacking approved demonstrations must contribute to progress toward attainment by providing a 20% net reduction in emissions remaining after application of the baseline above to all sources involved in the trade or, if the bubble is being processed under a state generic rule, the greater of a 20% net reduction or the percent reduction which would be required from all controllable stationary sources in that area (e.g., taking into account expected mobile source reductions and disregarding area-source contributions) in order to achieve attainment;

• Bubbles in attainment areas and nonattainment areas with approved demonstrations must use the lower of actual or allowable values for each of the three baseline components, unless allowable values higher than corresponding actual values are clearly used or reflected in the demonstration or otherwise shown not to jeopardize ambient standards, PSD increments or visibility;

• In all areas, emission reductions must be made state-enforceable in order to qualify as ERCs and be deposited in an EPA-approvable bank;

• In all areas, bubbles must meet more stringent tests for ambient equivalence, including additional ambient significance levels, more protective air quality modeling requirements, and more conservative definitions of *de minimis* trades;

• In all areas, the total of any incidental emissions of hazardous or potentially hazardous air pollutants associated with a criteria pollutant in a bubble trade must remain equal or be decreased, whether such hazardous pollutants have been regulated, proposed for regulation, listed, or the subject of a notice-of-intent-to-list under Clean Air Act 112;

• States must provide assurances to EPA that bubbles submitted for EPA approval in primary nonattainment areas needing but lacking approved demonstrations are consistent with the state's SIP-planning and attainment objectives. For generic rules, the state must make certain assurances in conjunction with its submittal of the generic rule to EPA, and certain additional assurances with the state's proposed and final approval of each individual bubble under that rule;

• Bubbles in such primary nonattainment areas may not use credit from reductions made before application to bank or trade such credit;

• Where sources in such areas seek to bank credits in the future, "application to bank," for purposes of evaluating credits for use in bubbles, means the time of filing an application to make the proposed credits state-enforceable through or concurrent with use of a formal or informal banking mechanism;

• Bubbles must not impede compliance or enforcement (e.g., the policy states that compliance extensions may no longer be granted under generic rules in any nonattainment area, and that bubble applications do not *per se* suspend underlying SIP limits or defer source obligations to achieve those limits);

• Generic rules in all areas will be subject to increased EPA oversight, including EPA participation in the state's public notice and comment process prior to state approval of individual bubbles, subsequent reviews of individual generic approvals, and reviews of the general implementation of the rules themselves, in order to assure that approved rules are being properly implemented; and

• EPA or state notices of proposed and final bubble approvals, in all areas, must clearly indicate any changes in actual as well as allowable emissions at all sources involved in the bubble, so the ambient effects of these trades may be known.

These and other changes announced today will generally be applied to all SIP revision bubbles and state generic bubble rules that have not been approved by EPA as of this date.[3]

On June 25, 1984 the Supreme Court unanimously ruled that EPA may allow states to use a single, plantwide definition of "stationary source" for new source review (NSR) purposes in nonattainment areas as well as attainment areas, provided use of that definition would not interfere with attainment and maintenance of national ambient air quality standards (NAAQS).[4] Under the "plantwide" definition, increases and decreases occurring anywhere on plant property from emission units within the same two-digit SIC code are generally eligible for netting,[5] and may be used to balance each other without triggering preconstruction permit requirements for major new sources or modifications, so long as actual plantwide emissions would not significantly increase.

States and sources considering the use of netting should, however, be aware that applicable New Source Performance Standards (NSPS), preconstruction review requirements under 40 CFR 51.18 (a)–(h) and (j), NESHAPS, and SIP limits continue to apply to such modifications. EPA is currently developing guidance for states that wish to adopt a plant-wide definition of "source" for nonattainment areas into their new source review regulations.[6]

Pending or future litigation or rulemaking, particularly final resolution of the settlement agreement arising from the industry challenge to ERA's 1980 promulgation of revised NSR rules (*Chemical Manufacturers Association v. EPA*, No. 79–1112, D.C. Cir., February, 1982), may alter aspects of this policy, especially regarding certain transactions under EPA new source review regulations. See 48 FR 28742 (August 25, 1983) (proposed revisions). However, unless and until EPA finally revises the relevant regulations, the current requirements remain in effect.

II. Major Issues

A. Baselines

The baseline for a given source is that level of emissions below which any additional reductions may be counted (credited) for use in trades. Questions relating to appropriate bubble baselines for particular emitting sources or types of sources in nonattainment areas generated the principal issues resolved by today's notice. EPA's resolutions strengthen SIP integrity and states' ability to make progress toward attainment by (a) identifying more

[3] See, however, discussion of "pending bubbles" in Section I.G. of today's Policy Statement and Section I.A.1.b.(4) of today's Technical Issues Document.

[4] *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 104 S. Ct. 2778, 14 ELR 20507, overruling *Natural Resources Defense Council, Inc., v. Gorsuch*, 685 F.2d 718, 12 ELR 20942 (D.C. Cir. 1982).

[5] SIC Code means codes described in the Standard Industrial Classification Manual, 1972, amended 1977 (U.S. Government Printing Office, stock numbers 4101–0066 and 003–005–00176–0, respectively).

[6] Many states currently employ the so-called "dual definition" of "statutory source," under which both the plant and each emitting piece of equipment within it are "stationary sources." Under this definition, when any individual piece of equipment is large enough in terms of potential emissions to be defined as a "major stationary source," only increases and decreases in actual emissions from that individual unit are eligible to "net."

While the plantwide definition provides greater opportunity for netting in general, netting is also allowed under the dual definition. Indeed, where no individual piece of emitting equipment is a "major stationary source," the "dual definition" allows the same opportunity to "net" as the "plantwide" definition.

precisely the three factors which must be addressed in calculating baseline emissions; (b) reaffirming that for bubbles in nonattainment areas with demonstrations of attainment that have been approved and not subsequently found by EPA to be substantially inadequate to attain ambient standards, the baseline must be consistent with assumptions used to develop the area's demonstration or must otherwise be shown by appropriate ambient dispersion modeling to protect air quality standards; and (c) specifying a number of special "progress" requirements for bubbles in primary nonattainment areas needing but lacking approved demonstrations of attainment, including stringent new baseline requirements, a ban on the use of reductions produced before application to bank or trade, and a mandatory extra reduction of at least 20% beyond applicable baseline emissions. Together with tightened criteria for modeled demonstrations of ambient equivalence, as well as other new requirements for bubbles, banks, and generic rules, these resolutions will assure continued environmental progress through trades.

1. Determining Baselines—General Guidance

A source's baseline emissions are calculated by multiplying three factors: the source's *emission rate* (usually expressed as emissions per quantity of production or throughput); its *hours of operations* or hourly usage over some representative time period; and its *capacity utilization* (e.g., the units of production per hour of use).[7] All three factors must be addressed, since a source's emissions for a given period may vary widely despite a constant emission rate, depending, for example, on whether it is operated at low capacity for a small number of hours or utilized near full capacity for a large number of hours. The product of this baseline calculation is generally expressed in pounds of emissions per day or tons of emissions per year (TPY), or both.

Today's policy clarifies EPA's original intent regarding appropriate methods for determining these three baseline factors. In general, in nonattainment areas with approved demonstrations, a source's baseline emissions for bubble purposes must be calculated using the lower of its actual emission rate or allowable emission limit, plus the lower of its actual or allowable capacity utilization and hours of operation. That is, baseline emissions in these areas must generally be calculated using lower of actual or allowable values for all three baseline factors.[8]

Actual values for these factors are based on some representative historical time period (generally the average of the two years preceding the source's application to bank or trade).

However, where the state or applicant shows that the SIP, a source-specific preconstruction permit, or an equivalent document clearly assumes or specifies allowable values which are higher than corresponding actual values for one or more baseline factors, and that document post-dates the baseline inventory year for a SIP's attainment demonstration, these values may replace actual values for calculating the bubble baseline. Where only one value (typically the emission rate) is specified, the other two baseline factors must generally be based on actual levels.[9]

Such showings must be based on either data from the SIP or data used in SIP preparation.[10] Applicants may alternatively perform appropriate modeling to demonstrate that use of allowable values which are higher than actual values will not delay or jeopardize attainment and maintenance of ambient standards, protection of PSD increments, or visibility. Upon either type of showing, these allowable values may be used.[11]

This approach is required because control of existing sources through approved SIP measures is the Clean Air Act's principal mechanism for timely attainment, and because many approved demonstrations either do not contain stated assumptions regarding all three baseline factors, or were based on combinations of actual and allowable values for these factors. It recognizes that bubble baselines must accurately reflect the SIP assumptions for all three baseline factors in order to maintain SIP integrity.

Under this approach, determination of bubble baselines consistent with approved demonstrations is a sequential, tiered process. That process was implicit in both EPA's 1982 policy and its 1983 request for further comment, as well as actual practice in bubble actions under those notices. EPA is making it explicit in response to concerns that "paper trades" might undermine attainment demonstrations because approved SIPs do not always state all assumptions on which their demonstrations rely. By requiring that unstated or ambiguous values for all baseline factors *be resolved in favor of lower actual values*, today's notice provides additional assurance that bubbles in nonattainment areas with approved demonstrations will not threaten ambient standards, PSD increments, or visability protection.

2. Comments on Baselines in Nonattainment Areas With Approved Demonstrations of Attainment

Comments on baselines in these areas indicated wide disagreement over where EPA require states to set this baseline level. The 1982 policy noted that "In nonattainment areas with approved demonstrations of attainment, the baseline must be consistent with assumptions used to develop the area's SIP." That policy generally required that where approved SIP demonstrations relied on *actual* emission levels at particular sources, those actual levels would have to be reflected in bubble baselines. Where SIP demonstrations were based on *allowable* emissions, the 1982 policy authorized baselines reflecting such allowable levels, despite the fact that some sources' actual emissions are currently or historically lower than their "allowables."[12]

[7] For detailed discussion of baseline emissions and baseline factors, see Technical Issues Document, Appendix B.

[8] Netting and offset transactions are governed by EPA's regulations at 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27 and 52.28. Accordingly, this discussion of baseline applies only to bubbles.

[9] See Section I.A.1 and Appendix B of today's Technical Issues Document for further details on baseline calculation.

[10] This could include documentation such as the demonstration calculations themselves, accompanying materials, or affidavits from those who constructed the demonstration.

[11] Use of such higher allowable values which must be justified by modeling because they are not shown to be clearly reflected in or assumed by the demonstration or an equivalent document, would require such bubbles in nonattainment areas with approved demonstrations to be processed as SIP revisions, since Level III modeling would be required for their justification under today's modeling screen. In addition, the SIP's reasonable further progress (RFP) calculations would generally have to be revised.

The principal difference between use of such higher allowable values in these nonattainment areas and in attainment areas is that in attainment areas, ambient evaluations more limited than Level III modeling may justify use of such allowable values. However, for bubbles processed as case-by-case SIP revisions in attainment areas, the Region retains discretion to require additional technical support, where limited air quality dispersion modeling is proposed to justify use of such allowable baseline values. See Section I.A.1.a. of today's Technical Issues Document.

All bubbles in attainment areas relying on allowable values not used or reflected in an approved demonstration must be evaluated for ambient impact based on a comparison of before-trade actual emissions and post-trade allowable emissions (i.e., the "worst case"), in order to assure that any potential increase in actual emissions are identified and that their effects are consistent with applicable Clean Air Act requirements. See today's Technical Issues Document, Section I.A.1.a.

[12] See n. 13 below.

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The great majority of commenters supported this SIP foundation for trading baselines, noting that SIPs are the cornerstone of the Act's approach to air quality management. These commenters also asserted that regardless of sources' actual emissions, measuring reductions from allowable levels assumed in a valid SIP demonstration was entirely appropriate for use in trading, since the area would still attain ambient standards in a timely manner. See, e.g., 48 FR 39582 (August 31, 1983).

However, other commenters asserted this approach was either "too loose" or "too tight." The first group stated that credit should only be granted for reductions below current actual emissions, provided actual emissions met applicable SIP limits.[13] They advanced various reasons for this position, including assertions that reliance on past reductions, while consistent with approved plans for attainment, might not comport with "broader" clean air goals. Some felt that SIPs were insufficently precise to serve as a basis for trading.

A second group of comments went in the opposite direction, asserting that baselines should always be maximum allowable source emissions, regardless of assumptions used in SIP development. These commenters noted that emission *rates* (e.g., emissions per volume of throughput or unit of production) specified in SIP emission limits are generally the only enforceable limits applicable to existing sources. Since existing sources can legally emit up to annual levels equivalent to maximum output and round-the-clock operations so long as they meet these SIP emission-rate limitations, these commenters reasoned, companies should receive credit for agreeing to binding limits on output or hours of operations which forgo such production flexibility.

Today's notice responds in two principal ways to these concerns. First, it clarifies the components of baselines, how these are to be determined, and who bears the burden of demonstrating that a proposed baseline is consistent with a particular SIP. Several comments indicated that confusion related to the determination of baselines may have generated unnecessary concern over use of allowables baselines under approved SIPs. Second, it reiterates and further supports EPA's position that *where SIP demonstrations are approved as adequate,* the Clean Air Act simply requires trading to be consistent with assumptions used to develop the area's SIP.

3. EPA's Resolutions on Baselines in Nonattainment Areas With Approved Demonstrations of Attainment

Where a state has demonstrated it will attain an ambient standard, and EPA has approved the demonstration and not subsequently found it substantially inadequate to assure attainment, bubbles relying on baseline levels used or reflected in that demonstration amount to routine SIP revisions. The state then has discretion to maintain its demonstration through any alternative combination of emission reductions, so long as these are adequate for attainment and maintenance of the ambient standards. Since EPA cannot require states to do more than demonstrate timely attainment and maintain ambient standards, EPA will approve such trades as long as they are enforceable and do not undermine the demonstration. See, e.g., *Train* v. *NRDC,* 421 U.S. 60, 79–80 (1975); *Union Electric Co.* v. *EPA,* 427 U.S. 246 (1976). This means that credits must not be doubled-counted, that they must be calculated from a baseline consistent with the approved demonstration, and that tests of air quality equivalence to the original SIP emission limits must be met.

In short, under the Clean Air Act an approved attainment demonstration creates a legal and logical boundary. The state has met its statutory responsibility and can substitute reductions not relied on in the SIP for those assumed by the SIP, so long as air quality impacts are equivalent. This holds true for all types of emission reductions—whether derived from process changes, extra pollution control equipment, improved operating or maintenance procedures, or other actions—as long as the substitute reductions have not been relied on in the approved SIP.[14]

EPA accordingly reaffirms the general principle that states may grant sources credit for reductions below levels assumed by approved demonstrations. This generally means that where actual values for emission rate, capacity utilization and hours of operation form the basis for an approved demonstration, sources proposing a bubble must use the lower of actual or allowable values for those factors in calculating baseline emissions, and that where an approved demonstration was based on allowable values which are higher than corresponding actual values for any of these baseline factors, those allowable values may be used for such factors in calculating the baseline.

B. Baseline and Other Requirements for Bubbles in Primary Nonattainment Areas Which Require But Lack Approved Demonstrations of Attainment

EPA's 1982 policy proposed two baseline mechanisms for bubbles in primary nonattainment areas needing but lacking approved demonstrations of attainment. These areas needed additional emission reductions to attain national ambient health standards, but had not yet fully determined what amount of reductions would be necessary for attainment or which sources would be required to produce them. Nevertheless, that policy said, states could allow existing sources in these areas to trade on an interim basis, either (1) by using baselines reflecting Reasonably Available Control Technology (RACT) provisions which EPA had already approved, or (2) where EPA had not yet approved general state RACT provisions, by using "negotiated RACT" baselines agreed to between the source, the state and EPA.[15] Both the 1982 policy and subsequent notices advanced detailed programmatic and environmental rationales for this approach, including the fact that RACT was the Act's most stringent general requirement for existing sources in nonattainment areas; that appropriately determined RACT baselines were consistent with current attainment needs; and that trades using such baselines could produce faster interim progress by providing incentives for sources voluntarily to define RACT, disclose better emissions or ambient data, or take other steps to do more than the minimum required. See, e.g., 47 FR 15076, 15080–81; 48 FR 39582–83, 39585.

Many commenters on the 1982 policy approved this "negotiated RACT"

[13] The 1982 policy assumed, but did not specify, the components of "actual" emissions, such as capacity usage or number of hours of operation of a particular source. It also assumed, but did not expressly require, that actual emission levels must be reduced to compliance levels before further reductions were eligible for credit.

[14] It also holds true where the Agency may suspect, but has not formally indicated, that a previously approved SIP demonstration is no longer adequate to assure timely attainment. For reasons of policy continuity, regulatory predictability and fair notice, until EPA makes a formal finding of SIP inadequacy, the approved demonstration controls. See Clean Air Act section 110(a)(2)(H), 110(c)(1); 48 FR 39582 (August 31, 1983).

[15] The 1982 policy also authorized limited use of higher actual (rather than RACT-allowable) baselines in certain nonattainment "extension" areas which did not then have complete approved SIPs. See 47 FR 15077, 15080 (April 7, 1982). Expiration of the July 1982 statutory deadline for submitting such SIPs vitiated this third baseline option. See, e.g., 48 FR at 39580 and n.2, 39582 and n.7, 39584–85 (August 31, 1983).

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approach, finding it innovative and acceptable. However, two groups of commenters again asserted that it was either "too restrictive" or "insufficiently constrained." The first group maintained that for reasons of administrative efficiency, bubbles should be based either on existing SIP reduction requirements or on actual emissions, without the need to negotiate new source-specific RACT baselines. Since trading sources in these areas would eventually be subject to RACT requirements in any case, they reasoned, no new interim baseline should be required. In partial support of this position some alluded to the one instance in which Congress has explicitly addressed such baseline issues—its 1977 declaration that in nonattainment areas without adequate demonstrations, existing SIP limits would for the next several years be the baseline for offset transactions, which were then the only types of emissions trades.[16]

The second group asserted that no [illegible]es should be allowed in such [illegible] since regulators could not know [illegible]eductions were surplus until [illegible]trations were completed and approved.

In August 1983, "in light of formal comments on the [1982] Policy, the *NRDC* v. *Gorsuch* decision [since reversed] . . . and the need to further articulate the Policy's approach in this area," EPA requested further comment on certain issues relating to credit from plant shutdowns or production curtailments for use in existing-source bubbles, particularly bubbles in primary nonattainment areas requiring but lacking demonstrations. 48 FR 39580. While most comments on the 1982 policy supported continued use of such credits without further restrictions, some commenters had special concerns about shutdowns in these areas. These commenters stated that shutdowns can hasten attainment, and suggested that granting credit for shutdowns that 'might have happened anyway' might not be consistent with the Act's requirement for attainment "as expeditiously as practicable."

In the August 1983 notice EPA addressed these concerns in detail, noting that:

> . . . Unlike surplus reductions from additional pollution control or less-polluting process changes, shutdowns produce a total reduction of emissions, 100% of which might benefit air quality if credit were not allowed. Granting full or partial credit for their use in existing-source bubbles might reduce that benefit . . . at least where the source would have shut down anyway. This reasoning [reflecting a desire to avoid granting credit for reductions that may not be "surplus" because they would have occurred in any event] underlies some commenters' suggestions that credit be allowed only if credit were a sole or principal reason for the shutdown . . .
>
> Unfortunately the issue is not this simple. So long as it has not been double-counted and a proper RACT baseline is applied, the shutdown does contribute to air quality progress, since much less than 100% credit will be granted. Moreover, the opportunity for credit may improve air quality by encouraging early shutdown of high-polluting facilities that might otherwise be kept running, either because replacement is too expensive or to preserve credit for further plant expansion.
>
> In addition, these commenters' suggestion of a test based on subjective motive appears administratively unworkable. EPA and states would find it exceedingly difficult to evaluate or rebut source evidence that a shutdown was motivated by credit and that the shutdown facility would otherwise have operated [, e.g.,] for twenty or forty years. Thus this approach would likely result in either *de facto* approval of all such credits (undermining the reason for the test), or a burden of proof so stringent that none would be approved (penalizing sources whose shutdowns were elicited by trading). More straightforward approaches might either ban shutdown bubbles until a demonstration of attainment, or acknowledge their uncertain nature by applying a margin of safety—e.g., a requirement that such bubbles produce substantial air quality improvement—sufficient to compensate for any uncertainties and protect the integrity of current or future SIPs. 48 FR at 39583–84 (footnotes omitted.)

EPA then suggested seven specific alternatives to the 1982 policy for bubbles in these areas, including: a prohibition on bubble credit from shutdowns; a requirement of substantial air quality benefit from bubbles proposing to use shutdown credit; or a requirement of substantial air quality benefit from all bubbles, with no special restrictions on shutdown credit. In partial support of this last proposed alternative, EPA indicated the administrative benefits of avoiding special definition or treatment of "shutdowns" and "curtailments," and stated that:

> . . . Requiring substantial progress from each bubble . . . could accelerate momentum toward attainment, directly improve air quality through each trade, and provide an objective margin of safety against uncertainties associated with some individual shutdowns, while leaving to the state the task of final SIP development. It would also maintain the incentive within the [1982] Policy for industry to shut down high-polluting, economically-marginal sources . . . . The more each existing-source bubble contributes directly to accelerated air quality progress, the stronger the justification for use of surplus reductions for such bubbles in the absence of a demonstration. Moreover, requiring all bubbles to produce a substantial air quality improvement, beyond RACT baselines and RACT equivalence, could provide a margin of safety sufficient to make special treatment of shutdowns unnecessary . . . 48 FR at 39585–86 (footnotes omitted).

Thus, while the issue explicitly raised by the August 1983 notice was use of bubble credit from shutdowns in primary nonattainment areas which lack approved demonstrations, the underlying issue was use of *any* type of bubble credit in these areas. Since emission reductions have the same effect on air quality whether produced by less-polluting process changes, more efficient operation of installed control equipment, additional pollution controls, or shutdowns or production curtailments, the fundamental question was whether *all* such reductions or none of them should be prohibited or subject to special requirements when used for bubbles in these areas. That question reflected a further choice. Should EPA defer bubbles in these areas until a compete demonstration was finally approved? Or should EPA authorize continued use of bubbles, in order to secure interim emission reductions?

Comments responding to the August 1983 notice were essentially the same as earlier ones. A large majority of industries and state pollution control agencies commenting at that time supported continued opportunity for bubbles (including those using credit from shutdowns) in nonattainment areas with or without approved demonstrations. Virtually all industries and states commenting with respect to areas that *have* approved demonstrations supported continued use of the 1982 policy, without change.[17] Of 13 state agencies commenting with respect to areas that *do not have* approved demonstrations, ten urged that shutdown credits be retained for these

[16] See, e.g., Clean Air Act Amendments of 1977, section 129, codified at 42 U.S.C. 7502 note; 3 [illegible] *tive History of the Clean Air Act* [illegible] *ments of 1977*, pp. 537, 713; 44 FR 2174–75 [illegible]. 1979). This Congressional mandate was [illegible] erseded by eventual state adoption of super[illegible]ng SIP limits. Under current EPA regulations such SIP allowable emission rates may ordinarily be used to compute the baseline for offsets only where an approved SIP demonstration used inventoried allowable emissions in its demonstration of reasonable further progress. See Clean Air Act 173(1)(A), 42 U.S.C. 7503(1)(A).

[17] E.g., Allegheny County (PA) Health Department, Bureau of Air Pollution Control; Air Pollution Control District of Jefferson County (Louisville); Cf. Dayton (OH) Regional Air Pollution Control Agency. See also, e.g., comments of Chevron USA

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areas as well.[18] However, many comments also supported or acknowledged the appropriateness of a requirement for a net air quality benefit—in the range of 20% extra reductions in emissions remaining beyond a baseline reflecting RACT emission limits—from each bubble, so long as that requirement was objective and easily administered.[19] To the extent they addressed this issue, these comments generally opposed efforts to test bubbles by examining the subjective motives underlying reductions.[20] Two state of local agencies asked that bubbles be prohibited in these areas until complete demonstrations were approved by EPA.

Several commenting environmental groups asserted that EPA should not permit any bubbles in nonattainment areas lacking adequate demonstrations. One argued that EPA cannot determine that emission reductions are "surplus," and therefore creditable, in these areas because to do so would violate the statutory requirement to attain standards "as expeditiously as practicable." Moreover, this group claimed, using RACT as a baseline would not solve this problem because RACT limits are minimum measures, not a substitute for a SIP providing timely attainment. This group also asserted that crediting shutdowns would conflict with states' duty to meet air quality standards "as expeditiously as practicable" because, by "resurrecting" emissions that have already ceased, it would accomplish less emission reduction than is practicable within a given period of time. Another group asserted that allowing shutdown credits in these areas would strain efforts to progress toward attainment. One environmental group went a step further and urged that opportunity for bubbles be restricted solely to attainment areas which have already met national air quality standards.[21]

At the same time, comments filed on Federal Register proposals to approve individual bubbles as SIP revisions under the 1982 policy[22] raised related issues. Several of these proposed bubbles were also located in primary nonattainment areas which required but lacked approved demonstrations. The issue raised related to bubbles of two types: (1) Those which relied on reductions from shutdowns that occurred long before any application to bank or trade; and (2) those which relied on extra reductions produced by routine installation of required control equipment, long before application to bank or trade. Both types of bubbles raised the larger question of whether SIP integrity and environmental progress might better be assured in primary nonattainment areas which require but lack approved demonstrations of attainment by allowing no bubble credit, or allowing bubble credit only for reductions beyond actual emission levels already achieved *as of the time sources applied to bank or trade.*

The final policy strikes what EPA believes to be a reasonable, environmentally-sound balance between all these views, and establishes numerous tightening clarifications and new requirements to implement that balance. These changes and the rationales supporting them are set forth below.

1. EPA's Resolutions Regarding Baseline and Other Requirements

In primary nonattainment areas which require but do not, at the time of a bubble application, have EPA-approved demonstrations that ambient health standards will be attained, bubbles will generally be approved if they do not rely on reductions which occurred before application for credit; if they meet other criteria for baselines, ambient equivalence, and consistency with future planning efforts; and if they produce at least a 20% net reduction in emissions remaining after appropriate baselines have been applied. These objective tests both respond to previous comments on certain individual bubble applications, and go substantially beyond alternatives discussed in EPA's August 1983 notice. At the same time they assure greater predictability and ambient progress, without imposing so heavy a burden on voluntary bubble transactions that the environmental benefits of such trades are forgone. The reflect the general principle that because such properly-structured bubbles provide continuing incentives for sources to deliberately overshoot regulatory marks (rather than plan merely to meet them), bubble trades in these areas can produce interim progress beyond current SIP requirements, and should be approved.

a. Specific "Progress" Requirements. Applications for existing-source bubbles in primary nonattainment areas which require but lack approved demonstrations of attainment will be deemed to produce a net air quality benefit and will be processed for approval if they:

(i) Use "lowest-of-actual-SIP-allowable-or-RACT-allowable" emissions baselines. Such baselines must be calculated using

- Either the actual emission rate, the SIP or other federally enforceable emission limit, or a RACT emission limit, whichever is lowest, for each source involved in the trade. This baseline factor shall be determined as the time of the source's application to bank or trade, whichever is earlier.
- The lower of actual or allowable capacity utilitization and hours of operation for each source involved in the trade. These baseline factors shall generally be based on the two years of operation preceding the application to bank or trade, unless another two year period is shown to be more representative of normal source operations;

(ii) Meet the general *ambient* equivalence tests outlined in today's policy (see Section I.B.1.b of the Technical Issues Document) using the baselines described above and, for the post-bubble case, emission levels that reflect overall *emissions* equivalence; and

(iii) Produce a substantial net reduction in actual emissions—i.e., a reduction of at least 20% in the emissions remaining after application of the stringent new baselines described above. (A reduction of greater than 20% may be required for bubbles approved under generic rules in some of these nonattainment areas. See discussion in Section III.A.1.(d) of this Preamble, below.)

With respect to sources which seek to bank emission reductions after publication of today's notice, "application to bank" for purpose of evaluating credit for use in bubbles means the time of filing of an

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[18] E.g., Memphis Health Department; Colorado Dept. of Health, Air Pollution Control Division. Cf. comments of Illinois EPA.

Many industrial commenters also asserted the importance of continuing to allow shutdown credits in these nonattainment areas. See, e.g., Chevron USA; Champlin Petroleum.

[19] E.g., Bay Area (CA) Air Quality Management District. See also Southern California Gas Co.

[20] E.g., Massachusetts Department of Environmental Quality Engineering; South Coast (CA) Air Quality Management District.

[21] In oral or written submissions to the Administrator made in early 1986 while final decisions on today's policy were still pending, representatives of seven states and the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officers (STAPPA/ALAPCO) similarly urged that bubbles no longer be authorized in primary nonattainment areas until a complete attainment demonstration was submitted or approved. This position was generally echoed by a coalition of environmental groups. Since this position and related underlying issues had been raised and articulated at length by earlier comments, it is addressed as part of the Agency's final response below.

[22] Cf., eg., Union Carbide Corp. (Texas City), 47 FR 21533 (May 19, 1982); B.F. Goodrich (Avon Lake), 49 FR 4798 (February 8, 1984).

application to make such reductions state-enforceable through or concurrent with use of a formal or informal banking mechanism. However, in order to avoid needless disruption and inequitable retroactivity, this definition does not apply to reductions which sources have previously applied to bank. See Section I.A.1.b.(1) of the Technical Issues Document.

b. *Additional "Progress" Requirement: State Assurances.* In concluding that properly-structured bubbles as defined above can produce valuable interim progress in primary nonattainment areas which require but lack approved demonstrations, EPA also considered whether other showings might be necessary to assure that individual bubbles do produce such progress. The Agency has concluded that few such showings, whether bubble-related or otherwise, are practicable or workable. It did, however, conclude that certain representations meant to assure each bubble's consistency with SIP planning goals, by requiring states to take a meaningful look at such consistency in each bubble approval, would help assure that progress is achieved.

Under circumstances detailed in the Final Policy and Technical Issues Document, today's notice therefore requires the appropriate state authority to provide the following written assurances to accompany each bubble which is approved (either directly by EPA as a case-by-case SIP revision, or by states under an EPA-approved generic rule) in these areas:

1. The resulting emission limits are consistent with EPA requirements for ambient air quality progress, as specified in today's notice.

2. The bubble emission limits will be included in any new SIP and associated control strategy demonstration.

3. The bubble will not constrain the state or local agency's ability to obtain any traditional emission reductions needed to expeditiously attain and maintain ambient air quality standards.

4. The state or local agency is making reasonable efforts to develop a complete approval SIP and intends to adhere to the schedule for such development (including dates for completion of emissions inventory and subsequent increments of progress) stated in the letter accompanying the bubble approval or in previous such letters.

5. The baseline used to calculate the bubble emission limits is consistent with baseline requirements in the Emissions Trading Policy Statement and Technical Issues Document.

Such assurances need not be verified by, e.g., detailed quantifications, comparison with year-by-year progress projections, or showings that all reductions needed for area-wide progress or attainment have been identified and targeted for regulation. They are, however, expected to be based upon meaningful review by the state and to be consistent with the documentation supporting the bubble. EPA will not second-guess such state representations, provided they are a substantial test applied by the state to each bubble and the state has explained how the proposed bubble is consistent with the area's projected attainment strategy. Nor will EPA examine, or expect states to examine in making such representations, any specific source's subjective motivation in making claimed reductions. The combined effect of these requirements will be (a) to deny bubble credit for reductions which occurred before application for credit, in recognition of the fact that reductions produced before any application to bank or trade are unlikely to have been elicited in any way whatsoever by the opportunity to trade; (b) to help assure that only actual reductions in current emissions are relied upon to satisfy pending control requirements in these areas; (c) to more systematically encourage efforts by sources to produce and permanently maintain these additional reductions, by granting them predictable bubble credit where specified baseline and other tests have been applied; and (d) to assure that these bubbles will not interfere with these areas' attainment efforts. Any other approach would enmesh EPA and state agencies in lengthy, resource-intensive, and uncertain efforts to determine subjective company motives for making particular claimed reductions—efforts which appear unlikely to provide greater environmental protection than the criteria articulated here. Cf. e.g., 48 FR at 39584 and n. 15, 39585–86.

2. Basic Rationale

EPA believes that Congress would clearly have intended the Agency to approve bubbles that, despite the lack of a complete attainment demonstration for the affected areas, nevertheless produce progress toward attainment in those areas. Section 172(b) of the Clean Air Act does require states to formulate complete control strategies to attain the standards in these areas as expeditiously as practicable and, in the case of primary standards, by certain fixed dates. It also requires these areas to demonstrate reasonable further progress toward attainment in the interim. However, SIPs and attainment demonstrations are composed of dozens, if not hundreds, of regulations and commitments adopted at the state or local level, following proceedings that often are time-consuming and overlap in sequence. If EPA were to wait until every such provision were adopted and submitted by the state before acting on any of them, substantial environmental benefits that would otherwise accrue from having each available requirement promptly incorporated in a binding manner into the SIP and made federally enforceable would be forgone. Such an "all or nothing" approach would produce less expeditious progress toward attainment than a combination of (a) EPA approvals of state provisions submitted sequentially and (b) appropriate use of sanctions authorized by the statute to effect the adoption and submittal of remaining necessary provisions. Given the strong emphases in the statute as enacted, it is doubtful that Congress would have intended the former, less progressive approach.[23]

For these reasons, EPA has decided to approve in these areas bubbles which individually produce progress, both beyond preexisting plan requirements and in the air itself, and which do not interfere with these areas' efforts to construct complete strategies that provide for attainment as expeditiously as practicable.

Today's notice accordingly disallows use in bubbles of reductions made prior to any application to bank or trade, but allows appropriate use of reductions made after such application. Where a source voluntarily proposes to make creditable reductions as part of and following a banking or trading application, the stringent lowest-of-actual-SIP-allowable-or-RACT-allowable baselines must be applied if a bubble is involved, and that bubble must meet appropriate ambient tests, using emission levels that produce overall equivalence to the emissions baseline. The "net 20%" discount in remaining emissions then applies to all sources in the bubble, and provides an additional safety margin to assure ambient progress from bubbles in these areas.[24] Finally, the state assurances

[23] See, e.g., *Chevron USA v. NRDC*, supra n. 4.

[24] This "net 20%" requirement is also supported by evidence indicating that for most extension area SIPs addressing ozone pollution—the most widespread remaining nonattainment health problem—a net 85% reduction (81% RACT + 20% of remaining VOC emissions) appears sufficient to produce ambient attainment, if those areas could secure such reductions from all controllable stationary sources of VOC emissions which remain after implementation of stringent controls already in place. See, e.g., "on Attainment Status of 33 Areas Under Different Degrees of Stationary Source

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[26] The Agency has determined that these conclusions also apply where the post-application reduction on which the applicant relies for credit happens to be a shutdown or production curtailment. Because multiple motives similarly affect, and can determinatively "tip," decisions to close a facility or restrict its productive capacity, shutdowns that occur after the source owner applies for credit, no less than other types of post-application reductions, may be presumed reasonably elicited by the opportunity to trade. This is particularly true because the source operator, whatever its antecedent motives, must make a deliberate decision to forgo an item of substantial value—either by surrendering its operating permit or by accepting binding production limits—in order to create credit. Since it would be administratively difficult, if not impossible, to prove or disprove that opportunity to trade was the driving force or a subjective motive behind the shutdown, such a presumption is amply justified.

[26] See, e.g., 47 FR 15077, 15080; 48 FR 39580 and n. 2, 39582 and n. 7.

RACT levels are generally at least 80% or more below uncontrolled emission levels, depending on the pollutant. Where pre-trade actual emissions are higher than RACT baseline levels this requirement directly accelerates air quality progress, since no credit can be secured for the difference.

[27] Trade applications submitted over the last several years have, among other things, helped establish and verify emissions factors for nontraditional sources, as well as provide detailed emissions profiles of such sources (see, e.g., application of Shenango Iron and Steel Co., approved 46 FR 52894 (December 29, 1981)); have provided current emissions data not otherwise available to EPA through the Agency's National Emissions Data System (50 FR 25083, June 17, 1985); and have disclosed the existence of sources (or in at least one case an entire plant) that had been wholly missed in development of the state's emissions inventory. Other applications have identified and reduced previously unsuspected threats to PSD increments; helped correct substantial discrepancies between inventoried and actual emissions, or between SIP emission limits and attainment demonstrations; and helped improve enforcement procedures in certain state programs. In addition to such case-specific examples, opportunity to trade appears to reduce traditional reasons for sources to underestimate their emissions, resulting in better inventory and planning data. For example, Massachusetts requires firms to provide data on their two years of highest emissions since the design year of the SIP, in order to establish a daily emissions cap under the state's VOC bubble rule. This requirement has produced baseline data for previously unquantified emission years for some sources.

Through all these mechanisms, bubbles can achieve substantial emission reductions and air quality planning benefits, even without special "progress" requirements.

Notwithstanding these independent progressive effects, EPA believes that it may approve bubbles in these nonattainment areas only if they meet the specific progress requirements described above and do not interfere with the affected areas' efforts to develop and implement complete attainment strategies. Such bubbles can help adjust existing inadequate regulations on a source-specific basis, help make progress toward a full-approved demonstration, and help improve air quality, without "freezing" inadequate SIP requirements that are currently in place.

Accordingly, EPA has decided to approve "progress" bubbles which are consistent with the attainment needs of these areas, which produce a net air quality benefit, and which may therefore secure faster interim progress toward attainment and more rapid development of complete attainment plans.

3. Additional Policy Changes and Clarifications

Today's notice makes numerous additional changes in response to comments on and following the 1982 policy. The most important of these changes or clarifications are discussed below.

A. Generic Bubble Rules

Today's notice recognizes the special position of EPA-approved state generic bubble rules. Such rules may provide clearer approval criteria and may result in more rapid bubble approvals with reduced expenditure of EPA and state resources, by eliminating the need for case-by-case Federal rulemaking on each bubble as an individual SIP revision.

Today's policy affirms that states may continue to use generic rules to approve bubbles within the scope of such rules in all areas of the country, including primary nonattainment areas needing but lacking approved demonstrations of attainment. It also establishes specific procedures to ensure opportunity for public comment on individual generic actions and for regular EPA oversight of the administration of all such rules. However, it spells out additional "process" requirements that new generic rules must satisfy to be approvable for primary nonattainment areas needing but lacking demonstrations of attainment.

State generic bubble rules approved by EPA as SIP revisions have independent force of law and further Congress' intent that "the prevention and control of air pollution at its source [remains] the primary responsibility of States and local governments." Clean Air Act, § 101(a)(3). EPA has approved or proposed to approve 10 such rules for 9 different states, and at least 12 others are being developed. Few approved rules currently apply to primary nonattainment areas which require but lack approved demonstrations. However, today's notice requires that all generic rules meet certain additional procedural requirements in order to assure effective EPA oversight of their administration and to identify any deficiencies in individual approvals or state implementation procedures before substantial numbers of state-approved bubbles may be put at risk. To the extent these requirements require modification of existing generic rules, they may apply to rules affecting any area, not just primary nonattainment areas which need but lack demonstrations.

Today's policy is meant to assure these rules' smooth continued operation, both now and through any future transition periods, without undermining the considerable investment states have already made in generic approaches. At the same time, the policy is designed to assure that actions under generic rules will meet the policy's substantive and procedural objectives.

Basically, *bubbles approved by states under existing EPA-approved generic rules before the effective date of this policy* will not be affected or revisited due to today's changes. Because EPA-approved generic rules possess independent validity and may only be changed upon completion of specific procedures for altering such SIP provisions (see, e.g., Clean Air Act sections 110(a)(2)(H), 110(i)), states may also *continue to approve bubbles in accord with such rules*, unless and until those rules are finally changed in response to an EPA notice requesting and establishing a specific timetable for their modification. However, in order to provide maximum assurance of SIP integrity and minimize any need for future SIP corrections, EPA expects states to assure so far as feasible that generic bubbles they approve are consistent with applicable terms of today's policy as well as their generic rules. *New or pending generic rules must all meet the terms of today's notice.*

All existing generic rules which require modification to conform to this policy must, as requested by EPA, be promptly revised. EPA will review such today's requirements, and will publish Federal Register notices identifying generic rules requiring modification. These notices will identify specific deficiencies and means for correcting them, and set forth a schedule for both submittal and EPA review of revised rules. Where states fail to resolve identified deficiencies in such rules within the prescribed period, EPA may either rescind its previous approval of the rule, or issue a notice of SIP deficiency under section 110(a)(2)(H) of the Act.

1. Substantive "Progress" Requirements

Generic bubble rules applicable *to primary nonattainment areas which need but lack approved demonstrations* must provide that all generic bubbles in these areas:

(a) Use lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baselines, as described above, for all sources involved in the trade;

(b) Grant credit only for those reductions occurring after an application to bank or trade credit (whichever is earlier) has been made;

(c) Incorporate replicable procedures which assure that all trades preapproved by EPA as meeting the rule will also satisfy applicable ambient equivalence tests (see Technical Issues Document, Section II.B.2.); and

(d) Produce an overall emission reduction at least equal to a net 20% reduction in emissions remaining after application of the above baselines, or at least equal (in percentage terms) to the overall emission reduction (in percentage terms) needed to attain in the area (i.e., at least equal to the source-by-source emission reductions that would be required for a full demonstration of attainment, taking into account "uncontrollable" stationary [e.g., area] sources and expected emission reductions from mobile sources), whichever is larger.[28] This last

[28] For example, assume air quality analysis indicates the area must decrease its base-year emissions by 45% to attain the relevant NAAQS. Further assume:

	TPY
(a) For the base year:	
Uncontrollable stationary source emissions (e.g., residential combustion sources)	2,500
Controllable stationary source emissions	3,500
Mobile source emissions	4,000
Total	10,000
Target emissions for attainment: 10,000 × (1.0–0.45)	5,500
(b) For the projected attainment year (before additional controls):	
Uncontrollable stationary source emissions (2,500 × 1.1)	2,750
Controllable stationary source emissions (3,500 × 1.2)	4,200
Mobile source emissions	2,500

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determination must be submitted with the rule, and must use the same type and quality of analysis required for an EPA-approvable SIP. In no event may the overall emission reduction required of generic bubbles in such areas be less than 20% of the emissions remaining after application of the baselines specified above; and

(e) provide assurances, in conjunction with the state's submittal of the generic rule to EPA, that the state (i) is making reasonable efforts to develop a complete approvable SIP that will achieve the percent emission reduction from controllable sources described in the previous paragraph and (ii) intends to adhere to the schedule for development of such a SIP (including dates for completion of emissions inventory and subsequent increments of progress), as stated in the letter accompanying the submittal or in previous letters. EPA believes that the numerical determination and progress requirement discussed in the previous paragraph is the functional equivalent of the additional assurances described earlier in this notice (see Section II.B.1.b above) for bubbles needing case-by-case EPA approval, since bubbles meeting this requirement will produce attainment-level reductions. For that reason, EPA does not believe that it must require the state to make those additional assurances when it submits the generic

Therefore the reductions needed from controllable stationary sources are 9,450 − 5,500 = 3,950 tons/yr.

And the percent emission reduction required from controllable stationary sources to attain is

$$\frac{(3950)}{(4200)} \times 100 = 94\%$$

Thus the net overall reduction required from each generic bubble would be 94% (i.e., the reductions produced by applicable baselines (e.g., application of a RACT emission rate) plus whatever percent reduction in emissions remaining after this RACT limit is sufficient to yield the 94% total).

States that wish to avoid case-be-case SIP revisions for sources for which RACT has not yet been defined in an approved SIP provison may incorporate "presumptive RACT" values (e.g., 80% reduction for VOC) in their generic rules. Sources would than have the option of accepting these RACT values for generic bubble purposes, or negotiating different RACT values through the case-by-case SIP revison process. However, where a source involved in a trade is one for which EPA has issued a CTG, but the state has not yet adopted the CTG-specified emission rate as RACT and no RACT has yet been specified by the state for that source, the presumptive or negotiated RACT values for the trade must be at least as restrictive as the CTG-specified emission rate for that source.

SIP limits, which remain enforceable and may make such trades the subject of remedial action after due notice by EPA to the state and source.

In addition to requiring that generic rules or other state provisions assure meaningful notice *to EPA* by the first day of the public comment period on *proposed* generic actions, and immediately upon *final* generic actions, today's policy also requires that state generic rules or other state provisions provide *the general public* adequate notice and opportunity to comment, including opportunity for judicial review sufficient to make comment effective. Existing state generic rules, statutes or regulations will generally satisfy this requirement. However, some jurisdictions, for example, deny judicial review to commenters who do not possess a direct financial stake in individual permits. Such jurisdictions will have to modify their generic rule, or other provisions, to meet this requirement.

B. Bubbles Involving Hazardous or Toxic Air Pollutants

EPA reaffirms and extends its 1982 determination that bubbles in any area must not increase emissions of hazardous or toxic air pollutants. Bubbles cannot be used to meet or avoid National Emission Standards for Hazardous Air Pollutants (NESHAPs) *that have been finally promulgated* under Section 112 of the Act. Where NESHAPs *have been proposed but not promulgated* for emitting sources which are the subject of a bubble application, the proposed NESHAP will generally serve as the baseline for determining creditable bubble reductions, and the trade must produce reductions at least as great as those which the proposed NESHAP would produce, if promulgated. Moreover, no source emitting a pollutant subject to such a proposed NESHAP may exceed emissions allowed under the proposed NESHAP as a result of the trade. Where a bubble involves a pollutant which is *listed* under Section 112, but no NESHAP has yet been proposed for the relevant source category, or a pollutant for which EPA has issued a Notice-of-Intent-to-List, there must be no net increase in actual emissions of the noticed or listed pollutant.[29] In general,

[29] In some limited circumstances additional pollutants may be treated as listed pollutants. See Technical Issues Document, Section I.B.1.d.

all bubbles involving emissions of pollutants described above must use lower-of-actual-or-NESHAPs-allowable emissions baselines, and must take place within a single plant or contiguous plants.[20]

Commenters who addressed this issue divided into two general groups. One group asserted that hazardous/toxic restrictions should extend beyond pollutants currently regulated, proposed to be regulated, or listed under Section 112. These comments generally maintained that restrictions should also apply to all pollutants the Agency is "actively considering" for listing. A second group asserted that neither volatile organic compound (VOC) nor particulate emissions should be traded unless there is clear evidence that specific substances present in such VOC or particulate emissions are "relatively innocuous."

EPA has determined that for reasons of policy and administrative practicality these suggestions, while laudable in intent, should not be adopted. Bubbles are alternative means of compliance which should generally be treated no differently than other compliance strategies, provided basic SIP requirements of consistency with ambient needs, PSD increments, and interim progress are met. EPA's statutory authority to further restrict trades on the basis of hazardous substances which may be present in a particular criteria pollutant stream (e.g., VOCs) and which may be subject to a listing, notice-of-intent-to-list or proposed NESHAP, but are not as yet regulated under § 112, is limited. Generalized attempts to exercise such authority based on the presence of substances on which the Agency has taken no formal action whatever would be still more tenuous. Moreover, the inherent ambiguity of such terms as "actively considering" or "relatively innocuous" militates against such tests. States remain free to adopt further restrictions consistent with local laws and needs. However, with respect to national requirements EPA has concluded that clear decision points based on actions pursuant to the deliberative process and record evidence underlying section 112 determinations are to be preferred.

Interested parties should be aware, however, that under today's policy the Administrator reserves discretion to consider on a case-by-case basis whether bubble proposals involve pollutants which, while not regulated, listed or otherwise noticed under section 112, are regulated as toxic under other federal health-based statutes, and to require further analysis before approving such proposals.

One commenter expressed concern over the 1982 policy's use of the term "reasonably close" to indicate the distance which may be covered by bubbles involving pollutants listed or proposed to be regulated under section 112. EPA agrees this term is ambiguous, and with the exception of bubbles which affirmatively *decrease* such pollutants below the lower-of-actual-or-NESHAPs-allowable baseline, has substituted the more protective and certain requirement that such trades occur within a single plant or contiguous plants. In order to assure that such trades do not produce adverse health or environemental effects, today's notice also requires that they rely only on reductions below current actual or section 112 allowable emissions as of the trading application, whichever is lower, in pollutant streams containing a substance which has been noticed, listed, or proposed to be regulated under section 112.

Several of these provisions—notably the proposed NESHAPs baseline and source-specific proposed-NESHAPs emissions cap, the inclusion of pollutants subject to Notices-of-Intent-to-List, and the general limitation to contiguous plants and lower-of-actuals-or-§ 112-allowables baselines—represent substantial tightenings over the 1982 policy.

C. *Banking Emission Reduction Credits (ERCs)*

EPA-approvable emission reduction banks may allow sources to store ERCs for their own future use or use by others. Today's notice reiterates that states are by no means required to adopt banking procedures, but notes that banks may help states and communities realize important planning and environmental benefits.[21] Banks may encourage firms to create inexpensive extra reductions at earlier, optimal times (e.g., when replacing outworn control equipment or deciding how to meet new requirements) and disclose such information to state agencies. They may help create a central pool of identifiable, readily-available reductions which can ease plant modernizations or expansions, new source siting, or existing-source compliance. Properly-structured banks may reduce incentives for sources to delay, conceal or hoard actual or potential reductions until an immediate use arises. Banks may also produce other, interim environmental benefits, since banked ERCs remain out of the air (although they must be treated for SIP planning purposes as "in the air") until used. In addition, banks can help state agencies manage their permit workloads more efficiently, because portions of new source or existing-source compliance transactions may be pre-permitted or reviewed in advance. Banks may also help states systematically assure that all unused surplus reductions are treated as "in the air" for SIP planning purposes, avoiding potential inconsistencies which might cause those reductions to be lost.

Comments indicated some confusion over whether, in addition to meeting other ERC requirements, reductions must be made federally enforceable to be formally credited for banking. The answer is no. However, in order to qualify as emission reduction credits and be deposited in EPA-approvable banks, emission reductions must be made enforceable *by the state*. Reductions must be made enforceable by the state by their time of deposit in order, e.g., to better ensure the integrity of the state's air quality planning process by preventing sources from banking reductions of emissions which their permits do not preclude them from continuing to emit. This requirement will also prevent undue reliance by parties or potential parties on emission reductions which have not actually occurred.[22] However, because these

[20] The one exception involves bubbles in which surplus reductions in the emissions of pollutants subject to regulation, proposed regulation, listing, or Notice-of-Intent-to-List as hazardous emissions compensate for increases in non-hazardous emissions. (E.g., where a source decreases benzene emissions below the baseline specified above, in exchange for corresponding increases elsewhere in a non-hazardous VOC.) As long as such a trade would not result in an increase in either actual or allowable emissions of a pollutant subject to the special restrictions discussed above at any source, it would not differ in nature of requirements from a trade involving only non-hazardous emissions.

[21] See e.g., 47 FR 15083–84 (April 7, 1982).

[22] In primary nonattainment areas which need but lack approved demonstrations, emission reductions made prior to application to bank or trade (whichever is earlier) will not be credited for use in bubbles (see Section I.A.1.c.(1) of today's Technical Issues Document). Following publication of today's notice, the "date of application to bank" will be the date the source submits an application to the state to make a reduction state-enforceable through or concurrent with use of a formal bank or informal banking mechanism (see section I.A.1.b.(1) of today's Technical Issues Document).

In other areas, although emission reductions cannot qualify as ERCs or be deposited in EPA-approvable banks until they are made enforceable by the state, emission reductions banked through other formal or informal banking mechanisms which do not make reductions state-enforceable by the time of deposit will still be eligible for use in future trades, so long as those reductions are made federally enforceable at time of use and all applicable requirements of the regulatory program under which they will be used are met.

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actions merely create extra reductions in actual or allowable emissions which cannot by themselves produce any adverse effects on air quality, they need not be made *federally* enforceable until used.[33] Where states wish to make banked emission reductions *federally* enforceable at the time they are banked, several mechanisms may be available for doing so without case-by-case SIP revisions. States with EPA-approved PSD, NSR, visibility and preconstruction review programs can issue permits to credit reductions from emission units currently subject to these preconstruction permits.[34] States with EPA-approved generic rules may also be able to use those rules' procedures to make reductions at existing sources federally enforceable. Since only reductions in applicable emission limits are involved at the banking stage, modeling should not be required. Moreover, these reductions should automatically meet the requirement that changes in emission limits under generic rules not jeopardize ambient standards or PSD increments.

Since some trades have special requirements, banks do not guarantee the validity of particular banked ERCs for all potential uses or for all time. For example, because only actual reductions occurring at the same major stationary source are eligible for netting, banked reductions created at other stationary sources cannot be used for netting transactions. However, banked credits resulting from reductions at other stationary sources may be used as offsets or in bubbles, so long as this notice's other requirements for appropriate use of credits are observed and applicable offset requirements are satisfied.

Because of differing regulatory requirements, the amount of credit actually derived from particular emission reductions may also differ from one regulatory program to another. For example, in primary nonattainment areas needing but lacking approved demonstrations, the amount of credit available from a given reduction for bubble purposes may be less than that available from the same reduction for netting or offset purposes, since special progress requirements apply to bubbles in these areas.

Because the *use* of credits will change (rather than merely reduce) emission levels if approved, such proposals should be carefully evaluated to assure they meet all of today's criteria for appropriate use. For similar reasons proposals to *use* banked credits will usually require additional approval procedures (e.g., additional modeling for certain TSP or SO_2 trades), whether such proposals are evaluated as case-by-case SIP revisions, under EPA-approved generic rules, or under EPA-approved new source review programs.

One commenter asked how banked ERCs would be treated if a nonattainment area is being redesignated to attainment. Redesignation will have no effect on the banked ERCs, so long as state planning considered those ERCs to be *in the air* (i.e., in the inventory) at the site of their creation. Because local recessions or shifts in industrial patterns can temporarily affect air quality without regard to the adequacy of state emission-control efforts, EPA guidance requires that redesignation not be based solely on monitored air quality. In addition to considering factors such as the state of the particular economy and its effect on emissions, EPA may consider the number, type, and state inventory treatment of banked credits. Such procedures will help assure that reliably banked reductions are not reduced or otherwise adversely affected by shifts in an area's designated attainment status.

Some commenters asserted it is overly cautious to require that *all* banked emissions be considered as "in the air." One commenter asked that state planning be required to include as "in the air" only a *portion* of banked emissions analogous to a "reserve requirement." This comment drew parallels with financial banking to assume that, given withdrawals and deposits, a certain "float" quantity of ERCs would always remain in the bank and out of the air. EPA recognizes that reductions placed in banks may tend to keep the air cleaner through a relatively constant level of deposits. However, EPA cannot allow states to consider less than their full amount of banked deposits as "in the air." To do so could jeopardize air quality planning and attainment.[35]

D. OBERS Projections and Double-Counting

In its August 1983 notice EPA asked for further comment on whether some SIPs' translation of general economic growth projections provided by OBERS (Department of Commerce) directly into projected emissions growth, left "no straightforward way to disaggregate the projections into shutdowns and new plant openings." Whether such SIP demonstrations were fully or only partly approved, the notice continued, such use of OBERS might make it impossible to distinguish which shutdowns were already relied on in the demonstration. Therefore, it might be "difficult or impossible for states whose SIPs rest on OBERS projections to grant credit from shutdowns for use in existing source bubble trades, consistent with the Clean Air Act." 48 FR 39581.

Most industry and several state commenters asserted that where OBERS data were used to project needed SIP reductions, use of shutdown credits in bubbles was not a problem, since OBERS figures substantially overestimate the total amount of emission reduction needed to attain. For example, one industry commenter noted that "emissions growth will not be directly proportional to economic growth because of the installation of new environmentally efficient technologies. Therefore, SIPs which used "OBERS" projections already have

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Since states may have to revise their regulations or permit procedures in order to implement this new state-enforceability requirement, full implementation will not be expected until one year after publication of today's notice. However, all credits not made enforceable when banked during this interim period, together with all credits deposited prior to today's notice, should be made state-enforceable within eighteen months from the date of this policy.

[33] Cf. 47 FR 15076, 15081 at col. 2.

[34] Some jurisdictions may also use general state preconstruction review programs that have received EPA approval to credit reductions at existing sources if such reductions are covered under the program, since requirements under these programs are federally enforceable.

[35] In order not to defeat banking's purpose of encouraging the earliest possible disclosure and production of potential extra emission reductions, use of banked credits for bubble purposes *in primary nonattainment areas which lack approved demonstrations* will continue to be allowed, provided these credits meet all baseline and other applicable requirements of today's notice for these areas. This generally includes the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline, applied as of the date of written application to the state to bank such reductions through a formal bank or informal banking mechanism for use in future trades. It also includes that 20% net reduction requirement and state assurances specified above, at the time such credits are approved for use in bubbles. Banked credits resulting from *plant shutdown or production curtailments* may be used for bubbles in these areas on the same terms as use of other banked credits, provided their use is subject to stringent qualitative review to assure legal, technical and programmatic consistency with SIP planning goals (e.g., avoidance of "shifting demand"). See today's Policy at n. 24 and Section I.A.1.c(3) of the Technical Issues Document. (Banked credits resulting from certain shutdowns or production curtailments may, however, be subject to special restrictions for offset purposes. See today's Technical Issues Document at n. 14).

The special restrictions discussed above do not apply under today's notice to use of banked credit for bubble purposes in other areas.

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an inherent growth potential built into them, and allowing ERCs for shutdowns in these areas will not jeopardize a state's ability to demonstrate attainment." A local agency agreed that "demonstrations . . . based on such emission projections would overestimate attainment because some growth will occur from [wholly] new sources, new sources replacing existing sources, or modified existing sources, [all of] which would be subject to . . . New Source Review rules, rather than the less stringent [SIP] requirements assumed in the emission projections."

Several state commenters also stressed that while use of OBERS projections is not widespread, the underlying question is whether the area's SIP process incorporates conditions sufficient to prevent double-counting of shutdown credits. One local agency recommended that shutdown credits be prohibited where the source involved is within an industrial category projected to go through an economic downturn, asserting that in such cases the SIP implicitly relies on the expected shutdowns. An environmental group went a step further, and urged that all shutdown credits for bubbles in areas where OBERS projections be completely pronibited.

EPA has concluded that the requirements of the 1982 policy are sufficient to prevent double-counting of shutdown credits, and should be retained without further special restrictions. First, use of OBERS or any other projection is relevant only where an area has an approved attainment demonstration. Today's notice generally disallows bubble credit for pre-application reductions (including reductions from shutdowns or curtailments) in primary nonattainment areas which require but lack such demonstrations. Thus today's notice largely moots any issue of double-counting for past shutdowns, in the areas for which this issue has been raised with the greatest concern. Second, use of OBERS projections in areas with approved demonstrations does not appear nearly so common as was assumed in EPA's 1983 request for further comment. Even where such projections were used in approved demonstrations, they generally overestimate the amount of emissions forecast to exist in the year of projected attainment. They therefore tend to produce substantially less overall reductions from source turnover than will actually occur.[36]

Finally, even if such projections did not overestimate emissions, under today's notice the state must show that use in bubbles of any reductions created by shutdowns is consistent with its attainment demonstration and that those reductions were not already assumed in its SIP. For example, the state must show that it did not implicitly or explicitly rely on a "turnover rate" from the difference in emissions between existing sources and better-controlled new sources for part of the reductions required in its SIP from that industrial category. Alternatively, it must show that if a "turnover rate" was assumed, the shutdown credits used in an individual trade result from reductions in excess of that turnover rate. Where a state regulated the sources in a standard industrial classification (SIC) without explicitly relying on turnovers, then bubble credit for a shutdown within that SCI category would not in general be double-counted.[37]

These requirements should fully protect states and sources against adverse environmental or SIP effects.

E. Improved Modeling and de Minimis Requirements

Bubble applicants must show that their proposed trades are at least equivalent in ambient effect to the SIP (or other) emission limits the bubble would replace. For some criteria pollutants (e.g., VOC or NO_x) this test may generally be met by showing equal reductions in emissions.[38] For other pollutants (e.g., SO_2, TSP or CO) it was traditionally met, prior to the 1982 policy, through ambient dispersion modeling.

The 1982 policy made available several alternatives to the use of full-scale dispersion modeling where such modeling was not needed to protect air quality. These alternatives could, in appropriate, carefully-limited circumstances, be used to demonstrate ambient equivalence for bubbles involving particulate matter or other pollutants whose ambient effects were not linearly related to emissions. They included *de minimis* levels and the use of other screening criteria to identify circumstances in which full-scale modeling was unnecessary, either for bubbles processed as SIP revisions or those approved under generic rules.

Today's notice both tightens some of these screening criteria and expands the circumstances in which such criteria can be used.

Today's notice also specifies certain conditions and types of case-by-case SIP-revision bubbles for which EPA Regional Offices may require additional technical support, beyond basic modeling requirements, deemed necessary to protect NAAQS, PSD increments or visibility where allowable values used to calculate baseline emissions are not clearly used or reflected in an approved demonstration, or may not reasonably be assumed consistent with the need to protect PSD increments or visibility. See Technical Issues Document, Section I.A.1.a.

1. De Minimis Levels

Under the 1982 policy, trades in which net baseline emissions did not increase and in which the sum of emission increases, looking only at the increasing sources, totaled less than 100 tons per year (TPY) after applicable control requirements, could be exempted from SIP revisions under an approved generic rule. The rationale for this approach was that EPA regulations implementing the Clean Air Act already allow some exemptions from NSR requirements for new sources which are not defined as "major"—i.e., which do not have potential emissions greater than 100 TPY. See e.g., CAA section 302(j) and 40 CFR 52.21(b)(1) and 51.18(j)(1)(v). Thus trades which merely shift lesser amounts of emissions, and which are

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[36] This is so because OBERS-based SIP projections assume that units of production (and hence emissions) in particular SIC Codes will keep pace with projected trends in earnings and/or employment in those SIC codes, without regard to changing distributions between new and existing sources. See, e.g., *1980 OBERS: BEA Regional Projections. Volume 1: Methodology, Concepts and State Data.* p. (xi). U.S. Department of Commerce (July 1981).

[37] Such credits must of course meet all other requirements of today's notice, including application of appropriate baselines and other criteria defining surplus reductions, before they may be used in a bubble trade.

States which expressly relied on OBERS projections may also show that no double-counting occurred by demonstrating that they did not implicitly rely on any turnover credits. This showing should not be difficult to make because OBERS assume that emissions will evenly increase at each plant and production line, proportionate to growth in earnings and employment potential for that SIC code. Cf. n. 36 above. This assumption neither anticipates nor relies on the fact that any shutdown will occur.

The one exception to these general principles could occur where a SIP relied on OBERS projections for an SIC category predicted to undergo a *quantified* future economic downturn, without taking explicit affirmative steps to preclude reliance on that downturn. In these circumstances the state would either have to show that a proposed shutdown credit from a source within that SIC category was not double-counted (e.g., by showing that more shutdown reductions than projected for the SIC category had already occurred), or deny credit.

[38] Interested parties should, however, be aware that ambient equivalence considerations which apply to SO_2, TSP and CO, as described below, also apply to NO_x trades involving visibility impacts from elevated plumes. See Section I.B.1.b. of today's Technical Issues document.

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...panied by compensating ...es, should not be subject to more ...ingent requirements. As the 1982 ...tice put it, "Such trades will have at ...st a *de minimis* impact on local air ...ality because only minor quantities of ...issions are involved . . . the Federal ...ources required to evaluate these ...des could best be used to evaluate ...tions that have a potential impact on ... quality." 47 FR at 15085.[39]

...One commenter asserted that this 100 ...Y limitation was unnecessary, since ... trades to which it applied were ...eady required to produce no net ...rease in emissions. However, four ...te and environmental commenters ...ed that *de minimis* levels for such ...des be the same as those triggering ...lerally-mandated review of emissions ...reases in PSD areas. These comments ...marily noted that EPA had already ...ined more relevant "cutoff" levels in ... regulations for PSD, for NSR ... construction permits in ...nattainment areas, and in visibility ...mit regulations, and that emission ...fts of 100 TPY from one source to ...ther might still be too large to go ...examined for certain types of ...ions and situations.

...er to ensure prosecution of ...b... air quality, today's notice ...pts more protective *de minimis* ...els—derived from those for PSD; NSR ...mits in nonattainment areas; and the ...bility permit regulations—of 100 TPY ... CO, 40 TPY for SO_2, 25 TPY for ...ticulate matter, and 0.6 TPY for lead. ...ause of this action, state ambient ...luation of *de minimis* trades will no ...ger be required for generic bubble ...s to be approvable by EPA.[40] Trades ...olving sources of substantial size ... still be implemented as *de minimis* ...er today's provisions, as long as the ...lity of ERCs traded by these sources ...elow the levels specified above.

...lodeling Requirements[41]

...umerous comments were received ...he 1982 policy's three-level approach to demonstrating ambient equivalence. The vast majority sought added clarification, stating, for example, that the 1982 policy did "not adequately delineate the level of modeling necessary in each instance." Today's notice tightens and clarifies the conditions under which ambient equivalence may be demonstrated with less than full-scale modeling.

a. Level I Criteria. Under the 1982 document no modeling was generally required of SO_2, TSP, or similar trades where applicable net baseline emissions did not increase, sources were located in the same immediate vicinity (generally within 250 meters of each other), and the taller stack was the one which increased its emissions. These conditions were believed sufficient to assure that local ambient concentrations of the relevant criteria pollutants would not increase as a result of the trade.

EPA has added two criteria to those specified in 1982, in order to provide additional assurance that trades approved under Level I will have no adverse ambient effect. First, there must be no complex (e.g., mountainous) terrain within 50 kilometers of the trading sources or within the trade's area of significant impact, whichever is less. (For simplified methods of determining "area of significant impact," see today's Technical Issues Document, Appendix E). Second, stacks with increasing baseline emissions must be sufficiently tall to avoid downwash.

Some industry commenters objected to the 250-meter limitation, advocating use of either trade ratios for sources beyond that distance, or an 800-meter limit extrapolated from unrelated EPA regulations.[42] EPA has retained the 250-meter limit as substantially more consistent with the modeling screen's original intent of simplifying modeling requirements for trades which could not jeopardize ambient equivalence.[43]

b. Level II Criteria. Trades of SO_2, TSP, CO, Pb and NO_x (for visibility purposes) may also be approved through limited Level II modeling of the ambient effects *solely of sources involved in the trade*, where applicable net baseline emissions do not increase and designated ambient significance levels are not exceeded.

Today's notice confirms, clarifies, and in certain cases extends various 1983 improvements made to increase certainty and better assure that such Level II trades result in ambient equivalence. In particular, "significant ambient impact" may no longer be measured solely by changes at the "receptor of maximum predicted impact" before and after the trade. Instead such changes must be measured at every affected receptor for every averaging period relevant to the particular pollutant, throughout the year. Under this approach no Level II trades will be approved without further scrutiny, involving full or limited Level III modeling, if they result in a significant net ambient effect at any modeling point for any such averaging period during a modeled year.

Today's notice also specifies Level II significance levels for all averaging periods consistent with all current national ambient air quality standards, not just the 24-hour averaging periods for SO_2 and PM or the 8-hour averaging period for CO.[44] Refined models such as MPTER and ISC must generally be used to measure changes resulting from the trade at each receptor, using the most recent full year of meteorological data.[45]

These modeling requirements assure that bubbles which pass applicable Level II tests and meet all other requirements of today's policy will result in air quality equal to or better

The 1982 document did, however, note that "[generic] trades are still subject to ambient [at the *state* level, and] . . . should ...dingly be evaluated by the state under the ...ling screen . . . or an equivalent approach." ... 15085 at n.9.

This should not be construed to imply that *new* ...es and modifications need not meet all ...cable requirements, including those specified ... 40 CFR 51.18 or parallel EPA-approved state ...

...owing discussion summarizes both ... ...ovements made in the 1982 modeling ... (see Technical Issues Document, Appendix ... EPA's responses to major comments on ...ling issues.

[42] See e.g., 47 FR 5864, 5865 (February 8, 1982).

[43] Trade ratios may already be used under general provisions inviting states to design other equivalent approaches which adequately address ambient concerns. See., e.g., 47 FR at 15077 and n.2, 15078. However, to be approved by EPA such ratios would generally have to be defined through area-wide advance modeling of all sources, as well as those likely to trade.

Several comments also objected to the requirement that Level I trades not increase emissions from the source with the lower effective plume height. These comments noted that under various conditions similar stacks could so vary in effective plume height that neither would consistently be "higher" or "lower." One also suggested this limitation might encourage use of tall stacks to cure local exceedances.

Today's notice retains this Level I requirement unchanged. That two sources may be virtually indistinguishable in effective stack height should not delay approval of Level I trades, since the limitation's purpose—preventing potentially significant increases in ground-level ambient concentrations due to shifts of emissions from "higher" to "lower" stacks—will still be satisfied. Moreover, since such trades cannot increase net baseline emissions, this limitation merely ensures they will not create *new* ambient violations. Because other EPA regulations address the use of excessively tall stacks to cure *existing* ambient violations, no further restriction in this Level I requirement appears required.

[44] For further discussion of these significance levels and the increased assurance of environmental equivalence they provide in conjunction with today's more sophisticated Level II modeling approach, see Fleckenstein, "Modeling Criteria; The Key to Major Reforms for Emissions Trades," APCA Paper 84-65.2 (San Francisco, California, June 28, 1984).

[45] Under some limited conditions, conservative screening models may be substituted for these refined models, and in these cases a full year of meteorological data may not be necessary. See Technical Issues Document, Section I.B.1.b.(3).

than that produced by pre-trade emission limits, and may be approved. Because refined models have now been approved by EPA and their parameters may be specified with greater certainty and confidence, these requirements also provide a firmer basis for approving state generic rules incorporating Level II.[46]

c. *Level III Criteria.* Trades which are not *de minimis* and do not satisfy Level I or Level II above must generally be evaluated by full-scale ambient dispersion modeling. Two air pollution control agencies recommended fixed trading ratios in lieu of such modeling, asserting this would reduce cost and uncertainty while continuing to meet the goals of the Clean Air Act. EPA recognizes the legitimacy of these concerns but has concluded that trades which do not satisfy Level I or II raise the kinds of air quality issues which appropriately require full-scale modeling, unless such trading ratios have been justified by similar area-wide modeling conducted in advance of the trade.

Today's notice does, however, modify Level III to provide states and sources more flexibility in this regard. Where a trade meets all other criteria of Level II, but Level II modeling has shown significant potential increases at particular receptors, modeling analyses under Level III may under appropriate circumstances be limited to a receptor area smaller than the trade's entire area of impact, so long as it includes emissions from all sources which contribute to ambient concentrations in that limited geographic area. Because of the unique nature of each situation, the appropriate limited geographic area must be determined in accord with EPA guidelines on modeling and case-by-case evaluation. This "limited Level III" approach may conserve significant resources, while allowing states and sources to focus on specific geographic areas of concern.[47]

F. Enforcement Issues

Several commenters noted that while sources should, as provided in the 1982 policy, be allowed to use bubbles to come into compliance, bubble applications might also be used to delay compliance or enforcement without compensating environmental benefits. Some of these commenters alluded to language in the 1982 notice which, while not authorizing or intended to authorize such results, could have been interpreted to allow them. Such unacceptable delay might, for example, arise where a source facing an imminent compliance deadline suddenly advances a bubble application and asserts that more time is needed to develop and evaluate that application before compliance with original SIP limits should be required.

Both bubbles and generic rules can be important means of allowing environmentally-sound compliance. Generic rules may be more expeditious than case-by-case SIP revision bubbles. They may also preserve the very opportunity to bubble when the time needed to process a case-by-case SIP revision might extend beyond the source's original SIP compliance date. At the same time, bubble applications should not become a shield against enforcement actions for sources which have failed to take necessary steps to meet required control obligations on time. Bubbles are simply alternative means of complying at less cost. They should be treated neither more nor less stringently than other, more traditional methods of compliance. Bubbles offer innovative ways to meet emission reduction obligations. They should not become devices to avoid such obligations.

Today's notice substantially clarifies and tightens the 1982 policy to better implement these principles. Among other steps, compliance extensions will no longer be granted under generic rules in any nonattainment area, and may be granted generically in attainment areas only where EPA has approved the time-extension portion of the rule as consistent with relevant Clean Air Act requirements, including expeditious attainment and maintenance of ambient standards. Cf. 47 FR at 15078 col. 2. This will generally mean that requests for time extensions as part of bubble applications must be separately reviewed as individual SIP revisions, subject to criteria EPA normally applies to such requests.

Today's notice also re-emphasizes that as a matter of law and sound policy, sources seeking bubbles remain subject to enforcement of existing (pre-trade) SIP limits until the bubble is finally approved. Sources which possess approved bubbles with future effective dates remain subject to similar enforcement of pre-trade limits until either those limits or the new ones are met, and may wish to take steps identified in the notice, including accelerated compliance with bubble limits, to minimize that possibility. See Technical Issues Document, section I.B.2.a.

Under today's notice, EPA will not specifically select such sources for enforcement action. Nor will EPA withhold or defer enforcement simply because a source is seeking alternative emission limits through a bubble. In exercising its inherent enforcement discretion, EPA will apply the same considerations to noncompliant sources which seek to comply through bubbles, as to those which do not.[48]

Emissions Trading Policy Statement

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[46] Interested parties should, however, be aware that because of replicability concerns related to application of any approach requiring use of case-specific ambient dispersion modeling, such Level II generic rules may be more difficult to draft and implement than rules incorporating only *de minimis* and Level I approaches for SO_2, TSP, CO or Pb. During and after issuance of the 1982 interim policy EPA staff drafted and informally circulated, at the request of state and local air agency directors, model generic rules which provided more detail to help interested states acceptably address these concerns. The Agency plans to update and recirculate those model rules as quickly as possible after publication of today's notice. EPA encourages parties wishing to develop generic rules to use these new models and work closely with relevant Regional staff, so that potential problems may be promptly identified and resolved.

[47] Today's notice also requires bubble trades in certain primary nonattainment areas needing but lacking approved demonstrations to produce a "net air quality benefit," which shall consist at minimum of a 20% reduction in emissions remaining after application of the lower-of-actual-SIP-allowable-or-RACT-allowable emissions baselines to all sources involved in the bubble. See, e.g., Section II. B above. This requirement does not entail any modeling different than or in addition to the modeling approaches discussed above. It is merely intended to ensure that where appropriate levels of modeling indicate that prescribed baseline values are not sufficient to produce ambient equivalence, additional reductions which assure such equivalence prior to the 20% net discount in baseline emissions, will be required.

[48] States and sources should, however, be aware that under current EPA guidance, such discretion is most likely to be exercised where a SIP-revision bubble has been formally proposed for approval at the state level and EPA staff have concluded that it appears approvable under current EPA policy. In these circumstances initiation of action to enforce pre-trade limits that would soon be replaced by a valid bubble reconfiguration would likely consume limited EPA enforcement resources to little environmental end.

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EMISSIONS TRADING POLICY STATEMENT

I. Introduction: Basic Elements of Emissions Trading

This statement details EPA policy on emissions trading. It sets out conditions EPA considers necessary for emissions trades to satisfy the Clean Air Act. It also clarifies and otherwise makes final the Interim Policy proposed on April 7, 1982 (47 FR 15076). It is accompanied by a Technical Issues Document which elaborates and provides greater detail on principles set forth below. Finally, it addresses new issues, and incorporates certain additional safeguards as a result of past trading experience, to better assure the environmental integrity of future trades.

A. What is Emissions Trading?

Emissions trading consists of bubbles, netting, emission offsets, and emission reduction banking. These steps involve creation of surplus emission reductions at certain stacks, vents or similar sources of emissions and use of these emission reductions to meet or redefine pollution control requirements applicable to other emission sources. Such emissions trades can provide more flexibility to meet environmental requirements, and may therefore be used to reduce control costs and encourage faster compliance. Moreover, by developing "generic" trading rules (see Section III below) states[1] may be able to expedite bubble approvals by eliminating the need for case-by-case SIP revisions[2] and by providing more predictable approval criteria.

B. The Bubble

EPA's bubble lets *existing* plants (or groups of plants) increase emissions at one or more emission sources in exchange for compensating extra decreases in emissions at other emission sources. Approved bubbles give plant managers the ability to implement less costly ways of meeting air quality requirements. To be approvable, each bubble must produce results which are equivalent to or better than the baseline emission levels in terms of ambient impact and enforceability. Thus, bubbles should jeopardize neither ambient standards nor applicable PSD increments and visibility requirements. Under EPA's bubble, emission reductions from existing sources can not be used to meet technology-based requirements applicable to new or modified stationary sources.

This Policy Statement replaces EPA's original bubble policy (December 11, 1979; 44 FR 71779) and Interim Emissions Trading Policy (47 FR 15076). It tightens general bubble principles as well as requirements for bubbles in primary nonattainment areas which require but lack demonstrations of attainment, and requires bubbles in these areas to produce progress towards attainment, beyond equivalence to stringent emission limits. By specifying EPA's requirements for bubbles in all areas, this Policy Statement should make the development, review and approval of environmentally-sound bubbles more rapid and predictable.

C. Netting

Netting may exempt "modifications" of existing major sources from certain preconstruction permit requirements under New Source Review (NSR), so long as there is no net emissions increase within the major source or any such increase falls below significance levels.[3] By "netting out," the modification is not considered "major and is therefore not subject to associated preconstruction permit requirements for major modifications under 40 CFR 51.18, 51.24, 52.21, 52.24, 52.27, or 52.28. The modification must nevertheless meet applicable new source performance standards (NSPS) national emissions standards for hazardous air pollutants (NESHAPs), preconstruction applicability review requirements under 40 CFR 51.18(a)-(h and (l), and SIP requirements.

Netting's scope is determined by the definition of "source" for review of major modifications. In general, PSD areas use a single, plantwide definitio allowing actual emission reductions anywhere in a contiguous plant to compensate for potential emission increases at individual emitting units within the plant. Nonattainment areas can choose either this single, plantwid definition or a dual definition, so long the definition selected does not interfe with attainment and maintenance of NAAQS and is consistent with progre towards attainment. Under the plantwide definition, significant net actual increases at the plant as a wh will trigger new source review. Und the dual definition, significant increa at either the plant as a whole or individual emitting units will trigger ne source review.

In addition to these federal definitio for major new sources and modifications, state preconstruction permits for major or minor new source and modifications may be required under 40 CFR 51.18(a), and some state preclude netting.

D. Emission Offsets

In *nonattainment* areas, major new stationary sources and major modifications are subject to a presconstruction permit requirement that they secure sufficient surplus emission reductions to more than "offset" their emissions. This requirement is designed to allow industrial growth in nonattainment areas without interfering with attainment and maintenance of ambie air quality standards. It is currently implemented through SIP regulations adopted by states to meet the requirements of 40 CFR 51.18(j).

In *attainment* areas, some new sources and modifications might not otherwise be able to be constructed because their emissions would resul

[1] "States" includes any entity properly delegated authority to administer relevant parts of a State Implementation Plan (SIP) under the Clean Air Act.

[2] "Case-by-case SIP revision" means case-by-case approval by EPA as a SIP revision. This is the traditional mechanism by which bubbles and other SIP changes have been approved by EPA.

[3] See, e.g., 40 CFR 51.18(j)(1)(x), 51.24(b)(23), 52.21(b)(23). See also today's Technical Issues Document, n. 47 and accompanying text.

On November 7, 1986, EPA restructured CFR Part 51 and renumbered many of that Part's sections (51 FR 40856). Because most readers will be more familiar with prior designations, today's notice contains citations based on the organization of Part 51 as it existed before this restructuring. Interested parties may use Appendix F of today's Technical Issues Document to convert today's Part 51 citatio to the corresponding new ones.

an exceedance of the applicable PSD increment or ambient air quality standard, would significantly contribute to a violation of an ambient air quality standard in a designated primary nonattainment area, or would significantly contribute to visibility impairment in a Federal Class I area. These sources may use emissions offsets to allow desired growth while protecting that increment, standard, or visibility.

E. Emission Reduction Banking

Firms may store qualified emission reduction credits (ERCs) in EPA-approvable banks for later use in bubble, offset or netting transactions. Depending on the bank's rules, banked ERCs may also be sold or transferred to other firms which seek to meet certain regulatory requirements by use of emissions trades.

EPA's revised Offset Ruling (40 CFR Part 51, Appendix S) allows states to establish banking rules as part of their SIPs. This Policy Statement and accompanying Technical Issues Document detail the necessary components of a complete state banking rule approvable under the Clean Air Act. While many areas also allow banking of emission reductions for various purposes through various formal or informal banking mechanisms, banks which do not meet today's criteria (e.g., by not making banked emission reductions enforceable by the state by the time the reductions are actually banked, or by not assuring that deposits are taken explicitly into account for SIP planning purposes) cannot qualify emission reductions as ERCs, and may offer substantially less protection in the event of future SIP corrections or changes in ambient attainment status.

F. Generic Trading Rules

Generic rules adopted as part of the SIP can authorize states to approve certain types of individual transactions without the need for case-by-case SIP revisions or associated federal review prior to approval. The first state generic bubble rule was approved by EPA April 6, 1981 (46 FR 20551). For the current scope of permissible rules, see Section III below.

G. Effect of This Policy Statement

Emissions trading is largely voluntary: no source is required to trade, and no state is required by EPA to approve a particular trade or to adopt a generic rule. Trading merely offers states and stationary sources alternative ways to meet regulatory requirements. For example, states are free to adopt generic rules or continue to implement trades as individual SIP revisions. They may adopt rules which incorporate all or any combination of the above trading approaches.[4]

This Policy Statement is accompanied by a Technical Issues Document for use by states and industry in further understanding emissions trading. The Document offers elaboration and important detail on requirements and available options under the Clean Air Act.

This notice reflects the current Clean Air Act and existing EPA regulations. A policy statement cannot legally alter such requirements. However, this notice establishes EPA policy in areas not governed by applicable regulations and sets out general principles which may help states and industry apply those regulations in individual cases. Federal or state rulemaking in response to, e.g., future litigation or changes in ambient standards, attainment status, or SIP validity, may affect states or firms that plan to engage or have engaged in emissions trading activities.

Nothing in today's notice alters EPA new source review requirements or exempts owners or operators of stationary sources from compliance with applicable preconstruction permit regulations in accord with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27, and 52.28. Interested parties should, however, be aware that bubble trades are not subject to preconstruction review or regulations where these trades do not involve construction, reconstruction, or modification of a source.

EPA intends to apply changes made by today's policy prospectively (e.g., not to actions which have already been approved as case-by-case SIP revisions or under generic rules). If, however, ambient violations are discovered in an area where EPA has approved a trade, or if other violations of Clean Air Act requirements are discovered in that area, sources involved in the trade should be aware that they are potentially subject to requirements for additional emission reductions, just as are all other sources in the area.

This policy requires that substantial additional reductions (at least 20%) in emissions remaining beyond applicable baselines be produced by future bubbles in primary nonattainment areas which require but lack approved demonstrations of attainment. However, applications for bubbles in such areas which are still pending at EPA without formal action under the 1982 policy, or which were previously submitted to EPA Regions under the 1982 policy but not accepted for evaluation, will be reexamined and processed for approval if they meet the requirements of the 1982 policy and contribute to progress towards attainment. "Progress towards attainment" means some extra reduction beyond equivalence to a lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline, with this baseline applied as of the time applicants originally sought credit. Pending bubbles in attainment areas and nonattainment areas with approved demonstrations of attainment will be processed for approval if they meet the requirements of the 1982 policy and show that ambient standards, PSD increments and visibility will not be jeopardized.

For further discussion on pending bubbles see Section I.A.1.b.(4) of the Technical Issues Document.[5]

II. Requirements for Creating, Using, or Banking Emission Reduction Credits[6]

A. Creating Emission Reduction Credits

Emission reduction credits (ERC's) are the common currency of all trading activity. ERCs may be created by reductions from either stationary, area, or mobile sources. To assure that emissions trades do not contravene relevant requirements of the Clean Air Act, only reductions which are *surplus, enforceable, permanent,* and *quantifiable* can qualify as ERCs and be banked or used in an emissions trade.

[4] Some requirements *underlying* emissions trading are not voluntary. For example, construction of a major new source or major modification in a nonattainment area requires sufficient existing-source reductions to constitute "reasonable progress toward attainment" despite the new emissions (40 CFR 51.18(j); Part 51, Appendix S). However, where the area has an established "growth margin" of extra reductions in a SIP which is currently approved by EPA, the state may provide the offsets from that growth margin rather than require them from the source, so long as it reduces the margin accordingly. See Clean Air Act section 173(1)(A) and (B).

[5] EPA encourages states or sources which submitted bubbles that were returned without evaluation by EPA to resubmit them under these criteria, provided they can document (a) formal, timely submittal of an application to EPA in accord with normal EPA procedures and (b) that the application was returned without evaluation, rather than rejected for failure to meet the terms of the 1982 policy. Bubble applications which were accepted for evaluation but rejected for failure to meet the 1982 policy will be treated as new applications under today's notice.

[6] Because this Policy Statement and accompanying Technical Issues Document reflect general Clean Air Act principles, states, individual sources, or commenters on specific rulemaking actions are free to show that a general principle does not apply to particular circumstances or could be satisfied using approaches other than those described. States, sources and commenters have this option under current law, and nothing in this Policy Statement or the Technical Issues Document restricts their opportunity to make such showings.

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1. *Surplus.* At minimum, only emission reductions not required by current regulations in the SIP, not already relied on for SIP planning purposes, and not used by the source to meet any other regulatory requirement, can be considered surplus. To determine the quantity of emission reductions that are surplus, the state must first establish an appropriate emissions baseline from which surplus reductions can be calculated. Baseline emissions for any source are the product of three factors—emission rate, capacity utilization, and hours of operation.[7]

In attainment areas, the lower of actual or allowable values must generally be used for each of these baseline factors. However, allowable values for one or more of these factors, when higher than actual values, may be used in calculating the baseline emissions, provided those values are shown to be used or reflected in an approved demonstration.[8] The burden of meeting this test by written evidence rests with the state or applicant which seeks to use an allowable value.

When allowable values for one or more baseline factors are not used or reflected in an approved demonstration, such values may still be used in calculating baseline emissions. However, in such cases applicants must perform appropriate modeling to demonstrate that allowable values which are higher than actual values will not delay or jeopardize attainment and maintenance of ambient standards.[9]

In attainment areas where the PSD baseline has been triggered, credit may be granted consistent with the PSD baseline concentration as specified in 40 CFR 51.24(b)(13) and 52.21(b)(13). This will generally require use of actual values for each of the baseline factors. *However,* states may use allowable values if they show through appropriate modeling [10] that attainment and maintenance of neither the ambient standards nor applicable PSD increments will be jeopardized, and quantify the amount of increment consumed.

In nonattainment areas with approved demonstrations of attainment, the baseline must be consistent with assumptions used to develop the area's demonstration. This generally means that actual values must be used for each baseline factor where actual values were used for such demonstrations, and that higher allowable values for these factors may be used where allowable values were used for such demonstrations.[11] The burden of showing that an allowable value was used or reflected in the approved demonstration rests with the state or applicant which seeks to use an allowable value. In the absence of written evidence to that effect, full Level III modeling would be required to make use of an allowable value in baseline calculations.[12]

In primary nonattainment areas which need but lack approved demonstrations of attainment, states must show that bubbles meet special "progress" requirements designed to produce a net air quality benefit. This must be demonstrated by (1) using the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline for each source involved in the trade; [13] (2) meeting the ambient equivalence tests outlined in sections II.B.2 of this Policy and I.B.1.b. of the Technical Issues Document; and then (3) producing a substantial net reduction in actual emissions (i.e., a reduction of at least 20% in the emissions remaining after application of the baseline specified above). The state must also provide assurances that the bubble is consistent with ambient progress and future air quality planning goals.[14]

2. *Enforceable.* To assure that Clean Air Act requirements are met, each transaction which revises any emission limit upward must be approved by the state and be federally enforceable. Means of making emission limits federally enforceable include SIP revisions (see section IV below), EPA-approved generic bubble rules (see Section III below), and new source preconstruction permits issued by state under EPA-approved SIP regulations pursuant to provisions of 40 CFR 51.18, 51.24, or 51.307, as well as construction permits issued by EPA or delegated states under 52.21.[15] Bubbles should be incorporated in an enforceable compliance instrument which requires recordkeeping based on the averaging period over which the bubble is operating, so it may easily be determined over any single averaging period that bubble limits are being met.

3. *Permanent.* Only permanent reductions in emissions can qualify for credit. Permanence may generally be assured by requiring federally enforceable changes in source permits or applicable state regulations to reflect a reduced level of allowable emissions.

4. *Quantifiable.* Emission reductions must be quantifiable both in terms of *estimating* the amount of the reduction and *characterizing* that reduction for future use. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, process or production inputs, modeling, or other reasonable measurement practices. The same method of calculating emissions should generally be used to quantify emission levels both before and after the reduction.

B. Using Emission Reduction Credits

ERCs may be used by sources in bubble, offset or netting transactions. The general principles below will assure

[7] For further discussion of these factors as they relate to baseline calculations, see Appendix B of the Technical Issues Document.

[8] This statement does not apply to netting, where "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.24(b)(3).

Bubbles in areas with demonstrations based only on qualitative judgments (e.g., the "example region" approach or no technical support) ordinarily may not rely, without appropriate modeling, on allowable values in calculating baseline emissions. However, bubbles in areas with demonstrations based on rollback or dispersion modeling may use allowable values that are reflected in the demonstration. In certain circumstances an allowable baseline value specified in a preconstruction permit may be deemed equivalent to one used or reflected in an approved demonstration. See Technical Issues Document, n. 7.

For further definition of "actual" and "allowable" see today's Technical Issues Document, Section I.A.1.a. and Appendix B.

[9] This demonstration would require a Level II modeling analysis, in accord with the modeling screen discussed below, using actual emissions for the pre-bubble case, unless, for *bubbles processed as case-by-case SIP revisions,* the Region determines that additional technical support is needed to protect applicable standards or increments. For discussion of Level II modeling, see Technical Issues Document, section I.B.1.b.(3). For further discussion of additional technical support which Regions may require in these circumstances, see Technical Issues Document, Section I.A.1.a. For a discussion of parallel modeling requirements for use of such higher allowable values in attainment areas under *generic rules,* see Technical Issues Document, n.31.

[10] See n.9 above.

[11] For netting, "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.18(j)(1)(vi).

[12] For further discussion of Level III modeling, see Technical Issues Document, section I.B.1.b(4).

[13] For purposes of today's notice, the "lowest-of-actual-SIP-allowable-or-RACT-allowable" emissions baseline means the product of (1) the lowest of the actual emission rate, the SIP or other federally enforceable emission limit, or a RACT emission limit, and (2) the lower of actual or allowable capacity utilization and hours of operation. For further discussion of this baseline, see Appendix B of today's Technical Issues Document.

[14] The specific assurances may be found in the Technical Issues Document at I.A.1.b.(3). EPA will not second-guess such state assurances, provided they are: (1) A substantial test applied by the state to each bubble, and (2) the state has explained how the proposed bubble is consistent with the area's projected attainment strategy. This authority has not been delegated with EPA. See Clean Air Act section 301(a)(1), 42 U.S.C. 7601(a)(1).

[15] EPA is also considering generic steps which would make state operating permits federally enforceable. Prior to use, *banked* credits need not be made federally enforceable. See Section II.C. below.

that all uses of ERCs are consistent with ambient attainment and maintenance considerations under the Clean Air Act. They are further articulated in the accompanying Technical Issues Document.

1. *Emissions trades must involve the same criteria pollutant.* An emission reduction may only be traded against an increase in the same criteria pollutant. For example, only reductions of SO_2 can be substituted for increases of SO_2.

2. *All uses of ERCs must satisfy applicable ambient tests.* The Clean Air Act requires that all areas throughout the country attain and maintain national ambient air quality standards and meet applicable ambient requirements relating to PSD increments and Class I protection, including visibility. The ambient effect of a trade depends on the dispersion characteristics of the pollutant involved. With the exception of visibility for NO_x, dispersion considerations will generally not affect trades involving VOC or NO_x, whose impacts occur across broad geographic areas. For these pollutants "pound for pound" trades may be treated as equal in ambient effect where all sources involved in the trade are located in the same control strategy demonstration area, or where the state otherwise shows such sources to be sufficiently close that a "pound for pound" trade can be justified. However, dispersion characteristics are important for bubble and offset trades of SO_2, particulates, CO, or lead, whose ambient impact may vary with where the emission increases and decreases occur. To assure ambient equivalence, such trades of these pollutants must satisfy ambient tests under the modeling screen discussed in the Technical Issues Document or under a similar, equally effective approach.[16]

3. *Bubbles must not increase hazardous pollutants.* Bubbles may not be used to meet applicable requirements of National Emissions Standards for Hazardous Air Pollutants (NESHAPs) promulgated under section 112 of the Clean Air Act, to increase emissions at any source beyond the levels applicable NESHAPs prescribe, or to create any net increase in baseline emissions of a pollutant regulated under section 112. The applicable baseline for regulated sources is the lower of actual or NESHAPs-allowable emissions of the hazardous pollutant.

Where a NESHAP has been *proposed* but not yet promulgated for a source category which emits a pollutant listed under section 112, the proposal will serve as an interim guideline for evaluating the effects of any proposed emissions trade involving a source that would be subject to the proposed standard. In general, such trades will be approvable with respect to the emissions component of the trade subject to the proposal, so long as they result in emission limits at each source emitting the relevant pollutant which are equivalent to or lower than those the proposed NESHAP would have required if already promulgated.[17]

Where a pollutant has been *listed* under section 112 or where EPA has published a Notice-of-Intent-to-List, but no regulations for the source category involved in the trade have yet been proposed or promulgated, the trade will generally be acceptable with respect to the emissions component of the trade subject to notice or listing, if there is no net increase in actual emissions of that pollutant as a result of the trade.[18]

Any trade involving sources or source categories subject to the preceding subparagraphs must take place within a single plant or contiguous plants, and must credit only reductions below current actual or NESHAPs—allowable emissions, whichever is lower. But cf. generally n. 6 above and today's Technical Issues Document, section I.B.1.d.

Trades which do not meet the special restrictions discussed in this section may also be approved where surplus reductions in the pollutants addressed above compensate for increases in non-hazardous emissions of the same criteria pollutant (e.g., benzene, a hazardous VOC, is reduced to create credits for an increase in non-hazardous VOC emissions.) As long as such a trade would not result in an increase in either actual or allowable emissions of a pollutant subject to the preceding paragraphs at any source, it would not differ in nature or requirements from a trade involving only nonhazardous VOC emissions.

4. *ERCs from existing sources cannot be used to meet technology-based requirements applicable to new sources.* Under Clean Air Act section 111 and EPA implementing regulations, new affected facilities must satisfy technology-based New Source Performance Standards (NSPS), regardless of the attainment status of the area in which they are located. Under sections 165 and 173 and EPA implementing regulations, new or modified major stationary sources must also satisfy technology-based control obligations associated with pre-construction permits. These requirements prohibit use of credits from existing sources to meet or avoid applicable NSPS, and bar use of such credits to meet applicable new source review requirements for best available control technology (BACT) in PSD areas, or lowest achievable emission rate control technology (LAER) in nonattainment areas.[19]

5. *States may approve bubbles in primary nonattainment areas which require but lack approved demonstrations of attainment,* provided such trades meet requirements designed to produce a net air quality benefit and the state provides certain assurances. See section II.A.1. above and the Technical Issues Document, section I.A.1.b. Bubbles which meet these objective requirements will be processed for approval by EPA.

6. *Sources need not be subject to binding compliance schedules based on current SIP requirements* before they can apply for a bubble which would supersede those requirements. Sources that are *already* subject to binding compliance schedules should be aware, however, that such schedules remain fully enforceable until a bubble affecting the schedule has been approved by EPA or under a state generic rule and the

[16] For similar reasons, bubbles of these pollutants must involve sources which are in the same or adjacent control strategy demonstration areas within the same general air basin.

See section II.A.1. above and Technical Issues Document. Section I.A.1.a regarding additional technical support required for certain trades in attainment areas.

While bubbles in primary nonattainment areas which need but lack approved demonstrations of attainment must produce a net air quality benefit, this does not entail additional ambient tests. Such bubbles must first meet the general tests under the modeling screen showing ambient equivalence for bubbles, prior to producing the required additional reductions. They must then produce additional reductions of at least 20% beyond the applicable baseline emissions used to demonstrate ambient equivalence. Since these additional reductions will necessarily reduce ambient concentrations below equivalence at some receptors, while continuing to meet the tests for ambient equivalence at all others, a net air quality benefit should occur and no additional ambient showings, beyond those generally required for all bubbles, are required.

[17] The allowable emission rate for a source subject to a proposed NESHAP is the limit stipulated in the proposal.

[18] Where EPA has issued a "Notice-of-Intent-Not-to-Regulate" one or more source categories for a listed pollutant, emissions of that pollutant from the unregulated source category will nevertheless be treated the same as emissions of any other listed pollutant. Under limited circumstances, similar treatment will be given to pollutants for which a "Notice-of-Intent-Not-to-List" has been published. See the Technical Issues Document, section I.B.1.d.

[19] But cf. sections I.C. and I.D. above.

Today's notice does not address whether or under what circumstances facilities subject to NSPS, BACT or LAER may surpass applicable permit limits reflecting such requirements in order to create credits for existing-source trades.

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schedule has been modified accordingly. Sources subject to compliance schedules in administrative orders or judicial decrees must obtain prior approval from EPA or the relevant court, as appropriate, to be relieved from the schedule contained in the order or decree. Sources that are subject to SIP requirements remain responsible for meeting those requirements unless and until a bubble has become effective under Federal law. See section II.B.12 below.

7. States may extend certain compliance schedules. States may no longer grant compliance extensions under new or revised generic rules in *nonattainment areas*, whether or not such areas have demonstrations.[20] However, states may continue to grant compliance date extensions under generic rules in *attainment areas*, provided EPA has approved the extension provisions of the generic rule as being adequate to comply with the Clean Air Act, including requirements for attainment and maintenance of ambient air quality standards.

States that wish to give sources in nonattainment areas, and sources in attainment areas for which there is no applicable generic SIP provision, more time to implement bubbles by granting compliance extensions, must receive EPA approval of the extensions through case-by-case SIP revisions. Requests for such compliance date extensions, whether in attainment or nonattainment areas, may be submitted to EPA together with bubbles, as part of a single SIP revision package. EPA will separately evaluate the time extension portion of these SIP revision packages in accord with the Agency's normal criteria for review of time extensions, including consistency with the Act's requirements for expeditiousness, reasonable further progress, and attainment and maintenance. Sources should be aware that disapproval of such time extension requests may result in disapproval of the entire package (i.e., both post-trade limits and the time extension) or only part of it, depending on whether the state views these components of the proposed SIP revision as separable.

8. States may approve bubbles involving open dust sources of particulate emissions, based on modeling demonstrations. Open dust trades may be approved through individual SIP revisions based on acceptable modeling and/or monitoring demonstrations, provided sources agree to post-approval monitoring to determine if predicted air quality results have been realized and make an enforceable commitment to achieve necessary additional reductions if predicted results do not materialize.

9. Trade involving lead. Unlike other criteria pollutants, EPA does not designate nonattainment areas for lead. However, the Regional Administrator will review lead trades, as all other trades, to assure that they do not interfere with attainment and maintenance of NAAQS.

10. Trades involving ERCs from mobile source measures. ERCs from mobile source measures may be used to meet SIP requirements applicable to existing stationary sources, so long as such reductions are surplus, permanent, quantifiable, and enforceable. Reductions from certain types of mobile-source measures (e.g., mechanical conversion of existing vehicle fleets to cleaner fuels such as methanol) may satisfy these criteria more readily than those from other transport-related measures. However, due to possible difficulties in determining whether specific mobile-source reductions fully meet these criteria, all such trades must be implemented as case-by-case SIP revisions.

11. Interstate trades. Trades involving sources located in neighboring states may be approved, provided they meet all other requirements of today's notice. However, in order to avoid complex SIP accounting issues, where state trading requirements differ EPA will require that such trades meet the substantive requirements of the more stringent state. In general, EPA will deem ERCs created in one state to contribute to progress in the state where used to the extent of that use, provided that applicable ambient tests (section II.B.2 above) are met. Interstate trades must be implemented through case-by-case SIP revisions.

12. Bubbles must not impede enforcement. In general, bubbles are a form of SIP revision which should be treated neither more nor less stringently than other SIP revisions. Bubbles should not become a shield against enforcement actions for sources which have failed to take necessary steps to meet required control obligations on time.

Sources seeking trades should note that they remain subject to enforcement of existing (pre-trade) SIP limits until the bubble is approved. EPA will use the same principles and procedures for deciding whether to initiate enforcement actions in these circumstances as the Agency applies to any other source which is subject to a proposed or final SIP revision.

Under established EPA policy, regulated sources must be subject to an applicable, enforceable emission limit at all times. Accordingly, sources which have approved bubbles with emission limits effective at a future date, and which are not in compliance with their pre-trade limits prior to that effective date, may be subject to enforcement action, which could include penalties based on a failure to meet the pre-trade limits. Sources in these situations may wish to minimize the chance that capital expenditures may be required to meet pre-trade limits, either by (a) agreeing to post-trade compliance dates which are substantially similar to their pre-trade compliance dates, or (b) accelerating their compliance with post-trade limits.

In accord with the general principle that bubbles should be treated neither more nor less stringently than other SIP actions, implementation of this Policy Statement will be neutral with respect to EPA enforcement of pre-trade emission limits. This means that EPA will not specifically select for enforcement action noncompliant sources seeking to use a bubble either to come into compliance or to restructure traditional compliance. However, it also means that EPA will not withhold or defer enforcement simply because a source is seeking alternative emission limits through a bubble. In exercising its enforcement discretion, EPA will apply the same considerations to noncompliant sources which seek to comply through bubbles as to those which do not.

C. Banking Emission Reduction Credits

Only emission reductions that are surplus, permanent, quantifiable, and enforceable can qualify as ERCs and be deposited in EPA-approvable banks.[21] Such banks offer sources legal recognition that qualifying reductions meet these ERC requirements. However,

[20] Existing generic rules applicable to these areas must be revised to comport with this principle where they contain such generic extension provisions. EPA will publish Federal Register notices identifying any generic rules which require formal modification. Failure to resolve deficiencies identified in such a notice within the prescribed time period may result in EPA rescinding approval of the existing generic rule or issuing a notice of SIP deficiency. EPA expects states to ensure in the interim, so far as feasible, that compliance date extensions under existing generic rules are not granted to sources located in nonattainment areas. See section III below and section II.E.4. of the Technical Issues Document.

[21] Under today's notice emission reductions must be made enforceable *by the state* in order to qualify as ERCs and be deposited in EPA-approvable banks. However, because mere deposit of a reduction cannot result in emissions increases elsewhere, banked reductions need not be made federally enforceable until used.

the fact that an ERC has been banked does not relieve it from the need to meet all criteria of the specific regulatory program under which it is to be used.[22] Because some trades have special limitations (e.g., only reductions occurring at the same major stationary source can be used for netting), banks do not guarantee the validity or specific amount of particular banked ERCs for all potential uses or for all time. To provide maximun protection for the environment and sources and to avoid potential legal problems, state banking rules may specify the types of sources eligible to bank ERCs and any additional conditions placed on certifying, holding or using banked ERCs.

State banking rules may establish ownership rights. However, any such rights must be consistent with Clean Air Act requirements, including the requirement that SIPs provide for expenditious attainment and maintenance of ambient air quality standards and protect PSD increments and visibility. To be approvable by EPA, such banking rules must also treat banked reductions as current actual emissions "in the air" at the source of their creation, in order to protect the integrity of future air quality planning. Failure to track the ambient effects of such banked reductions (e.g. by not including them in a new or updated inventory used for SIP planning purposes, or by relying on those reductions to secure attainment redesignations) would ordinarily preclude their use as ERCs, due to double-counting. Nevertheless, states have considerable latitude in meeting these requirements, and may guarantee banked ERCs against full or partial reduction in quantity, so long as that guarantee does not undermine attainment redesignations or interfere with progress and attainment should ambient standards change or additional emission reductions be required. The Technical Issues Document, section I.C.9, outlines ways such guarantees may be made effective consistent with these requirements.

In many states, banking could be an extension of ongoing preconstruction permit activities. The state or its designee could accept and evaluate requests to certify an ERC, maintain a publicly-available ERC registry or similar instrument describing the quantity and types of banked credits, and track transfers and withdrawals of ERCs.

Because banked reductions do not increase emissions at any source, they need not be made federally enforceable until used. For administrative or other reasons states may, however, choose to make them federally enforceable upon deposit. How the state makes a reduction federally enforceable for banking will depend on the type of source at which the reduction occurs. In some states, reductions associated with other modifications at a source can be included in federally-enforceable preconstruction permits issued under rules approved pursuant to 40 CFR 51.18, 51.24 or 51.307. States with EPA-approved generic rules can use their rules' procedures to make reductions occurring at existing sources federally enforceable. See Section III below. Since these transactions involve only reductions, air quality modeling is generally not required to assure that new emission limits do not interfere with attainment and maintenance of ambient standards, protection of applicable PSD increments, or impairment of visibility in mandatory federal class I areas. Such reductions will automatically meet the generic rule's test of whether a particular limit is within EPA's preapproved array of acceptable emission limits.[23]

States without EPA-approved generic rules can adopt rules limited to banking transactions, or can use the standard SIP revision process to make reductions federally enforceable at existing sources. General state preconstruction permit or review programs that have received EPA approval may also be used for this purpose, since permits issued through such programs are federally enforceable. See 40 CFR 51.18; 51.24; 51.307.[24]

III. State Generic Trading Rules

Use of emission reduction credits under state regulations approved by EPA as generic for identified classes of trades will not require individual SIP revisions for those trades. The Technical Issues Document explains acceptable generic procedures which states may adopt to reduce the need for individual SIP revisions.

Emissions trades can be approved without case-by-case SIP revisions if evaluated by the state under EPA-approved procedures which assure that no trade which meets their terms will interfere with timely attainment and maintenance of ambient standards, protection of applicable PSD increments, or visibility provisions. State generic rules are approvable only if their procedures are sufficiently replicable in operation to meet this test. By approving the generic rule, EPA approves in advance an array of SIP-compatible emission limits, and no further case-by-case Federal review or approval is required for individual trades which meet the terms of the rule.

In order to ensure that generic rules are properly implemented, EPA intends to (a) examine and comment on, together with any other public commenter, the information which must be provided for individual trades proposed by states under a generic rule, (b) conduct reviews of individual bubbles approved under a generic rule, and (c) periodically audit the general implementation of generic rules, as part of its National Air Audit System reviews of state air programs.[25]

Any trade under a generic rule will involve emission increases at some sources and extra emission decreases at others. For trades to be approvable under a generic rule, the sum of these increases and decreases (beyond

[22] States may, however, expand opportunities for banked credits beyond those of current SIP programs (e.g., extend the "contemporaneous" period for netting), by submitting revised regulations addressing the banking and use of such credits, for approval as SIP revisions.

[23] Modeling will be necessary when a banked ERC is later evaluated for use in a trade, to the extent modeling is generally required for that particular type of emissions trade.

[24] In *primary nonattainment areas which need but lack approved demonstrations*, use for bubble purposes of banked credits produced by shutdowns or curtailments will continue to be allowed on the same terms as use of other banked credits, provided their use is subject to stringent qualitative review to assure technical, legal and programmatic consistency with SIP planning goals (e.g., avoidance of doublecounting or "shifting demand"). However, sources which seek to use banked credits from shutdowns or curtailments for bubble purposes after publication of today's notice must show that a written application was submitted to make the shutdown/curtailment state-enforceable through or concurrent with use of a formal bank or informal banking mechanism, prior to the time the shutdown/curtailment occurred. For sources which banked or sought to bank credits from shutdowns or curtailments in these nonattainment areas prior to publication of today's notice, written evidence must be provided showing either that an application to deposit the credits in a formal bank was submitted to the state prior to the time the shutdown/curtailment occurred, or that the state acknowledged, before or at the time the shutdown/curtailment occurred, both the existence of that shutdown/curtailment, and the source's intent to use the resulting credits in a future trade. For additional detail on banking and use of credits resulting from shutdowns or curtailments in these or other areas, see Technical Issues Document, Sections I.A.I.c.(3) and I.C.

[25] See, e.g., National Air Audit System Guidelines for FY 1084, Office of Air Quality Planning and Standards, EPA–450/2–83–007 (November 1983). State-approved generic trades that do not meet the terms of the relevant generic rule do not alter underlying SIP requirements, which remain fully enforceable. Generic rules found to be generally deficient in substance or implementation could ultimately result in notices of SIP deficiency or in rulemaking to rescind EPA's approval of the rule. For more detail on EPA oversight of generic rules, see Technical Issues Document, Section II.E.

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applicable net baseline emissions) must be zero or less. Subject to this requirement, states may adopt generic rules which exempt from individual SIP revisions: (1) *De minimis* trades where total increases in emissions from all increasing sources (which must be balanced by equal or greater emissions decreases from other sources) are less than 25 tons per year (TPY) of particulates, 40 TPY of SO_2, 100 TPY of CO, or 0.6 TPY of lead, after applicable control requirements; (2) large classes of trades involving VOC or NO_x emissions;[26] (3) trades between certain types of SO_2 sources, between certain types of CO sources, between certain types of stationary lead sources, or between certain types of particulate sources, for which it can reasonably be assumed that "pound for pound" trades will produce ambient effects equivalent to those which approved air quality models would predict; and (4) other SO_2, CO, Pb or particulate trades which do not increase baseline emissions and for which carefully defined modeling predicts no significant increase in ambient concentrations.

States and sources should, however, be aware that because of replicability problems inherent in modeling, generic rules which rely on preapproved procedures for modeled demonstrations of ambient equivalence may be difficult to draft or implement, and many trades may not be approvable under such rules. For these reasons generic rules covering only the first three classes of trades above will often prove easiest to secure. EPA encourages states to work closely with EPA Regional Offices to formulate and adopt approvable rules or develop alternative approaches that equally assure attainment and maintenance of ambient standards and protection of PSD increments and visibility. See Section II of the Technical Issues Document, which details criteria under which such generic rules may be approved.

To the extent general state procedures for rulemaking or permit changes do not assure reasonable public notice of proposed and final limits or effective opportunity for comment on proposed trades, states must incorporate such provisions in their generic rules.

In primary nonattainment areas which need but lack approved demonstrations, new generic rules must require, and existing generic rules must, as requested by EPA, be revised to

[26] Where visibility impairment due to elevated NO_x emissions is a concern, generic trades involving NO_x must ordinarily be subject to ambient requirements similar to those applicable to generic trades involving TSP, SO_2, CO or Pb.

[27] In the interim, EPA expects states to ensure, so far as feasible, that future bubbles approved under existing generic rules are consistent with this policy as well as the terms of their EPA-approved rules. States should be aware that without this or similar precautions, continued approval of bubbles under existing generic rules containing identified deficiencies may create or accentuate plan deficiencies that may have to be corrected at a later date or compensated for by other means. See section II.E.4. of the Technical Issues Document.

[28] Such notices may also be issued for existing generic rules in attainment areas and nonattainment areas with approved demonstrations, if these generic rules are found to require procedural revision in order to make them consistent with the current Emissions Trading Policy. See Technical Issues Document, section II.E.4.

EPA recognizes the additional timing burden which may be imposed on bubble applicants in areas where new generic rules cannot be or have not been developed to meet the specific air quality benefit requirements described above, and will attempt, so far as feasible, to ameliorate that burden in implementing this policy. See, e.g., n.8 and section II–B–12. above and related Preamble discussion, at n.48 and accompanying text.

IV. Bubbles Which Require Case-By-Case SIP Revisions

States and sources must use the case-by-case SIP revision process to implement bubbles which are not covered by a generic rule. Because the case-by-case SIP revision process can take account of many more individual variations, numerous trades which could not be accomplished through generic rules or similar means may still be approvable as case-by-case SIP revisions.

EPA will take action on generic rules and individual trades submitted as SIP revisions as quickly as circumstances permit after a state has adopted a SIP revision and submitted the action to EPA. EPA encourages "parallel processing" of such SIP revisions, with EPA and the state conducting concurrent review so that both agencies can propose and take final action at roughly the same time. EPA will also publish noncontroversial SIP revisions as immediate final actions, converting them to proposals only if requests to submit adverse comments are received within 30 days (see 46 FR 44477, September 4, 1981). In all bubble actions EPA will clearly identify (or require states to identify, as appropriate) both pre- and post-trade actual and allowable emissions for each source involved in the trade, so that the ambient effects of each bubble may be known.

V. Conclusion

This Policy Statement sets out basic principles for approving individual trades and generic trading rules. It tightens many requirements in order to better ensure SIP integrity and environmental progress, while offering ample opportunities for use of approvable, environmentally-sound trades. EPA encourages states and sources to use these principles as a framework and refer to the accompanying Technical Issues Document for further discussion and examples. EPA also encourages states to develop other approaches which satisfy these principles while meeting their specific needs.

As a policy statement, this notice does not establish conclusively how EPA will resolve issues in individual cases. EPA will accept public comment on specific SIP changes submitted under it, and will review individually each generic rule and those emissions trades submitted as SIP revisions to determine their acceptability under the Clean Air Act. Interested parties will have full opportunity to scrutinize application of these principles in specific cases, and to seek subsequent judicial review of such cases after EPA has taken final action on particular trades or generic rules.

Dated: November 18, 1986.

Lee M. Thomas,

Administrator.

Emissions, Trading: Technical Issues Document

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EMISSIONS TRADING: TECHNICAL ISSUES DOCUMENT

This Document offers more detail on technical issues for firms and pollution control agencies seeking to implement individual emissions trades or generic trading rules that meet the principles in EPA's final Emissions Trading Policy Statement. It describes both the legal requirements for emissions trades under the Clean Air Act, and a range of legal options which states [1] and sources may consider. States and firms may pursue other approaches consistent with those discussed here.

Section I of this Document explains general principles governing all emissions trading. Section II explains principles governing state generic rules. Section III discusses special considerations for emissions trades which must be implemented as case-by-case SIP revisions.

Because these sections reflect general Clean Air Act principles, states, individual sources or public commenters remain free to show that a general principle does not apply to particular circumstances or can be satisfied using another approach. States, sources and commenters have this option under current law, and nothing in the Policy Statement or this Document restricts their opportunity to make such showings.

Nothing in today's notice alters EPA new source review requirements or exempts owners or operators of stationary sources from compliance with applicable preconstruction permit regulations in accordance with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27, and 52.28. Interested parties should, however, be aware that bubble trades are not subject to preconstruction review or regulations where these trades do not involve construction, reconstruction or modification of a source within the meaning of those terms in the regulations listed above.

[1] "States" includes any entity properly delegated authority to administer relevant parts of a State Implementation Plan (SIP) under the Clean Air Act.

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I. Elements Of Emissions Trading

The basic elements of any emissions trade are the *creation* of an emission reduction credit (ERC), its *use* in a trade and its possible *storage* in a bank prior to use.

A. Creating Emission Reduction Credits

States may grant credit only for those emission reductions that are surplus, enforceable, permanent, and quantifiable. Otherwise use of ERCs might degrade air quality, threaten the viability of the area's SIP, and make more stringent control requirements necessary.

1. All Reductions Must Be Surplus

At minimum, only emission reductions not required by current regulations in the SIP, not already relied on for SIP planning purposes, and not used by the source to meet any other regulatory requirement can be considered surplus and substituted for required reductions as part of an emissions trade.

The first step in qualifying a reduction as "surplus" is to establish a level of baseline emissions. This baseline represents the level of required emissions beyond which reductions must occur for a source to be eligible for credit. Three baseline factors—emission rate, capacity utilization, and hours of operation—must be used to compute and compare pre-trade and post-trade emission levels.[2]

The baseline for each source must be established both on an annual basis and for all other averaging periods consistent with the relevant NAAQS and PSD increments. This approach is necessary to protect the ambient standards and PSD increments on a short term as well as an annual basis. The baseline will generally be determined by the attainment status of the area,[3] by the way the state developed its SIP, and by whether the area is subject to PSD requirements.

a. Use of Actual or Allowable Emissions as the Baseline: Attainment Areas and Nonattainment Areas With Approved Demonstrations of Attainment (including rural ozone nonattainment areas). In attainment areas, baseline emissions must generally be calculated using the lower of actual or allowable values [4] for all three baseline factors. However, allowable values corresponding to one or more of these factors, when higher than corresponding actual values, may be used in calculating baseline emissions, provided those values are shown to be used or reflected in an approved demonstration.[5] The burden of meeting this test rests with the state or applicant. Where the State or applicant cannot show by written evidence [6] that the demonstration assumed an allowable value for a given baseline factor, appropriate modeling would be required in order to use an allowable value for that factor in calculating baseline emissions for the source.[7] This will require a Level II modeling analysis as specified in the modeling screen described below, using actual emissions for the pre-trade case, unless the appropriate EPA Regional Office ("the Region") determines that additional technical support is necessary to protect the NAAQS, PSD increments or visibility. Additional technical support may be necessary because crediting the difference between actual and allowable values for even one of these factors may produce a post-trade increase in actual emissions sufficient to jeopardize applicable standards, increments or visibility.

Additional technical support is not necessarily limited to determining the impact of the increases from the trade. The Region may require such additional technical support, up to and including full Level III modeling, as is necessary to assure that applicable NAAQS, PSD increments and visibility requirements will be protected. It may require the determination of background concentrations to which the impacts of possible emissions increases that would otherwise fall below Level II significance values must be added. Background concentrations should be determined in a manner consistent with EPA's *Guidelines on Air Quality Models*.

In attainment areas where the PSD baseline has been triggered, the trading baseline for a source must generally be computed using actual values for all three baseline factors (i.e., only reductions below a source's actual emissions can be considered surplus). Because 40 CFR 51.24 and 52.21 specify that increses in actual emissions occurring after the PSD baseline date consume PSD increment, any trades based on allowable emissions which would potentially increase actual emissions must perform at least a Level II modeling analysis using actual emissions for the pre-trade case, and provide additional technical support if deemed necessary by the Region, to demonstrate that they protect the relevant increment ceiling, NAAQS, and visibility.

In nonattainment areas with approved demonstrations, baseline emissions for a source may be calculated using either allowable values or actual values for the three baseline factors, depending on the assumptions used in developing the area's demonstration.[8]

Some states relied on allowable values for certain sources in developing their SO_2 and TSP attainment plans. In these nonattainment areas, sources may use allowable values in calculating baseline emissions, to the extent the state used or assumed those allowable values as the basis for its demonstration. The burden of showing that an allowable value was used or reflected in an approved demonstration rests with the state or applicant which seeks to use an allowable value.[9]

Other nonattainment areas either used inventories based on actual emissions, or relied on measured (and therefore "actual") ambient air quality values, as the primary basis for determining SIP emission limits needed

[4] For the definition of "actual" and "allowable" values, and further discussion on calculation of baseline emissions, see Appendix B.

[5] This statement does not apply to netting, where "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.24(b)(3).

Bubbles in areas with demonstrations based solely on qualitative judgements (e.g., the "example region" approach or no technical support) ordinarily may not rely, without appropriate modeling, on allowable values in calculating baseline emissions. However, bubbles in areas with demonstrations based on rollbacks or dispersion modeling may use allowable values that are reflected in the demonstration.

[6] For example, the demonstration calculations themselves, accompanying materials, or affidavits from those who constructed the demonstration.

[7] In certain circumstances an allowable baseline value specified in a preconstruction permit will be deemed equivalent to one used or reflected in an approved demonstration. For example, a source in an *attainment* area where a PSD baseline has been triggered may use allowable values consistent with its preconstruction permit, if that source's emissions are not reflected in the PSD ambient baseline concentration. (However, if modeling using allowable emissions predicts a PSD increment violation, then additional analyses must be done to assure that the PSD increment is protected.) A source in a *nonattainment* area may use allowable values consistent with its preconstruction permit to calculate its baseline, provided that permit post-dates the nonattainment designation, SIP call, design year, or baseline inventory year, whichever is applicable.

[8] This statement does not apply to netting, where "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.18(j)(1)(vi). See also Appendix B for detailed discussion of "actual" and "allowable" emissions.

[9] See n. 6 and 7 above.

to demonstrate attainment. In some areas, SIP demonstrations were based merely on qualitative judgments (e.g., "example region" approaches). Baseline emissions for sources in all these other areas must generally be calculated using the lower of actual or allowable values for each baseline factor. However, states may approve, on a case-by-case basis, use of allowable values in calculating baseline emissions, where they explicitly demonstrate that such use comports with reasonable further progress and will neither create a new ambient violation nor delay the planned removal of an existing violation. Such demonstrations require full Level III modeling and must be submitted to EPA as case-by-case SIP revisions.

EPA deems designated *Rural Ozone Nonattainment Areas* to possess acceptable demonstrations of attainment provided they have an approved new source review rule and require RACT controls for all major VOC sources for which EPA has issued Control Technique Guidance (CTG) documents. (See, e.g., 43 FR 21673 (May 19, 1978)). Because these areas' nonattainment is generally caused by emissions from sources in a nearby urban area, control of emissions from that area is expected to bring the rural area into attainment. Put differently, EPA does not require rural areas to cure problems due to transport from pollution-generating areas which rural areas cannot control. However, EPA believes that further clarifications are required for bubbles in these areas.

Sources involved in such bubbles must use RACT emission limits in calculating baseline emissions, if subject to Group I or II CTGs under the EPA approved SIP for these areas. Sources subject to other SIP emission limits must use those limits in calculating baseline emissions. Other baseline factors must also be consistent with the applicable SIP requirements, and will generally be actual historical values. Where a source is not regulated by the EPA-approved SIP its baseline will be actual emissions in the year EPA approved the Part D plan for the affected rural area. In those approvals, EPA presumed that controls for sources in the upwind urban areas, as well as RACT on GTC sources in the rural area, would bring about attainment in the rural area, and that non-CTG sources in the area, unless regulated by the SIP, could continue to emit at actual, non-RACT levels without interfering with attainment in those areas. See also 43 FR 21673 (May 19, 1978).

b. Special Progress Requirements for Bubbles In Primary Nonattainment Areas Which Need But Lack Approved Demonstrations of Attainment. EPA will approve bubbles which are consistent with the attainment needs of these areas, which produce a net air quality benefit, and which therefore secure interim progress towards attainment.[10]

(1) *Objective Tests For All Applications.* Bubble applications in primary nonattainment areas which require but lack approved demonstrations of attainment will be deemed to produce a net air quality benefit and will be processed for approval if they:

(a) Use lowest-of-actual-SIP-allowable or RACT-allowable emissions baselines. Such baselines are calculated using either:

(i) The actual emission rate, the SIP or other federally enforceable emission limit, or the applicable RACT emission limit,[11] whichever is lower, to compute the baseline for each source involved in the trade. This baseline factor shall be determined as of the date of the source's application to bank or trade, whichever is earlier.

(ii) The lower of actual or allowable capacity utilization and hours of operation to compute the baseline for each source involved in the trade. Actual values shall generally be based on the two years of operation preceding the application to bank or trade, unless another two year period is shown to be more representative of actual operations. Sources which shut down prior to the application to bank or trade have zero emissions, and therefore no credit is available.

For sources which banked or sought to bank credit in these nonattainment areas prior to publication of today's notice, the "date of application to bank" is the date of written application to the states to bank credit through a formal bank or informal banking mechanism for use in future trades. For sources which seek to bank credit in these areas following publication of today's notice, the date of application to bank will be the date of written application to the state to *make a reduction state-enforceable* through or concurrent with use of a formal bank or informal banking mechanism.

(b) Using baseline emissions defined above, meet applicable *de minimis*, Level I, Level II or Level III modeling tests for ambient equivalence, as appropriate.

(c) Produce a substantial net reduction in actual emissions (i.e., a reduction of at least 20% in the emissions remaining after application of the baselines specified above).

(d) Are accompanied by the assurances of consistency with ambient progress and air quality planning goals specified in section I.A.1.b.(3) below.

(2) *Where These Special Progress Requirements Will Apply.* The following primary nonattainment areas need but lack approved demonstrations, and bubbles within them are therefore subject to the special progress requirements in section I.A.1.b.(1) above:

(a) Areas that are designated primary non-attainment areas under section 107 for the pollutant involved in the trade and which failed to submit a 1979 Part D attainment demonstration or which submitted one that has not yet received full EPA approval. This includes primary total suspended particulate (TSP) nonattainment areas which submitted a SIP that did not include an actual demonstration of attainment but still received EPA approval (i.e., a "RACT plus studies" SIP).

(b) Extension nonattainment areas which failed to submit a 1982 SIP demonstration, or which submitted one that has not yet received EPA approval. Also included are those ozone nonattainment areas that are unable to demonstrate attainment by 1987, unless a demonstration of attainment for the area is subsequently approved by EPA.

(c) Areas that have received either: (1) A section 110(a)(2)(H) notice of deficiency based on failure to attain or maintain the National Ambient Air Quality Standards (NAAQS), in the form of a SIP call or a new section 107 or 171(2) nonattainment designation: or (2) a notice of failure to implement an approved SIP.

(d) Areas which received notice from EPA that they have failed to meet conditions in their EPA-approved SIPs, including commitments to adopt particular regulations by specified dates. The one exception would occur where the only portion of the SIP (including the attainment demonstration) lacking full approval is the inspection/maintenance provision for mobile sources. In these circumstances, stationary-source bubbles will be treated as if the area had a fully approved SIP.

(e) Any area that does not have an EPA-approved or EPA-promulgated plan for lead.

[10] While not all of today's new requirements for bubbles in these areas are strictly "baseline" matters, all basic requirements for these bubbles are set out here for simplicity. New requirements also apply to generic bubble rules in these areas. See Section II.D below.

[11] Where an emission limit for a source involved in the trade has not previously been approved by EPA as RACT, a baseline reflecting a negotiated RACT emission rate must be agreed upon by the source, state and EPA for the source in question.

(3) *State Assurances.* EPA will not approve a bubble in primary nonattainment areas needing but lacking approved demonstrations unless the state provides assurances that the proposed trade will be consistent with its efforts to attain the ambient standard. The state must make the following representations to the EPA Regional Office in or with the letter formally submitting the bubble as a revision to the SIP:

(a) The resulting emission limits are consistent with EPA requirements for ambient air quality progress, as specified in Section I.A.1.b.(1) above.

(b) The bubble emission limits will be included in any new SIP and associated control strategy demonstration.

(c) The bubble will not constrain the state or local agency's ability to obtain any additional emission reductions needed to expeditiously attain and maintain ambient air quality standards.

(d) The state or local agency is making reasonable efforts to develop a complete approvable SIP and intends to adhere to the schedule for such development (including dates for completion of emissions inventory and subsequent increments of progress) stated in or with the letter formally submitting the bubble or previous such letters.

(e) The baseline used to calculate the bubble emission limits is consistent with the baseline requirements in section I.A.1.b.(1) above.

These state assurances must be made in writing by the appropriate state or local authority (e.g., State Air Director, Air Pollution Control Board, or Legislative Committee). EPA will not second-guess such state representations, provided: (1) They are a substantial test applied by the state to each bubble, and (2) the state has explained how the proposed bubble is consistent with the area's projected attainment strategy. Nor will EPA examine, or expect states to examine in making such representations, any specific source's subjective motivation in making claimed reductions.

(4) *Treatment of Pending Bubble Applications.* "Pending bubbles" means those which are currently pending at EPA Regions or Headquarters, as well as any bubble applications which were formally submitted to EPA Regions under the 1982 policy but returned without action because final bubble criteria had not yet been issued. In primary nonattainment areas needing but lacking demonstrations, these bubbles should contribute to progress towards attainment. "Progress towards attainment" means some extra reduction beyond equivalence, with the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline applied as of the time applicants originally sought credit. In other areas these bubbles must show that applicable standards, increments, and visibility requirements will not be jeopardized. Pending bubbles which meet these tests and all other applicable requirements of the 1982 policy will be processed for approval.

Pending bubbles may undergo limited modification by the states or sources which submitted them in order to meet the new requirements outlined above (e.g., it may be necessary to recalculate the applicable baseline emissions of certain bubbles in nonattainment areas needing but lacking demonstrations and to reconfigure those bubbles in response to the reduced credit which may be allowed under the new more stringent requirements). However, pending bubbles which prior to final EPA approval are changed to the extent that they no longer reasonably resemble the original proposal qualifying for pending bubble status (e.g., those which are substantially expanded in scope or changed to involve primarily different sources of emission reduction credit) will be considered new bubbles subject to all of the requirements of today's notice.

Bubble applications which were submitted to EPA Regions by states, but which were withdrawn (or rejected) as inadequate under the 1982 policy, are not "pending." These bubbles, if reformulated and resubmitted, must meet all requirements of today's notice applicable to new bubble applications.

(c.) *No Double-Counting of Reductions.* At minimum, to be considered surplus an emission reduction cannot already have been claimed as part of a demonstration or updated emission inventory by any state air quality plan or have been used by the source to meet any other regulatory requirement. Double-counting of reductions—granting credit for the same emission reduction, e.g., once to the state as part of its nonattainment SIP demonstration or PSD baseline, and a second time to a source for use in an emissions trade, must be addressed in the following situations.

(1) *Crediting Pre-Existing Emission Reductions.* In *nonattainment areas* credit generally cannot be granted for emission reductions made before monitoring data is or was collected for use in current SIP planning. Because monitored ambient levels *already* reflect these emission decreases, such decreases may have been assumed in calculating the further reductions needed to attain ambient standards. States must clearly show that the existence of these reductions has been

[12] For baselines and base year dates in rural ozone nonattainment areas, see section I.A.1.a. above.

[13] In order to help avoid such results, states may wish to make sources responsible to report banked emission reductions when responding to the states' inventory reporting requirements.

[14] In all nonattainment areas, emission reductions achieved by shutting down or permanently curtailing an existing source prior to application for a new source permit cannot generally be used as *offsets.* See 40 CFR 51.18(j)(3)(ii)(c). EPA proposed on August 25, 1983 to remove this restriction. See 48 FR 38742, 38751. However, it remains in effect unless and until EPA takes final action on that proposal.

reduction credits must be considered to be "in the air" for all planning purposes, if the baseline date is triggered before banked credits are actually used, such banked credits will be considered as part of the baseline and will not consume increment when used in an emissions trade.

In attainment areas where the PSD baseline has not been triggered as of the date EPA or the permitting authority takes relevant final action on the trading transaction, reductions below current SIP or permit limits generally may be used without special restrictions in bubble or banking transactions, provided they are otherwise creditable and there is assurance that NAAQS will not be violated due to any potential increase in actual emissions.[15]

(2) *Crediting Reductions From Shutdowns.* Shutdowns are generally treated for purposes of emissions trading like any other type of emissions reduction.[16] For example, the same limitations on pre-existing reductions (section I.A.1.c.(1), above) apply to shutdowns where they apply to any other type of emissions reduction. However, under current federal New Source Review requirements for major sources, shutdowns that occur prior to application for a new source permit can be used as offsets only for equipment replacing on-site productive capacity which was shut down.[17]

Shutdowns are of general concern with respect to double-counting where a state may have relied directly or indirectly on shutdowns in a SIP demonstration of attainment. (Where a primary nonattainment area needs but lacks an approved demonstration of attainment, the progress requirements of subsection I.A.1.b. above apply to bubbles involving shutdowns as well as to bubbles involving other types of emission reductions. These requirements generally bar use of reductions from shutdowns which occurred before application to bank or trade.)

In general, a state may credit reductions from shutdowns if the SIP has not already assumed credit for these reductions in its attainment strategy. So long as reductions from shutdowns have not already been counted in developing an area's attainment strategy, they are a potential source of surplus reductions.

Some SIPs assumed a set quantity of reductions from the overall difference in emissions due to new plant openings and existing plant shutdowns. These SIPs incorporated into their attainment strategy a net "turnover" reduction in emissions because new sources are generally cleaner than those that shut down. Double-counting would occur if a specific source received credit for reductions from such a shutdown, since that reduction was already assumed in the SIP's demonstration of attainment.

These states have at least two options for granting sources credit for shutdowns without this kind of double-counting. First, they may reexamine any "turnover" reductions relied on in their SIP and decide not to take credit for these reductions. This approach would require EPA approval of a revised demonstration of attainment or a SIP revision showing consistency with the existing demonstration. Such an action can be processed by EPA concurrently with a bubble or generic rule. Alternatively, these states may allow credit only after the total quantity of shutdown reductions relied on in the SIP has occurred.

In all cases where net turnover reductions have been quantified and relied on as part of attainment demonstrations, states which seek to grant shutdown credit for use in trading must be prepared to show clearly and unequivocally on the basis of SIP documents or tracking that the credit has not been double-counted or otherwise relied on for SIP planning purposes.

(3) *Use of Banked Credits From Shutdowns or Other Actions for Bubble Purposes.*[18] In primary nonattainment areas which need but lack approved demonstrations, ERCs intended for bubble purposes may generally be banked and used with the same lowest-of-actual-SIP-allowable-or-RACT-allowable baseline used for other bubble transactions.[19] This baseline should be applied as of the time banked credit is or was initially sought, with the 20% reduction applied to both sources in the trade if these credits are later used for bubbles. The lowest-of-actual-SIP-allowable-or-RACT-allowable baseline plus the 20% discount will also apply to the source using that credit in a bubble, as of the time of such subsequent bubble application.

Banked credits produced by *shutdowns and curtailments* may be used for bubbles in these areas on the same terms as use of other banked credits, provided their use is subject to stringent qualitative review to assure technical, legal, and programmatic consistency with SIP planning goals (e.g., avoidance of double-counting and "shifting demand"). This review will not examine any source's motivation in shutting down a facility or curtailing production. However, the source must show that a written application was submitted to make the shutdown/curtailment state-enforceable through or concurrent with use of a formal bank or informal banking mechanism, prior to the time the shutdown/curtailment occurred. Submittal of such an application to make proposed reductions from a shutdown or curtailment state-enforceable will constitute the relevant definition of "application to bank" for timing purposes related to the evaluation of bubble credits in these nonattainment areas (see section I.A.1.b(1) above).[20] The shutdown/curtailment must be made *federally* enforcement when it is used in a bubble.

Use for bubble purposes of *nonbanked* credits resulting from current shutdowns or curtailments will be allowed in these areas if the lowest-of-actual-SIP-allowable-or-RACT-allowable baseline plus the 20% additional reduction are applied to determine the amount of credit.

No special baseline or additional reduction requirements will apply to these credits in other areas.

d. Multiple Use of ERCs. Once surplus reductions are credited, states must prohibit their multiple use. The same pound of reduction must not be simultaneously banked by two different entities or used to satisfy two different regulatory requirements at the same time. To prevent these results, states must adopt an ERC registry or equivalent means of accounting for the creation, banking, transfer, or use of ERCs. See Section I.C.6 below. States must also ensure that past reductions used in bubble, netting or offset transactions are not later credited in newly-established banks.

[15] However, reductions at sources other than major stationary sources on which construction commenced before January 1, 1975 may not be used to offset increases at such pre-1975 major sources.

[16] For use of banked shutdown credits for bubbles in primary nonattainment areas needing but lacking approved demonstrations, see section I.A.1.c(3) below.

[17] See n. 14 above.

[18] ERCs used for *netting* and *offset* purposes (including those derived from banks) must comply with relevant NSR and PSD requirements.

[19] For further discussion related to the use of banked credits in these nonattainment areas, see section I.C.9. below.

[20] For sources which banked or sought to bank credits from shutdowns or curtailments in these nonattainment areas *prior to publication of today's notice,* written evidence must be provided showing either that an application to deposit the credits in a formal bank was submitted to the state prior to the time the shutdown/curtailment occurred, or that the state acknowledged, before or at the time the shutdown/curtailment occurred, both the existence of that shutdown/curtailment, and the source's intent to use the resulting credits in a future trade.

e. Reductions from Uninventoried Sources. Sources not included in an area's SIP emission inventory may apply for emission reduction credit. Such applications may enhance state air quality planning capabilities. Where such sources are already subject to SIP emission limits, those emission limits must be used as the basis for determining emission reduction credit, unless a more stringent baseline would normally be required (see sections I.A.1.a. and I.A.1.b. above).[21]

In *attainment areas* states may grant bubble credit to sources regardless of whether they have been included in an inventory, based on use of actual values for each of the three baseline factors, so long as those sources are not subject to lower allowable values for those factors. Allowable values, when higher than actual values, may alternatively be used in calculating the baseline, provided sources show that any resulting potential increase in actual emissions does not jeopardize applicable ambient standards, PSD increments, or visibility. (See 40 CFR 51.24 and 52.21 for specific requirements concerning PSD increments and visibility.)

In *nonattainment areas with approved demonstrations of attainment*, whether sources not on the inventory can create bubble credit will turn on how the approved demonstration of attainment was designed. Some states first monitored ambient values to determine required reductions for the SIP, then required a proportionate reduction in emissions from certain general source categories (i.e., a "rollback") in order to attain. States may grant credit for reductions from uninventoried sources in these areas in at least two ways.

(1) They could require the average of percentage reductions imposed on all inventoried sources, and grant credit only for reductions in excess of that amount. In this case, baseline emissions should be based on the percentage reduction in actual emissions for the year in which the baseline data for the rollback was gathered. Where such sources are already subject to lower SIP emission limits, those limits must be used to determine credit.

(2) They could require the source to use a RACT emission rate and the lower of actual or allowable capacity utilization and hours of operation to calculate the baseline, and grant credit only for reductions below that baseline. This RACT baseline would have to result in a reduction at least as great as the percentage reduction assumed in the rollback. As discussed above, where sources are already subject to lower SIP emission limits, those limits must be used as the basis for determining credit.

Other areas developed SIP demonstrations based on dispersion models rather than area-wide proportionate reductions. To the extent these SIPs demonstrated ambient attainment through reductions required from specific inventoried sources, incorporated emissions from uninventoried sources in the background or area source totals, and projected attainment by modeling the effects of those reductions, reductions from sources not on the inventory can be credited using the lower of actual or allowable values for each of the baseline factors.

In *primary nonattainment areas which need but lack an approved demonstration of attainment*, the progress requirements of Section I.A.1.b. above apply to bubbles which seek to use credit from uninventoried sources. These include a lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline. Where a RACT emission limit has not already been adopted for an uninventoried source, such a limit must be agreed upon between the source, the state and EPA before the baseline can be determined.

States which grant credit from uninventoried sources not subject to permits, offset requirements, or enforceable production constraints should address the possibility that reductions from one such source may be followed by equal or greater increases from similar nearby sources due to shifting demand. These states must clearly demonstrate that ERCs from the uninventoried source are surplus and permanent. Interested parties should be aware that some uninventoried sources may not readily meet these tests. For example, reductions resulting from shutdown of a dry cleaner will generally not be creditable, unless the state subjects such sources to offset requirements or other measures addressing this problem. However, reductions due to improved control at such a dry cleaner would generally be creditable, since shifting demand is not implicated.

Baselines for Open Dust Trades. Fugitive dust regulations generally consist of generic work practices and operating procedures. The specifics of a fugitive dust program are generally contained in an operating permit or fugitive dust program. It is generally not possible to identify the appropriate emissions baseline from a general state open dust regulation. Therefore, for any open dust trade a negotiated RACT baseline must generally be agreed upon between the source, state and USEPA for the open dust source in question.

2. Alternative Emission Limits Must Be Enforceable

Each bubble, netting, offset or banking transaction must be approved by the state and must be federally enforceable at the time an ERC is used. Reviewing authorities may be able to use existing procedures (including preconstruction permits issued by states pursuant to 40 CFR 51.18, 51.24, 51.307 or 52.21) or EPA-approved generic rules to make reductions federally enforceable. The former possibility exists because permits issued under a federally-approved new source review program are federally enforceable. However, many preconstruction permit programs have been federally approved strictly for sources subject to NSR, and therefore may not be capable of use for transactions that do not trigger NSR requirements, or that involve sources not already subject to preconstruction permits.

With respect to the latter possibility, any enforceable compliance instrument imposing emission limits within the scope of an EPA-approved generic rule is deemed federally enforceable as part of the SIP.

Emission limits established by a trade must be incorporated in a compliance instrument which is legally binding and practicably enforceable by EPA.

Trades involving individual SIP revisions automatically satisfy this requirement. For trades under generic rules a compliance instrument culd take the form of an agreement between the source and state, a preconstruction permit (if one is applicable), a consent decree, a state operating permit, or any other compliance instrument judicially enforceable by the state. To assure state enforceability, the generic rule should state that sources subject to these instruments are required to meet the emission limits contained therein. Such instruments would then automatically become federally enforceable via an EPA-approved generic rule, provided they are issued as, or part of, the compliance instrument specifically required by the generic rule.

Compliance instruments must ensure that enforcement personnel do not have

[21] Where a given source was not subject to mandatory RACT regulation due to the fact that it was not included in the inventory (e.g., where no RACT regulation for a source category was adopted because the state, unaware of the source, issued a declaration that no source existed in that source category, or where an uninventoried, non-CTG source of greater than 100 TPY emissions is located in an ozone extension area), a baseline reflecting a negotiated RACT emission rate must be agreed upon between the source, the state and EPA for the uninventoried source in question.

to test simultaneously every emission source involved in a trade. This generally requires source-specific emission limits. However, states may use pre-specified combinations of source-specific emission limits which are enforceable. States may also use an overall limit that applies to a group of emission sources which can be evaluated simultaneously, where there is a reliable and enforceable method of determining compliance (e.g., through production records, input factors, or other indirect means, or through use of a continuous emissions monitor.) See, e.g., 45 FR 80324, December 8, 1980.

The compliance instrument should also specify applicable restrictions on hours of operation, production rates or input rates; enforceable test methods for determining compliance; and necessary recordkeeping or reporting requirements. To be enforceable, these limits must state the minimum time period over which they will be averaged (e.g., lbs/hour, lbs/MBtu averaged over 24 hours, production rate/day).[22] Unless such enforceable restrictions are or have been placed on capacity utilization and hours of operation, or on overall emissions, maximum values for capacity utilization and hours of operation must generally be used in calculating post-trade emission limits and in ambient modeling of the post-trade case.

3. All Reductions Must Be Permanent

All emission increases in a trade must be compensated by emission reductions that are permanent (i.e., assured for the life of the corresponding increase, whether unlimited or limitied in duration).[23] This requirement may generally be met by enforceable permit limitations confirming the amount and duration of the decrease. If reductions with a limited life are used, the life of the trade must be limited accordingly, so that the trade will automatically terminate with expiration of those reductions. The date of termination may be specified in the notice of approval. Alternatively, source(s) may agree to provide formal written notification to EPA and the state before such reductions may be discontinued and the trade terminated.

Permanence may present special but resolvable "shifting demand" problems for reductions from small sources not subject to permits, offset requirements, or enforceable production constraints. States which grant credit from these source categories must address the possibility that reductions from one source may result in equal or greater increases from similar nearby sources.[24]

In order to use, in a bubble trade, emission reduction credits derived from reductions in operations beyond those consistent with the baseline (e.g., a reduction from 3 to 2 workshifts), a source must have its preconstruction permit or other federally enforceable compliance instrument altered to reflect the curtailment in production records reflecting such curtailment (see section I.A.2 above).[25] Future increases in production beyond the permit amount may trigger new source review or require approval of a new emissions trading application which includes compensating emission reductions. As with other types of noncompliance, any source which exceeds permitted production limits would be subject to potential noncompliance penalties.

4. All Reductions Must be Quantifiable

Before an emission reduction can be credited it must be quantified. This generally means the state must establish a reliable basis for calculating the amount and rate of the reduction and describing its characteristics.

a. Calculating the Reduction. To quantify the amount of emission reductions eligible as ERCs, emissions must be calculated both before and after the reduction (i.e., assuming the post-reduction limits). Although many different methods of calculation are available (e.g., emission factors, stack tests, monitored values, production or process inputs), the same method and averaging time should generally be used to quantify emissions both before and after the reduction.[26]

b. Describing the Reduction. If an ERC will be used at the time of creation, only characteristics necessary to evaluate that proposed use need be described. Where the ERC will be banked and its eventual use is not yet known, a more detailed description should be provided in order to facilitate its later evaluation for a particular use.

B. Using Emission Reduction Credits

This section explains the substantive and procedural principles applicable to use of ERCs, primarily for existing-source bubbles. Many of these principles also apply to use of ERCs in netting or offset transactions. However, those transactions are governed by EPA's New Source Review regulations (40 CFR Parts 51 and 52) or state rules reflecting them.

1. *Substantive Principles for Using ERCs.*

a. Emissions Trades Must Involve the Same Pollutant. The Clean Air Act requires states to develop separate plans to attain and maintain the national ambient air quality standard for each criteria pollutant. Thus, all individual bubble, netting or offset transactions must involve the same pollutant. Only reductions of particulates can substitute for increases of particulates, reductions of SO_2 for increases in SO_2, etc.

b. All Uses of ERCs Must Satisfy Ambient Tests. Because the Clean Air Act requires that all areas throughout the country attain and maintain ambient standards, protect applicable PSD increments, and protect visibility in mandatory Federal Class I (PSD) areas, bubbles must generally be equivalent in ambient effects to the baseline emission levels which they replace.[27] In *nonattainment areas*, use of ERCs cannot create a new violation of an ambient standard or delay the planned removal of an existing violation. In *attainment* areas, use of ERCs cannot violate an increment or ambient standard. Use of ERCs in either type or area cannot adversely affect visibility in any mandatory Federal Class I area.

The ambient effect of a trade generally depends on the dispersion characteristics of the pollutant involved.

VOC or NO_x Trades. Trades involving VOC or NO_x need consider only emissions. Since the ambient impact of these pollutants is areawide rather than localized, one pound of increased emissions will be balanced in ambient

[22] Many state permits or permit procedures may need revisions to assure that they provide adequate compliance information. However, such revisions need only occur on a case-by-case basis as individual trades are approved.

[23] Permits or other compliance instruments for limited-duration trades must clearly state such limits.

[24] States can address such potentially "shifting demand" among such sources as dry cleaners, paint shops and gas stations by, for example (1) prohibiting creation of ERCs due to shutdown or curtailment of such small sources; (2) limiting ERCs from small sources to categories determined not to be subject to shifting demand; or (3) requiring offsets for increases in emissions from such small sources. Cf. section I.A.1.e. above.

[25] Under EPA's NSR regulations, prior curtailments are subject to the same restrictions for offset purposes as prior shutdowns. See n. 14 above.

[26] In general, states may not approve VOC trades in ozone nonattainment areas where such trades would incorporate averaging times longer than one day. However, where VOC sources show that daily VOC emissions cannot be determined or application of RACT is not technically or economically feasible on a daily basis, longer averaging times may be permitted. See Appendix D.

[27] In primary nonattainment areas needing but lacking an approved demonstration of attainment, bubbles must achieve a net air quality benefit. See Section I.A.1.b. above.

effect by one pound of decreased emissions within the same broad geographic area, and the precise location of those increases and decreases ordinarily does not matter. For VOC and NO_x such "pound-for-pound" trades may therefore be treated as equal in ambient effect where all sources involved in the trade are located in the same control strategy demonstration area or the state otherwise shows such source to be sufficiently close that a "pound-for-pound" trade can be justified.[28]

Particulate Matter, SO_2, CO or Lead Trades. Ambient considerations are critical for trades involving emissions of sulfur dioxide, particulates, carbon monoxide, or lead, whose air quality impacts may vary with where the emission increases and decreases occur. For example, one hundred pounds of ERCs for such a pollutant created at one source may balance the ambient impact of a 100-pound increase at a source nearby, but may only balance the effect of an 80-pound increase at a source further away. In addition to distance between sources, plume parameters, pollutant characteristics, meteorology, and topography will also affect the ambient impact of such trades.[29]

This Document authorizes the use of four alternative methods of determining ambient equivalence, with the degree of required modeling linked to the likely ambient impact of the proposed trade. The following sections describe use of these alternatives to evaluate for approval many bubble or offset trades without full scale ambient dispersion modeling.[30] Use of these alternatives under generic rules is discussed in section II below.

(1) *De Minimis.* In general no modeling is needed to determine the ambient equivalence of trades in which applicable net baseline emissions do not increase [31] and in which the sum of the emissions increases, looking only at the increasing sources, totals less than 25 tons per year (TPY) for particulate matter, 40 TPY for sulfur dioxide, 100 TPY for carbon monoxide, 40 TPY for NO_x (where visibility impacts are of concern), or 0.6 TPY for lead, after applicable control requirements. Such trades will have at most a *de minimis* impacts on local air quality because no net increase in emissions will be produced and the amount of emissions being shifted is less than designated significance levels in associated EPA regulations (see, e.g., 40 CFR 51.18(j)(1)(x) and 51.24(b)(23)(i)).[32]

(2) *Level I.* In general no modeling to determine ambient equivalence is needed if:

(a) The trade does not result in an increase in applicable net baseline emissions; [33]

(b) The relevant sources are located in the same immediate vicinity (within 250 meters of each other);

(c) No increase in baseline emissions occurs at the source with the lower effective plume height as determined under EPA's *Guidelines on Air Quality Modeling:*

(d) No complex terrain [34] is within the area of significant impact of the trade [35] or 50 kilometers, whichever is less; [36]

(e) Stacks with increasing baseline emissions are sufficiently tall to avoid possible downwash situations, as determined by the formula described at 50 FR 27892 (July 8, 1985) (to be codified at 40 CFR Part 51); and

(f) The trade does not involve open dust sources.

For such Level I trades it can reasonably be assumed that "pound-for-pound" trades will produce ambient effects equivalent to those which EPA-approved air quality models would predict. Therefore modeling to determine ambient equivalence is not required.

Trades between fugitive process sources and stack sources (i.e., process-for-process or process-for-stack) can acceptably be evaluated and approved under Level I as long as the maximum distance between any emitting sources in the trade is less than 250 meters and all other Level I criteria are met.

(3) *Level II.* Bubble trades which are neither *de minimis* nor Level I may nevertheless be evaluated for approval based on modeling to determine ambient equivalence limited solely to the impacts of the specific emission sources involved in the trade, if there is no increase in applicable net baseline emissions,[37] if the potential change in emissions before and after the trade will not cause a significant increase in pollutant concentrations at any receptor for any averaging time specified in an applicable ambient air quality

[28] The discussion in this paragraph does not apply to NO_x trades involving visibility impacts of elevated plumes.

[29] The ambient equivalence considerations elaborated in this and following paragraphs also apply to NO_x trades involving visibility impacts of elevated plumes. See n. 28 above.

[30] Modeling is generally not required for new source netting, whose purpose is to avoid expending resources where adverse emission or ambient impacts from changes at a source are extremely unlikely. See, e.g., 45 FR 52677–78 (August 7, 1980).

[31] Interested parties should, however, be aware that in some circumstances modeling may be required to justify using certain emissions baselines, prior to the trade. Where a bubble in a *nonattainment* area seeks to employ allowable values greater than corresponding actual values in the calculation of baseline emissions, and where such allowable values are not shown to be used or reflected in an approved demonstration, a full Level III modeling analysis will be required. Where a bubble in an *attainment* area seeks to employ allowable values greater than corresponding actual values in the calculation of baseline emissions, and where such allowable values are not shown to be used or reflected in an approved demonstration, a Level II modeling analysis (see below) using actual emissions for the pre-bubble case will be required unless, for bubbles processed as case-by-case-SIP revisions, the Region determines that additional technical support is necessary to protect applicable standards or increments. Where allowable values are used to calculate baseline emissions for such a case-by-case-SIP revision bubble in an attainment area where the PSD baseline has been triggered, the Region will require the technical support necessary to protect PSD increments.

Where allowable values higher than actual values are not shown to be used or reflected in an approved demonstration, states that wish to authorize their use in attainment areas *under generic bubble rules* must either state, or develop replicable procedures addressing, background values and how they will be evaluated in conjunction with the actual changes in ambient concentration predicted by the Level II analysis. These steps must be sufficient to protect standards and increments and must be approved by EPA as part of a generic rule.

For further discussion regarding calculation of baseline emissions and related modeling requirements, see Section I.A.1. above and Appendix B below.

[32] This paragraph should not be construed to imply that *new* sources and modifications need not meet all applicable requirements, including those specified under 40 CFR 51.18 or parallel EPA-approved state rules.

[33] See n. 31 above.

[34] Complex terrain is broadly defined by EPA as terrain greater in height than the physical stack height of a source. For bubble purposes, this definition is applicable only to sources with increasing baseline emissions.

[35] For guidance on determining "area of significant impact," see Appendix E below. The graph in Appendix E, or EPA-approved alternative approaches, may be incorporated in generic rules to make this aspect of Level I analysis replicable and operational. See Section II below.

[36] Generally, trades involving complex terrain as defined above may not be exempt from modeling under a Level I analysis. However, EPA will consider on a case-by-case basis additional criteria for determining whether a particular trade involving complex terrain, but otherwise meeting the requirements specified above, does not present a problem of potential plume impaction and may be approved under a Level I analysis. These additional criteria would include such factors as source height and emission rates, distance between stacks and elevated features, rate of topographical rise, and other considerations which may be appropriate for the particular geographic area. States are encouraged to work with EPA to determine where and how such additional criteria can be developed and applied to individual trades.

[37] See n. 31 above.

standard,[38] and if such an analysis does not predict any increase in ambient concentrations in a mandatory Federal Class I area.[39] The change in concentration from the before-trade case to the after-trade case must in general be modeled using refined models such as MPTER and ISC for each appropriate averaging time for the relevant national ambient air quality standards for each receptor, using the most recent full year of meteorological data.[40]

(4) *Level III.* Full dispersion modeling considering all sources affecting the trade's area of impact is required to determine ambient equivalence if applicable net baseline emissions will increase as a result of the trade,[41] or if the trade cannot meet criteria for approval under *de minimis*, Level I or Level II.

However, a geographically limited Level III analysis may be used in some cases where a Level II analysis predicts one or more exceedances of the Level II significance values. While this analysis will be limited in terms of geographic scope, it must otherwise meet the modeling requirements for a full Level III analysis, including consideration of all sources affecting the limited geographical area. In many situations this approach may permit the receptor area to be smaller than the trade's entire area of impact. Because of the unique nature of each situation, the appropriate limited geographic area must be determined in accord with EPA guidelines on modeling, and through case-by-case evaluation.

Bubble trades are approvable under either type of Level III analysis if they do not cause a new violation of NAAQS or PSD increments, significantly contribute to or delay the planned removal of an existing violation, or adversely affect visibility in mandatory Federal Class I areas.[42]

This three-tiered modeling approach is both reasonable and conservative. It will assure that the ambient impact of trades is at least equivalent in effect to original SIP emission limits, while conserving government resources and shortening approval times for many individual trades.

c. Bubbles Should Not Increase Applicable Net Baseline Emissions. Ordinarily, bubbles may not result in an increase in applicable net baseline emissions. Such a bubble would require a case-by-case SIP revision, and may only be approved based upon a combined Level III and Level II modeling analysis (i.e., an analysis sufficient to show that all applicable requirements of a full Level III analysis (as described above) are met, and that the bubble would not result in any exceedance of significance values specified for a Level II analysis at any receptor for any averaging time specified in an applicable ambient air quality standard.[43]

Where such a bubble is proposed in a *nonattainment area*, the state must demonstrate that the trade is consistent with the progress demonstration under an approved demonstration of attainment, revise its EPA-approved progress demonstration as part of the proposed SIP revision, or otherwise show (e.g., by modeling and any necessary compensating emission reductions) that the proposed trade comports with the EPA-approved emissions and ambient progress demonstration.

d. Bubbles Should Not Increase Emissions of Hazardous or Toxic Air Pollutants. Under the Clean Air Act all sources must meet applicable section 112 (NESHAPs) requirements for control of hazardous air pollutants. Sources may neither use a bubble to meet these requirements, nor increase emissions beyond the levels they prescribe. Where a source wishes to generate or use emission reduction credit for a criteria pollutant, and where a NESHAPs pollutant is part of the criteria pollutant stream, the emissions baseline for emissions of the hazardous pollutant from that source would be the lower-of-actual-or-NESHAPs-allowable emissions of that pollutant, applied as of the time of application for credit. Where EPA has *proposed* to regulate a source category for emissions of a pollutant under section 112, but has not yet promulgated a NESHAP for that source category, the proposal will serve as the interim guideline for evaluating the potential effects of any proposed emissions trade involving sources to which the proposed standard would apply. The emissions baseline for such a pollutant emitted by a source subject to the proposed NESHAP would be lower-of-actual-or-proposed-NESHAPs-allowable emissions for that pollutant.

In general, such trading proposals will be approved so long as they (1) result in emission limits for *each source* emitting the relevant pollutant which are equivalent to or less than those that the approved NESHAP requires or the proposed NESHAP would require if promulgated, (2) rely only on reductions below actual or allowable levels (whichever is less) of that pollutant, and (3) take place within a single plant or contiguous plants.

Where a pollutant has been *listed* under section 112 or EPA has published a Notice-of-Intent-to-List, but no NESHAP has been promulgated or proposed for a source which emits that

[38] In determining "significant" impact for Level II *bubble* trades, states may use the following significance values to identify trades whose potential ambient impact need not be further evaluated before approval:

10 μg/m³ for any 24-hour period for particulate matter;

5 μg/m³ for any annual period for particulate matter;

13 μg/m³ for any 24-hour period for SO_2;

46 μg/m³ for any 3-hour period for SO_2;

3 μg/m³ for an annual period for SO_2;

575 μg/m³ for any 8-hour period for CO;

2300 μg/m³ for any 1-hour period for CO;

0.1 μg/m³ for any 3-month period for Pb.

See 45 FR 52709 (August 7, 1980). For *offset* transactions, any required modeling must follow procedures consistent with EPA's new Source Review regulations in 40 CFR 51.18 or Part 51, Appendix S, or parallel EPA-approved state regulations. "Significant" impact under 40 CFR Part 51, Appendix S is defined as 1 μg/m³ annual average for particulates, SO_2 or NO_2; 5 μg/m³ 24-hour average for particulates and SO_2; 25 μg/m³ 3-hour average for SO_2; and 0.5 mg/m³ 8-hour average and 2 mg/m³ one-hour average for CO.

[39] However a bubble ordinarily may not be approved under Level II where other evidence related to background—i.e., formally validated ambient air quality monitoring data or previously established background values—clearly indicates that the bubble would create a new violation of an ambient standard or PSD increment, or would delay the planned removal of an existing violation.

[40] Other techniques may be approved where sources show they equally well protect NAAQS, applicable PSD increments, and visibility. For example, in limited circumstances conservative screening models may be acceptable in lieu of MPTER and ISC. In such cases, use of a full year of meteorological data may not be necessary. Such screening models may be acceptable where: (a) The screening model shows that all the emissions from the stack(s) with increasing emissions would not produce exceedances of the Level II significance values described in n. 38 above, *or* (b) the stack parameters at the stack(s) with increasing emissions do not change *and* the screening model shows that the increase in emissions at the increasing stack(s) would not produce exceedances of these significance values.

[41] See discussion in I.B.1.c. below.

[42] Where a Level III modeling analysis submitted to support a voluntary trading application indicates an exceedance of an ambient requirement, EPA will review such applications on a common-sense case-by-case basis, seeking to encourage disclosure of such exceedances and avoid undue delay of decisions on the trade, while adequately ensuring protection of public health, the integrity of the SIP process (including the state's prerogatives in determining how to remedy nonattainment), and the prompt and effective remedy of any condition of nonattainment. In its review, the Agency will take into account such factors as the degree of exceedance, the contribution of the trading sources and the trade itself to the exceedance, and the degree to which such sources would be part of any solution remedying the exceedance.

[43] Where a proposed bubble increasing net baseline emissions cannot meet this test of ambient equivalence, it may not be approved as a bubble under the Emissions Trading Policy. However, sources may still submit such revised limits for approval under the [illegible] requirements applicable to SIP revisions.

pollutant, states may generally allow trades consisting of equivalent increases and decreases of actual emissions of that pollutant within a single plant or contiguous plants. Once the relevant NESHAP is promulgated, every source, regardless of any previously approved trade involving emissions of that pollutant, must meet the requirements of that promulgation.

Where EPA has decided that one or more source categories which emit a listed pollutant do not require regulation solely because of limited national exposure, emissions of that pollutant will continue to be treated the same as emissions of any other pollutant listed under section 112.

Where EPA has issued a formal Notice-of-Intent-Not-to-List a pollutant under section 112, that pollutant will ordinarily be treated as non-hazardous. *However*, where the decision not to list or not to regulate was based on limited national exposure, but the individual risk was sufficiently high that EPA committed in the announcement of its decision to support (through some formal mechanism such as a Memorandum of Understanding (MOU)) state-level efforts to develop regulations, the pollutant will be treated as listed for trading purposes in order to assure that such state efforts are not compromised. The model for the intended scope of this classification is EPA's acrylonitrile decision. (50 FR 24319; June 10, 1985).

If a substance is neither listed nor regulated as hazardous under section 112, nor meets any of the other conditions specified above, but has been formally listed or regulated as toxic under any comparable health-based federal statute, the Administrator may consider this fact in evaluating trades which may increase emissions of that substance. This authority has not been delegated within EPA by the Administrator. See Clean Air Act section 301(a)(1), 42 U.S.C. 7601(a)(1).[44]

Exception. Trades which involve the pollutants addressed in this section but do not meet the special restrictions discussed above, may also be approved where surplus reductions in those pollutants compensate for increases in non-hazardous emissions of the same criteria pollutant. For example, a source emitting benzene may trade with a source emitting a non-hazardous VOC without meeting these special restrictions, if the benzene emissions are reduced as a result of the trade (i.e., "traded down"). As long as such a trade would not result in an increase in either actual or allowable emissions of a pollutant subject to the preceding paragraphs at any source, it would not differ in nature or requirements from a trade involving only non-hazardous VOC emissions.

e. Existing-Source Credits Cannot Be Used to Meet Applicable Technology-Based Requirements for New Sources. Under Clean Air Act section 111 and EPA implementing regulations, new affected facilities must satisfy technology-based New Source Performance Standards (NSPS), regardless of the attainment status of the area in which they are located. Under sections 165 and 173 and EPA implementing regulations, new or modified major sources must also satisfy technology-based control requirements associated with preconstruction permits. These requirements prohibit use of credits from existing sources to meet or avoid applicable NSPS, and bar use of such credits to meet applicable new source review requirements for best available control technology (BACT) in PSD areas, or lowest achievable emission rate control technology (LAER) in nonattainment areas.[45]

However, modifications of existing major sources in PSD and nonattainment areas with an EPA-approved "plantwide" definition of source can use "contemporaneous" reductions in actual emissions from within the same source to "net out of" New Source Review.[46] Under such "netting," sourcewide increases in potential emissions that do not exceed designated levels of significance (see 40 CFR 51.18(j)(1)(x), 51.24(b)(23), and 52.21(b)(23)) will not be considered "major modifications" of the source under 40 CFR 51.18, 51.24, 51.22, 51.307, 52.26, or 52.27. Thus, while these source changes must still meet applicable NSPS, NESHAPs, preconstruction applicability review requirements under 40 CFR 51.18 (a)–(h) and (l), and SIP requirements, they are not subject to new source review requirements for major modification because they are not considered "major."[47]

f. Trades Involving Open Dust Emissions. Trades involving open dust sources of particulate emissions may be approved through case-by-case SIP revisions based on modeled demonstrations of ambient equivalence. Sources proposing such trades must commit, as part of the trade's approval, to (i) undertake a post-approval monitoring program to evaluate the impact of their control efforts, and (ii) make further enforceable reductions if post-trade monitoring indicates initial open dust controls do not produce the predicted air quality results.

g. Interstate Trades. EPA will approve trades which involve sources located in neighboring states where such trades meet the criteria below and all other approval criteria applicable under today's notice. Where state trading requirements differ, EPA will require that trades with increasing and decreasing sources in different states meet the substantive requirements of the more stringent state. In general, in order to avoid complex accounting problems, EPA will deem ERCs created in another state to contribute to progress in the state where used, to the extent of that use. Such trades must be accomplished through case-by-case SIP revisions.

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[44] Trades involving emission streams partially or wholly composed of any pollutants subject to special considerations under this section must meet two separate and distinct tests to be approved. First, such trades must be approvable under the criteria and principles which apply to all trades, as discussed throughout this policy (i.e., such trades must meet baseline and other requirements for the relevant criteria pollutant). Second, such trades must be approvable with respect to the hazardous pollutant fraction of the criteria pollutant emission stream. This means that there must be no net increase in emissions of the pollutants addressed in this section, as a result of such trades. Where a NESHAP has been promulgated or proposed, the baseline for determining whether such an increase has occurred is the lower-of-actual-or-NESHAPs-allowable emissions for the hazardous component of the trade, for the source which emits that component. The promulgated or proposed NESHAP limit not only is used to define the allowable emissions for that source, but serves as an absolute ceiling on the source as well. Where a NESHAP has not yet been promulgated or proposed, the baseline for determining whether such an increase has occurred is generally actual emissions for the hazardous pollutant component of the trade. But cf. today's Policy Statement at n. 8.

[45] Today's notice does not address whether or under what circumstances facilities subject to NSPS, BACT or LAER may surpass applicable permit limits reflecting such requirements in order to create credits for existing-source trades.

[46] "Contemporaneous" means a reasonable period for accumulating increases and decreases in emissions, as specified by the state. See 40 CFR 51.18(j)(1)(vi) and 51.24(b)(3)(b) (ii).

[47] Netting also applies under the narrower "dual definition" of "source" in certain circumstances. For example, firms may use reductions within the plant to compensate for increases at several emitting units which, while not individually significant, might otherwise add up to a significant increase plantwide.

Under current EPA regulations, if a nonattainment area is subject to a moratorium on new preconstruction permits for major sources or modifications and the area does not have an approved New Source Review program, then the area automatically uses a plantwide definition. See 40 CFR 52.24.

EPA's general expansion of opportunities for states to use the plantwide source definition for certain nonattainment areas (49 FR 50768, October 14, 1984) was affirmed by the U.S. Supreme Court on June 25, 1984. *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 104 S. Ct. 2778, 14 ELR 20507, *overruling Natural Resources Defense Council, Inc. v. Gorsuch*, 685 F.2d 718, 12 ELR 20942 (D.C. Cir. 1982).

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2. Procedural Steps for Using ERCs

Bubble trades may be implemented through individual SIP revisions or state generic rules. This section describes principles applicable to either procedure. General principles for generic rules are addressed in Section II below. Special considerations for trades which require individual SIP revisions are addressed in Section III.

a. Effect of Existing Compliance Schedules. EPA's 1979 bubble policy required that sources be subject to binding compliance schedules based on original SIP emission limits before being eligible to apply for bubbles. Because of the time required to process bubble applications as case-by-case SIP revisions, this requirement tended either (a) to discourage sources faced with tight milestones for the installation of conventional control equipment from pursuing bubble applications, where they had agreed in good faith to SIP compliance schedules before discovering bubble opportunities, or (b) to discourage sources from agreeing to any compliance schedule until they had fully examined bubble opportunities.

Today's policy allows an application to be filed though the applicant is not subject to compliance schedules based on original SIP emission limits, so long as that applicant agrees to emission limits established as part of a complete bubble application. Sources which are already subject to binding compliance schedules should, however, be aware that submittal or proposed approval of a bubble application does not suspend their obligation to comply with such schedules. Such schedules and existing SIP requirements remain applicable and enforceable until the bubble is finally approved and the schedule has been modified accordingly.

Sources seeking trades should note that they remain subject to enforcement of existing (pre-trade) SIP limits until the bubble is approved. EPA will use the same principles and procedures for deciding whether to initiate enforcements actions in these circumstances as the Agency applies to any other source which is subject to a proposed SIP revision.

Under established EPA policy, regulated sources must be subject to an applicable enforceable emission limit at all times. Accordingly, sources which have approved bubbles with emission limits effective at future date and which are not in compliance with their pre-trade limits, may be subject to enforcement action, which could include penalties based on a failure to meet the pre-trade limits. Sources in such situations may wish to minimize the chance that capital expenditures will be required to meet pre-trade limits, either by (a) agreeing to post-trade compliance dates which are substantially similar to their pretrade compliance dates, or (b) accelerating their compliance with post-trade limits.

In accord with the general principle that bubbles should be treated neither more nor less stringently than other SIP actions, implementation of today's policy will be neutral with respect to EPA enforcement of pre-trade emission limits. This means that EPA will not specifically target for enforcement action non-compliant sources seeking to use a bubble either to come into compliance or to restructure traditional compliance. However, it also means that EPA will not withhold or defer enforcement simply because a source is seeking alternative emission limits through a bubble. In exercising its enforcement discretion, EPA will apply the same considerations to noncompliant sources which seek to comply through bubbles as to those which do not.[49]

b. Extensions of Compliance Deadlines. States may modify or extend compliance schedules or deadlines for individual sources on a case-by-case basis in conjunction with bubble approvals. Such modifications or extensions must be consistent with the requirements of 40 CFR 51.15. Compliance schedules for sources in *nonattainment* areas cannot be extended beyond the statutory date for attainment, and applicable compliance milestones must be specified and met for each year of the revised or extended compliance schedule. Because an extension will usually require a revision of the state's progress demonstration, such approvals must ordinarily be submitted as SIP revisions.

[48] While sources involved in a trade, like all other sources, may be subject to requirements for additional emission reductions, neither previous trades approved by EPA or by states under EPA-approved generic rules, nor emission reduction credits used as part of a bubble, offset or netting action, should be terminated.

Such termination could occur, for example, where two sources in a given source category were subject to pre-bubble mass emission limits of 100 TPY each and post-bubble limits of 50 TPY and 150 TPY respectively. Assume the state imposes a new category-wide regulation which would normally limit those sources to 40 TPY each. In this case, the first source should be required to meet the new 40 TPY limit (i.e., it should be required to produce additional reductions of 10 TPY), while the second source should be subject to a new limit of 90 TPY (i.e., a level reflecting the continued existence of the 50 TPY emission reduction credit). Termination of the emission reduction credit would occur either by requiring the first source to produce additional emission reductions of 60 TPY (i.e., more than its current level of emissions), or the second source to meet the 40 TPY limit. Either of these results would undermine the purpose of today's notice by eliminating the predictability required for generation or use of ERC's. They could also penalize trading sources for taking environmentally beneficial measures sooner than required, since it would often be more difficult to achieve the new reductions than had earlier voluntary steps not been taken.

For these reasons, EPA urges states not to take such credit-terminating actions unless there is no other practical way to satisfy the requirements of the Clean Air Act.

[illegible]day's procedures for deposit and use of banked [illegible]s already address additional state emission reduction needs in the context of banking (see section I.C.9. below). States should, however, account for all previous trades and previously granted emission reduction credits in estimating emission reductions resulting from new control strategies, in order to avoid problems due to double-counting.

[49] Parties contemplating bubbles involving the trade of emission reduction credits from one firm to another should be aware that when the credits being provided by the first firm are the result of emission limits with a future compliance date, the obligation to meet pre-trade limits remains with the second firm (which may face enforcement action, including cash penalties, for failure to comply with those pre-trade limits) until the time specified for the first firm to achieve the reductions necessary for compliance under the bubble. The first firm's failure to achieve required bubble reductions on schedule may thereafter result in enforcement action (including cash penalties) against that firm. *However*, this paragraph should be read in conjunction with the general principle articulated above that EPA implementation of today's policy will be neutral with respect to enforcement of pretrade limits.

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In *nonattainment areas*, states which wish to give sources more time to implement bubbles by granting compliance extensions must receive EPA approval of the extension through case-by-case SIP revisions. EPA will evaluate the time extension portions of these SIP revision packages in accordance with the Agency's normal procedures for review of time extensions, including consistency with the Act's requirements of expeditiousness, reasonable further progress, and attainment and maintenance of ambient air quality standards. Sources should be aware that disapproval of the time extension portion may result in disapproval of the entire package (i.e., both post-trade limits and the time extension) or only part of it, depending on whether the state views these components of the proposed SIP revision as separable.

In *attainment areas*, states may continue to grant compliance extensions without case-by-case SIP revisions, as part of bubble approvals under a generic rule. Such generic compliance date extensions may be granted in these areas only if EPA has approved the extension provision of the generic rule as adequate to comply with the Clean Air Act, including requirements for attainment and maintenance of ambient air quality standards.

c. Pending Enforcement Actions. A bubble cannot be approved for an individual emission source which is presently the subject of a federal enforcement action or outstanding enforcement order unless EPA (and where necessary the appropriate court) approves the proposal and any compliance schedule it may contain. "Federal enforcement action or outstanding order" includes notices of violation, civil actions filed under Clean Air Act section 113(b), criminal actions filed under section 113(c), notices imposing noncompliance penalties issued under section 120, administrative orders issued under section 113(a), or citizen suits filed under section 304 in which EPA has intervened if the source is subject to an administrative or judicial order.

This requirement need not preclude bubble approvals under generic rules, provided the rule specifies an appropriate mechanism for securing and recording EPA or court approval.[50] Sources should, however, be aware that such approvals cannot be finally effective until approved by the appropriate agency or court, and that they remain subject to original emission limits until such approval.

C. Banking Emission Reduction Credits

Emission reductions that are surplus, permanent, quantifiable and enforceable can qualify as emission reduction credits (ERCs) and be deposited in EPA-approvable banks. States may establish such banks by adopting appropriate rules to govern whether and how sources may own and hold surplus emission reduction credits for future use in bubble, offset or netting transactions.[51] Such banking rules may encourage sources to take measures to reduce emissions in advance of specific need for ERCs, resulting in lower transaction costs for those seeking offsets, bubbles, or partners for these transactions. States should, however, be aware that because an area's air quality situation or the status of its SIP may change in the future, failure to account for banked credits in emission inventories used for planning purposes may result in loss of those ERCs not treated as "in the air" (e.g., not included in any future SIP inventory or accounted for in any redesignation of the area to attainment), due to double-counting. Banking rules may protect such reductions in whole or in part as long as such protection is consistent with the Act's mandate to attain and maintain ambient standards while protecting PSD increments and visibility.

EPA-approvable banks can accept and evaluate requests to certify an ERC, serve as a clearinghouse for credits on deposit, and account for transfers and withdrawals of ERCs.[52] Banks can also: Register ERCs to ensure they are considered as current actual emissions in future planning (thus providing the greatest technical measure of protection to those ERCs); notify prospective purchasers of the existence of ERCs; and account for transfers and withdrawals. These roles will generally be performed by the state as part of its normal permitting activities. *Use* of banked credits must meet all the criteria of the particular SIP regulatory program under which they are to be used.[53]

The following sections address both minimum requirements for state banking rules which are approvable by EPA, and issues states should consider. States may adopt other approaches which produce equivalent results.

1. Banking Rules Must Designate an Administering Agency

Banking rules must identify the entity responsible for specific functions. While the state will ordinarily be responsible for verifying and processing ERC requests, all or part of this responsibility may be delegated to other organizations. Such organization(s) must possess the resources and legal authority to implement delegated activities.

2. Only ERCs May Be Banked

Banked emission reduction credits must be surplus, permanent, quantifiable, and enforceable by the state by the time they are banked.[54] However, if a source commits to produce a specific reduction at a specific time in the future, a state may allow a conditional deposit to be made. Procedures for such conditional deposits must ensure that they do not

[50] See section II.B.3 below.

[51] States may incorporate EPA-approvable banking rules in the SIP by submitting them for approval as SIP revisions.

Emission reductions banked through a formal or informal banking mechanism prior to a state's adoption of EPA-approvable banking rules may qualify for deposit in the EPA-approvable bank so long as (1) the source shows that its reductions are surplus, permanent, quantifiable and enforceable; and (2) the state shows that these reductions have not already been assumed or otherwise double-counted in the SIP.

[52] States and sources should be aware that because of differing regulatory requirements, the amount of credit actually derived from particular emission reductions may differ from one regulatory program to another. For example, in primary nonattainment areas needing but lacking approved demonstrations, the amount of credit from a given reduction which is available for bubble purposes may be less than that available from the same reduction for offset or netting purposes, since special progress requirements apply to bubbles in these areas.

[53] States may, however, expand opportunities for use of banked credits beyond those of current SIP programs (e.g., extend the "contemporaneous" period for netting), by submitting revised regulations addressing the banking and use of such credits, for approval as SIP revisions.

[54] In primary nonattainment areas which need but lack approved demonstrations, emission reductions made prior to application to bank or trade (whichever is earlier) will not be credited for use in bubbles (see section I.A.1.c.(1) above). Following publication of today's notice, the "date of application to bank" will be the date the source submits an application to the state to make a reduction state-enforceable through or concurrent with use of a formal bank or informal banking mechanism (see section I.A.1.b.(1) above).

In other areas, although emission reductions cannot qualify as ERCs or be deposited in EPA-approvable banks until they are made enforceable by the state, emission reductions banked through other formal or informal banking mechanisms will still be eligible for use in future trades, so long as those reductions are made federally enforceable at their time of use and all applicable requirements of the regulatory program under which they will be used are met. Since states may have to revise their regulations or permit procedures in order to implement this new definition, full implementation will not be expected until one year after publication of today's notice. However, all credits not made enforceable when banked during this interim period should ultimately be made enforceable within eighteen months from today's notice. Emission reductions currently deposited in banks should also be made enforceable by the state within eighteen months from the date of this policy.

compromise the state's ability to secure through further regulation any future reductions which may be needed.[55] In all cases the reduction must be made federally enforceable by the time the emissions trade which relies upon it is finally approved.

3. *Possible Limitations on Use of ERCs for New Source Permitting*

Use of banked ERCs for new source permitting must be consistent with applicable regulations approved by EPA under 40 CFR Parts 51 and 52. For example, under 40 CFR 51.18(j)(3)(ii)(c) shutdowns that occur prior to applications for a new source permit may ordinarily be used only as offsets for replacement facilities, and then only if the permit application was filed within one year after the shutdown occurred or if the reduction occurred after August 7, 1977.[56]

4. *Sources Should Apply to Bank Surplus Reductions As Soon As They Decide To Make Them*

For administrative simplicity and accurate quantification, sources should apply to bank reductions as soon as possible after they decide to make them. The administering agency should formally note the source's intent to make a surplus reduction, as expressed in the application. The state must then verify whether and to what extent the reduction actually occurred, and must make the reduction enforceable by the time it is accepted for deposit.

5. Procedures for Banking Surplus Emission Reductions Should Be Defined

To speed approval of trades and provide greater certainty for potential ERC creators and users, state banking rules should clearly specify which proposed emission reductions can qualify to be credited and banked, the information required of sources to substantiate their claim for credit, and any required application forms. At minimum, such rules must require firms to maintain records (e.g., production records and records of previous emission tests) adequate to determine the pre- and post-reduction actual and allowable values for emission rate, capacity utilization, and hours of operation for the source generating the ERC.

6. Banking Rules May Establish Ownership Rights

To prevent two entities from claiming or attempting to use the same ERCs at the same time, state banking rules may specify who can own ERCs. For example, while the source creating the ERC will generally be its owner, the state could, as part of its rule, reserve ownership of certain classes of ERCs to itself or local governments. States considering the latter course should carefully weigh whether such reservations are likely to increase or diminish future reductions and air quality management capabilities.

7. Banking Rules Must Establish an ERC Registry or Its Equivalent

An ERC registry or equivalent instrument allows states to track ownership, use, and transfer of all banked ERCs. Banking rules may provide that no transfer of title to a banked ERC will take effect until the transaction is reflected in the registry. This tracking system can minimize potential disputes and provide a central list of certified ERCs which may be available to potential purchasers. It can also provide useful information for quickly evaluating any proposed use of a banked ERC.

Information which may help evaluate future proposed uses of a banked ERC should be recorded at the time of its creation and entered as part of its banking record. This information should include the location of the source creating the ERCs; whether the reduction is due to a shutdown or curtailment; the date the reduction occurred or will occur (to allow future determination of the timing of the reduction with respect to the application for credit or its contemporaneity for use in netting or, if a shutdown, as an offset); the source's stack parameters; the temperature and velocity of its plume; particle size; the existence of any hazardous pollutants; daily and seasonal emission rates; and other data which might reasonably be deemed necessary under the requirements described in sections I.A. and I.B. above to evaluate future use.

To perform these tracking and clearinghouse functions the ERC registry must be accessible to the public. Subject to confidentiality considerations, states should make copies of the ERC registry available at convenient locations and times, and may want to publish or otherwise issue a periodic summary of banked ERCs.

8. Possible Adjustments to ERCs Based on Enforcement Considerations

Banking rules should state what, if any, changes may occur to ERCs after they have been banked. Once an ERC has been used by another source to meet a permit or other regulatory requirement, any violation of the conditions under which that ERC was created should result in enforcement against the source producing that ERC and not the source using it. If a state attempted to enforce against the source using purchased ERCs, a complex set of third-party lawsuits would likely ensue.[57]

9. Possible Adjustments to ERCs Based on Ambient Attainment Considerations

To assure the validity of its demonstration(s) of progress or attainment, a state with a banking rule must assume that all banked emissions will ultimately be used. In evaluating their ability to attain national standards, such states must add to their emissions inventory or measured ambient values all unused banked reductions at the site at which they were created. This is especially important for areas requesting reclassification from nonattainment to attainment. Failure to account for banked reductions as "in the air" for SIP planning purposes would ordinarily eliminate their use as ERCs following a new SIP design or inventory year, due to double-counting.

Additional emission reductions may be required from sources because of their area's failure to attain ambient standards, because of an increment violation, because of existing visibility impairment, or because new RACT requirements are being imposed under a SIP schedule. The existence of banked ERCs must not interfere with states' ability to obtain these additional reductions, and a state's rules on treatment of banked ERCs must provide it the necessary flexibility to meet future requirements. However, state banking rules may address, within this criterion, how banked ERCs will be treated if

[55] States have several available options to provide such assurance. They may, for example, bar conditional deposits from source categories which are subject to pending regulation. Alternatively, they may allow unrestricted conditional deposits but write future regulations in terms of RACT-equivalent reductions (e.g., an 80% reduction in current actual emissions) rather than in terms of specific control strategies or emission levels. The latter approach can avoid possible claims by some sources that no further control is required, while lengthening the state's ability to encourage further voluntary reductions as well as mandate needed ones. See section I.C.2.b below. States may adopt whichever alternative satisfies these concerns in their particular situation.

[56] See n. 14 above.

[57] Moreover, conflicting private-party attempts to assess ultimate responsibility for required reductions could make the purchased ERCs unenforceable and result in restoration of the creating source's original (higher) emission limits, due to claims that surplus reductions were produced in reliance on government rules implying their reasonable merchantibility and use. For these reasons emission limits altered as a result of the creation and use of ERCs must remain final and enforceable against the creator of those ERCs, so far as EPA is concerned.

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'ditional reductions are required to
n and maintain NAAQS, protect
increments, or improve visibility. Available options include:

a. ERCs Generated Prior to the Design or Baseline Year Could be Eliminated. The use of ERCs generated prior to the design or baseline year is unlikely to be consistent with the state's demonstration, unless the state included such ERCs as "in the air" for planning purposes at that time.

b. ERCs Could be Guaranteed Against Adjustment. The state would determine the necessary quantity of reductions from individual sources and source categories and require these reductions from actively emitting sources. Banked credits previously created by sources would be fully preserved. Emitting sources could then satisfy new requirements for reductions either by reducing emissions directly or by using or purchasing equivalent ERCs.

In implementing this option, it would be particularly important for states to adjust downward the estimated total reductions due to these new regulatory requirements, in order to reflect reductions previously achieved as a result of banking actions. Alternatively, states could phrase new control
uirements in terms of equivalent
tion results (e.g., "RACT-
e valent" reductions in nonattainment areas) as well as specified control techniques or emission levels. Under this approach necessary additional control requirements would be expressly stated in terms of additional reduction responsibilities, to be met without regard to prior trades.[58]

c. Use or Deposit of ERCs Could be Temporarily Suspended. States may suspend either ERC use or future ERC deposits until the state has committed in its SIP to secure reductions sufficient to reestablish progress or cure an increment violation. Use of either type of moratorium would be consistent with air quality objectives while allowing sources to retain and eventually use their entire quantity of banked ERCs. However, these options may be undesirable because of uncertainty regarding the moratorium's start, duration, or potential interference with user planning. This may be especially true where a moratorium on use (rather than deposit) is imposed after ERCs have been banked.

d. Across-the-Board Discounting. Under this option, the state could discount all ERCs in the bank by the
e factor. For example, if a 10%
ional reduction is required from a particular category of sources for the SIP's new demonstration, the state would discount all currently banked ERCs from those types of sources by 10%. Although the quantity of ERCs held by a firm will be reduced, the overall supply of ERCs will decrease, while demand will increase. Indeed, other sources may seek to purchase banked ERCs from creating sources, in order to meet the 10% reductions required of them. Thus, the price per unit of remaining ERCs is likely in many cases to increase.

This option is relatively straightforward for VOC or NO_x. For SO_x or particulate matter more detailed, source-specific modeling would generally be required to allocate the discount necessary to demonstrate attainment.

States may adopt any of these methods of accommodating possible additional reductions. They may also adopt any equivalent method which achieves the same objectives.[59]

II. Trades Covered by State Generic Rules

This section explains how states may develop EPA-approvable generic rules under which classes of emissions trades may be exempt from the general requirement for subsequent EPA approval as case-by-case SIP revisions.

A. General Principles for Evaluating Generic Rules

A generic rule is approvable if it assures that emissions trades otherwise requiring case-by-case SIP revisions under sections 110(i) and 110 (a)(3) of the Clean Air Act will be evaluated under state procedures that are sufficiently replicable in operation to guarantee that emission limits produced under the rule will not interfere with timely ambient attainment and maintenance or jeopardize PSD increments or visibility. Replicability generally means a high likelihood-that two decision-makers applying the rule to a given trade would reach the same conclusion. For one example of a generic rule incorporating a very simple formula that meets tests of replicability, see 46 FR 20551 (April 8, 1981). In relation to generic bubble rules, this means that specific modeling procedures or surrogates are prescribed and that states have appropriately defined their choice of models, model inputs, and modeling techniques in applying these procedures to specific trades. Thus these trades should not create new ambient violations of standards or increments, delay the planned removal of existing violations, or degrade visibility in Class I areas. By approving such generic rules, EPA approves in advance an array of acceptable SIP emission limits, and no further SIP revision is required for trades which meet the terms of the state's approved rule.

EPA will comment on trades proposed under generic rules, conduct reviews of trades approved under those rules, and audit the implementation of these rules as part of its routine audits of other state air programs. See Section E below.

B. Scope of Generic Rules

States may use a range of mechanisms to exempt bubble trades from individual SIP revisions. While several general mechanisms are explained below, states may submit other generic rules that satisfy these basic principles. See section II.D below for specific requirements for generic rules in primary nonattainment areas which need but lack approved demonstrations.

1. VOC or NO_x Trades

VOC or NO_x trades approved by states under a generic rule that assures no net increase in applicable baseline emissions may occur without case-by-case SIP revisions.

The ambient impacts of VOC and NO_x emissions are areawide rather than source-specific. All such emissions within a broad area are considered comparable, regardless of plume height, topography or related factors. Thus, the ambient impact of trades involving emissions of VOC or NO_x from different sources within such an area will by definition be equivalent to that of the sum of applicable baseline emission limits for the sources involved in the trade.

For VOC and NO_x such pound-for-pound trades may therefore be treated under generic rules as equal in ambient effect where all sources involved in the

[58] See footnote 55 above.

[59] The preceding discussion generally assumes the bank is located in an attainment area or nonattainment area with an approved demonstration. In primary nonattainment areas which need but lack approved demonstrations, use for bubble purposes of banked shutdown or other credits which meet relevant requirements of today's notice will similarly be allowed. See section I.A.1.c.(3) above. Bubbles in these areas will already be subject to special progress requirements. However, in order to accommodate possible additional reduction requirements in other areas in a manner consistent with banks, states may voluntarily adopt such an approach for bubbles prior to the issuance by EPA of any formal notice of SIP deficiency mandating such requirements. States may also choose (as some have already done) to specify greater than 1:1 trading ratios for bubbles, offsets or netting. While this approach would not adjust the total amount of credit available in a bank, it can substantially enhance SIP planning efforts and provide a net air quality benefit by reducing the amount of emissions that can ultimately be returned from the bank to the air.

trade are located in the same control strategy demonstration area, or where replicable procedures have been approved by EPA as part of the generic rule for determining when sources outside the demonstration area are sufficiently close that a pound-for-pound trade can be justified.[60]

In general, generic VOC trading rules must require that surface coating emissions be calculated on a solids-applied basis. The rule should also specify the maximum time period over which emissions may be averaged in an acceptable compliance demonstration. For VOC that averaging time should not exceed 24 hours unless the rule contains language approved by EPA that expressly allows a longer averaging period. See Appendix D below.

2. Particulate, SO_2, CO or Pb Trades

Classes of particulate, SO_2, CO and lead (Pb) trades may also be exempt from SIP revisions if they are approved under a state generic rule which assures that valid ERC uses cannot reasonably interfere with attainment and maintenance of air quality standards or jeopardize PSD increments or visibility.[61]

De Minimis Trades. Trades of particulates, SO_2 CO or lead (Pb) in which applicable net baseline emissions[62] do not increase and in which the sum of the emission increases, looking only at the increasing sources, totals less than 25 tons per year (TPY) for particulates, 40 TPY for sulfur dioxide, 100 TPY for carbon monoxide, or 0.6 TPY for lead (Pb), after applicable control requirements, may proceed without modeling and case-by-case SIP revisions.[63] Such trades will have at most a *de minimis* impact on local air quality because they will produce no net increase in emissions and the amount of emissions being shifted is not significant in ambient effect under associated EPA regulations. See 45 FR 52745 (August 7, 1980).[64]

Level I Trades. The ambient impact of particulate, SO_2, CO or Pb emissions depends on site-specific factors such as topography and plume height which are ordinarily evaluated by ambient dispersion modeling. However, if applicable baseline emissions do not increase, sources are located in the same immediate vicinity, and all other Level I requirements discussed in section I.B.1.b.(2) above are met, it can reasonably be assumed that "pound-for-pound" trades will produce ambient effects equivalent to those which currently approved air quality models would predict. As a result, trades meeting the criteria in section I.B.1.b.(2) above may be treated in the same manner as generic VOC and NO_x trades, and exempted from modeling and case-by-case SIP revisions.

EPA will normally approve generic rules that define "same immediate vicinity" as up to 250 meters between individual emission sources involved in a trade.

Level II Trades. Other particulate, SO_2, CO and Pb trades may also be exempted from case-by-case SIP revisions if they meet the Level II criteria in section I.B.1.b.(3) above and can routinely be modeled in a prescribed manner. The state's generic trading rule must specify the particular refined model that will be employed in a given situation, or criteria for selecting models in specified circumstances. To limit variability in modeling results the rule must also require at least a full year of meteorological data, identify the sites for that data, and specify procedures for selecting input data (e.g., wind speed, stability class, source emission rate) which are sufficiently defined to satisfy replicability concerns.[65] In some limited circumstances, a sufficiently conservative screening model could be specified as part of the generic rule. See section I.B.1.b(3) above.

Level III Trades. Because of the wide variability in data input and use inherent in full-scale dispersion modeling, Level III trades must be processed as individual SIP revisions. But cf. sections II.B.4 and III below.

3. Limits on Trades Exempt From SIP Revisions Under Generic Rules

Because some trades cannot readily be addressed in a replicable manner, the following may *not* in general be exempted under generic rules from the requirement for case-by-case SIP revisions:

a. Particulate, SO_2 CO or Pb trades requiring full-scale dispersion modeling under Level III (see section I.B.1.b.(4) above);

b. Particulate, SO_2, CO or Pb trades where complex terrain[66] is within the area of the source's significant impact or 50 km., whichever is less, unless the trade does not result in a modification of effective stack heights and the trade otherwise qualifies as *de minimis* or Level I. The area of significant impact can be determined as noted in footnote 21 above and in Appendix E;[67]

c. Open dust trades; and

d. Level II trades involving process fugitive particulate, SO_2, CO or Pb emissions not discharged through stacks.[68]

In addition to the above, in order to protect the integrity of various SIP processes, the following types of trades may *not*, in general, be exempted under generic rules from the requirement for case-by-case SIP revisions: (1) Trades involving ERCs from mobile source measures, (2) trades involving emission sources which are the subject of an enforcement action manifested by issuance of a notice of violation, an administrative order or section 120 action, or the filing of a judicial complaint, unless the rule specifies an

[60] The discussion in this paragraph does not apply to certain NO_x trades involving visibility impaction due to elevated plumes.

[61] The ambient equivalence considerations elaborated in this and following paragraphs also apply to NO_x trades involving visibility impaction due to elevated plumes. See n. 60 above.

Unlike other critical pollutants, EPA does not designate nonattainment areas for lead. However, states must review lead trades, as all other trades, to assure that they do not interfere with attainment and maintenance of the NAAQS.

Generic state approvals of trades involving pollutants addressed in this subsection must be limited to sources which are located in the same or adjacent control strategy demonstration areas and the same general air basin.

[62] See n. 31 above.

[63] The *de minimis* level is 40 TPY for NO_x trades where visibility impaction due to elevated plumes is a consideration.

[64] This paragraph should not be construed to imply that *new* sources and modifications need not meet all applicable requirements, including those specified under 40 CFR 51.18 or parallel EPA-approved state rules.

[65] Because today's notice confirms the authority of states to use such EPA-approved refined models as MPTER, CRSTER or ISC to conduct the "daily, temporal, spatial analysis" of post-trade ambient impacts required under Level II, approval of generic rules incorporating Level II approaches should be less uncertain and burdensome than under the previous 1982 approach. See, e.g., Appendix C below.

[66] Complex terrain is broadly defined by EPA as terrain greater in height than the physical stack height of a source. For bubble purposes, this definition is applicable only to sources with an increase over baseline emissions.

[67] Generally, aside from the exception stated above, trades involving complex terrain as defined above may not be processed under generic rules. However, states may wish to develop and submit for EPA approval additional area-specific criteria for determining when trades involving complex terrain do not present problems of potential plume impaction, and therefore may be approved under generic rules as *de minimis*, Level I or Level II trades using a flat terrain model. These additional criteria would include such factors as source height and emission rate, distance between stack and elevated features, rate of topographical rise, and other considerations which may be appropriate for a particular geographic area. States are encouraged to work with EPA to determine whether, where and how much additional criteria can be developed and applied within their state. Unless EPA has formally approved such additional criteria for a given geographic area as part of a generic rule, states must apply the general restrictions stated above when processing trades in that area under the rule.

[68] See Appendix C.

appropriate mechanism for notifying EPA of the source's bubble application prior to formal state proposal and for securing and recording written EPA concurrence that the bubble meets all pertinent requirements of the generic rule, (3) interstate trades, (4) VOC trades with averaging times longer than 24 hours, unless a state generic rule expressly providing for longer averaging times has been approved by EPA, (5) trades involving work practice and equipment standards, unless a state generic rule containing a provision expressly providing for state evaluation of such trades in a replicable manner has been approved by EPA, and (6) trades involving negotiated RACT baselines. *However*, a state generic trading rule could specify "presumptive RACT" limits which acceptably define generic trading baselines where RACT has not otherwise been defined in the SIP. While RACT baselines different from this presumptive limit could still be used for specific trades, they would need to be approved as case-by-case SIP revisions. Where there is no RACT in the SIP, but EPA has issued a CTG for sources of the type involved in the trade, the CTG should be used as the presumptive RACT-component of the generic trading baseline.

To the extent necessary, EPA will issue notices requiring that existing generic rules be revised to reflect these restrictions. See section II.E.4. below.

4. Other Generic Mechanisms for Exempting Particulate, SO_2, CO or Pb Trades From Case-by-Case SIP Revisions

EPA will approve other generic techniques which are demonstrated to equally protect ambient standards, PSD increments, Class I areas, and visibility. For example, a state could approve a modeled formula for two or more specific emission sources which would satisfy ambient concerns while allowing firms to define specific permit limits at each covered emission source. Like other generic provisions, such a formula would have to be approved as part of the SIP. EPA encourages states to work with EPA Regional Offices where they seek to develop other generic mechanisms which meet the tests of replicability and ambient equivalence described above.

C. Enforcing Emission Limits Under Generic Rules

Alternative emission limits approved under generic rules are considered by EPA to be federally enforceable so long as the generic rule specifies the compliance instrument (permit limits, etc.) under which the conditions of the trade will be implemented and all substantive and procedural requirements of the approved rule are met. Generic rules must specify that such alternative limits become applicable requirements of the SIP under § 110 for purposes of sections 113, 120, and 304 of the Clean Air Act and are enforceable in the same manner as other SIP requirements. To assure that EPA and citizens know what emission limits apply, generic rules must also specify that, and in what manner, EPA will be informed of emission limits applicable before and after the trade. (For additional issues related to enforceability, see section I.A.2 above. For requirements related to opportunity for public comment, see section II.F. below).

D. Generic Bubble Rules in Primary Nonattainment Areas Which Lack Approved Demonstrations of Attainment

Generic rules will continue to operate in primary nonattainment areas which require but lack approved demonstrations of attainment, under the following conditions:

1. Bubbles approved under existing generic bubble rules prior to the effective date of today's policy will not be affected by today's requirements.

2. Bubbles submitted to states under existing generic rules may continue to be approved by states in accord with those rules, until such rules are finally changed, pursuant to specific formal EPA request, to meet the criteria listed below. Such rules must, however, as requested by EPA, be modified to meet the criteria below.[69]

3. Applications for new generic bubble rules applicable to these areas, and applications for generic rules now pending before EPA, will be approved provided they meet the criteria below and all other applicable requirements of today's policy.

Criteria for Approvable Generic Bubble Rules. New and revised generic bubble rules applicable to primary nonattainment areas which require but lack approved demonstrations of attainment must, for bubbles in those areas:

a. Use lowest-of-actual-SIP-allowable or-RACT-allowable emissions baselines for all sources involved in the trade;[70]

b. Using baseline emissions defined above, meet applicable *de minimis* Level I or Level II modeling tests for ambient equivalence, as appropriate;

c. Produce an overall emission reduction from each bubble equal (in percentage terms) to the larger of a 20% reduction in emissions remaining after applicable baselines, or to the overall emission reduction from controllable stationary sources (in percentage terms) needed to attain in the area (i.e., at least equal to the source-by-source emission reductions that would be required for a full demonstration of attainment, taking into account "uncontrollable" area or other stationary sources and expected emission reductions from mobil sources).[71] This determination must be

[69] In the interim, EPA expects states to ensure, so far as feasible, that bubbles approved under existing generic rules are consistent with this policy as well as with the terms of their EPA-approved rules. States should be aware that without this or similar precautions, continued approval of bubbles under existing generic rules containing identified deficiencies may create or accentuate plan deficiencies which may have to be corrected at a later date or compensated for by other means. See section E.4. below.

[70] For detailed discussion of these baselines, see section I.A.1.b. above and Appendix B.

[71] For example, assume air quality analysis indicates the area must decrease its base-year emissions by 45% to attain the relevant NAAQS. Further assume

	TPY
(a) For the base year:	
Uncontrollable stationary source emissions (e.g., residential combustion sources)	2,500
Controllable stationary source emissions	3,500
Mobile source emissions	4,000
Total	10,000
Target emissions for attainment 10,000×(1.0–0.45)	5,500
(b) For the projected attainment year (before additional controls):	
Uncontrollable stationary source emissions (2,500×1.1)	2,750
Controllable stationary source emissions (3,500×1.2)	4,200
Mobile source emissions	2,500
Total	9,450

Therefore the reductions needed from controllable stationary sources are 9,450–5,500 = 3,950 TPY

And the percent emission reduction required from controllable stationary sources to attain is

$$\frac{(3950)}{(4200)} \times 100 = 94\%$$

Thus the net overall reduction required from each generic bubble would be 94% (i.e., the reductions produced by applicable baselines (e.g., application of a RACT emission rate) plus whatever percent reduction in emissions remaining after this RACT limit is sufficient to yield the 94% total).

States that wish to avoid SIP revisions for sources for which RACT has not yet been defined in an approved SIP provision may incorporate "presumptive RACT" limits (e.g., 80% reduction for VOC) in their generic rules. Sources would then have the option of accepting these RACT limits for generic bubble purposes, or negotiating different RACT limits through the SIP revisions process. However, where a source involved in a trade is one for which EPA has issued a CTG, but the state has not yet adopted the CTG-specified limit as RACT and no RACT has yet been specified by the state for that source, the presumptive or negotiated RACT limit for the trade must be at least as protective as the CTG for that source.

submitted with the rule, and must use the same type and quality of analysis as that required for an EPA-approvable SIP; and

d. Provide assurances, in conjunction with the State's submittal of the generic rule to EPA, that the state (i) is making reasonable efforts to develop a complete approvable SIP that will achieve the percent emission reduction from controllable sources described in the previous paragraph and (ii) intends to adhere to the schedule for development of such a SIP (including dates for completion of emissions inventory and subsequent increments of progress), as stated in the letter accompanying the submittal or in previous letters. In addition, to ensure that generic approvals continue to complement and do not interfere with attainment planning, EPA will require the state to include the specific assurances listed at section I.A.1.b.(3) above in or with its notices of proposed and final approval of each bubble issued under the generic rule in such a nonattainment area.[72]

E. EPA Oversight of Generic Rules

In order to ensure proper implementation of EPA-approved generic trading rules, EPA intends to (a) examine and comment on, together with any other public commenter, the information provided for individual trades proposed under a generic rule, (b) conduct reviews of individual trades approved under such a rule, and (c) periodically audit the implementation of the generic rule itself.

1. EPA Comment on Trades Proposed Under Generic Rules

When processing emissions trades under generic rules, states are required to provide EPA and the public with adequate notice and opportunity to comment. See sections II.F. and II.G. below. EPA will use state procedures for notice and comment to oversee the implementation of generic rules without delaying state processing of trading applications.

The information which a state must provide to EPA by the first day of the comment period (see section II.G. below) is generally sufficient for EPA to determine that a trading application is being processed properly. Where this information is not sufficient, EPA may request the application itself, and the state must provide it promptly.

Where EPA elects to provide any comments on the proposed approval, it will do so in writing, by the close of the comment period specified in the state's notice. EPA may also testify at any public hearing held pursuant to the approval of a trading application under a generic rule. Trading applicants and state officials are strongly advised to address EPA's comments, and where necessary to incorporate an appropriate response to those comments in the final approval document.[73]

2. Reviews of Individual Bubbles Approved Under Generic Rules

Reviews of individual generic bubble approvals, apart from the regularly scheduled reviews associated with activities under EPA's National Air Audit System (see section II.E.3. below), may be conducted at any time by EPA in order to promptly address identified or suspected problems and to avoid patterns of improper approval or other adverse effects which might accumulate before the next biannual audit is conducted.

3. EPA Audits of the General Implementation of Generic Rules

Under the National Air Audit System, EPA conducts a program audit of each state agency responsible for implementing the SIP and delegated federal programs.[74] These audits are currently carried out on a biannual basis. As part of the National Air Audit System, EPA will conduct an in-depth file audit of a representative sample of generic trading approvals issued by the relevant state.

4. Deficient Generic Trades

As discussed above, generic rules can expedite the approval process for certain classes of emissions trades because they allow such trades to be approved by states without undergoing a subsequent federal rulemaking process. However, to be considered valid by EPA, a trade approved under a generic rule must:

(1) Be one of a class of trades which is within the scope of the generic rule,

(2) Be approved *after* the generic rule has been approved by EPA, and

(3) Meet all the provisions of the generic rule as approved by EPA.

If a state-approved emissions trade does not meet all these requirements it cannot be considered part of the SIP and by definition cannot replace prior valid emission limits in the SIP. See 46 FR 20554–55 (April 6, 1981). Should EPA determine, as a result of its oversight activities, that a state-approved trade is inconsistent with the above requirements, it will notify the state and source in writing and specify any necessary remedial measures. In such circumstances, EPA may take appropriate remedial action to assure attainment and maintenance, including direct enforcement of the original SIP limits.[75]

5. Deficient Generic Rules

Existing generic rules approved under previous EPA policy and guidance may require revision in order to make them consistent with today's final policy. In addition, a generic rule approved by EPA under the final policy may subsequently be found to be deficient in some respect. Because EPA-approved generic rules have independent force of law, they can only be amended upon completion of a formal SIP revision process.

In order to ensure that generic rules are consistent with the Agency's current Emissions Trading Policy, EPA will publish notices in the Federal Register which identify any generic rules requiring formal modification.[76] These notices will identify specific deficiencies and means for correcting them, and will set forth a schedule for submission and review of revised rules. These notices will alert affected states to the danger that continued processing of trades

[72] These four requirements must be included as a contingent provision in all future generic rules, with the contingency triggered to apply to bubbles in primary nonattainment areas which become subject to a SIP call questioning their approved demonstration, after the generic rule was approved.

[73] Lack of EPA comment during the comment period will not bar future appropriate EPA enforcement or rulemaking actions if the bubble is found to be inconsistent with the generic rule.

[74] See, e.g., National Air Audit Guidelines for FY 84, Office of Air Quality Planning and Standards, EPA–450/2–83–007 (November 1983).

[75] In some cases EPA may have approved state SIP provisions which meet the functional criteria for generic rules, without indicating whether or not those provisions were approved for generic operation. Today's notice does not address the effect of generic validity of such provisions.

[76] EPA's publication of such notices will not trigger special progress requirements for case-by-case SIP revision bubbles in areas other than primary nonattainment areas which require but lack demonstration. Primary nonattainment areas which require but lack demonstrations should already be subject to special progress requirements of case-by-case SIP revision bubbles.

under these rules may create or accentuate plan deficiencies which may have to be corrected at a later date or compensated by other means. Where states fail to remedy deficiencies identified in the notice within the prescribed period, EPA may either rescind its previous approval of the rule, or issue a notice of SIP deficiency under section 110(a)(2)(H) of the Act.

F. Public Comment

For emissions trades processed under generic rules, existing state statutes or regulations will generally provide for adequate public notice and opportunity to comment, including opportunity for judicial review sufficient to make comment effective. Under such statutes or regulations, after the state has reviewed a bubble application submitted pursuant to an approved generic rule, a newspaper or similar notice is typically published providing a comment period (usually thirty (30) days) on the proposed decision to approve or disapprove the application. This notice generally informs the public that the proposed approval document (license, order, permit, consent agreement, etc.), the application itself (with the exception of any portion entitled to confidentiality under state or federal law[77], and the technical analysis performed by the state in making its proposed determination, are available for review at specified times and locations. The notice also offers the opportunity for a public hearing.

Under today's policy, the state must also notify the relevant Federal Land Manager if an emissions trade will take place within 100 kilometers of a PSD Class I area. Notification must occur early enough in the review process to allow at least 30 days for the submittal of comments before the trade will be approved by the state.

Where adequate procedures for public notice and comment are not already provided in existing state statutes or regulations, such procedures must be provided as part of an EPA-approved generic rules. In all proposed and final generic bubble actions, states must clearly and publicly identify both the pre- and post-trade actual and allowable emissions of each source involved in the trade, so that the ambient effects of each bubble may be known.

To ensure adequate public awareness consistent with § 304 of the Clean Air Act, state generic rules or other existing state laws or regulations must also make publicly available any changes to

[77] The specific pollutants emitted by the source, the amount of those pollutants, and their ambient air impact may not be deemed confidential.

accomplished under a generic rule may nevertheless be approved as case-by-case SIP revisions. Through this SIP revision process, states and sources may also demonstrate that a general principle discussed in Section I above does not apply to their particular circumstances, or that such a principle may be satisfied in other ways.

EPA will make reasonable efforts to take prompt action on SIP trading proposals after a state has ruled on an individual application and submitted it to the Agency. EPA encourages "parallel processing" of such proposals, with EPA and state officials conducting concurrent review so that both agencies can give public notice of proposed action at roughly the same time. EPA can then take final action after the state completes its proceedings, provided the state does not substantially alter the proposal after public notice. EPA will also publish noncontroversial SIP revisions as direct final actions, converting them to proposals only if requests to submit adverse comments are received within 30 days (see generally 46 FR 44477, September 4, 1981). In all bubble actions EPA will clearly identify (or require states to identify, as appropriate) both pre- and post-trade actual and allowable emissions for each source involved in the trade, so that the ambient effects of each bubble may be known.

Appendix A—Regional EPA Emissions Trading Coordinators

Region I. David Conroy (APS–2310), State Air Programs Branch, U.S. Environmental Protection Agency, Region I, John F. Kennedy Federal Building, Boston, Massachusetts 02203, (617) 565–3252; FTS 835–3252

Region II: Betty Martinovich, Air Branch, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10007, (212) 264–2517; FTS 264–2517

Region III: Cynthia Stahl, Air Programs Branch, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, Pennsylvania 19101, (215) 597–8337; FTS 597–8337

Region IV: Melvin Russell, Air Programs Branch, U.S. Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30308, (404) 257–2864; FTS 257–2864

Region V: Joe Paisie, Air Compliance Branch, U.S. Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 886–5777; FTS 886–5777

Region VI: Bill Riddle, Air Program Branch, U.S. Environmental Protections Agency, Region VI, First

International Building, 1201 Elm Street, Dallas, Texas 75270, (214) 767–9870; FTS 729–9870

Region VII: Charles Whitmore, Air Support Branch, U.S. Environmental Protection Agency, Region VII, 324 East 11th Street, Kansas City, Missouri 64106, (913) 236–2896; FTS 757–2896

Region VIII: Dale Wells, Air Programs Branch, U.S. Environmental Protection Agency, Region VIII, 1860 Lincoln Street, Denver, Colorado 80296, (303) 293–1773; FTS 564–1773

Region IX: Nancy Harney, Air Management Division, U.S. Environmental Protection Agency, Region IX, 215 Fremont Street, San Francisco, California 94105, (415) 974–7658; FTS 454–7658

Region X: David Bray, Air Programs Branch, U.S. Environmental Protection Agency, Region X, 1200 6th Avenue, Seattle, Washington 98101, (206) 442–4253; FTS 399–4253

Appendix B—Definitions of "Actual," "Allowable" and "Baseline" Emissions for Purposes of Emissions Trading

As used in this document with respect to bubbles, a source's "actual" emissions equal its average historical emissions, in tons per year, for the two-year period preceding the source's application to bank or trade emission reduction credit. Another time period may be deemed more representative of typical operations, but the applicant or state must show that actual emissions of such other period are consistent with air quality planning for the area. The definition of "actual emissions" for new source review purposes is somewhat different.[1] See 45 FR 52745 (August 7, 1980); 40 CFR 51.18(j)(1)(xii), 51.24(b)(21), 52.21(b)(21) and 52.24(f)(13).

A sources's "allowable" emissions in tons per year are calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable operating restrictions) and the most stringent of: (a) A standard applicable under 40 CFR Parts 60 or 61; (b) any applicable SIP emissions limitation, including those with a future compliance date; or (c) an emissions rate set in a federally enforceable permit condition. See 40 CFR 51.18 (j)(1)(xi), 51.24(b)(16), 51.21(b)(16) and 52.24(f)(11). The same definition of "allowable emissions" appears at each of these citations. See also 45 FR 52745 (August 7, 1980).

For bubbles, a source's "baseline" emissions are equal to the product of its (1) *emission rate* ("ER"), specified in terms of mass emission per unit of production or throughput (e.g., pounds SO_2 per million BTU or pounds of VOC per weight of solids applied); (2) *average hourly capacity utilization* ("CU") (e.g., millions of BTU per hour or weight of solids applied per hour); and (3) *number of hours of operation* ("H") during the relevant time period. I.e., baseline emissions = ER x CU x H. Net baseline emissions for a bubble are the sum of the baseline emissions of all sources involved in the trade.

Nonattainment areas and attainment areas with approved demonstrations of attainment, a source's baseline emissions for bubble purposes must generally be determined using the lower of "actual" or "allowable" values for each of the three baseline factors. Actual values for these factors are determined based on the source's average historical values for the factors for the two-year period preceding the source's application to bank or trade emission reduction credits. As discussed above, another time period may be deemed more representative of typical operations, but the emissions for that other period must be shown to be consistent with air quality planning for the area. A source's allowable values for the three baseline factors are determined based on its lowest federally enforceable limit for those factors (i.e., the lowest limit specified in an applicable SIP, PSD or other NSR permit issued under an EPA-approved program, compliance order, or consent decree), including those with a future compliance date.

The actual values for any of the three baseline factors, when higher than corresponding allowable values, may not be used by a source in calculating baseline emissions (i.e., reductions down to compliance levels cannot qualify for emission reduction credit). The allowable values for one or more of these factors, when higher than the corresponding actual values, may be used in calculating bubble baseline emissions for a source only in the following circumstances:

- Where, in a nonattainment or attainment area with an approved demonstration, the applicant shows that the demonstration assumes allowable value(s) for the factor(s) in question. Such a showing must be based on written evidence.
- Where, in an attainment area, the approved demonstration does not assume allowable value(s) for the baseline factor(s) in question, but the applicant performs satisfactory ambient tests to show that the use of such allowable value(s) will not jeopardize attainment and maintenance of NAAQS, PSD increments or visibility. For particulate matter or SO_2, this will require at least a Level II modeling analysis using actual emissions for the pre-trade case.[2] Where such an analysis is submitted to justify allowable values for a case-by-case SIP revision bubble, the Region may require additional technical support if deemed necessary to protect applicable standards or increments. See Section I.B.1.b above.
- Where, in a non-attainment area with an approved demonstration of attainment, the demonstration does not assume allowable value(s) for the baseline factor(s) in question, but the applicant demonstrates through a Level III modeling analysis that the use of such allowable value(s) will not jeopardize attainment and maintenance of NAAQS or PSD increments.
- Where, in an attainment area or a nonattainment area with an approved demonstration, a source has a new source preconstruction permit issued after the PSD baseline date or the base year of the attainment demonstration. In such cases, the applicant may use the value(s) of ER, CU and H upon which the new source permit was approved.

While the Emissions Trading Policy does permit sources to use allowable values for ER, CU and H in determining baseline emissions for bubbles under certain carefully prescribed conditions, the approach taken recognizes that SIP demonstrations are frequently based on a "hybrid" of allowable and actual values, and that bubble baselines in these areas must accurately reflect SIP assumptions for all three baseline factors, or be justified by appropriate modeling, to maintain SIP integrity.

In nonattainment areas needing but lacking approved demonstrations of attainment, sources involved in a bubble must use "lowest-of-actual-SIP-allowable-or-RACT-allowable" emissions baselines. The ER factor for such baselines is based on the actual emission rate, the SIP or other federally enforceable emission limit, or a RACT emission limit, whichever is lower, as of the time of the source's applicable to bank or trade, whichever is earlier. The CU and H factors for such baselines are based on the lower of actual or

[1] For instance, the calculation of actual emissions for netting purposes is as of the date of the event that brings about the reduction.

[2] Where the PSD baseline has been triggered, and such emissions data is available, the pre-bubble situation for sources which were in existence or commenced construction prior to the PSD baseline date should be modeled using emissions consistent with the PSD baseline concentration as defined in 40 CFR 51.24(b)(13) and 52.21(b)(13). However, emissions and associated parameters may be based on more recent values where past emissions data cannot readily be obtained. For example, see section I.A.1.c.(1) above.

allowable values for those factors. Actual values for CU and H must be determined using the source's average historical values for the two year period preceding the source's application to bank or trade, unless another two year period is shown to be more representative of typical operations.

For sources which banked or sought to bank credit in these nonattainment areas prior to publication of today's notice, the "date of application to bank" is the date of written application to the state to bank credit through a formal bank or informal banking mechanism for use in future trades. For sources which seek to bank credit in these areas following publication of today's notice, the date of application to bank will be the date of written application to the state to *make a reduction state-enforceable* through or concurrent with use of a formal bank or informal banking mechanism.

Appendix C—Approvable Modeling Approaches

U.S. Environmental Protection Agency

Office of Air, Noise, and Radiation

February 17, 1983.

Memorandum

Subject: Emissions Trading Policy—Technical Clarifications

From: Sheldon Meyers, Director, Office of Air Quality Planning and Standards (ANR–443)

To: Director, Air and Waste Management Division, Regions II–IV, VI–VIII, X; Director, Air Management Division, Regions I, V, IX

The proposed emission trading policy was published on April 7, 1982, in the Federal Register. During the initial implementation of the proposal, numerous emissions trading issues have arisen including several ralating to the technical requirements of dispersion modeling and control strategy evaluations. To address these modeling issues, a special workshop was held to solicit recomendations from Regional meteorologists/modelers as well as the various Headquarters technical staff. The Standing Committee on Emissions Trading has also considered these issues and the recommendations of the workshop group.

This memo is intended to outline the results of these meetings and to provide interim guidance. It is effective immediately and will be incorporated into the final Agency policy when promulgated. The following revisions or clarifications on modeling for TSP, CO, and SO_2, are intended to supplement the criteria included in the April 7, 1982, emissions trading policy statement.

Level I Analysis

- To ensure air quality equivalence under Level I analysis (modeling is not required), trades cannot be approved where complex terrain (terrain greater than any stack with increasing emissions) is within the area of significant impact of the source or 50 kilometers, whichever is less.
- Stacks with increasing emissions must be at least good engineering practice (GEP) to prevent downwash.
- Fugitive process and stack sources can be traded under Level I (i.e., process for process, process for stack, and stack for stack) as long as the maximum distance between any emitting points is less than 250 meters. (This is true for trades under generic rules as well as for trades implemented by SIP revisions. The effective stack height requirement in the April policy remains.)
- Since trades involving open dust sources are very difficult to address in a replicable manner, they cannot currently be approved under generic Level I bubble regulations. (Reiteration of April 7, 1982 proposed policy.)

Level II Modeling Analysis

- In order to satisfy the basic requirement of the emissions trading policy that trades "must demonstrate ambient equivalence," the maximum change in air quality impact (delta) must be determined when performing a Level II anaylsis. Experience has shown that this requirement is not necessarily met where the April 7 policy says to analyze only the "impact at the receptor of maximum predicted impact after the trade." Therefore, to assure that no degradation of air quality greater than the significance levels would occur at any site, the method of finding the maximum deltas must be determined on both a spatially and temporally consistent basis. This menas that you look at each receptor point and determine the change in concentration from the before trade case to the after trade case sequentially for each time period within a full year of meteorological data (time period means the appropriate ambient standard averaging time; e.g., 3-hour, 24-hour, etc.). This appears the most reasonable method of determining ambient equivalence at this time.

Other techniques may be approved where they can be demonstrated to be equally protective of the standards and PSD increments. Also, a Level III analysis may be used to supplement those cases where Level II analysis shows a few receptors registering deltas greater than the significance values. This limited Level III anaysis would involve only the geographical area containing the high deltas and would include all contributing sources to that area.

- Use of refined models (e.g., MPTER, ISC) with at least one year of meteorological data is acceptable for a Level II analysis.
- To ensure replicability, only trades involving process fugitive emission sources vented through stacks can be approved in generic Level II rules unless the State rule specifically identifies actual facilities between which process fugitive trades would be permitted. In such cases, the State rule must specify the emission points and all associated and pertinent parameters needed to ensure replicability of modeling results.
- Since trades involving open dust sources are very difficult to address in a replicable manner, they cannot currently be approved under generic Level II bubble regulations. (Reiteration of April 7, 1982 proposed policy.)
- Trades involving complex terrain cannot be approved under Level II generic rules; however, approval of such trades through individual SIP reviews are possible under Level II. EPA's experience in processing bubbles for such sources has shown that they are exceedingly difficult to address in a replicable manner. They require a considerable number of judgments and negotiations among Agency personnel concerning the models, data bases, and proper source characterization.
- All national ambient air quality standards (NAAQS) averaging periods, not just the 24-hour, must be considered when performing the air quality equivalence analysis. This is necessary to assure trades approved under Level II will not have any adverse health and welfare impacts. Therefore, all Level II analyses must test the delta for each receptor site against the following significance levels: TSP—10 $\mu g/m^3$ (24-hour), 5 $\mu g/m^3$ (annual); SO_2—13 $\mu g/m^3$ (24-hour), 46 $\mu g/m^3$ (3-hour), 3 $\mu g/m^3$ (annual); CO—575 $\mu g/m^3$ (8-hour) 2300 $\mu g/m^3$ (1-hour).

Implementation of Changes

Implementation of these changes by the Regional Offices in their negotiations with States and individual sources should begin immediately. If there are any on-going bubble activities where the Regions or States and sources have reached firm agreements which do not comport with these changes, please alert Tom Helms (FTS 629–5526) of my staff. Consideration will be given to situations where the source or State has

already invested significant resources in a good-faith analysis based on prior methods of demonstrating ambient equivalence. If you have specific questions regarding implementation of these policy changes, please call Tom Helms.

cc: Chief, Air Branch, Regions I–X, Meteorologist, Regions I–X, Mike Levin, Joe Tikvart, Darryl Tyler

Appendix D—Approvable Averaging Times for VOC Trades

U.S. Environmental Protection Agency

Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711

January 20, 1984.

Memorandum

Subject: Averaging Times for Compliance With VOC Emission Limits—SIP Revision Policy

From: John R. O'Connor, Acting Director, Office of Air Quality Planning and Standards (MD–10)

To: Director, Air and Waste Management Division, Regions II–IV, VI–VIII, X, Director, Air Management Division, Regions I, V, IX.

The purpose of this memorandum is to clarify the Agency's policy regarding emission time averaging for existing sources of volatile organic compounds (VOC's). Numerous State implementation Plan (SIP) revisions, both broad regulations and source-specific changes, have been submitted which provide for compliance determinations by "time averaging" emissions of VOC for periods exceeding 24 hours. These requests and the following policy on this subject were discussed extensively at a recent meeting attended by those Regional Offices which have the most pending actions (Regions I, III, IV, V); the Office of Air Quality Planning and Standards; and the Office of General Counsel. This policy represents the consensus of the meeting attendees.

The objective of EPA's national VOC emissions control program is the timely attainment and maintenance of the national ambient air quality standard (NAAQS) for ozone. SIP revisions and other regulatory actions relating to VOC control must maintain the integrity of this basic objective. There should be assurances that VOC emission control is reasonably consistent with protecting this short-term ozone standard. Further, ...ce SIP's and associated VOC control ...ograms comtemplate the actual application of reasonably available control technology (RACT), regulatory actions that incorporate longer term averages to circumvent the installation of overall RACT level controls cannot be allowed.

Current Agency guidance specifies the use of a daily weighted average for VOC regulations as the preferred alternative where continuous compliance is not feasible. An example might be where a facility operates in a batch manner with multiple lines and various products. Reference is made to the December 8, 1980, Federal Register (copy attached) where can coating operators are allowed to "bubble" several production lines and average emissions over a 24-hour time period.

The preferred daily weighted average alternative may not be feasible in all cases. Where the source operations are such that daily VOC emissions cannot be determined or where the application of RACT for each emission point (line, machine, etc.) is not economically or technically feasible on a daily basis, longer averaging times can be permitted under certain conditions. In determining feasibility, consideration might be given, for example, to the extent to which modifications can be made to testing, inventory, or recordkeeping practices in order to quantify daily emissions. Also, variability or lack of predictability in a source's daily operation might be considered as well as availability of control technology or the physical impediment or restriction to control equipment installation. In order to allow longer than daily averaging in SIP regulations, the following conditions or principles must be honored:

1. Real reductions in actual emissions must be achieved, consistent with the RACT control levels specified in SIP's or the control technique guidelines (CTG's). These limits are typically expressed in terms of VOC per unit of production (a qualitative term such as lbs VOC/gal coating). Where it is not feasible to specify emission limits in such terms, emission limits per unit of time can be approved provided that:

a. The emission limits reflect typical (rather than potential or allowable) production rate and operating hours. These emission limits must truly reflect emissions reductions consistent with RACT and are not simply an artificial constraint on potential emissions. This must be supported in the SIP revision by historical production and operation data.

b. Nonproduction or equipment downtime credits are not allowed in the emission limit calculation unless a Federally enforceable document specifically restricts operation during these times. Such credit must be based on real, historical emissions.

2. Averaging periods must be as short as practicable and in no case longer than 30 days.

3. A demonstration must be made that the use of long-term averaging (greater than 24-hour averaging) will not jeopardize either ambient standards attainment or the reasonable further progress (RFP) plan for the area. This must be accomplished by showing that the maximum *daily* increase in emissions associated with long-term averaging is consistent with the approved ozone SIP for the area.

4. Sources in areas lacking approved SIP's, or in areas with approved SIP's but showing measured violations, cannot be considered for longer term averages until the SIP has been revised demonstrating ambient standards attainment and maintenance of RFP (reflecting the maximum daily emissions from the source with long-term averaging).

Meaningful short-term (i.e., daily) emission caps are desirable especially for sources subject to large fluctuations in emissions. The use of a daily cap (equal to or less than current average emissions on a daily basis) that limits short-term emissions to RACT equivalent levels would meet the above objective of ensuring VOC control that is consistent with attaining the NAAQS for ozone.

States have the primary responsibility to show adherence to the above principles and, to do so, must include the following information (in detail) in all SIP revision requests that seek VOC averaging times greater than 24 hours:

1. The VOC limits specified in an enforceable form with appropriate compliance dates.

2. A description of the affected processes and associated historical production and operating rates.

3. A description of the control techniques to be applied to the affected processes such as low solvent and waterborne coating technology and/or add-on controls.

4. The nature of the emission control program whether a bubble, a regulation change, a compliance schedule, or some other form of alternative control program.

5. The method of recordkeeping and reporting to be employed to demonstrate compliance with the new emission limit requirement and to support the showing that the emission limit is consistent with RFP and the demonstration of attainment.

Each EPA Regional Office shall have

Misty

OhioEPA

State of Ohio Environmental Protection Agency

INTER-OFFICE COMMUNICATION

TO: District Office Air Unit Supervisors and Local Air Agency Directors

FROM: Jim Orlemann, Manager, Engineering Section, DAPC

SUBJECT: OAC rule 3745-21-07(G)(2)

DATE: April 9, 1993

On 12/4/92, we sent to each of you a questionnaire concerning the application of OAC rule 3745-21-07(G)(2) to coating operations. As a result of this survey, it is apparent that some guidance concerning the application of this rule is necessary. The following outlines, in general, how this rule should be applied to coating operations **that do not employ control equipment:**

1. If all or a portion of the coatings employed in an operation are photochemically reactive materials(PRMs), and these PRMs are generally employed each day of operation, then the total **organic material** emissions shall not exceed 8 lbs/hr or 40 lbs/day **at any time.** Please note that these emission limits would apply to **all** of the organic material emissions and **not just to the PRM emissions.**

2. In some cases, the PRMs may be employed infrequently, e.g., on just one day per week. In these cases, it would be acceptable to apply the emission limits only on those days when the PRMs are employed. As stated above, however, on those days the emission limits would apply to all of the organic material emissions, even if only a small portion of the coating materials used that day are PRMs.

3. For significant coating operations that fall into the scenario described in (1) above, and which do not employ control equipment, the following **daily** records should be maintained by the owner/operator:

the company identification for each coating and cleanup material employed;
documentation on whether or not each cleanup material is a photochemically reactive material (PRM);
the number of gallons of each coating and cleanup material employed;
the organic compound content of each coating and cleanup material, in pounds per gallon;
the organic compound emission rate for each coating

and cleanup material, in pounds per day;

(f) the total organic compound emission rate for all coatings and cleanup materials, in pounds per day; the organic compound emission rate for each coating and cleanup material, in pounds per hour for each hour of the day; and
the total organic compound emission rate for all coatings and cleanup materials, in pounds per hour for each hour of the day.

[**Note:** The coating information required in (c) through (h) must be for the coatings **as employed**, including any thinning solvents added at the coating line. Also, the cleanup material information required in (c) through (h) is only for those cleanup materials that are determined to be PRMs.]

This recordkeeping requirement assumes it is technically and economically reasonable for the entity to monitor and record the **hourly** usage of the coatings and cleanup materials. In many cases, it may not be reasonable. In cases where an entity can demonstrate that it is not reasonable, the following two subparagraphs may be used in place of (g) and (h) above:

(g) the total number of hours the coatings and cleanup materials were employed in the operation; and
(h) (f)/(g), in pounds per hour (average).

The use of these two subparagraphs will give an **average** hourly emission rate for the day; however, as long as this value remains well below the allowable of 8 lbs/hr (maximum), we can assume that compliance is being maintained.

The owner/operator also should be required to submit semiannual or quarterly summaries which include the following information:

(a) the total organic compound emission rate for all coatings and cleanup materials employed during the reporting period;
(b) either: an identification of each hour during which the organic compound emission rate exceeded 8 lbs/hr, and the actual organic compound emission rate during each such hour;
or: an identification of each day during which the average hourly organic compound emission rate exceeded 8 lbs/hr, and the actual average hourly organic compound emission rate for each such day;
(c) an identification of each day during which the organic compound emission rate exceeded 40 lbs/day, and the actual organic compound emission rate for each such day; and
(d) a description of any corrective actions taken to

address the exceedances identified in (b) and/or (c).

4. For significant coating operations that fall into the scenario described in (2) above, and which do not employ control equipment, the following daily records should be maintained by the owner/operator:

(a) same as (3)(a)
(b) documentation on whether or not each coating and cleanup material is a photochemically reactive material (PRM);
(c) same as (3)(c)
(d) same as (3)(d)
(e) for each day during which a PRM is employed, the organic compound emission rate for each coating and cleanup material, in pounds per day;
(f) for each day during which a PRM is employed, the total organic compound emission rate for all coatings and cleanup materials, in pounds per day;
(g) for each day during which a PRM is employed, the organic compound emission rate for each coating and cleanup material, in pounds per hour for each hour of the day;
(h) for each day during which a PRM is employed, the total organic compound emission rate for all coatings and cleanup materials, in pounds per hour for each hour of the day; and
(i) the total organic compound emission rate for all coatings and cleanup materials, in pounds per month.

[**Note:** The coating information required in (c) through (h) must be for the coatings **as employed**, including any thinning solvents added at the coating line. Also, the cleanup material information required in (c) through (h) is only for those cleanup materials that are determined to be PRMs.]

As explained in (3) above, if an entity can demonstrate that it is not reasonable to maintain hourly records of the usage of coatings and cleanup materials, the following two subparagraphs may be used in place of (g) and (h) above:

for each day during which a PRM is employed, the total number of hours the coatings and cleanup materials were employed in the operation; and
(f)/(g), in pounds per hour (average).

The owner/operator also should be required to submit semiannual or quarterly summaries which include the following information:

(a) the total organic compound emission rate for all coatings and cleanup materials employed during the reporting period;

(b) either: for the days during which a PRM was employed, an identification of each hour during which the organic compound emission rate exceeded 8 lbs/hr, and the actual organic compound emission rate during each such hour;
or: for the days during which a PRM was employed, an identification of each day during which the average hourly organic compound emission rate exceeded 8 lbs/hr, and the actual average hourly organic compound emission rate for each such day;
(c) for the days during which a PRM was employed, an identification of each day during which the organic compound emission rate exceeded 40 lbs/day, and the actual organic compound emission rate for each such day; and
(d) a description of any corrective actions taken to address the exceedances identified in (b) and/or (c).

For the purpose of determining what is a significant coating operation, we recommend that if an operation has actual organic compound emissions greater than 5 tons/year, it should be considered to be a significant operation.

Thanks for your input on the questionnaire! If you have any questions concerning this guidance, please give me a call at 614-644-3592. If necessary, we will expand this guidance to make it clearer.

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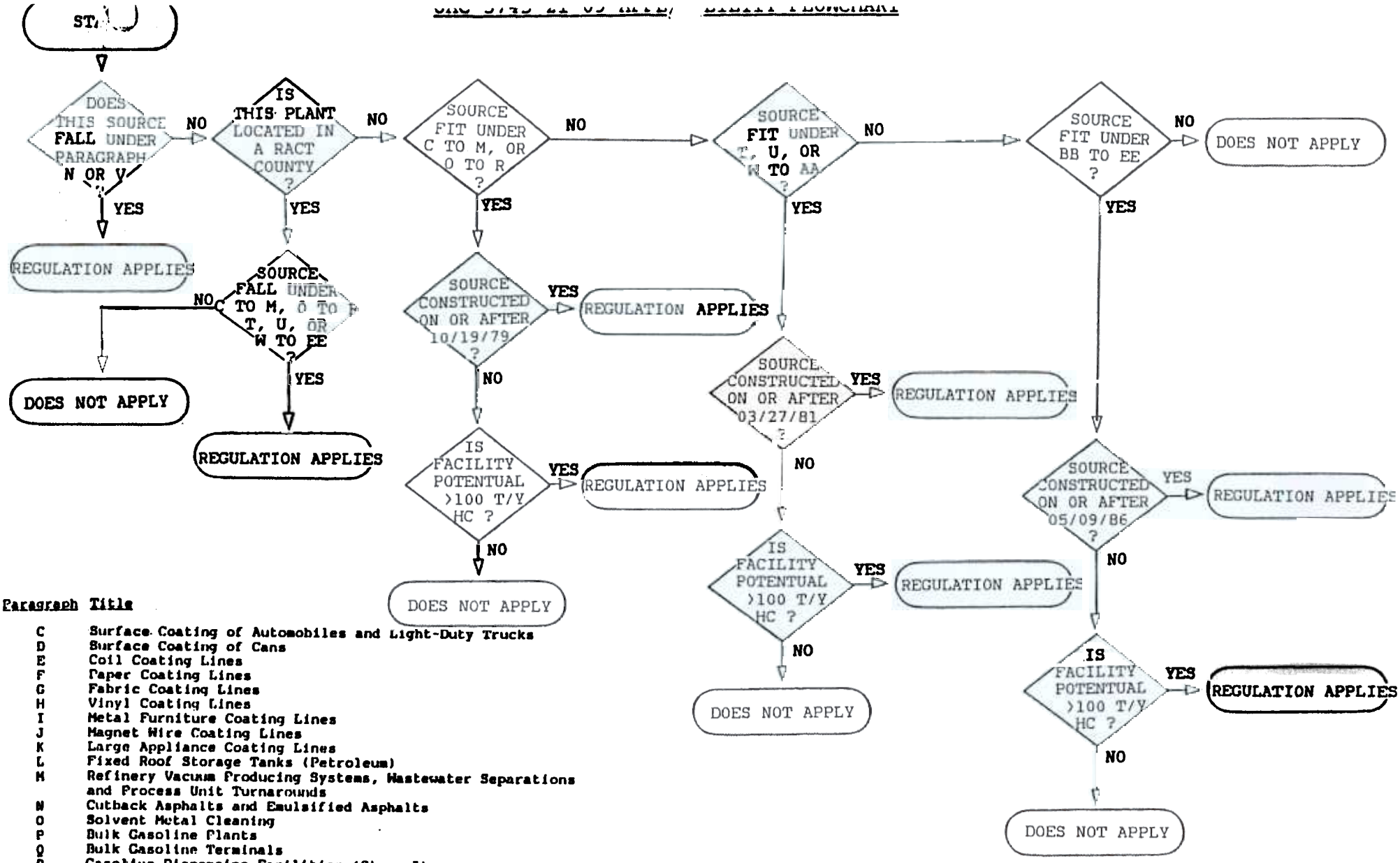
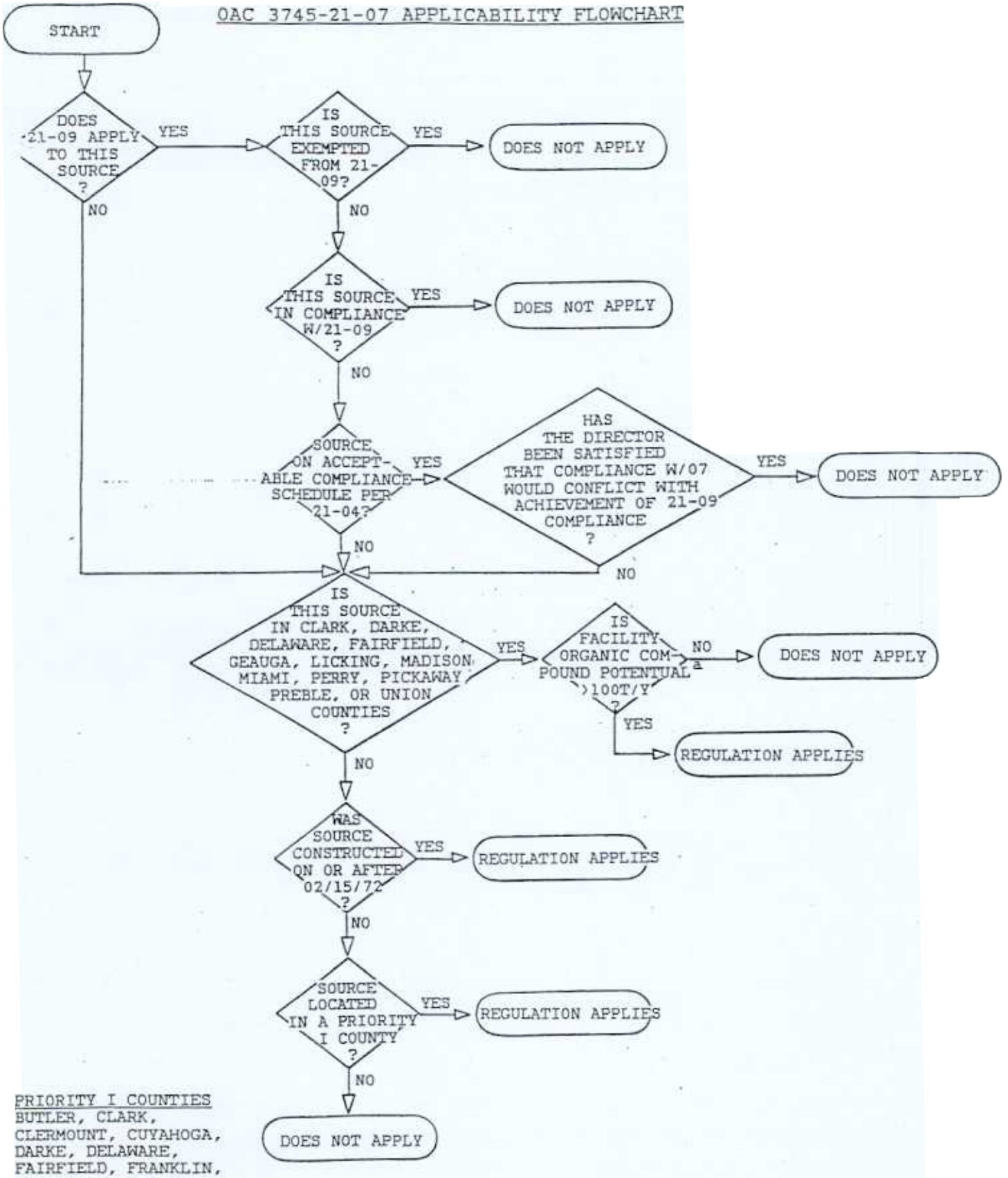


Paragraph	Title
C	Surface Coating of Automobiles and Light-Duty Trucks
D	Surface Coating of Cans
E	Coil Coating Lines
F	Paper Coating Lines
G	Fabric Coating Lines
H	Vinyl Coating Lines
I	Metal Furniture Coating Lines
J	Magnet Wire Coating Lines
K	Large Appliance Coating Lines
L	Fixed Roof Storage Tanks (Petroleum)
M	Refinery Vacuum Producing Systems, Wastewater Separations and Process Unit Turnarounds
N	Cutback Asphalts and Emulsified Asphalts
O	Solvent Metal Cleaning
P	Bulk Gasoline Plants
Q	Bulk Gasoline Terminals
R	Gasoline Dispensing Facilities (Stage I)
S	"Alside, Ink" Siding Coating Line and Corner Coating Line
T	Leaks From Petroleum Refinery Equipment
U	Miscellaneous Metal Parts and Products Coating Lines
V	Gasoline Tank Trucks
W	Synthesized Pharmaceutical Manufacturing
X	Rubber Tire Manufacturing
Y	Flexographic, Packaging Rotogravure and Publication Rotogravure Printing Lines
Z	External Floating Roof Tanks (Petroleum)
AA	Perchloroethylene Dry Cleaning Facilities
BB	Petroleum Dry Cleaning Facilities
CC	Continuous, Polystyrene Resin Manufacturing
DD	Leaks from Process Units that Produce Organic Chemicals
EE	Aerations Processes that Produce Organic Chemicals

RACT COUNTIES
BUTLER, CLERMONT, CUYAHOGA, FRANKLIN, GREEN, HAMILTON, LAKE, LORAIN, LUCUS, MOHONING, MEDINA, MONTGOMERY, PORTAGE, STARK, SUMMIT, TRUMBULL, WARREN, AND WOOD.

OAC 3745-21-07 APPLICABILITY FLOWCHART



PRIORITY I COUNTIES
BUTLER, CLARK, CLERMOUNT, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FRANKLIN, GEAUGA, GREEN, HAMILTON, LAKE, LICKING, LORAIN, LUCUS, MADISON, MEDINA, MIAMI, MOTGOMERY, PERRY, PICKAWAY, PORTAGE, PREBLE, STARK, SUMMIT, UNION, WARREN, AND WOOD.

a "POTENTUAL TO EMIT" MEANS THE MAXIMUM ACTUAL EMISSIONS BASED ON MAXIMUM CAPACITY WITH CONTROL EQUIPMENT.

AN EXPLANATION OF OHIO AIR POLLUTION HYDROCARBON REGULATIONS

AP-5-06 to AP-5-08
Covering Hydrocarbons and Photochemical Oxidants

Comments of the Ad-Hoc Committee
of the National Paint and Coatings Association

Presented by: James R Blegen
Technical Coordinator
Resins and Plastics Division
Ashland Chemical Company

June 29, 1972

Culminating many years of work, the Federal Environmental Protection Agency has taken the first major step this year to systematically provide for a nationwide air pollution abatement program.

The Federal government established in 1971 standards of air quality which were a measure of protection for the health and welfare of our nation's population. Legislation required the states to prepare implementation plans to meet these national air-quality standards when they were exceeded. These plans had to be submitted by January 31, 1972.

The objective of these plans was to control five sets of air contaminants: particulates (dust), carbon monoxide, sulfur, NOx and photochemical oxidants (hydrocarbons).

Of most concern to you is the latter category: hydrocarbons, (photo chemically reactive material). Ohio's implementation plan deals extensively with this subject. This discussion pertains to certain aspects of this regulation as they relate to the use of paints and coatings.

Only Priority I regions where measurement of photochemical oxidants exceeds 195 micrograms per cubic meter (0.10 ppm), 1 hour maximum are required to meet control of emission of organic materials. All existing sources in Cleveland and Columbus areas must comply with the regulation by 1975; Dayton, Toledo and Cincinnati regions must comply by 1977. New installations must meet control of emission of organic materials on completion of construction.

All owners or operators of existing sources must complete State of Ohio forms for permits and variances by August 15, 1972.

The intent of hydrocarbon control is to prevent formation of "smog." The chemistry of photochemical reaction creating smog is complex and its description is not the prime purpose of this presentation. It is important to emphasize that four major ingredients must be present to create photochemical smog: strong sunlight, NOx, ozone, and volatile photochemically reactive materials. While the incidence of the presence of photochemical smog is well documented in the Los Angeles Basin, its occurrence in other areas of our nation is sporadic. Smog is generally attributed to automobile exhausts and to a lesser extent the use of solvents, architectural coating, and hydrocarbon storage and handling.

Ohio's implementation plan, approved by the Federal Environmental Protection Agency, provided for strict control of hydrocarbons and is described in Regulation AP-5-06 to AP-5-08.

In an effort to clarify the regulations that apply to the use of paints and coatings, the Ad-Hoc Committee of the National Paint and Coatings Association, which is listed in the appendix, has made the following conclusions:

> The most far-reaching aspects under AP-5-07 fall under Section G: Section G (1) reads: "A person shall not discharge more than 15 pounds of organic materials into the atmosphere in any one day, nor more than 3 pounds in any one hour, from any article, machine, equipment, or other contrivance..... (Unit, etc).....in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is based, heat-cured, or heat-polymerized, in the presence of oxygen, unless said discharge has been reduced by at least 85 percent."

The regulation covers operations utilizing any organic solvent where, during the process, flame comes into contact with solvent or solvent vapor, or where baking, heat curing, or heat polymerizing takes place. There is no organic solvent composition qualification for this category. The uncontrolled emission of organic material from each operation is limited to 15 pounds per 24 hour day -- or 3 pounds per any hour limit -- or 85 percent reduction.

Thus, typical baking alkyd, alkyd melamine, thermosetting acrylic systems, and the like come under tight control.

Thermosetting systems are not subject to the 15 pound limit prior to heating, however, provided they are cut in solvents which are considered to be "exempt" or non-photochemically reactive. The exempt or non-photochemically reactive products are determined by excluding the photochemically reactive materials listed under AP-5-01, Section (C), subparagraphs (1) through (3), also Section (D).

Since it is not feasible to put afterburner controls on spray booths or open conveyor lines because of the large volumes of air in the effluent, it becomes necessary to make a wholesale shift to "exempt" solvents or go to some other system that is excluded from control under the legislation.

It must be understood that the "exempt" or non-photochemically reactive solvents completely lose this exemption and go under the tight controls listed above once they go into an oven and are subjected to curing by heat.

What may not be completely clear is that if the solvent is exempt or non-photochemically reactive, there is no limitation on it, even if the solvent is evaporated at elevated temperatures, for example, 30 minutes at 300°F -- provided the resin system does not polymerize.

Therefore, thermoplastic noncuring polymers -- such as those used in vinyl, nitrocellulose acrylic and for other lacquers -- if dissolved in "exempt" solvent, for example, nonbranched ketones (ie: methyl ethyl ketone), alcohols, esters and/or certain aliphatic hydrocarbons with ranges of aromatics permitted -- have no limitations imposed.

The proof as to whether the system is noncuring or nonpolymerizing under the influence of heat -- and therefore exempt from limitation -- is whether the system will redissolve in the original solvent.

Under Section G, paragraph (2), the Regulation reads: "A person shall not discharge more than 40 pounds of organic material into the atomosphere in any one day, nor more than 8 pounds in any one hour, from any article, machine, equipment.....(unit, etc).....used under the conditions other than described in subsection (G)(1) of this Regulation for employing, applying, evaporating or drying any photochemically reactive material or substance containing such photochemically reactive material, unless said discharge has been reduced by at least 85 percent."

In essence, if you don't bake or heat-polymerize, the limit is 40 pounds instead of 15 pounds even if you are using the photochemically reactive solvents. If you are using "exempt" solvents, as previously indicated, there is no limit.

Under Section G, paragraph (9), subparagraph (c), there is an exclusion saying ".....this regulation shall not apply to:.....(c) The use of any material.....if:

(i) the volatile content of such material consists only of water and liquid organic material, and
(ii) the liquid organic material comprises not more than 20 percent of said volatile content, and
(iii) the volatile content is not a photochemically reactive material."

What that says is that the conventional water based industrial systems are excluded from coverage even though they are baked and heat-polymerized, when the volatile solvent used in the water based system is "exempt."

A new provision is that in Section (G)(9), (d), which says that the above restrictions of 15 or 40 pounds per day or the greater restrictions per hour shall not apply if:

"(i) the volatile content of such material does not exceed 20 percent by volume of said material, and
(ii) the volatile content is not a photochemically reactive material."

In simple terms, what this says is that the Regulation does not apply to high solids coatings, namely which are 80 percent solids and not over 20 percent volatile providing the volatile is "exempt."

Some of the other exclusions are with reference to plasticizer volatility.

Architectural coatings are controlled to the 1 gallon size at the point of sale. Section (H)(1) on architectural coatings reads: "A person shall not sell or offer for sale for use in containers of greater than 1 gallon capacity, any architectural coating containing a photochemically reactive material." This simply says that architectural coatings sold in containers larger than 1 gallon should be in "exempt" solvents such as exempt mineral spirits. California and New York City make the cutoff point at 1 quart. It seems likely that most companies will simply convert to the use of "exempt" mineral spirits rather than segregate by size.

Under Section (H)(2), the use is likewise covered. The Regulation reads: "A person shall not employ, apply, evaporate, or dry any architectural coating, purchased in containers of greater than 1 gallon capacity, containing a photochemically reactive material."

Basically, Section (H)(3) prohibits the use of thinner other than "exempt" architectural type solvents, such as mineral spirits, by stating: "A person shall not thin or dilute for application any architectural coating with a photochemically reactive material."

Practically applying Section (H)(1) through (H)(3), it would seem the paint and architectural coating supplied in Ohio is Priority I region and must contain an "exempt" solvent such as exempt mineral spirits.

It should be understood that for air dry applications, essentially aliphatic hydrocarbons are permitted with certain reservations -- such as when the aromatic content of C8 and higher (except for ethyl benzene) does not exceed 8 percent by volume. We find that quite a number of people do not understand that ordinary mineral spirits is not acceptable under this Regulation when the aromatic content is above 8 percent by volume.

The definitions of photochemically reactive materials come under AP-5-01 and Section (C) reads as follows: " 'Photochemically reactive material' means

any liquid organic material with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of liquid:

(1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent;
(2) A combination of aromatic hydrocarbons with eight or more carbon atoms to the molecule except ethyl benzene: 8 percent;
(3) A combination of ethyl benzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent."

What this says is that up to 20 percent of toluene or trichloroethylene or methyl ethyl ketone or ethyl benzene singly may be used or in any combination of this group. With those which are limited to 8 percent and 5 percent limiting totals of each group are never exceeded. In other words, one cannot superimpose the 5, 8 and 20 percent limitations and total 33 percent. The total must not exceed the percent of the maximum individual group limitations.

The regulation notes: "Whenever any organic material or any constituent of an organic material may be classified from its chemical structure into more than one of the above groups of compounds, it shall be considered as a member of the most reactive group, that is, that group having the least allowable percent of the total volume of liquid.

Thus, a combination must not exceed each group total -- and the combinations must never exceed a 20 percent grand total. Any combination of the three groups in excess of 20 percent is regarded as photochemically reactive.

Some of the solvents which would be in the 5 percent by volume limitation are such things as olefins, dipentene, aldehydes and unsaturated ketones such as isophorone [redacted].

Typical of those products which are limited to 8 percent by volume are such aromatic hydrocarbons as xylene, tetralin, cumene and the aromatic 100 and 150 (Solvesso 100 and 150, Hi-Sol 10 and 15, etc.) type solvents.

In the 20 percent by volume limitation are such solvents as toluene, ethyl benzene, trichloroethylene, methyl isobutyl ketone and methyl isopropyl ketone. This list is not intended to be all inclusive but rather exemplary.

There is no limit in the use of saturated aliphatic hydrocarbon solvents which are classed as not being photochemically reactive when used in processes other than heat-curing or polymerization as applied to the coating.

SOME COMMONLY USED SOLVENTS IN THE COATINGS INDUSTRY BY CLASSIFICATION

I. SOLVENTS PERMITTED BY LIMITATION

A. Solvents limited to 5 percent by volume.

1. Olefins -- unsaturated hydrocarbons that are straight chain, branched or cyclic nonaromatic

   Examples:
   a. Ethylene, propylene or butene (not usually used as solvents)
   b. Butadiene (not used as a solvent)
   c. Terpene structures, including:
      Dipentene (also known as dl-limonene)
      Turpentine (a commercial mixture of terpenes)

2. Unsaturated ketones

   a. Isophorone
   b. Mesityl oxide

3. Unsaturated alcohols (none commonly used)

4. Unsaturated ethers

   a. Furan (not commonly used)

5. Unsaturated esters (none commonly used)

6. Aldehydes "(NOT NECESSARILY TRUE, RG SAYS MUST BE SATURATED

   a. Furfural (also called furfuraldehyde)
   b. Most aldehydes as effluents from baking ovens are decomposition products of urea formaldehyde, melamine formaldehyde and phenol formaldehyde resins

B. Solvents limited to 8 percent by volume.

1. Aromatic hydrocarbons, C8 or higher except ethyl benzene

Examples:
a. Xylene (also called xylol)
b. Tetralin (1, 2, 3, 4 tetrahydronaphthalene)
c. Cumene (also called isopropyl benzene)
d. Aromatic 100 type solvents (approximately 100°F flash) (Examples: Solvesso 100, SC 100, Hi-Sol 10, etc)
e. Aromatic 150 type solvents (approximately 150°F flash) (Examples: Solvesso 150, SC 150, Hi-Sol 15, etc)

C. Solvents limited to 20 percent by volume. (Alone, or in combination with those on prior lists limited to 5 and 8 percent respectively.)

1. Aromatic hydrocarbons with fewer than 8 carbon atoms

a. Toluene (also called toluol)

2. Ethyl benzene

3. Trichloroethylene

4. Branch chain ketones

a. Methyl isobutyl ketone (MIBK)
b. Methyl isopropyl ketone
c. Ethyl amyl ketone (branched amyl group)
d. Pent-Oxone (tradename)
e. Isobutyl heptyl ketone
f. Diacetone alcohol (not a true alcohol)
g. Methyl isoamyl ketone (MIAK)

II. "EXEMPT" SOLVENTS -- NOT RESTRICTED PROVIDING RESINS WITH WHICH THEY ARE USED ARE NOT CURED (THERMOSET) TO INSOLUBILITY BY HEAT. (All solvent exemptions are lost under conditions of heat polymerization, etc. defined in the Law AP-5-07 (G)(1).)

A. Oxygenated solvents.

1. All saturated alcohols (by common name and other names, including tradenames)

	Common Name	Other Names (including tradenames)
a.	Methyl alcohol	Methanol
b.	Ethyl alcohol	Ethanol, denatured alcohol, Solox
c.	Isopropyl alcohol	Isopropanol
d.	Normal propyl alcohol	n-Propanol, 1-propanol
e.	Normal butyl alcohol	n-Butanol
f.	Isobutyl alcohol	Isobutanol
g.	Secondary butyl alcohol	Secondary butanol, 2-butanol
h.	Tertiary butyl alcohol	t-Butanol
i.	Normal amyl alcohol	1-Pentanol
j.	Primary amyl alcohol	2-Methyl-1-butanol
k.	Isoamyl alcohol	2-Methyl-1-butanol
l.	Methyl isobutyl carbinol	MIBC
m.	Hexyl alcohol	1-Hexanol or 2-methyl pentanol
n.	Hexadecyl alcohol	
o.	Cyclohexanol	Hexalin (tradename)
p.	2-Ethyl hexyl alcohol	2-Ethyl hexanol, isooctanol, isooctyl alcohol
q.	Texanol (tradename)	2, 2, 4-Trimethylpentandiol-1, 3 mono-isobutyrate
r.	Isooctyl alcohol	
s.	Decyl alcohol	Decanol

2. Glycols -- dihydric alcohols (also called diols)

Common Name	Other Names (including tradenames)
Ethylene glycol	
Propylene glycol	1, 2-Propylene glycol
1, 3-Butylene glycol	1, 3-Butanediol
1, 4-Butylene glycol	1, 4-Butanediol
Diethylene glycol	
Dipropylene glycol	
Hexylene glycol	
2-Ethyl-1, 3-hexanediol	
Triethylene glycol	
Tripropylene glycol	

3. Glycol ethers -- or ether alcohols
(The name Cellosolve®, while a registered trademark of Union Carbide, is so widely used to generically describe a product structure that many chemists are unaware of the true chemical nature. For this reason, this is used frequently below as the common name.)

	Common Name	Other Names (including tradename
a.	Methyl Cellosolve	Ethylene glycol monomethyl ether 2-methoxyethanol, Dowanol EM, Ektasolv EM, methyloxitol
b.	Cellosolve	Ethylene glycol monoethyl ether or 2-ethoxyethanol, Dowanol EE, Ektasolv EE, oxital
c.	Butyl Cellosolve	Ethylene glycol monobutyl ether or 2-butoxyethanol, Dowanol EB, Ektasolv EB, butyloxital
d.	Isobutyl Cellosolve	Ethylene glycol monoisobutyl ether or isobutoxyethanol, Ektasolv EIB
e.	Propylene glycol mono-methyl ether	Dowanol PM, Polysolv PM
f.	Propasol B	n-Butoxypropanol, propylene glyc monobutyl ether
g.	Dipropylene glycol mono-methyl ether	Polysolv DPM
h.	Diethyl Carbitol®	Diethylene glycol diethyl ether
i.	Methyl Carbitol	Diethylene glycol monomethyl ethe Dowanol DM, methyl dioxital, Ekta solv DM, Polysolv DM
j.	Carbitol	Diethylene glycol monoethyl ether, dioxital, Polysolv DE, Dowanol DE
k.	Hexyl Cellosolve	Ethylene glycol monohexyl ether
l.	Ektasolv® DIB	Diethylene glycol monoisobutyl eth
m.	Polysolv® TM	Triethylene glycol monomethyl eth
n.	Butyl Carbitol	Diethylene glycol monobutyl ether, Dowanol DB, Ektasolv DB
o.	Polysolv PE	Triethylene glycol ethyl ether
p.	Polysolv TB	Triethylene glycol butyl ether
q.	Hexyl Carbitol	Diethylene glycol monohexyl ether

4. Saturated esters

	Common Names	Other Names (including tradenames
a.	Methyl acetate	
b.	Ethyl acetate	
c.	Isopropyl acetate	
d.	Normal propyl acetate	n-Propyl acetate
e.	Secondary butyl acetate	2-Butyl acetate
f.	Isobutyl acetate	
g.	Normal butyl acetate	n-Butyl acetate
h.	Amyl acetate	Pent-Acetate
i.	Primary amyl acetate	
j.	Methyl amyl acetate	
k.	Butyl lactate	
l.	Isobutyl isobutyrate	IBIB
m.	Cellosolve acetate	Ethylene glycol monoethyl ether acetate, Dowanol EEA, Ektasolv EE Acetate, Polysolv EE Acetate
n.	Butyl cellosolve acetate	Ethylene glycol monobutyl ether acetate, Ektasolv EB Acetate
o.	Ethylene glycol diacetate	Glycol diacetate
p.	2-Ethylhexyl acetate	
q.	Carbitol acetate	Diethylene glycol monoethyl ether acetate, Ektasolv DE Acetate
r.	Butyl carbitol acetate	Diethylene glycol monobutyl ether acetate, Ektasolv DV Acetate

5. Saturated nonbranch ketones

	Common Names	Other Names (including tradenames)
a.	Acetone	Dimethyl ketone
b.	Methyl ethyl ketone	MEK
c.	Methyl propyl ketone	
d.	Methyl normal butyl ketone	Methyl n-butyl ketone
e.	Ethyl butyl ketone	
f.	Methyl normal amyl ketone	Methyl n-amyl ketone
g.	Methyl normal heptyl ketone	
h.	Acetophenone	
i.	Cyclohexanone	

6. Nitroparaffins

   a. Nitromethane
   b. Nitroethane
   c. 2-Nitropropane
   d. 1-Nitropropane

7. Miscellaneous solvents

	Common Names	Other Names (including tradenames)
a.	Ethyl ether	
b.	Isopropyl ether	
c.	Dioxane	1, 4 Dioxane
d.	Monoethanolamine	
e.	Diethanolamine	
f.	Triethanolamine	
g.	Dimethyl ethanolamine	
h.	Aminomethylpropanol	1-Amino-2-methylpropanol and AMP
i.	Monoisopropanolamine	
j.	Diisopropanolamine	
k.	Triisopropanolamine	
l.	Tetrahydrofuran	THF
m.	Methylpyrrolidone	
n.	Dimethyl formamide	DMF
o.	Glycerine	

B. Hydrocarbons -- essentially aliphatic.

1. Mixed paraffinic and naphthenic -- normal or branched chains or cycloaliphatic (saturated)

   a. "Exempt" Mineral Spirits (i.e., less than 8% C8 or above aromatics except ethyl benzene
   b. Odorless Mineral Spirits (high paraffinic)
   c. "Exempt" aliphatic 140 type -- sometimes called high flash mineral spirits
   d. "Exempt" VM&P naphtha -- (varnish markers and painters naphtha)
   e. "Exempt" rubber solvent
   f. "Exempt" textile solvent
   g. Pentane
   h. Hexane
   i. Heptane
   j. Cyclohexane
   k. Naphthenes -- cycloaliphatic compounds (saturated) -- NOT to be confused with naphthalene and aromatic

2. Chlorinated -- all saturated

    a. Perchloroethylene

C. Hydrocarbons -- aromatic.

1. Unsubstituted -- less than 8 carbon

    a. Benzene

2. Chlorinated

    a. Monochlorobenzene
    b. Dichlorobenzene

A much more comprehensive solvent listing may be obtained by purchasing the Solvent Section of the Raw Materials Index from the National Paint & Coatings Association, though this is still not an absolutely complete list of all solvents used in the industry.

The Ohio Environmental Protection Agency

The Division of Air Pollution Control

AirLines

March 13, 1992

RTC ✓
PJD ✓
AS ✓
RICK ✓
AC ✓

Administration

Personnel

We continue to post and hire. We have filled a supervisor position in AQM&P; Paul Koval has replaced Tom Hadden. We will soon be filling five district positions; interviews are underway right now. An acid rain position, oxy fuels position, enforcement position and fiscal specialist are next. We continue to attract and hire many fine individuals. We also have a vacancy at the Air Lab. Mike Rath was promoted recently, and we will miss him and wish him well.

1991 Award Winners

It is with great pleasure that we announce the winners of this year's awards. They were given at the March 11th awards ceremony.

The PM_{10} SIP team was the winner of the "teamwork" award and they were honored by the Director. The team consists of Jim Orlemann, Tom Kalman, Bruce Weinberg, Amy Turner, Tammy Beets, Tom Tucker, Bill Spires, Bob Hodanbosi, Gary Engler, and Jeanne Mallett. The SIP has been declared "complete" by Region V and is under review. Way to go team! Congratulations!

The Special Performance Awards went to:

Amy Turner

Amy works for Tom Kalman and was rewarded for her expertise on PM_{10} and her hard work to complete the SIP in a timely manner. Congratulations Amy!

Sharon Korecko

Sharon was recognized for her hard work as Technical Services Word Processor and her work with other sections including engineering and permits. She is always willing to help out when extra work is needed. Congratulations Sharon!

John Martz

John was recognized for his outstanding work with Tom Winston and Jenny Tiell on the AIP or agreement in priniciple on the radiological monitoring project for federal facilities. John has put a great deal of time and effort into developing a new program of monitoring for the districts and locals. Congratulations John!

Employee of the Year-*Tammy Beets:*

Tammy was honored for her hard work as half time Engineering word processor and half time permit word processor. She splits her time between the two sections. Tammy did an exemplary job on the PM_{10} SIP and her friendly and helpful attitude has been greatly appreciated by all. Her work is high quality and prepared efficiently. Congratulations Tammy!

AIR QUALITY MODELING & PLANNING

Maximum Achievable Control Technology (MACT) Regulations

The U.S. EPA has proposed a National emission standards for Hazardous Air Pollutants (NESHAP) for source category: perchloroethylene (PCE, also known as tetrachloroethylene) emissions from dry cleaning facilities [FR/ Vol.56, No. 236/ Monday, 12/9/91 p.64382.] The authority to set these standards comes from section 112 (Title III) of the Clean Air Act Amendments of 1990 (CAAA) which directs the administrator to develop and publish a list of source categories. All new and existing sources falling into the dry cleaning facility source category are included under the proposed standard based on the amount of HAP emissions and because of their potential adverse effects to human health and the environment. The principal driving force behind the establishment of an industry standard is the MACT which in turn is based on demonstrated technology. Prior to the NESHAP proposal a thorough evaluation of air pollution prevention and control methods was conducted vis-a-vis technological feasibility, environmental impacts, and cost analysis. The CAAA permits the Administrator to develop regulatory standards that "distinguish among classes, types, and sizes of sources within a category or subcategory." In this particular NESHAP it has resulted in three regulatory alternatives:

Regulatory Alternative I would require a 95 percent control on a dry-to-dry machine and 85 percent control on a transfer machine through installation of a carbon adsorber and refrigerated condenser, respectively.

Regulatory Alternative II requires 95 percent control on a dry-to-dry machine via installation of either a carbon adsorber or refrigerated condenser, 95 percent control on either a new or previously uncontrolled existing transfer machine via installation of a carbon adsorber, and 85 percent control on an existing refrigerated condenser controlled machine.

Regulatory Alternative III is equivalent to MACT for major sources; requires 95 percent control of emissions on either a dry-to-dry machine (by installing a carbon adsorber or refrigerated condenser) or transfer machine (by installing a carbon adsorber).

The entire summary is attached.

New Source PTI Review

The Central Office New Source - PTI Review staff have received permit worksheets with terms and conditions allowing the use of waste oil for the control of fugitive dust on roadways and parking areas. It has been our position that the use of any type of waste oil for this purpose is not Best Available Technology (BAT). Please be aware of this when new source permit applications request to use waste oil for dust suppression and do not allow it in the PTI worksheets you prepare. If you have any new source review questions or concerns, please contact us. Thank you.

ENGINEERING

Employees News:

In the 3/4/92 issue of The Columbus Dispatch, it was announced that Jasmine Liao of the DAPC Engineering Section passed the State examination for an Engineer-In-Training certificate. This is the first step in obtaining registration as a Professional Engineer in Ohio. Congratulations to Jasmine for this accomplishment.

CEM Program:

The 4th quarter 1991 update of the CEM program statewide overview is attached for your review and comment. Please continue to copy Dave Morehart at the Central Office on all warning letters, visible emission readings, etc. related to CEM issues. Also, performance audits can be conducted at any of your facilities utilizing continuous opacity monitoring systems. Contact Dave at (614) 644-3689 to schedule audits or to discuss any issues concerning CEMs.