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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 52, and 124

[FRL 1538-2]

Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans

AGENCY: Environmental Protection Agency.

ACTION: Final rules.

SUMMARY: In response to the decision of the U.S. Court of Appeals for the D.C. Circuit in *Alabama Power Company v. Costle*, EPA is today amending its regulations for the prevention of significant deterioration of air quality, 40 CFR 51.24, 52.21. Today's amendments also include regulatory changes affecting new source review in nonattainment areas, including restrictions on major source growth (40 CFR 52.24) and requirements under EPA's Emission Offset Interpretative Ruling (40 CFR Part 51, Appendix S) and Section 173 of the Clean Air Act (40 CFR 51.18 (j)).

DATES: The regulatory amendments announced here come into effect on August 7, 1980. State Implementation Plan revisions meeting today's regulatory changes are to be submitted to EPA within nine months after this publication.

FOR FURTHER INFORMATION CONTACT: James B. Weigold, Standards Implementation Branch (MD-15), Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, 919/541-5292.

SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline. A section entitled Summary of PSD Program has been added to provide a concise narrative overview of this program.

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I. Summary of PSD Program

The purpose of this summary is to help those people who are unfamiliar with the PSD program gain an understanding of it. Because this

summary seeks to condense the basic PSD rules, it may not precisely reflect the amendments announced in this notice. Should there be any apparent inconsistency between the summary and the remainder of the preamble and the regulations, the remaining preamble and the regulations shall govern.

A. PSD Allows Industrial Growth Within Specific Air Quality Goals

The basic goals of the prevention of significant air quality deterioration (PSD) regulations are (1) to ensure that economic growth will occur in harmony with the preservation of existing clean air resources to prevent the development of any new nonattainment problems; (2) to protect the public health and welfare from any adverse effect which might occur even at air pollution levels better than the national ambient air quality standards; and (3) to preserve, protect, and enhance the air quality in areas of special natural recreational, scenic, or historic value, such as national parks and wilderness areas.

States are required to develop SIP revisions for PSD pursuant to regulations published today. See 40 CFR 51.24, "Requirements for Preparation, Adoption and Submittal of Implementation Plans." If EPA approves the proposed PSD plan, the state can then implement its own program. In the absence of an approved state PSD plan, another portion of today's regulations will govern PSD review. See 40 CFR 52.21, "Approval and Promulgation of Implementation Plans." EPA will implement this regulation itself if the state does not submit an approvable PSD program of its own.

States can identify in their SIPs the local land use goals for each clean area through a system of area classifications. A "clean" area is one whose air quality is better than that required by the National Ambient Air Quality Standards. Each classification differs in the amount of growth it will permit before significant air quality deterioration would be deemed to occur. Significant deterioration is said to occur when the amount of new pollution would exceed the applicable maximum allowable increase ("increment"), the amount of which varies with the classification of the area. The reference point for determining air quality deterioration in an area is the baseline concentration, which is essentially the ambient concentration existing at the time of the first PSD permit application submittal affecting that area. To date, only PSD increments for sulfur dioxide and particulate matter have been established. Increments or alternatives

to increments are currently under investigation for the other criteria pollutants.

There are three types of area classifications. Class I areas have the smallest increments and thus allow only a small degree of air quality deterioration, while Class II areas can accommodate normal well-managed industrial growth. Class III designations have the largest increments and are appropriate for areas desiring a larger amount of development. In no case would the air quality of an area be allowed to deteriorate beyond the National Ambient Air Quality Standards. Except for certain wilderness areas and national parks, which are mandatory Class I areas, all clean areas of the country were initially designated as Class II. Flexibility exists under the Act to adjust most of these designations, except for those mandated by Congress.

The principal mechanism within the SIP to implement the objectives of the PSD program is the preconstruction review process. These provisions require that new major stationary sources and major modifications are carefully reviewed prior to construction to ensure compliance with the National Ambient Air Quality Standards, the applicable PSD air quality increments, and the requirements to apply the best available control technology on the project's pollutant emissions. In addition, proposed SIP relaxations which would limit further use of increment must be reviewed for their anticipated impact and not be approved if the applicable increment would be violated. The SIP must also contain PSD provisions for periodically reviewing all emissions increases, including those which occur outside the SIP revision and the new source review (NSR) process, and for restoring clean air when such increases cause violations of the applicable PSD increment. This corrective action may require additional controls on existing emissions sources which contribute to the problem.

B. Who is Subject to the Prevention of Significant Deterioration Regulations?

The requirements of today's PSD regulations apply to major stationary sources and major modifications which meet certain criteria concerning the geographic location, type of pollutants to be emitted, and timing of proposed construction. No source or modification subject to today's rules may be constructed without a permit which states that the stationary source or modification would meet all applicable PSD requirements. This section summarizes how PSD review as

modified in response to *Alabama Power* will apply.

The primary criterion in determining PSD applicability is whether the proposed project is sufficiently large (in terms of its emissions) to be a major stationary source or major modification. Source size, for applicability purposes, is defined in terms of "potential to emit." "Potential to emit" means the capability at maximum design capacity to emit a pollutant after the application of all required air pollution control equipment and after taking into account all federally enforceable requirements restricting the type or amount of source operation. A "major stationary source" is any source type belonging to a list of 28 source categories which emits or has the potential to emit 100 tons per year or more of any pollutant subject to regulation under the Act, or any other source type which emits or has the potential to emit such pollutants in amounts equal to or greater than 250 tons per year. A stationary source generally includes all pollutant-emitting activities which belong to the same industrial grouping, are located on contiguous or adjacent properties, and are under common control. Pollutant activities which belong to the same major group as defined in a standard industrial classification scheme developed by the Office of Management and Budget are considered part of the same industrial grouping. (See SOURCE).

A "major modification" is generally a physical change in or a 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. In determining if a proposed increase would cause a significant net increase to occur, several detailed calculations must be performed. First, the source owner must quantify the amount of the proposed emissions increase. This amount will generally be the potential to emit of the new or modified unit. Second, the owner must document and quantify all emissions increases and decreases that have occurred or will occur contemporaneously (generally within the past five years) and have not been evaluated as part of a PSD review. The value of each contemporaneous decrease and increase is generally determined by subtracting the old level of actual emissions from the new or revised one. Third, the proposed emissions changes and the unreviewed contemporaneous changes must then be totaled. Finally, if there is a resultant net emissions increase that is larger than certain values specified in the

regulations, the modification is major and subject to PSD review.

Certain changes are exempted from the definition of major modification. These include: (1) routine maintenance, repair, and replacement; (2) use of an alternative fuel or raw material by revision of an order under sections (2)(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation); (3) use of an alternative fuel by reason of an order or rule under section 125 of the Clean Air Act; (4) use of an alternative fuel at a steam generating unit to the extent it is generated from municipal solid waste; (5) use of an alternative fuel which the source is capable of accommodating; and (6) an increase in the hours of operation, or the production rate. The last two exemptions can be used only if the corresponding change is not prohibited by certain permit conditions established after January 6, 1975.

If a source or modification thus qualifies as major, its prospective location or existing location must also qualify as a PSD area, in order for PSD review to apply. A PSD area is one formally designated by the state as "attainment" or "unclassifiable" for any pollutant for which a national ambient air quality standard exists. This geographic applicability test does not take into account what new pollutant emissions caused the construction to be major. It looks simply at whether the source is major for any pollutant and will be located in a PSD area.

Once a source applicant has determined that proposed construction falls under PSD based on the above size and location tests, it must then assess whether the pollutants the project would emit are or are subject to PSD. If a new major stationary source emits pollutants for which the area it locates in is designated nonattainment, then the source is exempt from PSD review for those pollutants. These sources must, however, meet the applicable requirements of NSR for each nonattainment pollutant. Similarly, if a major modification to be constructed in a PSD area involves changes only for nonattainment pollutants then the source is not subject to PSD. These modifications must meet the appropriate nonattainment NSR under the SIP for the pollutant. Once the question of NSR jurisdiction is resolved, then the PSD review applies to all significant emissions increases of regulated air pollutants. Specific numerical cutoffs which define what emissions increases are "significant" have been spelled out in the regulations. These pollutant-

specific cutoffs can exempt a source from PSD review for a particular pollutant, except where the proposed construction would adversely impact a Class I area.

If a proposed source or modification would be subject to PSD review based on size, location, and pollutants emitted, then its construction schedule must meet certain tests before the PSD rules promulgated today would apply. All major construction otherwise qualifying for PSD review would not need a PSD permit under these regulations if the proposed construction: (1) was subject to the old PSD rules, has submitted a complete application under these rules before today, and was or is subsequently approved to construct based on this application; or (2) was not subject to the old PSD rules, has received all federal, state, and local air permits needed before today and commences construction in a continuous fashion at the proposed site within a reasonable time.

Finally, the PSD regulations contain some specific exceptions for some forms of source construction. The requirements of today's regulations do not apply to any major stationary source or major modification that is: (1) a nonprofit health or educational institution (only if such exemption is requested by the governor); or (2) a portable source which has already received a PSD permit and proposes relocation.

C. What Must A Source or Modification Do To Obtain A PSD Permit?

1. It must apply the best available control technology.

Any major stationary source or major modification subject to PSD must conduct an analysis to ensure application of best available control technology (BACT). During each analysis, which will be done on a case-by-case basis, the reviewing authority will evaluate the energy, environmental, economic and other costs associated with each alternative technology, and the benefit of reduced emissions that the technology would bring. The reviewing authority will then specify an emissions limitation for the source that reflects the maximum degree of reduction achievable for each pollutant regulated under the Act. In no event can a technology be recommended which would not meet any applicable standard of performance under 40 CFR Parts 60 and 61.

In addition, if the reviewing authority determines that there is no economically reasonable or technologically feasible way to accurately measure the emissions, and hence to impose an

enforceable emissions standard, it may require the source to use source design, alternative equipment, work practices or operational standards to reduce emissions of the pollutant to the maximum extent. For example, if an immense pile of uncovered coal emits coal dust into the atmosphere, it would make little sense to impose an emission standard, since measuring the amount of coal dust rising off the pile is nearly impossible. A much more direct approach to controlling emissions is, for example, requiring the owner to wet the coal pile daily. This type of standard or practice will be equivalent to an emissions limitation for purposes of the BACT requirement.

2. It must conduct an ambient air quality analysis.

Each PSD source or modification must perform an air quality analysis to demonstrate that its new pollutant emissions would not violate either the applicable NAAQS or the applicable PSD increment. This analysis ensures that the existing air quality is better than that required by national standards and that baseline air quality will not be degraded beyond the applicable PSD increment.

Each proposed major construction project subject to PSD must first assess the existing air quality for each regulated air pollutant that it emits in the affected area. This analysis requirement does not apply to pollutants for which the new emissions proposed by the applicant would cause insignificant ambient impacts. Today's PSD regulations define pollutant-specific impacts that are typically considered inconsequential and that can be exempted from analysis, unless existing air quality is poor or adverse impacts to a Class I area are in question. For pollutants for which a NAAQS exists, the applicant must provide ambient monitoring data that represent air quality levels in the year's period preceding the PSD application. Where no existing data are judged representative or adequate, then the source applicant must conduct its own monitoring program. This is often the case where the applicant will be establishing the baseline concentration for the affected area. Typically air quality dispersion modeling is used by applicants to support or extend the assessment made with gathered monitoring data. For pollutants for which there is no NAAQS, the required analysis will normally be based on dispersion modeling alone.

Source applicants who are subject to the ambient analysis requirement for sulfur dioxide or particulate matter must also perform an analysis to compute

how much of the PSD increment remains available to them. In general the amount of increment that is available depends on certain changes in actual emission. First, actual emissions changes occurring after January 6, 1975 which are associated with physical changes or changes in the method of operation at a major stationary source can affect the available increment. Accordingly, cleanup adds to the available growth margin while new emissions diminish it. Second, all changes in emissions, including those from minor sources and other types of changes at major sources, affect the available increment provided they occur after the baseline date. The baseline date is essentially the time that the first PSD application affecting the area is filed.

Once the question of how much increment remains is resolved, then the applicant must demonstrate that his proposed new emissions would not exceed the remaining PSD increment. Where a proposed project would cause a new violation of the increment or contribute to an existing violation, it cannot be approved. Existing violations must be entirely corrected before PSD sources which affect the area can be approved.

3. It must analyze impacts to soils, vegetation, and visibility.

An applicant is required to analyze whether its proposed emissions increases would impair visibility, or impact on soils or vegetation. Not only must the applicant look at the direct effect of source emissions on these resources, but it also must consider the impacts from general commercial, residential, industrial and other growth associated with the proposed source or modification. The results of this analysis may be used to determine if the project would have an adverse impact on a Class I area.

4. It must not adversely impact a Class I area.

If the reviewing authority receives a PSD permit application for a source that could impact a Class I area, it will immediately notify the Federal Land Manager and the federal official charged with direct responsibility for managing these lands. These officials are responsible for protecting the air quality-related values in Class I areas and for consulting with the reviewing authority to determine whether any proposed construction will adversely affect such values. If the Federal Land Manager demonstrates that emissions from a proposed source or modification would impair air quality-related values, even though the emissions levels would not cause a violation of the allowable air quality increment, the Federal Land

Manager may recommend that the reviewing authority deny the permit.

5. Its application must undergo adequate public participation.

The regulations solicit and encourage participation by the general public, industry, and other affected persons impacted by the proposed major source or major modification. Specific public notice requirements and a public comment period are required before the PSD review agency takes final action on a PSD application. The public notice must indicate whether the reviewing authority proposed permit approval, denial, or conditional approval of a proposed major source or major modification. Consideration is given to all comments received provided they are relevant to the scope of the review. Where requested, or at its own discretion, the reviewing authority may conduct a public hearing to help clarify the issues and obtain additional information to assist in making a final permit decision.

6. It must start construction on time.

The source owner, once receiving a PSD permit, must start construction within a reasonable period of time (typically within 18 months of approval) and must stay on a continuous construction schedule. Normally, long delays will invalidate the permit.

II. Background

On August 7, 1977, the President signed the Clean Air Act Amendments of 1977 (1977 Amendments) into law. Those amendments established, in the form of Part C of Title I of the Clean Air Act (CAA), a set of requirements for the prevention of significant deterioration (PSD) of air quality in "clean air" areas. Sections 160-69, 42 U.S.C. 7470-79. The requirements for preconstruction review of new stationary sources and modifications in Part C follow the outline of the PSD regulations that EPA promulgated in 1974, but are more elaborate and in many ways more stringent. Part C also requires that each state implementation plan (SIP) contain the new PSD requirements.

In response to Part C, EPA promulgated two sets of PSD regulations on June 19, 1978. One set specified the minimum requirements that a PSD SIP revision would have to contain in order to warrant EPA approval. See 43 FR 26380 (codified at 40 CFR 51.24 (1979)) (hereinafter, the "1978 Part 51 regulations") The other set comprehensively amended the 1974 PSD regulations, incorporating into them the new Part C requirements. 43 FR 26388 (codified at 40 CFR 52.21 (1979)) (hereinafter, the "1978 Part 52 regulations"). EPA intended that, until it

had approved a PSD SIP revision for a state, the permitting of new sources and modifications for PSD purposes would continue under the 1978 Part 52 regulations.

On June 18, 1979, the United States Court of Appeals for the District of Columbia Circuit issued a decision that upheld some of the substantive provisions of both the 1978 Part 51 and Part 52 regulations and overturned others. *Alabama Power Company v. Costle*, 13 ERC 1225. In its opinion, the court merely summarized its holdings, but promised to issue supplemental opinions after it had considered any petitions for reconsideration. In an order that accompanied the summary opinion, the court stayed the effect of its decision until it had issued the supplemental opinion. The purpose of that procedure, the court explained, was "to enable EPA to proceed as soon as possible to commence rulemaking or other proceedings necessary to promulgate those revisions in the PSD regulations required by [the court's] rulings * * *." *Id.* at 1227.

By a notice that appeared in the Federal Register for September 5, 1979, EPA began the process the court had in mind. 44 FR 51924. There EPA proposed various amendments to the PSD regulations that were to replace the provisions the court had held invalid, for instance, the definitions of "source," "modification," and "potential to emit." EPA also proposed amendments that were to add entirely new provisions to supplement the replacement provisions, for instance, the *de minimis* exemptions.

Prior to September, EPA had issued, also in response to the 1977 Amendments, various regulations and guidelines relating to the construction of new sources and modifications in and near "nonattainment" areas. In January 1979, the Agency revised its Emission Offset Interpretative Ruling ("Offset Ruling"), which now appears at 40 CFR Part 51, Appendix S (1979). Then, in April 1979, EPA issued a guideline entitled "General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas." 44 FR 20372.¹ Finally, in July 1979, EPA issued an interpretative rule concerning certain statutory restrictions on new construction in nonattainment areas. 44 FR 38471 ("construction moratorium").² EPA also asked for comment on certain

¹ For supplements to the General Preamble. See 44 FR 38583 (July 2, 1979); 44 FR 30371 (August 28, 1979); 44 FR 51924, 51928-29 (September 5, 1979); 44 FR 53761 (September 17, 1979); and 44 FR 67182 (November 23, 1979).

² For a fuller description of those nonattainment regulations and guidelines. See 44 FR 51925 and 45 FR 31304-05.

issues concerning new construction in such areas. 44 FR 38583.

In the September Federal Register notice, EPA also proposed various changes to those nonattainment regulations and guidelines. The purpose of those changes generally was to conform those regulations and guidelines to the decisions in *Alabama Power* concerning the statutory terms "source," "modification," and "potential to emit."

On September 18, 1979, EPA announced that it would hold public hearings on the September proposal on October 15 and 16 in Washington, D.C., and on October 18 and 19 in San Francisco. See 44 FR 54069. At the same time, the Agency set November 18 as the deadline for submitting information rebutting or supplementing any presentation at the hearings. Subsequently, EPA held the public hearings as scheduled.

On October 4, 1979, EPA announced various corrections to technical errors in the September proposal. 44 FR 57107. At the same time, it extended the period for submitting written comments until November 5, 1979. It added that it would hold the rulemaking docket open until November 18, 1979, not only for information rebutting or supplementing any presentation at the hearings, but also for information rebutting or supplementing any written comment.

On November 9, 1979, EPA announced that it had recently released for public comment a draft of a revision of the *Ambient Monitoring Guideline for Prevention of Significant Deterioration (PSD)* (OAQPS 1.2-096), which the Agency had originally published in May 1978. 44 FR 65084. EPA also announced that it would accept any written comments on the draft until December 10, 1979.

On December 14, 1979, the Court of Appeals handed down its final opinion in *Alabama Power*. 13 ERC 1993. Subsequently, in order to avoid the uncertainty and confusion that would occur in PSD permitting if the final opinion came into effect before EPA completed the rulemaking, EPA and many of the other parties to the litigation petitioned the court to keep the final opinion from coming into effect until June 2, 1980. On March 14, 1980, the court granted the request.

On May 30, 1980, EPA and other parties to the litigation again petitioned the court, requesting a further extension of time until July 18, 1980. The court granted an extension, to July 28, on June 23, 1980.

On January 30, 1980, EPA announced that it would reopen the rulemaking docket for the receipt of written

comments on various aspects of the rulemaking, including the final opinion of the court, certain issues that the Agency described in the notice, the redraft of the monitoring guidelines, and various meetings between EPA and others. 45 FR 6802.

On February 5, 1980, EPA issued a stay of the 1978 Part 52 PSD regulations as to certain sources and modifications. 45 FR 7800. The stay was effective as of January 30, 1980. Its purpose was "to relieve from the permitting requirements of the 1978 PSD regulations roughly those sources and modifications that would not be subject to the permitting requirements of valid replacement regulations that would comport with the *Alabama Power* opinion." *Id.*

On May 13, 1980, EPA promulgated a stay of the Offset Ruling and the construction moratorium that is similar to the PSD stay. See 45 FR 31304. On the same day, EPA promulgated certain amendments to the Offset Ruling, the regulations relating to new source review at 40 CFR 51.18, and the construction moratorium. Those amendments established the geographic applicability of the various nonattainment requirements relating to the construction of new sources and modifications. 44 FR 31307. Those amendments embody EPA's responses to many of the comments on the September proposal.

Finally, on May 19, 1980, EPA promulgated regulations aimed at consolidating and unifying various permit requirements and procedures. 45 FR 33290. Those new regulations contain provisions which will govern the processing of applications for permits under the new Part 52 PSD regulations.

During the course of the rulemaking that EPA began in September, it received approximately 375 written comments. The discussion that follows summarizes the proposals, the comments on them, EPA's responses, and the final provisions.

III. Highlights

Several significant changes from the September 5, 1979 proposal have occurred. These changes include the addition of certain provisions not addressed by the September 5, 1979 proposal but which are necessary under the Act. Several regulatory provisions which are unchanged in substance by today's notice have also been reprinted to clarify the effects of any revised paragraph numbering.

A. Transition: The proposed transition scheme for phasing in the additional monitoring requirements has been expanded to require no new monitoring requirements for PSD applications

submitted and complete within 10 months of the promulgation date. In addition, today's rules allow less than a full year of monitoring data to be included with PSD applications filed after the above times but before 18 months after the promulgation date. PSD applications filed later than 18 months from the date of promulgation will be subject to the full new monitoring requirements.

B. Potential To Emit: Potential to emit is the maximum design capacity of the source, except as constrained by federally enforceable permit conditions. This would include permit conditions restricting hours or type of source operation.

C. 50-Ton Exemption: Today's regulations essentially delete the "50-Ton Exemption" for both nonattainment and PSD. The eligibility date for the section 165(b) exemption has been changed from August 7, 1977 to March 1, 1978.

D. Fugitive Emissions: For the purpose of PSD and nonattainment, "fugitive emissions" now means those emissions released directly into the atmosphere, which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Fugitive emissions are not to be considered in determining whether a source would be a major source, except when such emissions come from specified source categories.

E. Fugitive Dust: Today's regulations promulgate the proposed deletion of the "fugitive dust exemption" from the applicable provisions of both PSD and the Offset Ruling.

F. Stationary Source: The definition of source for PSD purposes has been made more liberal than the previous regulations. Under today's rules, a PSD source is a grouping of all pollutant emitting activities at one location and owned or under the control of the same person or persons. This generally relates to the common notion of a plant. Smaller portions of such a plant no longer will be examined for applicability purposes. For added clarification, pollutant-emitting activities will now be considered part of the same "plant" if they belong to the same "major group" as described in the Standard Industrial Classification Manual. At this time, however, the Agency has decided not to change its previous approach to defining source for nonattainment purposes. Therefore, today's rules continue to incorporate the "dual definition" concept of source which requires consideration of overall emissions from a "plant" and from each "installation" within that plant. In a change from the proposal, this dual definition will apply

to major sources in all nonattainment areas designated under section 107 of the Act, regardless of SIP approvability or degree of completion.

G. Modification: The definition and treatment of modifications have been changed since the September 5, 1979 proposal. The concept of accumulating minor changes made at an existing minor source until the sum was equivalent to a major stationary source has been deleted. Rather, a source must now qualify as a major stationary source prior to making a modification to become subject to review, unless the change itself is greater than 100 or 250 tons per year. Contemporaneous changes now generally refer to emissions increases and decreases occurring within the same 5-year time period unless the state opts for a different time period in its Part D SIP or PSD program. Reductions, to be creditable, must be enforceable under the SIP before the contemporaneous emission increase would begin construction. Such reductions, as well as significant increases, will be quantitatively assessed on the basis of an "actual emissions" baseline, rather than a "potential to emit" baseline, as was proposed. "Reconstruction" (*i.e.*, 50% or more capital replacement) has been deleted from PSD but has been retained for nonattainment NSR, including the prohibition on construction.

H. "De Minimis" Exemptions: Three types of changes from the September 5 proposal appear in today's regulations: (1) different numbers have been developed for defining significant emissions from new sources and significant net emissions increases from modifications; (2) new air quality *de minimis* numbers have been generated and can only be used to exempt PSD sources from the ambient monitoring requirements; and (3) a ten kilometer proximity cutoff has been specified to indicate when a source, regardless of pollutant emissions, must be prepared to demonstrate that no 24-hour impact greater than 1 $\mu\text{g}/\text{m}^3$ would occur in the Class I area.

I. Geographic Applicability: PSD will generally apply only if the otherwise subject major construction locates in a section 107 area which is designated attainment or unclassified under section 107 for any criteria pollutant (regardless of what pollutants the proposed construction would emit or what pollutant qualified it as major). An exception to this rule is that no PSD permit is required for major construction which emits only the pollutant for which the area of location is nonattainment.

J. *Pollutant Applicability*: Any net significant emissions increase of any pollutant subject to regulation under the Act (not just those pollutants for which the source is major) now qualifies as a PSD modification. Nonattainment review will continue to focus on only the major nonattainment pollutant. No PSD review will be required for a given criteria pollutant, if a source would construct in an area designated nonattainment for that pollutant.

K. *Baseline Area/Date*: Baseline area now refers to all section 107 areas which are designated attainment or unclassified for PM or SO₂ (as may be redesignated) in which the PSD source triggering the baseline date would locate or would have an annual air quality impact equal to or greater than 1 µg/m³. Interstate impacts, however, do not trigger baseline date. This differs from the proposal, which focused on the AQCR rather than the designated area. Baseline dates are pollutant specific and can be established by the first PSD application of a source with significant emissions of the applicable pollutant. States will have the flexibility to redesignate clean or unclassified areas under section 107 and thereby remove baseline dates for certain areas. However, no redesignation may subdivide the impact area (>1 µg/m³) of the source triggering a baseline date.

L. *Best Available Control Technology*: Today's regulations reflect the proposal with one exception. A provision has been added that requires BACT for modifications only when both a net emissions increase occurs at the changed unit(s) and a significant net emissions increase occurs at the plant; BACT applies only to the units actually modified.

M. *Monitoring*: The proposed transition scheme for phasing in the additional monitoring requirements will provide relief for sources covered under the existing regulations that are in the process of monitoring and offer allowances for setup time of monitors in gathering the required data.

N. *Notification*: The notification provisions appearing in the September 5, 1979 proposal have been deleted from today's regulations.

O. *PSD SIP Revisions*: The requirements proposed on September 5 for governing the development of PSD SIP submittals are essentially unchanged. These regulations allow limited flexibility in the development of different but equally effective state plans.

P. *Increment Consumption*: A discussion has been included in the preamble to summarize the effects that the *Alabama Power* decision has had on

increment tracking. This section also discusses how certain SIP related issues are to be addressed, such as the Gulf Coast problem (SIP shows a theoretical increment violation in a clean area, unrelated to actual air quality impact) and temporary SIP relaxations. (SIP would be relaxed and only temporary emissions would occur.)

Q. *Public Participation*: The requirements of paragraph (r) of § 52.21 have been replaced with the public participation procedures associated with the consolidated permit regulations (40 CFR 124).

IV. Transition

This section focuses on those provisions of the final PSD and nonattainment regulations which govern the transition from the preexisting requirements to the new ones. It begins with a discussion of the new transition provisions of the Part 52 PSD regulations and then deals in turn with the transition provisions of the Part 51 PSD regulations, the Offset Ruling, the Part 51 nonattainment regulations, and finally the construction moratorium.

A. Part 52 PSD Regulations

The new transition provisions of the Part 52 PSD regulations fall into three categories: those that relate to the new coverage of the regulations, those that relate to the new requirements for best available control technology (BACT) and air quality assessments, and those that relate to the new procedural requirements. The discussion which follows deals with each in that order.

1. Coverage.

a. *Proposed transition provisions*: The preconstruction permit requirements of the 1978 Part 52 regulations applied to a certain class of projects that emit or would emit pollutants. The keystone of those regulations, section 52.21(i)(1), provided that "[n]o major stationary source of major modification shall be constructed unless the [permit] requirements of [the Part 52 regulations] have been met." It established the general rule that the permit requirements applied to any "major stationary source" or "major modification." The balance of section 52.21(i) then listed certain exceptions to that general rule. The main exceptions established various "grandfather" exemptions. The permit requirements of the regulations applied, therefore, to any pollutant-emitting project that was "major" and had no "grandfather" status.

In September 1979, EPA proposed to establish new Part 52 PSD regulations whose coverage would be substantially different from that of the 1978

regulations. First, it proposed to define "major stationary source" differently than it had defined that term in the 1978 regulations. Under the 1978 regulations, whether a "source" was "major" depended upon whether its "potential to emit" any pollutant regulated under the Act would equal or exceed certain thresholds. "Potential to emit" referred largely to the maximum rate at which a "source" would emit a pollutant *without* control equipment. Under the amendments that EPA proposed in September, "potential to emit" would be the maximum rate at which a "source" would emit a pollutant *with* control equipment. Second, EPA proposed to define "major modification" differently than it had defined that term in the 1978 regulations. There, a "major modification" was any change at a "source" that would increase the "potential to emit" of the "source" by 100 tons per year of any pollutant regulated under the Act, or 250 tons per year, depending on source type and ignoring any emission reductions. Under the amendments that EPA proposed in September, "major modification" would have become any change at a "source" that would result in a *significant net* increase in the "potential to emit" of the "source." "Significant" is defined as emissions greater than certain *de minimis* values. Finally, EPA proposed to limit the geographic applicability of the PSD permit requirements by adding an exception to section 52.21(i) that would exclude a "source" or "modification" from PSD review on the basis of its location.³

Amendments of the sort that EPA proposed in September would have left many projects that previously fell or would have fallen within the coverage of the 1978 Part 52 regulations outside the coverage of the resulting Part 52 regulation. For instance, many new "sources" that were "major" under the 1978 regulations would not have been "major" under the proposed amendments, because while their maximum uncontrolled emissions would exceed the applicable thresholds, their maximum controlled emissions would not.

Of those projects that were or would have been subject to the PSD permit requirements under the 1978 PSD regulations, but not under the proposed

³Specifically, EPA proposed that the permit requirements would apply only to any "major stationary source" or "major modification" that would be located in an area designated under section 107 of the Act as attainment or unclassifiable for a pollutant for which the "source" or "modification" would be major or would significantly impact an area in another state which is designated as attainment or unclassifiable for any such pollutant.

amendments, some have already received a PSD permit, while others have not. In September, EPA proposed to put both sets of projects outside the reach of the permit requirements as soon as possible by putting the new definitions of "potential to emit" and "modification" and the new limitation on geographic applicability into effect immediately upon their promulgation. See 44 FR 51927. But EPA also proposed that any permit that had already been issued would remain in effect, binding and particular project to its terms, until the permit had been rescinded under a proposed paragraph (w) or had expired under an existing paragraph (s). See *id.* at 51927, 51956. Under paragraph (w), a permittee would have been able to obtain rescission only if the permittee filed a complete application with the issuing authority within 90 days after paragraph (w) had come into effect.

Amendments of the sort that EPA proposed in September would also have brought some projects that previously fell or would have fallen outside the coverage of the 1978 regulations inside the coverage of the Part 52 regulations. For instance, many changes at a "source" that would result in a gross increase in "potential to emit" well below 100 or 250 tons per year might nevertheless result in a significant net increase.

In September, EPA proposed to exempt from PSD review certain of these projects that fell or would have fallen beyond the reach of the PSD permit requirements under the 1978 regulations, but not under the proposed amendments. In particular, EPA proposed to "grandfather" any such project which before the promulgation of the new amendments had received each preconstruction permit that the state implementation plan (SIP) required and which will have "commenced" construction within 18 months after promulgation. See *id.* at 51928 (first column), 51953 (proposed § 52.21(i)(7)); 44 FR 57108 (items B(1) and (C)(2)).

Finally, EPA proposed to add another new grandfather provision to § 52.21(i). That provision would have stated that the permit requirements of those regulations do not apply to any "source" or "modification" on which construction "commenced" before August 7, 1977, the date of enactment of the 1977 Amendments. See *id.* at 51928 (first column), 51953 (proposed § 52.21(i)(3)). The purpose of the proposal was merely to state in regulatory form what section 168(b) of the Act, 42 U.S.C. 7478(b), already provides.

b. *Comments and final action on the proposed transition provisions relating to coverage:* EPA received no comments

on its proposal to put the new definitions of "potential to emit" and "modification" and the new limitation on geographic applicability into effect immediately upon promulgation. EPA therefore has put those provisions into effect as of the date this notice appears in the Federal Register. Some projects that were within the coverage of the 1978 Part 52 regulations, but have yet to receive a PSD permit, are now outside the coverage of the new Part 52 regulations, since the prohibition on construction without a permit in § 52.21(i)(1)(i) no longer applies to them. As a result, construction on them may begin immediately.⁴ Because further delay is pointless, and might be harmful in some cases, EPA finds that it has "good cause" to put the new applicability provisions into effect immediately upon promulgation, within the meaning of section 4(d)(3) of the Administrative Procedure Act (APA), 5 U.S.C. 553(d)(3). See also APA 4(d)(1), 5 U.S.C. 553(d)(1).

EPA did receive numerous comments on its proposal to rescind certain permits, and to treat them as binding unless and until rescinded. While one commenter agreed with the proposal, most did not. They objected primarily to two aspects of the proposal: first, that it would place on the permittee the dual burden of coming forward with an application for rescission and of providing proof that the project in question does fall outside the coverage of the new Part 52 regulations and, second, that it would bar rescission if the permittee failed to file a complete application within a certain period of time. The commenters argued that EPA had no authority originally to require a permit for any project that falls outside the coverage of the new regulations and that it therefore has no authority now either to place the burden of coming forward and of proof on a permittee or to keep a rescindable permit in effect merely because of a failure to file a complete application for rescission by a certain time.

In response, EPA has promulgated a new provision, § 52.21(w), which does place the burden of coming forward and of proof on the permittee, but imposes no deadline for filing an application. Whether EPA had authority originally to require a permit for a project that falls outside the coverage of the new regulations is immaterial. EPA has authority under section 301(a)(1) of the Act, 42 U.S.C. 7601(a)(1), to fashion

⁴The partial stay of the 1978 regulations that EPA issued in January 1980 has probably already relieved most of those projects from the permit requirements of those regulations.

within reason the regulatory tools it needs to carry out its tasks. Here EPA has undertaken not only to release certain PSD permittees from the constraints of their PSD permits, but also to settle as finally, as publicly, and as quickly as possible which old permits are binding and which are not. Prospective applicants, in order to prepare applications, and permitting authorities, in order to meet their obligations under the PSD regulations, must assess increment consumption. Confusion and uncertainty over whether particular projects are subject to the emissions limitations in their PSD permits can only frustrate efforts to assess increment consumption. New § 52.21(w) maximizes EPA's ability to perform satisfactorily the tasks it has undertaken.

First, by stating explicitly that a permit generally remains in effect until rescinded, § 52.21(w) gives each permittee with a rescindable permit a strong reason to bring it before the reviewing authority as soon as possible. Second, by putting the burdens of coming forward and of proof on the permittee, § 52.21(w) ensures that the reviewing authority will spend its time efficiently and will have adequate information with which to make a sound decision. Third, by establishing that only the reviewing authority may rescind a permit, the provision promotes the soundness and therefore the finality of the rescission, since the reviewing authority will have the expertise and objectivity necessary to check adequately whether the permittee has applied the intricate applicability rules correctly. Finally, by requiring that the reviewing authority publish each rescission, § 52.21(w) ensures that the status of each permit will be in the public record.

Certain commenters suggested two alternatives to EPA's proposed rescission provision. One alternative was to declare upon promulgation that any PSD permit for a project that falls outside the coverage of the new regulations is null and void as of that time, but that any permittee which concludes it holds such a permit must send the reviewing authority a bare notice of that conclusion. The other alternative was to require any such permittee to send the reviewing authority an application for rescission and to establish that the failure of the reviewing authority to act on the application within a certain period would operate to grant the application. EPA has decided to adopt neither alternative. Under both, a project that should not be able to escape PSD

constraints would be able to escape them merely because of an oversight or a manpower deficiency. EPA, however, has no authority to allow escape from review on that basis.

Certain commenters also objected to other aspects of the proposed rescission provision. In particular, one commenter asserted that proposed § 52.21(w)(3), which would say that "[t]he permitting authority may approve" an application that does show that the permit is rescindable, should state instead that "[t]he permitting authority *shall* approve" such an application. (Emphasis added.) EPA agrees, and has placed the necessary mandatory language in the final provision. Other commenters urged that the final provision recognize the possibility that a permittee may wish to obtain rescission of only certain elements of a permit. In response, EPA has introduced language under which the reviewing authority may rescind only certain elements, if that is appropriate in the particular case.

With respect to the rescission provision, it should be noted that rescission of a permit would in no way affect any other limitations on the project that may apply by virtue of the SIP or a state permit. It should also be noted that, if a source or modification whose permit is rescinded were later found to be causing or contributing to an increment violation, additional controls might be necessary. See 40 CFR 51.24 (a)(3)(1979).

EPA received many comments on its proposal to "grandfather" certain projects that fall outside the coverage of the 1978 regulations, but not the new Part 52 regulations. Two commenters, while not focusing specifically on that proposal, expressed general opposition to "grandfathering" any project that would otherwise fall within the coverage of the new regulations. In its view, EPA should adhere to the transitional rules that it established in the 1978 regulations, so that in general a project would escape PSD review under the new Part 52 regulations only if certain permits were obtained for it by March 1, 1978, and construction "commenced" on it by March 19, 1979.

EPA disagrees that it should or must adhere to the transitional rules in the 1978 regulations in deciding which of the projects in question here should have to get a PSD permit. Part C of Title I of the Act contains two provisions, sections 165(a) and 168, which describe how the PSD permit requirements of Part C are to be implemented. Those sections, however, contradict each other irreconcilably. See *Citizens to Save Spencer County v. EPA*, 600 F.2d 844, 851-54, 860-73 (D.C. Cir., 1979). EPA has

authority under section 301(a)(1) of the Act, therefore, to set transitional rules which accommodate reasonably the purposes and concerns behind the two contradictory provisions. See *id.* at 873-74.

The court in *Citizens to Save Spencer County* identified those "considerations" as follows:

(1) enhanced protection of the environmental quality of the nation's air; (2) minimization of economic dislocation and loss as a result of such enhanced protection; (3) a heightened enforcement role for states * * *; and (4) facilitation of an efficient administrative transition from enforcement of the "old" to "new" preconstruction review requirements. (*Id.* at 889 (footnotes omitted).)

Here, the proposed grandfather provision would reasonably accommodate those considerations. Most of the projects in question are modifications that would result in a significant net increase in the maximum controlled emissions of the "source," but not in a gross increase in uncontrolled emissions equal to or above 100 or 250 tons per year. This discrete group of small modifications, even in the aggregate, have a relatively minor effect on air quality. But, because they are numerous, delaying them by imposing new PSD requirements could frustrate economic development. The proposed provision would strike a rough balance between the benefits and the cost of applying PSD to those projects by allowing any company that has already obtained each of the preconstruction permits otherwise necessary under the SIP to proceed to construction without delay. To require such a company to obtain a PSD permit could mean substantial delays. To impose such delays here would be excessive.⁵

One commenter urged EPA to promulgate a grandfather provision that would use the date of complete application instead of the date of permit issuance. The commenter was concerned that the proposed provision would treat unfairly a company that obtained the last permit necessary under the SIP just a day or two after the date this notice appeared in the Federal Register. Use of such a date, however, might exempt many more projects from review. Hence, in EPA's view, it would fail to give adequate expression to the interests behind section 165, especially the goal of protecting air quality.

⁵ Even if the conflict between sections 165(a) and 168 had not conferred on EPA the discretion to exempt certain projects that would otherwise be subject to PSD review for the first time, EPA would have authority under section 301(a)(1) to exempt those projects in order to phase-in new requirements on a reasonable schedule.

Certain commenters pointed out that a company might be unable to "commence construction" within the proposed 18-month period, because it might be unable to get sufficiently in advance any preconstruction permits that federal or state law outside the SIP might require. They recommended that EPA set the deadline 18 months from issuance of the last necessary federal authorization. That recommendation parallels a proposal EPA made in July 1979 to amend the grandfather provisions of the 1978 regulations so as to extend the "commence" construction deadlines in those provisions generally to a date nine months from the issuance of the last necessary federal authorization. See 44 FR 42722. EPA has not yet completed that rulemaking. When it does, it will decide whether to accept the recommendation of the commenters here.

EPA has decided to promulgate the grandfather provision basically as proposed. See § 52.21(i)(4)(v). The final provision contains the following clause: "the owner or operator * * * obtained all final federal, state and local preconstruction approvals or permits necessary" under the SIP by a certain date. EPA intends that clause to refer only to the date on which the reviewing authority issues the permit. For emissions increases as a result of SIP relaxations, the appropriate date is the effective date of final EPA approval. Because of the construction moratorium, 40 CFR 52.24, 44 FR 38471, some SIP permits may be issued before the time that the owner or operator is allowed to begin construction. Nevertheless, in EPA's view, the owner or operator "obtains" the permit when the reviewing authority issues it, even if permission to begin construction takes effect subsequently.

EPA received no comments on its proposal to put into regulatory language the provision in section 168(b) of the Act that only the PSD regulations in effect before August 7, 1977, apply to any project on which construction "commenced" by then. Hence, EPA is promulgating that provision basically as proposed. See section 52.21(i)(4)(i).

2. Substantive Provisions Relating to BACT.

a. *Proposed transition provisions:* In September, EPA proposed certain new substantive requirements. One of the new requirements was that a project apply BACT for each pollutant regulated under the Act that the project would emit in a significant, but "minor" amount. Under the 1978 Part 52 regulations, a project has to apply BACT only for each pollutant regulated under the Act that the project would emit in a

"major" amount. EPA added that it intended to put the new BACT requirement into effect immediately upon its promulgation.

In proposing the new BACT requirement, EPA also proposed to exempt certain projects from it. In particular, the Agency proposed not to apply the requirement to any project whose application for a PSD permit was complete before the requirement came into effect. See 44 FR 51928, 51954 (proposed § 52.21(j)(2)).

b. *Comments and final action on proposed transition provisions relating to BACT requirements:* In general, those commenting on the proposal to grandfather any project whose application was complete before the date of publication of this notice from the new BACT requirement favored such an exemption for at least those projects. Only two commenters, the same two who opposed the grandfather provision discussed above, opposed such an exemption for any project. They argued that EPA should adhere to the transitional rules that it established in the 1978 regulations, so that the new BACT requirements would apply to any project that fell or would fall within the coverage of those regulations, even to those which have already received a PSD permit.

EPA disagrees that it should or must adhere to the 1978 transitional rules in applying the new BACT requirements. As discussed above, the court in *Citizens to Save Spencer County* held that EPA has a "responsibility to harmonize the statutory provisions [sections 165(a) and 168] so as to implement the congressional mandate that new federal preconstruction review requirements be instituted promptly but with minimum economic dislocation." 600 F.2d at 851. Requiring a company which has already received a permit, or completed application for one, to amend project designs and permit applications to include BACT for pollutants to be emitted in "minor" amounts would hardly minimize economic dislocation. To the contrary, it would delay construction substantially in many cases. The benefits of that delay in those cases would probably fail to counterbalance its cost, since the new BACT requirements would apply only to pollutants this discrete group of projects would emit in "minor" amounts. Thus, applying the new BACT requirements retroactively to projects that already have a permit or a complete application would fail to give adequate expression to the economic considerations behind section 168.

Another commenter argued that the proposal did not go far enough, in that it

would require companies which on the date of promulgation were just about to file a complete application to amend project designs and applications. The commenter urged EPA to apply the new BACT requirement only to projects whose applications were not complete within one year after the date of publication of this notice in the Federal Register. That alternative, however, would fail to give adequate expression to the environmental considerations behind section 165(a). EPA therefore has rejected it, too.

Instead, EPA has decided to adopt a provision like the proposal which exempts from the new BACT requirements any project whose application was complete before this notice appears in the Federal Register. See § 52.21(i)(9). EPA believes that the final provision reasonably accommodates the purposes and concerns behind sections 165(a) and 168.⁶

The final provision differs from the proposed provision somewhat. First, it appears in paragraph (i), instead of paragraph (j); the provision that sets forth the general BACT requirement. EPA has sought to gather each of the exemption provisions into paragraph (i). Second, the new exemption provision exempts an eligible project from the new BACT requirement entirely, but adds that the project is subject to the BACT requirements of the 1978 regulations, if they would otherwise have applied. The purpose of that structure is in part to assure that BACT would apply to a pollutant for which the project would be "major" under the 1978 regulations, but "minor" under the new Part 52 regulations due to the new concepts of "potential to emit" and "modification."

The final Part 52 regulations contain a definition of the term "complete" in reference to an application. Under that definition an application becomes "complete" when it contains all of the information necessary for application processing.

It should be noted, finally, that the date an application was complete will generally differ from the date on which the reviewing authority makes its completeness determination, since the filing of the last necessary piece of information will typically occur before the determination is made. When EPA makes a completeness determination, it will specify the date as of which the application was "complete." That date

⁶Even if the conflict between sections 165(a) and 168 had not conferred on EPA the discretion to exempt projects with a complete application, EPA would have authority under section 301(a)(1) to exempt them, since applying the new BACT requirements to such projects would be unfair.

will be the date on which the last necessary piece of information was received. One of the provisions of the Consolidated Permit Regulations, 40 CFR 124.3(f) (discussed below), refers to the "effective date" of an application. Generally, the "effective date" of an application will follow the date it is "complete."

3. *Substantive Provisions Relating to Air Quality Analyses.*

a. *Proposed transition provisions:* Another new substantive requirement that EPA proposed in September was that an applicant provide an analysis of air quality in the area the project would affect for each pollutant regulated under the Act that the project would emit in "minor," but still significant, amounts. Under the 1978 regulations, an applicant had to provide such an analysis only for those pollutants for which the project would be "major" and for which EPA had set a national ambient air quality standard (NAAQS). The remaining new requirement was that, if the project would emit particulate matter or sulfur dioxide in a significant amount, the analysis focus on the extent to which ambient concentrations of the particular pollutant had consumed the applicable PSD increments.

In proposing the new requirements for air quality analyses, EPA also proposed to exempt certain projects from them. In particular, EPA proposed not to apply the new requirements to any project whose application was complete before the requirements came into effect. See 44 FR 51928, 51954 (proposed § 52.21(n)(1)(i)).

The 1978 Part 52 regulations contained a requirement that any air quality analysis for a pollutant for which a NAAQS exists ("criteria pollutant") must generally include monitoring data gathered over and relating to the year preceding the submission of a complete application. In September, EPA proposed a reformulation of that requirement. That requirement, however, when coupled with the new requirement for an analysis for each criteria pollutant emitted in "minor" amounts, could cause a prospective applicant substantial delay. As a result, EPA also proposed to require any applicant who does not file a complete application before the date of promulgation to gather monitoring data for any such "minor" pollutant only over the period (up to one year) from the date of promulgation and the date the applicant would file an otherwise complete application. See *id.* at 51928, 51954 (proposed § 52.21(n)(1)(iii)).

b. *Comments and final action on transition provisions relating to air quality analysis requirements:* Two

commenters argued that EPA should adhere to the transitional rules of the 1978 regulations with respect to the new requirements for air quality analyses. In their view, the monitoring requirements should apply in general to any "major" project for which certain permits were not obtained by March 1, 1978, and on which construction had not commenced by March 19, 1979. Certain other commenters objected to any application of the new monitoring requirements to a company which, although it had not filed a complete application by the date of promulgation, had nevertheless previously undertaken a program of monitoring the EPA or a state had approved.

Some additional comments were directed to the proposed phase-in provision. Those comments contended that a prospective applicant would find it impossible to satisfy that provision, since the purchase, installation, and "debugging" of new monitoring equipment, together with the analysis of any new data, would require at least several months. Many commenters did note that the draft of the revision of the monitoring guideline would allow three months for those tasks, but asserted that even three months would generally be insufficient. See U.S. EPA, (*Draft*) *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, (October 1979). Some recommended an allowance of 2-5 months, others 6-9 months, and still others more than 10 months.

A number of commenters observed that the proposed regulatory language failed to embody the intent that the preamble had described. First, the proposed exemption for each "major" project whose application was complete before the date of promulgation focused only on the new requirement for an analyses for each pollutant that the project would emit in a "minor" amount. Hence, it would have failed to shield each such project from the new requirement for an analysis for each non-criteria pollutant that the project would emit in a "major" amount. Second, the provision that would have phased-in any new monitoring requirements focused only on projects whose applications were complete by the date of promulgation. Consequently, it specified no phase-in rules for projects whose applications were not complete. by then, the very projects that EPA intended the rules to benefit.

Finally, one commenter pointed out an anomaly in the proposed phase-in provision: it focused only on the new requirement, in proposed § 52.21(n)(1)(iii), that an applicant

provide monitoring data for any criteria pollutant that the project would emit in "minor" amounts. As a result, the proposed provision would have required a company with a project that is "major" under the new regulations, but was not under the 1978 regulations, to gather the full amount of monitoring data for each of its "major" pollutants, but none of its "minor" pollutants. But, since the monitoring requirements would have been new for the "major" pollutants, as well as the "minor" pollutants, such a company should have protection with respect to the "major" pollutants, too.

The final transition provisions relating to the new requirements for air quality analyses adhere to the spirit of the proposed provisions, but differ substantially in structure and articulation. One of the four final provisions, § 52.21(i)(9), exempts certain sources and modifications from the new requirements with respect to monitoring entirely. It provides that those requirements shall *not* apply to a source of modification that was subject to the 1978 Part 52 regulations, if its application becomes complete on or before the date this notice appears in the Federal Register. Instead, the air quality analysis requirements in the 1978 regulations apply to the source or modification.

Two of the three remaining provisions exempt certain other sources and modifications from the new monitoring requirements for criteria and non-criteria pollutants. One of those provisions, § 52.21(i)(10)(i), exempts a source or modification that would have been subject to the 1978 Part 52 regulations from those new monitoring requirements, if its application becomes complete with respect to the requirements of the new Part 52 regulations, other than the new monitoring requirements, on or before a date ten months from the date of promulgation. The provision adds the clarification that the monitoring requirements of the 1978 regulations apply instead to the source or modification. The other exemption provision, § 52.21(i)(10)(ii), is similar. It exempts a source or modification that would not have been subject to the 1978 Part 52 regulations, if its application becomes complete with respect to the requirements of the New Part 52 regulations, other than those for monitoring, on or before a date ten months from the date this notice appears in the Federal Register.

The remaining provision, § 52.21(m)(1)(v), phases-in the monitoring requirements of new § 52.21(m)(1)(iv) to the extent that they

place monitoring burdens on an applicant that the 1978 Part 52 regulations would not have imposed. Section (m)(1)(iv) provides in general that any required air quality analysis for a criteria pollutant must include monitoring data gathered over a period of at least one year. However, the new phase-in provision establishes the general rule that for certain applications the required monitoring data shall have been gathered over a period at least equal to the period from the date six months from the date of promulgation to the date the application becomes complete, except as to the monitoring requirements of the new Part 52 regulations. The applications to which this provision applies are those which become complete, except as to those monitoring requirements, between the date ten months from promulgation and the date eighteen months from promulgation. The new phase-in provision then states three exceptions to that general rule. First, an applicant with a project that would have been subject to the 1978 Part 52 regulations must provide at least whatever monitoring data the 1978 Part 52 regulations would have required the applicant to provide. Second, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a shorter period (not to be less than four months), the required data may be gathered over at least that shorter period. Finally, if the monitoring data would relate exclusively to ozone and would not have been required under the 1978 regulations, the Administrator may waive the otherwise applicable requirements of the phase-in provision to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.

The following example illustrates how the proposed phase-in provision works. A company proposes to construct a new plant that would emit sulfur dioxide and particulate matter. Under both the new Part 52 regulations and the 1978 regulations, the plant would be "major" for sulfur dioxide and "minor" for particulate matter. The emissions of particulate matter would not be *de minimis*. But for the phase-in provision, the new Part 52 regulations would require an application for a permit for the plant to contain a year's worth of monitoring data for both sulfur dioxide and particulate matter. (This assumes that the Administrator does not determine that a complete and adequate analysis could be accomplished with data gathered over a shorter period.)

The 1978 regulations would have required the application to contain a year's worth of data for just sulfur dioxide. The company submits an application which becomes complete, except with respect to monitoring, at the end of the fifteenth month after promulgation. Under the phase-in provision, the application must contain (1) a year's worth of monitoring data for sulfur dioxide and (2) nine months' worth of data for particulate matter.

The four final provisions embody EPA's response to the comments on the proposals. First, EPA has adopted the fundamental approach of the proposal, which was to apply the new monitoring requirements prospectively only. EPA has concluded that that approach reasonably accommodates the purposes and concerns of sections 165(a) and (e)(2), on the one hand, and section 168, on the other. In brief, the approach institutes the new requirements promptly, but with minimum economic dislocation. See *Citizens To Save Spencer County v. EPA*, 600 F.2d at 851. Full and immediate application of the new monitoring requirements would have caused substantial delays in the submission of complete applications and hence the issuance of permits, but provided little direct environmental benefit in return. As for applicants who undertook an approved program of monitoring before the date of this notice, the phase-in provision affords them adequate protection from delay, while at the same time generally demanding as much compliance with the new monitoring requirements as possible.⁷ In short, EPA disagreed with the commenters who complained that the proposals would have instituted the new requirements too late, and with those who complained that the proposals would have instituted them too soon.

Second, with respect to the new monitoring requirements for criteria and non-criteria pollutants, EPA has established a grace period of ten months in the final grandfather provisions. It has done so because it agrees with the commenters who asserted that instituting a new monitoring program and analyzing the data it generates requires more than three months in many, if not most, circumstances. EPA has selected a grace period of ten months with respect to monitoring for both criteria and non-criteria pollutants, first, because six months is an estimate

of the amount of time that would generally be needed to complete those tasks and, second, because there is little usefulness to less than four months of data for most pollutants.

The promulgated provisions cure the ambiguities in the proposal observed by some commenters. Section 52.21(i)(10) exempts an eligible project from the requirements relating, not only to any non-criteria pollutant that it would emit in "minor" amounts, but also to any non-criteria pollutant that it would emit in "major" amounts. In addition, the phase-in provisions now deal explicitly with projects whose applications were not complete by the applicable deadline. Finally, § 52.21(i)(10) protects not only projects that were subject to the 1978 regulations, but also projects that were not subject to them.

4. Comments on the effective date of the substantive provisions.

In proposing the new substantive provisions relating to BACT and air quality analyses the Agency stated that it intended to put those new provisions into effect immediately upon their promulgation. One commenter contended that EPA should put the new provisions into effect 30 days after promulgation, rather than immediately on the date of promulgation, so that "potential applicants [would have] sufficient lead time in planning modifications and new sources." With respect to the new provisions relating to air quality monitoring, the 10-month grace period and phase-in provision described above should satisfy the concerns of the commenter. With respect to the new BACT provisions, however, EPA disagrees. Prospective applicants have had ample warning of the new BACT provisions. The court in *Alabama Power* held in June of 1979 that Congress intended them to be imposed and in September 1979 EPA specified when it intended to impose them. Therefore, there is good cause to make these requirements immediately effective. The Administrative Procedure Act (APA), moreover, would not require a 30-day delay in implementation, since the provisions amount to legal interpretations. See APA section 4(d)(2), 5 U.S.C. section 553(d)(2).

5. New Provisions Governing Procedure.

EPA recently promulgated regulations aimed at consolidating and unifying various permit requirements and procedures. See 45 FR 33290 (May 19, 1979) (the "Consolidated Permit Regulations"). Those new regulations contain provisions which will govern the processing of applications for permits under the Part 52 PSD regulations. Those provisions appear as 40 CFR 124.1-

124.21 and 124.41-124.42, 45 FR 33485-93. Paragraph (r) of the 1978 Part 52 regulations has governed the processing of PSD permit applications under those 1978 regulations.

The Consolidated Permit Regulations contain a provision, section 124.21, which describes the transition from the procedures of paragraph (r) to the new consolidated permit procedures. It provides that those new procedures shall "apply to PSD proceedings in progress on July 18, 1980." 45 FR 33492. It adds that the requirements of sections 124.9 and 124.18, which would require the preparation of a formal administrative record, shall apply only to "PSD permits for which draft permits [i.e., preliminary determinations] were prepared after the effective date of these regulations." *Id.*

In promulgating the new Part 52 regulations, EPA has adopted a new paragraph (q). It states that the new consolidated permit procedures govern the processing of PSD permit applications to the extent that they apply. It adds that the procedures of the 1978 Part 52 regulations continue to apply to the extent that the new procedures have not yet displaced them. In time, the new procedures will displace the old ones entirely.

B. Part 51 PSD Regulations

In September, EPA did not propose an amendments to the 1978 Part 51 regulations that paralleled the proposed Part 52 transition provisions. The Part 51 amendments that EPA did propose paralleled only the Part 52 provisions that would affect coverage and substance. The few comments that were submitted focused on this gap.

One commenter asked that EPA state in the Part 51 regulations that a state which has already adopted and obtained EPA approval of its own PSD program may, in conforming that program to the new Part 51 regulations, adopt a rescission provision like new § 52.21(w) into its plan. EPA believes that it is unnecessary to make such a statement in regulatory form. A state is free, in any event, to adopt such a provision and EPA would approve it.

Another commenter asked EPA to establish in the Part 51 regulations that a state with its own PSD program, in adopting new, more stringent requirements for BACT and air quality assessments in accordance with the new Part 51 regulations, may also adopt grandfather provisions that would apply the new requirements prospectively. In response, EPA had added a new section 51.24(a)(6) to the Part 51 regulations. The new section provides that PSD SIP revision may operate prospectively,

⁷ Even if the conflict between sections 165(a), 165(e)(2), and 168 had not conferred on EPA the discretion to exempt certain projects from the new air quality analysis requirements, EPA would have had authority under section 301(a)(1) to exempt those projects, because application of those requirements would have been unfair.

thereby establishing that a state may adopt grandfather provisions of that sort. It adds, however, that the revision must take effect no later than the date of its approval. EPA has also added a new section 51.24(j)(9) to the Part 51 regulations. It provides that an approval revision to a state PSD program, which program EPA has already approved, may contain transition provisions that parallel the new Part 52 transition provisions. The new section also establishes that the proposed transition provisions must operate at least as stringently as their Part 52 counterpart would in the context of the state PSD program.

Finally, a third commenter urged EPA to require a state with its own PSD program to delete these aspects of the plan that go beyond the requirements of the new Part 51 regulations within nine months after the date of promulgation of those new regulations, unless the state within that period of time submits "to EPA written acknowledgment that it is not required by federal law to include such provisions in its state plan, but has nevertheless elected to do so under state law pursuant to section 116 of the Act." The commenter feared that, absent such a requirement, inertia and lack of resources might prevent some states from deleting the provisions in question. Such a requirement, however, would interfere unnecessarily in the affairs of a state. EPA, moreover, doubts that it would have the authority in any event to repeal the more stringent aspects of a state plan simply because the state failed to say by a certain time that it wanted to retain those aspects. EPA therefore has not promulgated the requirement sought by the commenter.

After examining the Part 51 regulations in response to those comments, EPA has decided to add two new provisions. The first, section 51.24(a)(6), merely states in regulatory form what section 406(d)(2)(B) of the Clean Air Act Amendments of 1977 already states: any PSD SIP revision required by the new Part 51 regulations must be adopted and submitted within nine months of the date this notice appears in the Federal Register. The second provision, § 51.24(a)(6)(ii), establishes explicitly that any PSD SIP revision must contain provisions which describe when and as to what sources and modifications the revision is to take effect. The purpose of that requirement is merely to minimize confusion and uncertainty during the transition from any old to new PSD SIP requirements.

C. Offset Ruling

The amendments to the Offset Ruling which EPA is announcing in this notice

expand its coverage, just as the amendments to the Part 52 PSD regulations expand its coverage. In EPA's view, the expansion of the coverage of the Offset Ruling should operate prospectively only. Hence, it has inserted into the Ruling a grandfather provision that parallels the relevant PSD grandfather provision. It provides that the Ruling does not apply to any source or modification that was not subject to the version of the Ruling in effect prior to the date this notice appears in the Federal Register, if all necessary SIP permits were obtained for the source or modification by that date and if construction commences within 18 months of that date.

D. Part 51 Nonattainment Regulations

Pursuant to section 406(d)(2)(B) of the Clean Air Act Amendments of 1977, states will have nine months after the date of this notice appears in the Federal Register in which to adopt and submit any new definitions and other regulatory provisions required by new 40 CFR 51.18(j). States need not adopt verbatim the definitions in section 51.18(j)(1), but they must demonstrate that any different definitions they retain or adopt have the effect of being at least as stringent as those set out in § 51.18(j)(1). If a state plan currently includes definitions or regulatory provisions which are more stringent than the nonattainment definitions and other provisions contained in these final rules, the state has the choice of retaining its current regulations or of revising them so as to conform to EPA's rules. If a state does not submit any necessary revisions to its plan within nine months after the date this notice appears in the Federal Register, the construction moratorium will go into effect 15 months after this date in all nonattainment areas in that state. The additional 6 months is consistent with the review period allotted for Part D submitted under section 110(a)(2)(I) and 129(c) of Pub. L. 95-95.

EPA received only one comment on transitional requirements for § 51.18(j). This commenter requested that EPA allow states which have already adopted NSR regulations pursuant to section 173 of the Act be permitted to adopt a rescission provision like that of § 52.21(w). EPA believes that to make such a statement in regulatory form is unnecessary. A state is free to adopt such a provision, and EPA will approve it, provided that the state's NSR program meets the requirements of section 173 and that permit rescission will not interfere with reasonable further progress or attainment of ambient air quality standards.

E. Construction Moratorium

The amendments to the construction moratorium expand its coverage in some ways, too. Hence, EPA has promulgated a grandfather provision patterned after the relevant PSD and Offset Ruling provisions. It appears as § 52.24(g).

F. Pending SIP Revisions

By the date this notice appears in the Federal Register, EPA will not have taken final action on many PSD and nonattainment SIP revisions that states have already submitted. EPA intends to review those pending revisions under the requirements that applied to them before the date of promulgation. To wait until a state had revised its revisions to bring them into line with the new PSD and nonattainment requirements would cause the state and its industry to suffer a heavy and undue burden, particularly in those cases where approval of a Part D plan is needed to lift the construction moratorium.

G. Effective Date of the Nonattainment Provisions

EPA has made all of the new nonattainment provisions announced here effective immediately upon their promulgation. EPA finds that it has "good cause" within the meaning of the relevant provisions of the Administrative Procedure Act to do so. First, the new provisions in the main provide relief from pre-existing regulatory burdens. Second, the decision in *Alabama Power* and the September 1979 proposal provided ample warning of the new changes. Finally, it is important for planning and management by EPA, the states and industry that these new provisions come into effect as soon as possible.

H. Miscellaneous

Under the amendments announced in this notice, each set of PSD and nonattainment regulations uses the phrase "this section" at some points and phrases such as "40 CFR 52.21" at other points. EPA intends "this section," when used in a particular set of regulations to refer only to the version of the regulations which has resulted from the amendments announced here. For example, the phrase "this section" in new § 52.21(i)(1)(i) refers only to the Part 52 PSD regulations as newly constituted. EPA intends phrases such as "40 CFR 52.21" to refer to any version of the particular regulations which has appeared or is to appear at the particular location in the Code of Federal Regulations. For example, "40 CFR 52.21" refers to each version of the Part 52 PSD regulations that has ever

existed, including the version that has resulted from the amendments announced here.

V. Potential to Emit

The preconstruction review requirements of section 165 of the Act apply to any "major emitting facility." 42 U.S.C. 7475. Pursuant to section 169(1), that term includes any stationary source which emits or has the "potential to emit" 100 tons per year or more of any pollutant, for sources included in one of 28 specified source categories, or 250 tons per year or more of any pollutant for any other type of source. 42 U.S.C. 7479(1).

A. Control Equipment

Obviously, many more sources would be affected if the term "potential to emit" referred to the amount of pollution that a source would emit without controls than if it took the operation of control equipment into account. In the PSD regulations promulgated on June 19, 1978, EPA took the former approach and defined "potential to emit" as "the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment." 40 CFR 51.24(b)(3), 52.21(b)(3) (1979). This approach was rejected by the *Alabama Power* decision which held that Congress intended that, in determining a facility's potential to emit, EPA "must look to the facility's 'design capacity' a concept which not only includes a facility's maximum productive capacity (a criterion employed by EPA) but also takes into account the anticipated functioning of the air pollution control equipment designed into the facility." 13 ERC 1993, 2003.

In response to the court's decision, EPA proposed, on September 5, 1979, a revised definition under which the application of control equipment would be taken into account in computing potential emissions. That approach, which was very strongly supported by public comments, is now being promulgated. 40 CFR 51.24(b)(5) and 52.21(b)(5).

The proposal noted that EPA will assume that a facility's air pollution control equipment will function in the manner reasonably anticipated. In this promulgation the Administrator is implementing the proposed approach by requiring that operation of control equipment be an enforceable requirement. In other words, a company may receive credit for the application of control equipment only to the extent that the resulting reduction in emissions is federally enforceable (see below). This provision is necessary, as a practical matter, to ensure that sources

will perform the proper operation and maintenance for the control equipment. Thus, a source installing control equipment that would reduce emissions more than that required by generally applicable emissions limitations cannot receive credit for the additional increment of pollution reduction, unless it is federally enforceable. The definition of "potential to emit" is being modified appropriately.

Under the definition being promulgated, the potential to emit of existing sources with respect to the treatment of enforceable in-place control equipment shall be defined in the same fashion as discussed above for new sources. This responds to commenters who complained of this discrepancy in the September 5 proposal. Accordingly, potential to emit for all sources means the ability at maximum design capacity to emit air pollution, taking into account any in-place control equipment. Design capacity, and thus potential to emit, may be further limited if control equipment better than that normally required by the applicable SIP is installed and a correspondingly more stringent level of emissions control is included as an enforceable permit condition. Finally, it should be noted that the potential to emit of a stationary source in today's rule is of primary importance in defining when a source would be major; it is not generally used in determining increment consumption or the baseline for assessing emission increases and decreases at a source (see Modification).

B. Continuous Operation

Under the existing definition of "potential to emit," a source can avoid PSD review if it binds itself, in a federally enforceable permit, to sufficiently limited hours of operation. 40 CFR 51.24(v)(5), 52.21(b)(5) (1979). In the September 5, 1979 proposal, EPA proposed to delete the clause which allows such adjustments and to presume continuous (24 hours per day, 365 days per year) operation. Consistent with that change, EPA also proposed to delete, from the same regulation, the words "or amount"; those words at present allow permit limitations on amount of materials combusted, processed, or stored to be considered in computing potential to emit. In making this proposal, the Administrator also requested comment on the need to adjust the assumption of continuous operation, in the case of sources which are physically incapable of such operation.

Many commenters (169 of 173) have strongly criticized this proposal, the most frequent response being that few

sources operate constantly, and most cannot do so. These commenters also advised the Agency of certain benefits which would accrue from allowance of permit conditions in computing potential to emit. For example, a benefit noted is that such an approach would better relate the PSD permit applicability of new sources to the offset potential of existing sources, and to how the increment would be consumed. This approach was also claimed to be consistent with EPA's stated goal of developing PSD requirements which will fit into state programs in such a way as to minimize disruption of those programs and promote PSD SIP development by the states. Additionally, insignificant reviews would be minimized and PSD applicability would be more reflective of emissions actually produced by the source.

There was some comment in support of the proposal. A state environmental agency noted that emissions limits calculated from less than continuous operation are less easily enforceable than those which are based on continuous operation. An environmental group supported the proposal on the grounds that it is consistent with the interpretation of "full design capacity," that it would be appropriately technology-forcing, and that it is necessary to protect the short term increment. These concerns are addressed below.

The court based its definition of "potential to emit" on the source's full-design capacity. *Id.* at 2003. The June opinion in *Alabama Power* did not directly address the acceptability of legal limitations on operation but did stress design capacity in the sense of physical and technological, as opposed to operational, limitations. However, in the final opinion, released on December 14, 1979, the court stated:

The design capacity of a facility rarely contemplates uninterrupted operation 24 hours per day, 365 days per year. Projected downtime for repairs and maintenance or other factors may reduce the hours of operation that are appropriately considered in the calculation of a facility's "potential to emit." (*Id.* at 2005, n. 73.) (Emphasis added)

EPA interprets this language as not precluding permit conditions, that are federally enforceable under the applicable SIP, from circumscribing a source's potential to emit. In view of the above, the Agency believes it has discretion to adopt the most reasonable approach to this issue and has, therefore, reconsidered its proposal. Today's regulations recognize the ability of all federally enforceable limitations to constrain the potential to emit of a stationary source.

The Administrator believes that the policy concerning "enforceable permit conditions" is responsive to most of the concerns raised by commenters who were critical of EPA's proposal. New sources are now allowed to avoid NSR for PSD and nonattainment areas by limiting their type or amount of operation. Moreover, potential to emit is now defined in the same way for new and existing stationary sources. The use of certain permit conditions also addresses the concerns raised regarding physical incapability and peak load or standby units. This is, source owners or operators can now agree to source-specific permit conditions to limit their operation as appropriate. Such conditions can make infrequent operation and other physically limiting factors outside the design capacity of an emissions unit legally enforceable and can thereby limit the applicability of NSR.

The final policy concerning enforceable permit conditions has also taken in account the concerns of those favoring the proposal. One commenter noted that limited operation conditions would require greater enforcement attention. The Administrator agrees, but he believes that such conditions can be reasonably enforced. Another commenter also noted the need to minimize any air quality threats to short term increments by sources with intermittent operation but high short term rates of emission. No commenter presented a solution to this problem. EPA believes, however, that short term emissions limitations can be computed to address threats to short term increments, should any problems actually arise. It would be the responsibility of the reviewing authority to identify, in periodic evaluations, any sources causing such problems and apply appropriate limitations on their emissions. The Administrator will consider rulemaking to develop short term applicability thresholds, if necessary, after a reasonable amount of review experience has been developed.

Finally, as a result of today's policy, a potential problem exists concerning the future relaxation of a preconstruction permit that previously caused a proposed stationary source to enjoy minor rather than major status. For example, a source might evade NSR through agreement to unrealistically stringent operating limitations in its permit, and later obtain a relaxation of the condition. The Agency believes that the problem can be dealt with by 40 CFR 52.21(r)(4), entitled "Source Obligation." That paragraph provides that any owner or operator of a source, who would

receive a relaxation of a permit condition that had enabled avoidance of NSR, would then become subject to review for all units subject to the original permit, as if they were new sources. In other words, if operational limitations are to be considered as an aspect of a source's design, it is reasonable that the permit accurately incorporate that design. If such operation is changed, the permit, and concomitant obligations, should be correspondingly changed.

C. Additional Guidance

Fugitive emissions under today's regulations are applicable in defining potential to emit. (See Fugitive Emissions.) However, like the proposal, such emissions do not count in assessing permit applicability unless a specified type of source category is involved. To accomplish this a specific exemption has been added to the final regulations by which fugitive emissions will be included in determining potential to emit only for specified source categories.

The definition of "potential to emit" is important not only to PSD preconstruction review, but also to NSR under the Offset Ruling (44 FR 3274), the statutory requirements for nonattainment areas, and the restrictions on construction in sections 110(a)(2)(I) and 173(4) of the Act. EPA is promulgating for each of those nonattainment programs the same definition of "potential to emit" that it is promulgating for the PSD program, as well as a provision like § 52.21(r)(4). EPA also intends this definition to be implemented for those programs in the same way as for PSD.

EPA has traditionally distinguished, for the purpose of NSR, between the direct emissions of a source and its "secondary emissions." (See Additional Issues.) In revising the Offset Ruling in January 1979 the Agency added a definition of "secondary emissions" and a provision describing for what purposes and under what circumstances those emissions are to be taken into account. See 44 FR 3281, 3283-84 (January 16, 1979). EPA is now adding that concept to the PSD regulations and to the nonattainment provisions relating to NSR and the restrictions on construction. For each of those sets of provisions "secondary emissions" are to be excluded in determining whether the regulations apply to a source (*i.e.*, whether a source or modification is "major"). Similarly, the control technology requirements of BACT and lowest achievable emission rate (LAER) do not apply to secondary emissions. How the Agency would treat those emissions for other purposes, including

PSD air quality impact analysis, is described in Additional Issues.

VI. 50-Ton Exemption

Under the 1978 PSD regulations, stationary sources or modifications with allowable emissions of less than 50 tons per year, 1000 pounds per day, or 100 pounds per hour were in general exempted from the BACT and ambient air quality analysis PSD requirements. 40 CFR 51.24(j)(2), (k), and 52.21(j)(2), (k) (1979). In its preliminary *per curiam* decision the court thought that its ruling on "potential to emit" made a ruling on the 50-ton exemption "academic," since no 50-ton source would ever be major if "potential to emit" referred to controlled emissions. 13 ERC at 1228-29. Nevertheless, it remanded the exemption to the Agency for reconsideration and noted that the Agency had exceeded its authority in establishing the exemption. In response, EPA proposed to delete the provisions which embodied the exemption, and to delete parallel provisions in the Offset Ruling. EPA, however, proposed adding to the PSD regulations a 50-ton exemption for certain modifications. The proposed exemption tracked section 165(b) of the Act closely, but not exactly. Essentially it provided that a source qualifying for the exemption would face a limited air quality review for SO₂ and PM. Use of the exemption would be restricted to modifications, at a plant existing as of August 7, 1977, entailing emissions increases of 50 tons or less of any pollutant after application of BACT and which would impact no Class I area or interfere with the attainment of PM or SO₂ standards. All net emission changes since August 7, 1977 would be aggregated in applying the exemption.

All of the seventeen commenters who focused on the proposed provision expressed general agreement with this approach, but some commenters stated that the exemption should be broader. For example, four commenters wanted an additional 50-ton exemption after each full review. Five commenters requested a special, more lenient, review for pollutants whose emissions rates fall between 50 tons per year and the *de minimis* level in those cases where the exemption would not apply. The Administrator finds no grounds for providing additional exemptions after each review. Similarly, there is no justification or authority under section 165(b) for a special limited review for emissions increases falling between *de minimis* amounts and the 50-ton level. A few commenters suggested that other eligibility values than 50 tons be used. EPA responds that section 165 of the Act

mandates the 50-ton figure, but that much of these commenters' concerns are dealt with by the *de minimis* provisions being promulgated today. Two other commenters requested that the exemption be governed by net emissions increases. Today's regulations provide that review is applicable to net emissions increases, thus addressing the concerns of the two commenters cited above. With this exception, and the two noted below, the 50-ton exemption is being promulgated as proposed.

Some commenters pointed out that EPA's proposed 50-ton exemption clause was more limited in its application than the Clean Air Act language of section 165(b), in that the September 5 proposal contained additional consideration of Class I area impacts (e.g., 44 FR 51949, 40 CFR 51.24(k)(2)(i)). EPA agrees with these commenters and has eliminated that portion of the 50-ton exemption language dealing with Class I areas. See 40 CFR 51.24(i)(7) and 52.21(i)(7).

The 50-ton exemption contained in the Act made those sources existing as of August 7, 1977, eligible for the exemption; the same applicability date was proposed in September 1979 for this revised exemption. The *Alabama Power* final opinion suggested that EPA had authority to conform the eligibility date for the section 165(b) exemption to the "effective date" of the preconstruction permit requirements of the 1978 regulations, i.e., March 1, 1978. In the January 30, 1980 Federal Register notice EPA sought comment on changing the eligibility date and on whether March 1, 1978 would be the appropriate choice.

Twenty-four commenters addressed the issue of the eligibility date. Nineteen of these favored a date of March 1 or 19, 1978. Four wanted the date to be that of the final promulgation of these regulations. One commenter disagreed with the date change because it considers the exemption itself to be unauthorized; however, the Act clearly provides for the exemption, as explained elsewhere in this section. One industrial group alleged that the date of promulgation would be the proper eligibility date for the specific case of fugitive emissions, in that fugitives were not regulated as of March 1, 1978. This is apparently a reference to the fact that rulemaking relative to potential to emit (see Potential To Emit) had not yet been performed. In fact, though, fugitive emissions were covered by the 1978 regulations and the calculation of potential to emit does not change that circumstance. The commenters preferring March 19 to March 1 referred to a statement in *Alabama Power* that March 19, 1978 is the "effective date" of

the regulations. 13 ERC at 2006, n.79. The "effective date" of those regulations is, however, March 1, 1978. See *Citizens to Preserve Spencer County v. EPA*, 12 ERC 1961, 1978; and Preamble to 1978 Regulations, 43 FR 26380, 26390. Concerning the comments favoring the date of this promulgation as the eligibility date, the Administrator notes that section 165(b) of the Act limits eligibility for the 50-ton exemption to those sources in existence on the date of enactment of the 1977 Amendments to the Act. For the reasons noted in the *Alabama Power* decision, EPA has authority to extend eligibility to March 1, 1978. However, the Agency cannot extend this deadline to today's promulgation. For these reasons March 1, 1978 is now promulgated as the eligibility date for the 50-ton exemption.

VII. Fugitive Emissions

For PSD determinations prior to the *Alabama Power* decision, EPA considered all reasonably quantifiable emissions of a pollutant—including both point emissions (e.g., from a stack or chimney) and fugitive emissions—on the ground that the emissions deteriorate air quality regardless of how they emanate. This practice applied to calculations of a source's emissions and potential emissions of a given pollutant both: (1) for the threshold determination under section 169(1) of whether the source was a "major emitting facility" subject to section 165, and (2) for the permitting requirements of section 165 itself.

The *Alabama Power* court upheld EPA's practice for the latter purpose, and confirmed that:

The terms of section 165, which detail the preconstruction review and permit requirements for each new or modified "major emitting facility" apply with equal force to fugitive emissions and emissions from industrial point sources.

* * * * *

EPA is correct that a major emitting facility is subject to the requirements of section 165 for each pollutant it emits irrespective of the manner in which it is emitted. [13 ERC at 2016-2017.]

However, as to the first practice, the court held that section 169(1) is controlled by the rulemaking provision of section 302(j), and that fugitive emissions of a given pollutant may be included in the threshold calculation under section 169(1) only if the Administrator first determines, by rule, that they are to be included.

Accordingly, as part of the September 5, 1979 rulemaking proposal, the Administrator identified 27 categories of stationary sources for which he proposed to include fugitive emissions in threshold calculations of "major

emitting facility" status for purposes of both section 165 and new source review regulations. Numerous commenters responded that the Administrator's proposal did not constitute "adequate" rulemaking, and that fugitive emissions could not be included in threshold calculations unless the rulemaking also established, on an industry-by-industry basis, methods for quantification of fugitive emissions and for analysis of their impacts on air quality, and included the identification of effective techniques for their control. EPA has considered these comments, but believes that Congress intended the rulemaking provision of section 302(j) to serve a much simpler and narrower purpose.

As the court itself noted, "[t]he legislative history of this rulemaking provision is sparse," and it is therefore particularly difficult to discern Congress' motivation for including it. 13 ERC at 2017. In general, section 302(j) sets out the criteria for determining whether a source is "major" and hence subject to the stringent requirements of certain key provisions of the Act. Congress clearly intended such determinations to always include point emissions, the type most commonly associated with major polluters. It also expressed its affirmative intent *not* to exclude "non-point" or "fugitive" emissions from those determinations:

[T]he "major stationary source" definition is clarified to indicate the inclusion of major sources of fugitive emissions (last year's bill was unclear in this respect) * * *. [H.R. Rep. 95-294, 95th Cong. 1st Sess. 4 (1977).]

Rather than include fugitive emissions across-the-board, however, Congress left it to the Administrator to determine for which particular categories of sources fugitive emissions will be included in threshold calculations.

EPA therefore believes that the purpose of the rulemaking under section 302(j) is to afford members of affected categories of sources an opportunity to comment on the Administrator's determination to include fugitive emissions in the threshold calculation, and to allow them to present factual or policy arguments in support of claims that it would *not* be appropriate to do so. Although many such presentations will be technically oriented, EPA does not agree that section 302(j) requires the formal promulgation of measurement, modeling or control techniques or guidelines, because the fundamental decision which the Administrator is making under section 302(j) is *whether* fugitive emissions should be included in threshold calculations.

EPA finds support for this interpretation of section 302(j) in the fact that section 165 does *not* contain any rulemaking provision governing the substantive regulation of fugitive emissions. As explained earlier, the *Alabama Power* court confirmed that once a source is determined to be a major emitting facility under section 169(1), the substantive preconstruction review and permitting requirements of section 165 "apply with equal force to fugitive emissions and emissions from industrial point sources." In other words, even if fugitive emissions remain excluded from threshold calculations, section 165 requires that fugitive emissions be taken into account in determinations of whether NAAQS or allowable increments will be violated (section 165(a)(3)) and that fugitive emissions be subjected to BACT requirements (section 165(a)(4)). But these substantive provisions do *not* require EPA's prior promulgation of technical rules governing measurement, analysis or control such as those which the commenters suggest are necessary under section 302(j). Since the determination to include fugitive emissions in threshold applicability calculations is discretionary under sections 302(j) and 169(1), while the substantive regulation of fugitive emissions from all major emitting facilities is mandatory under section 165, EPA does not believe that the rulemaking provision of section 302(j) was intended to require the promulgation of such technical guidelines or regulations.

EPA therefore concludes that the rulemaking which it conducted was "adequate" under section 302(j) since affected sources were afforded the opportunity to comment upon the proposed inclusion of fugitive emissions in their threshold calculations. EPA's responses to more specific comments are set out below. Several commenters objected that the first 26 specific categories of sources identified in the proposal (as sources whose fugitive emissions would be taken into account in threshold calculations) were virtually identical to the 28 categories of sources identified in section 169(1) as sources with threshold tonnages of 100 tons per year (rather than 250 tons per year) for determinations of "major emitting facility" status.⁸ The commenters complained that by merely copying the 28 sources without any other supporting

rationale, EPA failed to conduct proper rulemaking.

Although it is true that the two lists are virtually identical, it is not true that EPA failed to conduct proper rulemaking. To the contrary, the Administrator recognized that in specifically identifying 28 categories of sources in section 169(1), "Congress' intention was to identify facilities which, due to their size, are financially able to bear the substantial regulatory costs imposed by the PSD provisions and which, as a group, are primarily responsible for emission of the deleterious pollutants that befoul our nation's air." 13 ERC at 2003. In light of that intent, the Administrator initially determined that as a matter of policy, it would be appropriate to count *all* emissions—including fugitive emissions—in threshold calculations of applicability for those 28 categories. The proposal reflected that determination as well as the Administrator's observation that, because those sources have traditionally been considered the major polluters in the country, EPA's experience in quantifying fugitive emissions from them is, in general, greater than its experience in doing so for other sources.⁹

Source Category and Reference

Primary zinc smelters

Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions—March 1977 (EPA-450/3-77-010)

Portland cement plants

(EPA-450/3-77-010)

Iron and steel mill plants

Particulate Emission Factors Applicable to Iron and Steel Industry (EPA-450/4-79-028) (EPA-450/3-77-010)

Primary aluminum ore reduction plants

(EPA-450/3-77-010)

Primary copper smelters

(EPA-450/3-77-010)

Petroleum refineries

Compilation of Air Pollutant Emission Factors (AP-42)

Lime plants

(NSPS) (AP-42) (EPA-450/3-77-010)

Phosphate rock processing plants

(EPA-450/3-77-010)

Coke oven batteries

(EPA-450/4-79-028)

Carbon black plants

(AP-42)

Primary lead smelters

(AP-42) (EPA-450/3-77-010)

Sintering plants

(See Iron and steel mill plants)

Fossil fuel-fired boilers

(See Fossil fuel-fired steam electric plants)

Petroleum storage and transfer units

(AP-42)

Fossil fuel-fired steam electric plants

(EPA-450/3-77-010)

Several commenters pointed out, however, that the two lists were not identical insofar as certain restrictions or limitations for six categories of sources in the section 169(1) list were not reflected in the proposed section 302(j) list. Specifically, the section 169(1) list includes only the following (the italicized portions were omitted from the proposal): fossil-fuel fired steam electric plants of *more than two-hundred-and-fifty million British thermal units per hour heat input*; coal cleaning plants (*thermal dryers*); municipal incinerators *capable of charging more than two-hundred-and-fifty tons of refuse per day*; carbon black plants (*furnace process*); fossil-fuel boilers of *more than two-hundred-and-fifty million British thermal units per hour heat input*; and petroleum storage and transfer facilities *with a capacity exceeding three-hundred-thousand barrels*. These discrepancies are the result of an inadvertent administrative error, since EPA intended to identify in the proposed section 302(j) list the same categories of sources identified by Congress in the section 169(1) list. Accordingly, the final list promulgated today reflects the qualifying descriptions specified above for the six categories of sources. Several commenters objected to the last category on the list of sources for which the Administrator proposed to include fugitive emissions in threshold calculations—namely, "any other stationary source category which, at the time of the applicability determination, is being regulated under section 111 or 112 of the Act." Section 111 concerns the establishment of standards of performance for new stationary sources (new source performance standards or NSPS) and section 112 concerns the establishment of national emissions standards for hazardous air pollutants (NESHAP). The commenters argued that the focus of these provisions is on emissions controls rather than on ambient air quality, and that there is therefore no logical link to support the automatic inclusion of fugitive emissions from a source for PSD threshold calculation purposes simply because the source is being regulated under section 111 or section 112. EPA disagrees with some of the commenters' assumptions and characterizations of NSPS and NESHAP regulation, but concludes for other reasons that the last category should be revised to apply only to sources which are being regulated under section 111 or section 112 as of the effective date of the amended PSD and NSR regulations.

⁸The apparent discrepancy in the number of categories (i.e., 26 versus 28) is explained by the fact that the September 5, 1979 proposal listed hydrofluoric, sulfuric and nitric acid plants together in a single subheading.

⁹For example, EPA has previously published fugitive emissions data for many of the identified categories of sources:

The commenters contend that since an NSPS under section 111 merely reflects, for a category of sources, an emissions limitation which is achievable through the best system of continuous emissions reduction which "the Administrator determines has been adequately demonstrated," the establishment of an NSPS for a source is unrelated to the ambient air quality considerations which are at the heart of PSD review. What the commenters overlook, however, is that under section 111(b)(1)(B), NSPS are only promulgated for categories of stationary sources which have been included in a list under section 111(b)(1)(A); and section 111(b)(1)(A) directs the Administrator to "include a category of sources in such list if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." In other words, although the NSPS itself may be based on technological considerations, the decision to develop the NSPS is clearly based on ambient air quality concerns. Moreover, under section 112, ambient air quality is clearly a compelling concern because a hazardous air pollutant to which a NESHAP will apply is one "which in the judgment of the Administrator causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness."

In short, categories of sources are regulated under section 111 or section 112 on the basis of determinations by the Administrator that their emissions seriously and adversely impact ambient air quality, and the Administrator therefore determined that it would be appropriate to include their fugitive emissions in their threshold calculations for purposes of PSD and NSR review and regulation. That basic policy determination is being finalized today.

At the same time, however, EPA believes that the comments about "automatic" inclusion of categories of sources which are not now regulated under section 111 or section 112, but which may be regulated thereunder at some point in the future, raise valid concerns. Although EPA believes that the same basic policy considerations would support the inclusion of fugitive emissions for such categories of sources, EPA recognizes that unless a source had affirmative notice during this rulemaking that it will be regulated in the future under section 111 or section 112, it will not really have been afforded a meaningful opportunity to comment on the proposed inclusion of its fugitive

emissions in its threshold calculations. Accordingly, EPA has determined to limit the scope of the last category on the proposed list to sources which are being regulated under section 111 or section 112 as of the effective date of these amended PSD and NSR regulations. At the time of any future rulemaking under section 111 or section 112 proposing to regulate additional categories of sources, EPA will conduct parallel section 302(j) rulemaking concerning the proposed inclusion of fugitive emissions in threshold calculations. On the issue of the appropriateness of including fugitive emissions in threshold calculations for particular categories of sources, the basic objection expressed by most commenters was that fugitive emissions data were either unavailable or inadequate, and that it would therefore be inappropriate to include fugitive emissions in threshold calculations for a particular category.

In response, EPA notes that such concerns should and will be addressed in the context of particular applicability determinations, but that they have not changed the basic policy decision made by the Administrator under section 302(j). As explained earlier, fugitive emissions *must* be taken into account under section 165 in determining the impact on ambient air quality of a proposed new source and the BACT requirements which will apply to it, even if there are no existing fugitive emissions data, or if the available data are crude. Obviously, the nature and extent of the available data and technologies are important factors in determining how fugitive emissions should be taken into account and how they should be regulated under the review and permitting process of section 165; but those factors will not avoid or eliminate the consideration of fugitive emissions under that process. Similarly, although the issue of quantification may be relevant to particular applicability determinations, EPA does not believe that that issue alone is critical in determining whether, as a general policy matter, it is appropriate to include fugitive emissions in threshold calculations for a particular category of sources.

EPA emphasizes, however, that fugitive emissions from a source in one of the listed categories will only be included in threshold calculations "to the extent quantifiable." EPA's intent was and is to provide sources the flexibility to explore with the reviewing authority in the context of a particular applicability determination, issues of quantification which might be peculiar

to an individual source. (Of course, fugitive emissions will not have to be quantified for threshold purposes if the source would qualify as a "major emitting facility" on the basis of point emissions alone, a situation which EPA believes will occur more often than not.) As indicated above, EPA has in the past published data and other information relating to the quantification of fugitive emissions for various categories of sources and, as some commenters noted, additional data and information are currently under development. EPA considers these publications concerning quantification of fugitive emissions as guidance to be used as the starting point for analysis, not as methodology or data which must be rigidly adhered to in all circumstances.

EPA encourages the development of more sophisticated or precise methods or models for quantification of fugitive emissions, and will accept any estimate of a source's fugitive emissions if the source can support the accuracy and reliability of the methodology which it has developed or employed. In situations where there are no published emissions factors or other fugitive emissions data for a particular category of sources, EPA will consider quantification estimates developed by a source which have any reasonable and rational basis, including estimates based on the transfer of technology or based on principles of material balance. Moreover, if a source satisfactorily demonstrates that all such methodologies are inappropriate in its circumstances and that there is absolutely no basis for reasonably estimating its fugitive emissions, EPA would be willing to discount fugitive emissions in the threshold calculation for that individual source.

In short, sources will have an opportunity to discuss the appropriateness and reasonableness of fugitive emissions estimates for purposes of both the threshold calculation, as well as the requirements of section 165. EPA is therefore finalizing today the proposed list of categories of sources whose fugitive emissions will be included in threshold calculations. EPA has considered comments with respect to the proposed definition of "fugitive emissions," and has determined that one change is appropriate. Instead of defining fugitive emissions as "those emission which *do not* pass through a stack, chimney, vent, or other functionally equivalent opening," EPA believes that the term should apply to "those emissions which *could not reasonably pass* through a stack, chimney, vent or other

functionally equivalent opening." This change will ensure that sources will not discharge as fugitive emissions those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings, and will eliminate disincentives for the construction of ductwork and stacks for the collection of emissions. Emissions which could reasonably pass through a stack, chimney, vent, or other functionally equivalent opening will be treated the same as all other point emissions for threshold calculation purposes.

In addition, in light of EPA's action today deleting the fugitive dust exemption (*see* Fugitive Dust Exemption), EPA is finalizing the proposed deletion of the existing definition of "fugitive dust" at 40 CFR 51.24(b)(6) and 52.21(b)(6) (1979).

VIII. Fugitive Dust Exemption

The 1978 PSD regulations provided that "fugitive dust" from a major stationary source or major modification be excluded from air quality impact assessment, 40 CFR 51.24(k)(5), 52.21(k)(5)(1979). Because of its decision regarding inclusion of fugitive emissions in threshold calculations, and because it questioned EPA's authority to establish the exemption in the manner in which it did, the court in *Alabama Power* vacated EPA's generalized exemption for fugitive dust and remanded it to the Agency for further consideration. 13 ERC at 1231 and 13 ERC at 2017.

In response to the court's opinion, EPA proposed deletion of the fugitive dust exemption. It also proposed to delete a parallel provision in the Offset Ruling (44 FR 3274). The majority of the public commenters directly opposed this proposal. The primary reasons were that fugitive dust allegedly has little impact on health and that techniques of evaluating its air quality impacts are unreliable.

As indicated above, the *Alabama Power* court vacated EPA's partial exemption of fugitive dust from the requirements of section 165 because the exemption was premised on the erroneous assumption that "the statute of its own momentum subjects major sources of fugitive emissions to PSD preconstruction review and permit requirements" 13 ERC at 2017. However, the court also expressed serious doubt that EPA had the statutory authority to establish such an exemption by regulation, because (1) section 165 does not distinguish between fugitive emissions and point emissions, but applies "with equal force" to both types of emissions, 13 ERC at 2016, and (2) in the absence of explicit statutory

exemption authority, EPA's "general" exemption authority is narrow in reach. 13 ERC at 2005-2010.

The court did outline, though, a mechanism which it indicated is available under the statutory scheme for accomplishing the objective of partially exempting fugitive dust emitted by major emitting facilities from the requirements of section 165. That approach would involve defining the pollutant "particulate matter" "to exclude particulates of a size or composition determined not to present substantial health or welfare concerns," 13 ERC at 2018, n. 134, and then regulating such "excluded particulates" under section 111. Pursuant to section 109, EPA is currently reviewing the criteria document for the particulate matter NAAQS, and particle size is a factor being considered in this review. If the standard is revised, the rulemaking requirements of section 307(d) will apply.

EPA today is adopting its proposed deletion of the existing "fugitive dust exemption" and is deferring further action on any such "exemption" pending completion of the standard review process.

IX. Source

A. Proposed Definitions of "Source"

In the 1978 PSD regulations, EPA defined "source" as "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)." The Offset Ruling contained the same definition of "source."

In its June 1979 opinion in *Alabama Power*, the Court of Appeals rejected the definition of "source" in the PSD regulations. It concluded that Congress intended section 111(a)(3) of the Act to govern the definition of "source" for PSD purposes. That section defines "source" as "any building, structure, facility, or installation which emits or may emit any air pollutant." In defining "source," EPA used the terms "building," "structure," "facility," and "installation," but then added "equipment," "operation," and "combination thereof." The court held that EPA, in adding those terms, exceeded its authority. It stated, however, that the Agency has substantial discretion to define one or more of the four terms in section 111(a)(3) to include a wide range of pollutant-emitting activities.

In its June opinion, the court also focused on the clause "which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or persons under common control)." The court held that the approach, which that clause embodied, of grouping pollutant-emitting activities solely on the basis of proximity and control is generally acceptable, since the Agency had "evidenced an intention to refrain from unreasonable literal applications of the definition and instead to consider as a single source only common sense industrial groupings." 13 ERC at 1230.

In September 1979, EPA proposed to define "building, structure, facility and installation" for PSD purposes as "any grouping of pollutant-emitting activities which are located on one or more contiguous or adjacent properties and which are owned or operated by the same person (or by persons under common control)." As the preamble to the September proposal explains in detail, EPA concluded that the proposed definition would serve the purposes of PSD adequately by requiring review of those major projects that would cause air quality deterioration. At the same time, the definition would operate to avoid review of projects that would not increase deterioration significantly. In EPA's view, the dominant purpose of PSD review is to maintain air quality within the applicable increments.

In September, EPA proposed to define the four component terms differently for nonattainment purposes. Specifically, the Agency proposed to define "building, structure and facility" as it had proposed to define them for PSD purposes, and "installation" as "an identifiable piece of process equipment." One effect of that proposal would be the application of nonattainment requirements to a new piece of equipment that would emit significant amounts of a pollutant for which the area had been designated nonattainment, regardless of any accompanying emissions offsets at the plant. The preamble to the proposal explained: "Unlike the PSD provision, the nonattainment provisions are primarily intended not merely to prevent excessive increases in emissions, but to reduce emissions. This fundamental difference in purpose requires a different approach to defining the sources that will be subject to NSR." 44 FR 51932. EPA proposed to apply this definition to "incomplete" SIPs, i.e., those which did not demonstrate attainment based exclusively on currently approved requirements. Fully

"complete" SIPs could, under EPA's proposal, use the PSD definition.

In December 1979, the court issued its final opinion on the 1978 PSD regulations, which opinion superseded the June 1979 opinion. In the December opinion, the court reaffirmed its earlier conclusions that EPA must adhere to section 111(a)(3) in defining "source" for PSD purposes and that EPA has discretion to define the component terms "reasonably to carry out" the purposes of PSD. 13 ERC at 2039. The court added that "a plant is to be viewed as a source" and that the Agency "should" provide for the aggregation of polluting-emitting activities "according to considerations such as proximity and ownership." *Id.* at 2039 and 2040. But it warned that "EPA cannot treat contiguous and commonly owned units as a single source unless they fit within the four permissible statutory terms." Finally, the court said that any new definitions "should also provide explicit notice as to whether (and on what statutory authority) EPA construes the term source, as divided into its constituent units, to include the unloading of vessels at marine terminals and 'long-line' operations such as pipelines, railroads, and transmission lines. We agreed with Industry Groups that EPA has not yet given adequate notice as to whether it considers those industrial activities to be subject to PSD." *Id.* at 2040.

In January 1980, EPA solicited comment on the September proposals in light of the December opinion of the court. 45 FR 6803. EPA specifically asked for comment on whether factors other than proximity and control, such as the functional relationship of one activity to another, should be used. The Agency also asked for specific examples of cases where a literal application of the proposed definition would be unreasonable.

B. PSD: Comments on Proposal and Responses

Most commenters agreed that for PSD purposes EPA should adopt definitions of "building," "structure," "facility," and "installation" that would aggregate pollutant-emitting activities, instead of definitions that would restrict one or more of those terms to an individual activity. One commenter, however, argued that EPA should adopt for PSD purposes the same definitions of those terms that it had proposed to adopt for nonattainment purposes. The commenter asserted that the decision of the court in *ASARCO v. EPA*, 578 F.2d 319 (D.C. Cir. 1978), required the Agency to impose BACT on a new unit at a plant, even if the unit would result in no

net increase in emissions. The commenter also asserted that the "all-encompassing definition * * * destroys the intent of the PSD program by letting opportunities for reducing increment consumption disappear before control technology standards (*i.e.*, NSPS) can be in place." (Emphasis added.)

EPA has decided to adopt for PSD purposes the sort of "all-encompassing" definitions that the commenter opposed. First, in its December 1979 opinion in *Alabama Power*, the court explicitly held that *ASARCO* "does not prevent aggregation of individual units of a plant into a single source." 13 ERC at 2040. Second, the dominant purpose of PSD review is not to reduce increment consumption, but rather to maintain air quality deterioration below an applicable increment. A definitional structure that aggregates pollutant-emitting activities into one "source" would serve that purpose, since it would allow only those changes at the "source" that would not significantly worsen air quality to escape review.

Some of the commenters who agreed that each of the component terms of "source" should aggregate pollutant-emitting activities also supported the use of proximity and control as the sole criteria for aggregating them. Most of those commenters, however, objected to the use of proximity and control as the sole criteria, some on the ground that the proposed definitions would be too inclusive and others on the ground that the definitions would not be inclusive enough.

The commenters who thought the definitions would be too inclusive asserted that they would group sets of activities at one site and under common control that are functionally or operationally distinct. Typical of the examples they gave are the following activities at one site and under common control: (1) a surface coal mine and coal-burning electrical generators that the mine supplies with coal; (2) a rock quarry and the portland cement plant that the quarry supplies with raw material; (3) a primary aluminum ore reduction plant, an aluminum fabrication plant and an aluminum reclamation plant; (4) a refinery, a service station, a research laboratory, a fertilizer factory, and a pesticide factory; and (5) a uranium mill and an oil field. With the language of the June 1979 opinion in mind, the commenters contended generally that to group the nominally different activities in each of those examples would violate any common-sense notion of "plant."

The commenters who thought the proposed definitions would be too inclusive suggested a wide range of

alternative definitions. For example, one group proposed that activities at one site and under common control should be combined only if: (1) they share the first three digits under the Standard Industrial Classification Code of the U.S. Department of Commerce, (2) they are dependent upon or affect the process of each other, (3) they use a common raw product or produce a common product, and (4) the proponent of the project in question does not show that the activities have entirely separate air quality impacts.

The commenters who thought the proposed definitions would not be inclusive enough urged the Agency to abandon control as a factor and adopt function in its place. Some of them described a plan by a group of independent companies to construct jointly a single coal-burning power plant to replace oil-burning power plants at various manufacturing sites belonging to those companies near to the site of the coal-burning plant. The commenters contended that EPA should treat the old plants and the new plant as being within one "source," so that the new plant might escape PSD review. They argued that the new plant would not deteriorate air quality, since presumably the decrease in emissions from the shutdown of the old plants would offset the increase from the new plant, and that to allow it to escape review would facilitate the national switch from oil to coal.

After considering the comments of those who objected to the use of proximity and control only, EPA has decided to adopt for PSD purposes a definition of "building, structure, facility, and installation" that is different from the one it proposed in September. The final definition provides that those component terms each denote "all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same 'Major Group' (*i.e.*, which have the same 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)."

In EPA's view, the December opinion of the court in *Alabama Power* sets the following boundaries on the definition for PSD purposes of the component terms of "source": (1) it must carry out

reasonably the purposes of PSD; (2) it must approximate a common sense notion of "plant"; and (3) it must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building," "structure," "facility," or "installation."

The comments on the proposed definition of "source" have persuaded EPA that the definition would fail to approximate a common sense notion of "plant," since in a significant number of cases it would group activities that ordinarily would be considered as separate. For instance, a uranium mill and an oil field would ordinarily be regarded as separate entities, yet the proposed definition would treat them as one.

In formulating a new definition of "source," EPA accepted the suggestion of one commenter that the Agency use a standard industrial classification code for distinguishing between sets of activities on the basis of their functional interrelationships. While EPA sought to distinguish between activities on that basis, it also sought to maximize the predictability of aggregating activities and to minimize the difficulty of administering the definition. To have merely added function to the proposed definition as another abstract factor would have reduced the predictability of aggregating activities under that definition dramatically, since any assessment of functional interrelationships would be highly subjective. To have merely added function would also have made administration of the definition substantially more difficult, since any attempt to assess those interrelationships would have embroiled the Agency in numerous, fine-grained analyses. A classification code, by contrast, offers objectivity and relative simplicity.

EPA has chosen the classification code in the *Standard Industrial Classification Manual, 1972*, as amended in 1977 ("SIC"), because it is both widely-known and widely-used. EPA has also chosen to use just one set of categories in the manual, those that describe each "Major Group" in the classification system and that bear a two-digit classification number, although the commenter who suggested that EPA use such a code also suggested that the Agency use the categories at the three-digit level. On the one hand, the two-digit categories are narrow enough to separate sets of activities into common sense groupings. In fact, most of the nominally different sets of activities in the examples given above would fall into a different two-digit

category; only the fertilizer factory and the pesticides factory would fall into the same category. On the other hand, the categories are broad enough to minimize the likelihood of artificially dividing a set of activities that does constitute a "plant" into more than one group and the likelihood of disputes over whether a set of activities falls entirely into one category or another.

Each source is to be classified according to its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Thus, one source classification encompasses both primary and support facilities, even when the latter includes units with a different two-digit SIC code. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product. Where a single unit is used to support two otherwise distinct sets of activities, the unit is to be included within the source which relies most heavily on its support. For example, a boiler might be used to generate process steam for both a commonly controlled and located kraft pulp mill and plywood manufacturing plant. If the yearly boiler output is used primarily by the pulp mill, then the total emissions of the boiler should be attributed to the mill.

In adopting the new definition of "source," EPA rejected the requests of those commenters who thought that the proposed definition would not be inclusive enough. As noted above, they urged that EPA formulate a definition that looked only to proximity and function. But such a definition by looking to function would unnecessarily increase uncertainty and drain the Agency's resources. In addition, such a definition would present groupings, such as the example the commenters gave, that would severely strain the boundaries of even the most elastic of the four terms, "building," "structure," "facility," and "installation."

Many commenters urged EPA to clarify the extent to which the final definition of those terms encompasses the activities along a "long-line" operation, such as a pipeline or electrical power line. For example, some urged EPA to add to the definition the provision that the properties for such operations are neither contiguous nor adjacent. To add such a provision is unnecessary. EPA has stated in the past and now confirms that it does not intend "source" to encompass activities that would be many miles apart along a long-line operation. For instance, EPA would not treat all of the pumping stations

along a multistate pipeline as one "source."

EPA is unable to say precisely at this point how far apart activities must be in order to be treated separately. The Agency can answer that question only through case-by-case determinations. One commenter asked, however, whether EPA would treat a surface coal mine and an electrical generator separated by 20 miles and linked by a railroad as one "source," if the mine, the generator, and the railroad were all under common control. EPA confirms that it would not. First, the mine and the generator would be too far apart. Second, each would fall into a different two-digit SIC category.

Three commenters focused on whether and to what extent the emissions from each ship that would dock at a proposed marine terminal should be taken into account in determining whether the terminal would be "major" for PSD purposes. One commenter argued in effect that the emissions of each such ship that are quantifiable and occur while the ship is coming to, staying at or going from the terminal should be taken into account. In the view of that commenter, all of those activities would be "integral" to the operation of the terminal. Another commenter asserted that none of the emissions of any such ship should be taken into account, because ships are mobile sources. The remaining commenter contended that only the emissions that: (1) come from a ship which is under the proprietary control of the owner or operator of the terminal and (2) occur while the ship is at the dock should be included in an applicability determination. That commenter viewed the ability of the terminal owner or operator to regulate the behavior of a ship as the critical consideration.

The permit requirements of the final Part 52 PSD regulations apply to a collection of pollutant-emitting activities according to the "potential to emit" of just those activities in that collection which constitute a "stationary source." Whether and to what extent the emissions of ships that would dock at a terminal are to be taken into account in determining PSD applicability depends, therefore, on whether and to what extent the term "stationary source" in the final regulations encompasses not only the activities of the terminal itself, but also the activities of the ships while they are coming to, staying at, or going from the terminal.

The final definition of "building, structure, facility, and installation" resolves that question. EPA intends the term "stationary source" under that

definition to encompass the activities of a marine terminal and only those dockside activities that would serve the purposes of the terminal directly and would be under the control of its owner or operator. The term "dockside activities" means those activities in which the ships would engage while docked at the terminal. While "stationary source" encompasses combinations of activities, it is limited to combinations that would be "stationary," that is, fixed to the particular site. The activities of a terminal itself would be stationary, but all ship activities would not be. Only those that would directly serve the purposes of the terminal, such as loading and unloading, would be stationary since they alone would be in a sense fixed to the particular site. Hence, "stationary source" encompasses the activities of a marine terminal and only those dockside activities that would directly serve its purposes.

In addition, while "stationary source" encompasses combinations of stationary activities, it is further limited to those that would locate on "contiguous or adjacent properties." In EPA's view, only dockside activities would be located on "property" that is contiguous or adjacent to the terminal. Next, "stationary source" is also limited to those combinations of activities that would be "under the control" of one person or one group of persons who are themselves under common control. Hence, "stationary source" encompasses only the activities at a terminal and those dockside activities over which the owner or operator of the terminal would have control. Finally, the activities at a terminal and any such dockside activities fall under a single two-digit SIC category, namely "Water Transportation" (number 44).

Whether a particular dockside activity would directly serve the purposes of a terminal and would be under the control of its owner or operator depends upon the circumstances of a specific situation. Presumably, however, the activity of loading or unloading a ship would in every case directly serve the purposes of the terminal and would be under the control of its owner or operator to a substantial extent. In particular, the Agency would expect that no loading or unloading could occur without the consent of the owner or operator and consequently that the owner or operator would set, or at least have a significant say in the setting of, the schedule for loading or unloading.

In adopting this interpretation of "stationary source," EPA in large measure has rejected the arguments of the commenters on the ship emissions issue. First, to treat *all* of the activities of a ship while it is coming to, staying at, and going from a terminal would violate any common sense notion of "building," "structure," "facility," or "installation." To group just those activities occurring at the terminal that are essential to its functioning entirely comports with common sense. Second, an activity such as loading and unloading is certainly stationary, even if the ships that engage in it have mobility. Ships, moreover, are not "mobile sources" within the meaning of section 110(a)(5) of the Act, the provision restricting indirect source review. Finally, the fact that a terminal owner or operator does not own a particular ship does not mean that the owner or operator has no control over behavior of the ship at the terminal.

In deference to the position taken in *Alabama Power*, EPA has decided to treat the definition of "source" in the 1978 PSD regulations as *not* encompassing any ship or ship activity. As a result, ship emissions are not to be taken into account at all in determining whether a marine terminal is subject to review under the 1978 PSD regulations. A terminal which would not be subject to review under the 1978 regulations if ship emissions are not included in the determination of potential to emit can also be excluded from review under the new regulations provided certain conditions are met. These conditions are that the owner or operator of such a source has obtained each of the permits required under the SIP for the terminal before the date this notice appears in the Federal Register and commences construction on it within 18 months after that date.

The final definition of the component terms of "stationary source" differs from the proposed definition in one significant respect. The proposed definition used the phrase "*any grouping of pollutant-emitting activities.*" The final definition uses the phrase "*all of the pollutant-emitting activities.*" Taken literally, the proposed definition would have referred not only to all of the activities at a plant, but also to any subgroup of those activities. EPA, however, intended it to refer only to all of the activities. The final definition merely makes that explicit.

C. Nonattainment: Comments on Proposal and Response

Many commenters objected to EPA's proposed definition of "source" for nonattainment areas. Several commenters argued that there was no

statutory basis for the distinction drawn in the proposal between "complete" and "incomplete" SIPs. Most of the commenters further claimed that the "dual definition" (*i.e.*, treating a source as both a plant and an individual piece of process equipment at the plant) both was illegal under the statute and *Alabama Power* and was wrong as a matter of policy.

The legal arguments presented by the commenters fell into two broad categories. First, they argued that the dual definition really defined "source" as a combination of sources, which had been forbidden by both *Alabama Power* and *ASARCO*. EPA therefore could, in these commenters' view, define "source" as either the entire plant or an individual piece of process equipment, but not both. These commenters opted for the former approach.

The second legal argument challenged EPA's contention that use of the plant-wide definition would be improper in nonattainment areas, because the purpose of the nonattainment new source review program is to reduce emissions, not to hold emissions constant. The commenters claimed that the Act gives primary responsibility for assuring reasonable further progress to the states, and the states therefore can choose whatever mix of strategies they want to achieve reasonable further progress. This suggested to the commenters that EPA had no authority to ban a plant-wide definition for new source review if the state could otherwise demonstrate reasonable further progress.

Several commenters also pointed to a variety of policy concerns which they felt militated against EPA's proposed dual definition. First, they argued that the definition would discourage technological innovation that could actually reduce emissions, because sources would be reluctant to modernize for fear that such requirements as LAER would be applied to them. In particular, they felt sources would be unwilling to retire old inefficient facilities and replace them with efficient cleaner ones. Second, some commenters claimed that there was no point to reviewing a facility where offsetting emissions could be obtained, since on the whole ambient air quality would not get any worse. Finally, many commenters complained that the definitional structure as a whole was far too complex, and they urged that EPA simplify the system both by eliminating the distinction between "complete" and "incomplete" SIPs and by adopting one definition for both PSD and nonattainment areas. Most commenters preferred the PSD

definition, although some urged that the dual definition be used.

In revising the Offset Ruling in January 1979, EPA adopted definitions of "source" and "modification" which had the effect of requiring any increase greater than 100 tons in the potential to emit of a plant to undergo nonattainment new source review, even if offsetting reductions at the plant were to accompany the change. The effect of the proposed definitions of "source" and "modification" which are being promulgated today would be basically the same as those in the Offset Ruling. Adoption of the proposed definitions would constitute, therefore, a continuation of an established approach to nonattainment new source review.

The comments on the dual definition have failed to persuade EPA that it should abandon the established approach at this time. As a result, the agency has decided to adopt the dual definition in each set of nonattainment regulations. For the reasons given below, EPA does not agree that the dual definition is either illegal or unsound from a policy standpoint. In addition, the agency has decided that the dual definition should be used regardless of whether the SIP is complete or incomplete. EPA agrees with the commenters that there is little support in the statute for defining "source" according to the complete or incomplete status of the SIP, and that the proposed definition was complicated.

The dual definition, by defining individual units as a "source," will bring more units in for review in areas with unhealthy air and thereby result in reducing emissions from the status quo. The legislative history of the Act indicates that new source review was intended to be an important tool in the drive towards attainment of ambient air quality standards. As the House Report stated:

[M]aximum pollution control from new sources is necessary in order to permit room for maximum potential economic growth. This is particularly true in light of the requirement for reasonable further progress and the indications that emissions from many existing sources in nonattainment areas will be increasing (due to fuel switching, natural gas curtailments) or remaining static (due to delayed compliance orders, et cetera). Finally, the technology forcing purpose of the act is best served by requiring maximum feasible pollution control from these new sources in dirty air areas. For all these reasons, the committee adopted the requirement for proposed new or modified major stationary sources in nonattainment areas to meet the lowest achievable emission rate requirement.

H. Rep. No. 95-294, 95th Congress, 1st Sess. 215 (1977). In addition, after

hearing testimony that no steel sources owned by five major steel companies were in compliance, the House inserted into section 173 a requirement that the owner of a proposed source or modification demonstrate that all other sources owned, operated, or controlled by him in the state are in compliance with the applicable SIP. *Id.* at 210-213. In this way, Congress meant to use new source review as a means of cleaning up existing sources as well.

To realize this goal fully, Congress intended that new source review be applied to the greatest extent possible. For example, Senator Muskie, in presenting the Clean Air Act Amendments of 1977 to the Senate, spoke of reviewing "any physical change which increases [emissions] * * *," and he went on to note:

Thus, [under the offset ruling and Part D NSR requirements] a new source is still subject to such requirements as "lowest achievable emission rate" even if it is constructed as a replacement for an older facility resulting in a new reduction from previous emission levels. 123 Cong. Rec. at S 13702 (daily edition, August 4, 1977).

Since the dual definition would bring in more sources or modifications for review than would the plant-wide definition used for PSD purposes (including many replacement facilities which would not be reviewed under a plant-wide definition), use of the dual definition clearly is more consistent with Congressional intent.

The dual definition also is consistent with *Alabama Power* and *ASARCO*. *Alabama Power* held that EPA had broad discretion to define the constituent terms of "source" so as best to effectuate the purposes of the statute. Different definitions of "source" can therefore be used for different sections of the statute. See 13 ERG at 2039. As EPA discussed in detail in its proposal, the purpose of the nonattainment provisions is to "positively reduce emissions," not merely to hold emissions constant. In addition, unrestricted use of meeting emissions at an entire plant in nonattainment areas would make attainment more difficult, since many of the limited number of cost-effective opportunities to reduce emissions will in fact be used to avoid review. See 44 FR 51932. The dual definition therefore comports with the purposes of Part D of the Act.

Moreover, *Alabama Power* and *ASARCO* taken together suggest that there is a distinction between Clean Air Act programs designed to enhance air quality and those designed only to maintain air quality. In *ASARCO*, the Court of Appeals for the District of Columbia Circuit struck down the

definition of "source" for new source performance standards (NSPS), which had employed a "bubble" concept. An important element in the court's decision was its belief that the "bubble," by allowing sources to escape NSPS, was inconsistent with the purpose of NSPS, which was to improve air quality. See 578 F.2d at 327-28. But in *Alabama Power*, the same court held that for PSD purposes, EPA must use a "bubble" approach, precisely because PSD is designed to maintain air quality and therefore deals with "a significantly different regulation and statutory purpose." 13 ERG at 2044.

Under this analysis, use of a plant-wide definition to avoid new source review would appear to be inappropriate in nonattainment areas, since the purpose of nonattainment SIPs is to improve existing air quality so as to attain the ambient air quality standards. EPA therefore believes that it would be more consistent with the purposes of the Act not to permit states to choose a plant-wide definition of source.

Promulgation of the dual definition follows the mandate of *Alabama Power*, which held that, while EPA could not define "source" as a combination of sources, EPA had broad discretion to define "building," "structure," "facility," and "installation" so as to best accomplish the purposes of the Act. 13 ERG at 2039. This holding contemplates that one term (such as "building") may be more inclusive than another term (such as "installation"), and so a "building" may include many "installations." In this way, a "source" can, under *Alabama Power*, be composed of smaller "sources," yet not be a combination of sources. The dual definition fits into *Alabama Power*, since under EPA's definitional scheme, a "source" is either an individual piece of process equipment or the entire plant; it is not a combination of sources. That is, when deciding whether a source must undergo new source review, the reviewing authority must determine whether there was a significant increase in emissions at either a "major" individual piece of equipment or at the plant as a whole. Wherever such an increase occurs is a "source." Thus the plant itself is a source, not a combination of sources, although it may contain smaller sources.

EPA recognizes that use of different definitions for PSD and nonattainment areas adds to the complexity of the permitting process. But this additional complexity is outweighed by the need for a more inclusive definition of source in nonattainment areas in order to assure attainment of standards.

Although it is claimed that some sources may not be willing to modernize their facilities due to the perceived added expense of LAER and the need to demonstrate statewide compliance, EPA believes that its approach is justified by the fact that the dual definition will bring in more sources and modifications for review and will require better pollution control technology in nonattainment areas.¹⁰

EPA disagrees that use of a plant-wide definition would allow a plant with a new installation to achieve the same emissions reductions as LAER, but in a less expensive manner by finding offsets elsewhere in the plant. This argument assumes that LAER is markedly more costly than the requirements that would otherwise apply. EPA believes that its own past actions, and those of the states, indicate that LAER need not and is not generally being interpreted in this manner.

EPA believes, and most commenters agreed, that new facilities should install state-of-the-art control technology. Such a requirement is imposed by the Clean Air Act for major new sources in PSD areas (BACT), for major new sources in nonattainment areas (LAER), and whenever EPA has set new source performance standards (NSPS). EPA therefore intends to interpret the LAER requirement in a reasonable manner, as it believes it has in the past, and to take a close look whenever LAER would be substantially stricter than these other requirements.

EPA intends that its interpretation of "building, structure, and facility" be identical to that for "building, structure, facility, or installation" used for PSD purposes.¹¹

X. Modification

This section discusses the final PSD and nonattainment definitions of "major modifications" and "net emissions increase" which EPA is promulgating in this notice. The section first describes those final provisions. It then focuses on each of their major aspects, giving in particular the relevant proposal, the comments on it and EPA's responses. An example of how the definitions work appears at the end of the section. The

¹⁰ Contrary to one commenter's argument, EPA believes that the dual definition will not cause sources to locate in clean areas. Any such source would be subject to PSD review in any event.

¹¹ One commenter requested EPA define "source" as one emitting the criteria pollutants, and not "any pollutant regulated under the Act." EPA has decided to retain its definition, since it comports with section 302(j) of the Act. However, pursuant to section 172(b)(6), EPA will require new source review permits only for those pollutants for which an area has been designated nonattainment and for which the source is major.

section also discusses a provision which appears in the PSD and nonattainment definitions of "major stationary source," but which stems from the final formulation of "major modification." That provision establishes that a physical change at a "minor" stationary source which change by itself would constitute a "major stationary source" shall be treated as a "major stationary source."

A. Final Definitions of "Major Modification" and "Net Emissions Increase"

With the final amendments announced here, the Part 51 and Part 52 PSD regulations now define "major modification" as any "physical change" or "change in method of operation" at a major stationary source which would result in a "significant net emissions increase" in any pollutant subject to regulation under the Act. See §§ 51.24(b)(2) and 52.21(b)(2).

While the new PSD regulations do not define "physical change" or "change in method of operation," they provide that those phrases do not encompass certain specific types of events. Those types are: (1) routine maintenance, repair and replacement; (2) a fuel switch due to an order under the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or due to a natural gas curtailment plan under the Federal Power Act; (3) a fuel switch due to an order or rule under section 125 of the Clean Air Act; (4) a switch at a steam generating unit to a fuel derived in whole or in part from municipal solid waste; (5) a switch to a fuel or raw material which (a) the source was capable of accommodating before January 6, 1975, so long as the switch would require no change in any preconstruction permit condition established after that date under the SIP (including any PSD permit condition) or (b) the source is approved to make under a PSD permit; (6) any increase in the hours or rate of operation of a source, so long as the increase would require no change in any preconstruction permit condition established after January 6, 1975 under the SIP; and (7) a change in the ownership of a stationary source.

The new PSD regulations define "significant" in terms of *de minimis* thresholds for each pollutant subject to regulation under the Act. Those thresholds appear in §§ 51.24(b)(21) and 52.21(b)(21). For example, the threshold for sulfur dioxide is 40 tons per year. A "net emissions increase" in sulfur dioxide below that level is not "significant." For a fuller discussion of

the thresholds, see the section entitled *De Minimis Exemptions*.

Finally, the new PSD regulations contain definitions of "net emissions increase," which appear as §§ 51.24(b)(3) and 52.21(b)(3). Under those definitions, "net emissions increase" denotes the positive sum of any increase in "actual emissions" from a particular physical or operational change at a source and any other increases and decreases in "actual emissions" that are contemporaneous with the particular change and otherwise creditable.

The first step in determining whether a "net emissions increase" would occur is to determine whether the physical or operational change in question would itself result in an increase in "actual emissions." If it would not, then it could not result in a "net emissions increase." If it would, the second step is to identify and quantify any other prior increases and decreases in "actual emissions" that would be contemporaneous with the particular change and otherwise creditable. The third step, finally, is to total the increase from the particular change with the other contemporaneous increases and decreases. If the total would exceed zero, then a "net emissions increase" would result from the change.

The definitions of "net emissions increase" specify which increases and decreases in "actual emissions" are contemporaneous. Under the definition in the Part 52 PSD regulations, increases or decreases are contemporaneous with a proposed change only if they occur between two dates: first, the date five years before construction "commences" on the proposed physical or operational change in question and, second, the date the increase from that change "occurs." An increase from a physical change "occurs" when the affected emissions unit becomes operational and begins to emit a particular pollutant. Any unit that requires shakedown becomes operational only after a reasonable shakedown period (not to exceed 180 days). Under the definition in the Part 51 regulations, a state in revising its SIP may set a period other than the five-year period of the Part 52 regulations to define what is contemporaneous and what is not, so long as the period is not unreasonably long.

The definitions of "net emissions increase" in the PSD regulations also specify which contemporaneous increases and decreases in "actual emissions" are creditable. A contemporaneous increase or decrease is creditable only if the relevant reviewing authority has not relied on it in issuing a PSD permit for the source,

and that 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. A contemporaneous increase or decrease in "actual emissions" of sulfur dioxide or particulate matter that occurs before the applicable baseline date is creditable only if, in addition, it is required to be considered in calculating how much of a particular increment remains available.

Finally, the definitions of "net emissions increase" in the new PSD regulations specify the extent to which any contemporaneous and otherwise creditable increase or decrease is creditable. Any such increase is creditable to the extent that the new level of "actual emissions" exceeds the old level of "actual emissions." Any such decrease is creditable only to the extent that (1) the old level of "actual emissions" (or the old level of "allowable emissions," if it is lower) exceeds the new level of "actual emissions," (2) the decrease is federally enforceable at the time construction begins on the proposed physical or operational change which it is intended to offset, and (3) the decrease has roughly the same health and welfare significance as the increase from the proposed change.

Under the final PSD regulations, the phrase "actual emissions" means the rate at which an emissions unit actually emits a particular pollutant. See §§ 51.24(b)(21) and 52.21(b)(21). In general, that rate as of a particular date equals 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 is representative of normal source operation. The reviewing authority may presume that any "source-specific allowable emissions" for the unit is equivalent to the actual emissions of the unit. For any unit which has yet to begin normal operations on the date in question, its actual emissions equal its "potential to emit" on that date. For a fuller discussion of the concept of "actual emissions" and in particular of what constitutes "source-specific allowable emissions," see the section on Increment Consumption.

The final PSD regulations also describe in detail the concept of "allowable emissions." See §§ 51.24(b)(16) and 52.21(b)(16). That phrase means in essence the maximum

rate at which an emissions unit under the most stringent of certain legal constraints may emit a particular pollutant. The legal constraints are (1) any applicable standards in 40 CFR Parts 60 and 61, (2) any applicable SIP limitations, including any with a future compliance date, and (3) any applicable condition in a permit issued under the SIP that is federally enforceable, also including any condition with a future compliance date.

The final amendments to the Offset Ruling, 40 CFR 51.18 and 40 CFR 52.24 which are announced here also include new definitions of "major modification," "significant," "net emissions increase," "actual emissions," and "allowable emissions." In general those definitions follow the pattern of the PSD definitions. Only the definitions of "net emissions increase" in those nonattainment provisions vary significantly. They add that a decrease in "actual emissions" which is contemporaneous with the increase in question may be credited only if and only to the extent that the relevant permitting authority has not already accepted it as a satisfactory "offset" in issuing a preconstruction permit under the SIP.

B. No Net Increase

The *Alabama Power* decision rejected EPA's regulatory approach of requiring PSD review of potential emissions increases at existing stationary sources only when such increases would equal or exceed the 100/250 ton threshold used in the review of new sources. It held instead that a change in a major stationary source is subject to review only if it would result in any significant net increase. In response, EPA proposed on September 5, 1979, an approach that would subject to new source review (NSR) under the relevant PSD or nonattainment provisions only each significant net increase that would occur in the potential to emit of a major stationary source. Under the proposal, a significant net increase was to be an overall increase in the potential to emit of the source equal to or greater than a pollutant-specific emissions cutoff (see *De Minimis* Exemptions), taking into account contemporaneous emissions increases and decreases at the same source. An exception to this general rule of netting contemporaneous increases and decreases was to be the case of construction restrictions under sections 110(a)(2)(I) and 173(4). There, accumulated increases would count toward triggering the growth prohibitions, without regard to any contemporaneous reductions occurring at the same source.

Public comment supported this proposal (except with respect to the construction restrictions) as the clear and proper interpretation of the *Alabama Power* decision. Sixty-two of sixty-three commenters endorsed the general netting approach to modification taken in the proposal, although several took issue with certain of the specific rules relating to the concept (see discussion below). Several commenters felt that requiring any significant net increase to undergo review was too strict on existing sources as compared with new sources, since new sources can emit up to 100/250 tons per year and still not be subject to review. The terms of the Act and the court decision preclude allowing such a general exemption for existing sources. Pursuant to *Alabama Power*, the Administrator is today promulgating the netting concept for determining the review applicability of changes at existing major stationary sources (consistent with each program's definition of source). This promulgation affects regulations for PSD (40 CFR 52.21 and 40 CFR 51.24), nonattainment NSR (Emissions Offset Interpretative Ruling and 40 CFR 51.18(j)), Review of New Stationary Sources and Modifications), and the construction restrictions under sections 110(a)(2)(I) and 173(4), (40 CFR 52.24, Statutory Restriction on new Stationary Sources). Allowance of netting for determining the applicability of 40 CFR 52.24 is a change from the proposal and is discussed below.

C. Pollutant Applicability

EPA proposed to require preconstruction review only if the increase in potential to emit would be for a pollutant which the source emits in major amounts. Once an increase in the major pollutant triggered PSD review then review would be required for all regulated pollutants emitted in greater than *de minimis* amounts as a result of the modification. Review would also be required if the emissions change itself were equivalent to a major stationary source.

Only limited comment was received on EPA's proposal to require review where major changes in emissions of minor pollutants or greater than *de minimis* changes in emissions of a major pollutant would occur. While a few groups endorsed the September 5 proposal, one group argued that *Alabama Power* did not restrict PSD applicability to just modifications involving the pollutant(s) which the source emits in major amounts. That group pointed out that section 111(a)(4) of the Act defines "modification" as "any physical change in, or change in the method of operation of, a stationary

source which increases the amount of any air pollutant emitted by such source or which results in the emissions of any air pollutant not previously emitted." (Emphasis added.)

The Administrator agrees that requiring review for a net emissions increase in any pollutant subject to regulation under the Act is consistent with the *Alabama Power* decision. Consequently, EPA is promulgating a final rule that requires PSD preconstruction review for net emissions increases in greater than *de minimis* amounts at a major stationary source for any pollutant subject to regulation under the Act emitted by the source, regardless of whether the source is major for that pollutant.

The Administrator is not changing the September 5 proposal with respect to pollutant applicability in nonattainment areas. See Geographic and Pollutant Applicability. The source must be major for the nonattainment pollutant(s) and must make a greater than *de minimis* emissions change in such a pollutant in order to trigger nonattainment review for that pollutant(s). A PSD review, however, would be triggered if a greater than *de minimis* change occurs at that major source for any regulated pollutant emitted by the source other than the nonattainment pollutant(s).

D. Netting of Actual Emissions

EPA proposed on September 5 that an activity be deemed a major modification when the "potential to emit" of the major stationary source experiences a net increase greater than a *de minimis* amount, taking into account all contemporaneous changes. EPA also proposed that a reduction would be creditable only if the physical capability of the source to emit a pollutant were actually reduced. In addition, where "allowable emissions" for a source, as defined in the 1978 PSD regulations and the Offset Ruling would be less than its "potential to emit," no credit would be given for reducing potential emissions to "allowable emissions." "Allowable emissions," as defined in those regulations, meant the emissions rate calculated using the maximum rated capacity of the source and is represented by the most stringent than any of the following: (1) any applicable standards in 40 CFR Parts 60 and 61; (2) any applicable SIP emissions limitations; and (3) any emissions rate specified as a permit condition under the SIP. The applicable SIP limitation in the case of designated nonattainment areas included the emissions rate that was assumed for the source in the attainment demonstration and in the

schedule for making reasonable further progress.

Forty of forty-two commenters favored an allowable emissions baseline, for determining whether a net emissions increase would occur, instead of one using "potential to emit." The other two commenters endorsed EPA's proposal. Many also complained of the different criteria for determining "potential to emit" from new and existing sources. (Under the proposal, "allowable emissions" and physical incapability could have constrained the "potential to emit" of existing but not new stationary sources.)

There are problems with using a baseline for netting that is based on the existing source's "potential to emit." A computation of an existing source's potential emissions could give a figure considerably higher than what it is actually emitting. This would be especially true if the source operated only a small part of the time or used considerably cleaner fuels than it is allowed to burn. Such an approach would therefore create a "paper offset" that could permit actual air quality to deteriorate seriously, while the change which increased actual emissions avoided NSR. Similar problems would arise if offsets were based on allowable emissions, as recommended by most commenters.

In the June 1979 opinion in *Alabama Power*, the court held that the definition of "modification" in section 111(a)(4) governs the definition of that term for PSD purposes. Section 111(a) provides that a "modification" is "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 emissions of any air pollutant not previously emitted." (Emphasis added.) Although the underlined words in the definition appear to refer to what the source is actually emitting at a particular time, the court in the June opinion described the concept of "modification" in terms of changes in the "potential to emit" of a source. As a result, EPA proposed definitions which also referred to changes in "potential to emit."

In its December 1979 opinion, however, the court used an entirely different set of terms to describe "modification." Instead of using "potential to emit," it used language which, like the section 111(a)(4) definition, suggest changes in actual emissions. For example, at one point the court states: "If these plants increase pollution, they will generally need a permit. Exceptions to this rule will occur when the increases are *de minimis*, and

when the increases are offset by contemporaneous decreases of pollutants, as we discuss below * * * " (Emphasis added.)

Following the lead of the court, EPA has also shifted the focus of its regulatory definitions from "potential to emit" to "actual emissions." For both PSD and nonattainment purposes, a "major modification" is now any significant "net emissions increase" at a major stationary source that results from certain changes. "Net emissions increase" is, in turn, roughly any net increase in "actual emissions." Not only are those definitions consistent with the court's view of section 111(a)(4), but they also avoid the "paper offset" problem described above, thereby better serving PSD and nonattainment purposes.

E. Contemporaneous Increases and Decreases

Under *Alabama Power*, a modification is any net increase in emissions that would result from "contemporaneous" changes at a major stationary source. The court decision left to EPA the task of defining what changes should be considered "contemporaneous."

A narrow interpretation of the term "contemporaneous" would restrict creditable decreases in emissions to those occurring at the same time as the emissions increases to be offset. The administrator decided against proposing such an interpretation, since it might promote the continued operation of old or obsolete equipment in order to preserve offset credit. Instead, EPA proposed a system that would grant credit for any post-promulgation emissions reduction and for certain pre-promulgation emissions reductions involving recent shutdowns or production curtailments. In order to be creditable, the reductions were to be enforceable before operation of the emissions unit(s) that would result in the emissions increases (except that a 180-day shakedown period could be granted for replacements). A preconstruction notice was also proposed as a mandatory means to record any reduction credit. (For a discussion of that proposed notice requirement, see the section entitled Notification.)

On January 30, 1980 (45 FR 6802), EPA solicited additional comment on its proposal for "contemporaneous." In particular, the Administrator asked whether a three-year time limit should be imposed for qualifying reductions as "contemporaneous." The proposed three-year time cap would have run from the time of the emissions reduction to the time that the source would have filed any necessary permit application

for the prospective emissions increase(s). Where a permit would not be required, the reference time would instead be the date on which construction commenced on the change resulting in the emissions increase.

Several comments were received on the September 5 proposal. Many confused the dates for accumulation at minor stationary sources (see discussion below) with the time limits for "contemporaneous" changes at major stationary sources. The majority of commenters on the January 30 Federal Register notice were from the industrial sector and they urged EPA to treat *any* emissions decrease which occurs before a proposed increase as being "Contemporaneous" with that increase. EPA however, has rejected those urgings. To credit any decrease that occurs before a proposed increase would violate any common sense notion of what is "contemporaneous," since a period of contemporaneity must have some definite boundaries.

EPA agrees with those industry commenters, however, to the extent that they contended that the period of contemporaneity should be fairly large. In particular, EPA believes that the period should be wide enough so as to minimize any incentive for keeping old or obsolete equipment in operation beyond its usefulness. As a result, EPA has set five years, plus time for construction, as the period of contemporaneity for the purposes of the Part 52 PSD regulations, the Offset Ruling and the construction moratorium. Specifically, the definition of "net emissions increase" in each of those regulations provides that a decrease in "actual emissions" may be credited only if it occurs between the date five years before construction "commences" on a proposed physical or operational change and the date the increase in "actual emissions" from that change occurs. A five-year limit was selected for those regulations rather than a three-year value, since five years is frequently used as the time duration over which corporate expansion planning is conducted.

For the purposes of the Part 51 PSD and nonattainment regulations, EPA has established that each state may set the period of contemporaneity for its own NSR regulations. The state may not, however, set a period of unreasonable or undefined length.

F. Otherwise Creditable Increases and Decreases

Whether an increase or decrease in "actual emissions" is creditable for PSD or nonattainment purposes depends, not only on whether it is contemporaneous

with the increase in question, but also on certain other factors. First, under each of the PSD and nonattainment definitions, a prior increase or decrease is creditable only if the relevant reviewing authority has not relied upon it in issuing a permit under the relevant NSR program. As stated earlier, 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. The purpose of that rule is to "wipe the slate clean." Once the reviewing authority has evaluated a significant net increase in issuing an NSR permit the net increase should not be a factor in deciding whether subsequent events should undergo scrutiny, too.

Second, under the PSD definition of "net emissions increase," an increase or decrease in actual emissions of sulfur dioxide or particulate matter which occurs before the baseline date is creditable only if it would be considered in calculating how much of an increment remains available. In formulating that definition, EPA sought to establish as close a correspondence as possible between what consumed increment and what must undergo NSR for PSD. Without that rule, some changes that *would* consume increment could escape review because of a prior decrease that was subsumed in the baseline concentration. In addition, without that rule, some changes that *would not* consume increment could have to undergo review because of a prior increase that was also subsumed in the baseline concentration.

G. The Extent to Which Increases and Decreases are Creditable

Each of the definitions of "net emissions increase" in the PSD and nonattainment regulations contains provisions which govern the extent to which a creditable increase or decrease in "actual emissions" may be credited.

The rules in each of those definitions relating to increases are simple. An increase is creditable to the extent that the new level of "actual emissions" at the emissions unit in question exceeds the old level. The old level of "actual emissions" is that which prevailed just prior to the physical or operational change which caused the increase. The new level is that which prevails just after the change.

The rules relating to decreases that are common to each of the definitions are more complex. First, a decrease is creditable only to the extent that "the old level of actual emissions or *the old*

level of allowable emissions, whichever is lower, exceeds the new level of actual emissions." (Emphasis added.) Since "allowable emissions" encompasses any federally enforceable requirement, including any with a future compliance date, the underlined language prevents a company from taking credit for decreases that it has had to make or will have to make in the future. EPA concluded that to give credit for a decrease a company has had to make in order to bring an emissions unit into compliance was unwise, since together with the five-year "contemporaneous" period it would create an incentive to stay out of compliance. Furthermore, it would be contrary to the purposes of the Act and good sense to provide what is in essence a benefit for recalcitrance. Similarly, EPA concluded that to give credit for a decrease a company will ultimately have to make anyway in order to meet a requirement by a certain date would also be unwise, since it would encourage procrastination. Further, allowing decreases which fulfill preexisting requirements to be used to avoid review would undermine the purposes of the PSD and nonattainment programs by interfering with efforts to preserve or achieve attainment.

Second, a decrease is creditable only to the extent that it is "federally enforceable" from the moment that actual construction begins on the physical or operational change which causes the "actual emissions" increase in question. The purpose of that rule is to ensure that the decrease is real and that it remains in effect. The term "federally enforceable" is defined in the regulations as any limitation or conditions which EPA can enforce, such as any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved under 40 CFR 51.18 and 40 CFR 51.24.

Finally, a decrease is creditable only to the extent that it has the same health and welfare significance as the increases in question. By this provision, EPA seeks mainly to prevent an increase in emissions with considerable health and welfare significance from escaping review merely because of a contemporaneous decrease in less harmful emissions. The basic health and welfare protection purposes of the Act mandate this provision.

The definitions of "net emissions increase" in the nonattainment regulations contain a restriction on crediting decreases that the PSD regulations do not contain. Specifically, they provide that a permitting authority may not credit a decrease to the extent that any permitting authority has

already accepted the decrease in satisfaction of the offset requirements of the applicable nonattainment regulations and consequently has issued a preconstruction permit to any source or modification, including the source at which the decrease occurred. The purpose of that rule is to prevent any "double crediting" of decreases in "actual emissions." Double crediting would allow air quality to deteriorate without prior review.

EPA is considering whether to introduce a provision to prevent double crediting in the PSD context. A discussion of the problem appears in the section on Increment Consumption.

H. Accumulation

On September 5, 1979, EPA proposed to continue the current policy of requiring PSD and nonattainment NSR when aggregate new emissions from individually minor units at the same stationary source, which itself was minor as of a certain date, are sufficient to require the series of changes to be treated as a major stationary source. In addition, the Administrator proposed to make the current policy consistent with the *Alabama Power* decision by applying NSR when the aggregate net increase in potential to emit after the applicable date qualifies it as a major stationary source (the existing rules accumulate only emissions increases and do not take decreases in account). For PSD review, the date from which emissions increases were to be aggregated was August 7, 1977, the date found in the 1978 PSD regulations. The proposed December 21, 1976 date for each of the nonattainment regulations, including the construction moratorium, marks the time when sources constructing in nonattainment areas were placed on notice that accumulation could later subject them to review.

EPA also proposed that, once a series of individually minor changes or one major change at a minor stationary source had qualified for review, the control technology assessment would focus on the last changed unit triggering review while the air quality assessment would consider all aggregated emissions.

Finally, the Administrator proposed on September 5 that accumulation would also govern the review of individual *de minimis* changes at major stationary sources. Once a source had aggregated enough emissions to make it major, a subsequent emissions increase of any size at the source would have to undergo review, unless the increase together with any contemporaneous increases or decreases of any size would qualify as a *de minimis* increase.

Twenty of the twenty-three comments received did not favor retaining the accumulation concept, even with the addition of netting. Two other commenters endorsed accumulation, but with different starting dates. Two industrial commenters claimed that accumulation cannot be legally required, since section 111(a)(4) defines modification in terms of *any change* and not a *series of changes* at a stationary source. Most other commenters agreed that neither the court nor the Act takes a position on accumulation, but they requested that the Agency not adopt or maintain such a concept. These commenters claimed that both major and minor source accumulation complicates the regulations and could eventually subject the most minor of emissions changes to review. The increase in paperwork, and the administrative strain of trying to document and report *de minimis* emissions changes, were claimed to be overwhelming, costly, and counterproductive.

These concerns might have had merit if the proposed *de minimis* emission levels had not been raised in the final regulations and the accumulation of *de minimis* changes was to continue even after a preconstruction permit had been issued. It was suggested that the general NSR procedures found in all SIPs be relied upon to effect good control for the *de minimis* or minor emissions changes, instead of accumulation. Commenters stressed that, in any event, accumulation of *de minimis* increases should run over the same time period for crediting contemporaneous reductions.

The Administrator has reconsidered the need for an accumulation rule and has decided to retain accumulation to determine if a greater than *de minimis* increase would occur at a major stationary source and to delete accumulation for aggregating changes at minor stationary sources. The primary reason for proposing accumulation at minor sources was to prevent circumvention of the regulations by the systematic construction of carefully sized emissions units which only in the aggregate would trigger review. Even though all significant changes at a source would face review once the source became major, a significant loophole was thought to exist. For example, absent an accumulation rule, a company could construct a 498-ton source without having to get a PSD permit by constructing first one-half of it and then subsequently the other half. The Administrator, however, does not find adequate support in the Act for applying PSD review to the change at a minor

source which would make the source major. Section 165 applies only to major emitting facilities on which "construction" commences after a specified date, where the term "construction" includes "modification." Similarly, section 172(b)(6) requires permits for the construction of new or modified major stationary sources. EPA believes that, in general, PSD and nonattainment review cannot be applied to a modification unless it would occur at a source that is already major. The one exception to this rule is where a proposed addition to an existing minor stationary source would be major in its own right. Such construction is equivalent to a new major stationary source and should therefore be subject to PSD and nonattainment review. A new subsection in each of the PSD and nonattainment regulations embodies that view.

In general, under the promulgation announced here a series of minor changes at the same minor stationary source will not be accumulated. On the other hand, a series of individually *de minimis* changes at a major stationary source would be accumulated within a contemporaneous time frame to see if a review would be required. This is reflected in the definitions of "net emissions increase" in the PSD and nonattainment regulations. Plainly, a series of individually *de minimis* increases in emissions in the aggregate deteriorate air quality significantly.

I. Restrictions on Construction

EPA proposed that the netting of emissions changes would not be permitted in areas subject to construction restrictions under section 110(a)(2)(I) or 173(4). EPA based this proposal on an interpretation that Congress intended all forms of offsets to cease after June 30, 1979, in the absence of an approved Part D plan. This policy would also have promoted the timely submittal of attainment plans and prevented the nonattainment problem from growing worse while the plan was being developed. The Administrator believed that sources might convert reductions later needed for attainment into offsets before the plan requiring those reductions could be adopted and approved.

Thirty-two of thirty-five commenters said that the proposed "increase only" approach was unacceptable. No substantial support was given by the three that favored it. Several questioned the legality of the proposed interpretation and claimed that *Alabama Power* authorized only a netting approach, despite any programmatic sense that another

approach might have. Several asserted that EPA's proposal would discourage early cleanup and actually perpetuate the existing air quality problem.

The Administrator has reconsidered the interpretation that led to the proposal of the "increase only" approach for carrying out the growth restrictions and concluded that the *Alabama Power* decision does not support it. Thus, in the final rules promulgated today, a major stationary source can construct in a growth restricted area, if sufficient contemporaneous, creditable net reductions are found (subject to the limitations on reconstruction described below).

J. Reconstruction

In the September 5, 1979 proposal, a reconstruction (roughly, improvements at an existing source which equal 50% or more of the capital cost for replacing the source) was to be treated as if it were a new source for purposes of NSR under both PSD and nonattainment rules. Under the proposal, a reconstructed major stationary source would be subject to review regardless of any contemporaneous emissions reductions that would occur at the same source. The Administrator proposed this approach in accordance with Congressional intent to subject new construction in nonattainment areas to requirements such as meeting the lowest achievable emission rate (LAER), even though a replacement of an older unit would result in a net reduction from previous emission levels (*see* 123 CONG. REC. 13702, col. 2 (daily ed. August 4, 1977) (statement of Senator Muskie)). In the agency's view nonattainment areas require very stringent NSR Procedures to overcome the inertia of the nonattainment problem. Having a reconstruction provision would promote maximum air quality improvements from an area's limited reduction capability by requiring more construction projects to meet LAER and bring other sources in the State under common control into compliance with the SIP.

The reconstruction rule was also proposed for PSD in an effort to be consistent with nonattainment NSR. Although the Administrator recognized that the air quality rationale for having reconstruction in nonattainment areas was considerably stronger than that for PSD inclusion, it was believed that less confusion would result with a parallel application of the reconstruction rule.

All ten commenters on the reconstruction topic voiced general disapproval for the proposal. Eight of the ten favored dropping the concept

entirely from both sets of regulations, with the remaining two requesting that its applicability be restricted. They advised that EPA should rely instead on the reconstruction provisions of NSPS and NESHAP to ensure such construction would apply adequate control technology. Commenters complained that review criteria based solely on the replacement cost of equipment regardless of air quality improvements make little sense for NSR rules charged with safeguarding air quality. They further argued that the added regulatory complexity inherent to the inclusion of a reconstruction provision was not warranted and its addition to NSR would not be consistent with the "no net increase" exemption under *Alabama Power*.

The Administrator agrees that the reconstruction requirement makes only limited air quality sense for PSD and has reconsidered the need to retain this concept for the program. It is true that a reconstructed source not otherwise subjected to PSD review as a major modification (i.e., such source would not cause a significant net emissions increase) would not interfere with the PSD air quality objective of allowing only limited deterioration of existing air quality. On the other hand, the PSD objective of maximizing future use of the allowable increments through application of best available control technology (BACT) would not be strictly met. Nevertheless, the Administrator believes that the general PSD objective of safeguarding existing air quality from significant degradation will not be undermined by deleting the requirement for review of reconstructions.

The proposal would have implemented reconstruction for PSD only on a plant wide basis. Thus, an entire plant would have to be reconstructed in order for it to be subjected to PSD review as a reconstruction. Few instances of plantwide reconstruction are expected. The limited applicability under PSD brings further doubt as to the real need for the added complexity that a reconstruction provision would bring to determining the permit applicability of construction projects. Furthermore, the deletion of reconstruction from PSD would avoid some increment tracking problems; treating reconstruction as new PSD sources could lead to increment consumption unrelated to actual air quality changes.

The Administrator does not agree with the commenters who argued that applying "reconstruction" in nonattainment areas would bring unwarranted complexity and no air

quality benefits. As explained in the proposal, EPA believes that the reconstruction provision within nonattainment NSR rules is consistent with stated Congressional intent and programmatic goals to get reasonable air quality improvements from each major construction activity. Since *Alabama Power* did not strictly bind EPA in nonattainment concerns and since the reconstruction concept was not expressly precluded, the Administrator has determined that reconstruction is warranted in nonattainment areas and is today promulgating this concept as proposed for nonattainment NSR rules.

Commenters also asked that several exemptions be considered if a reconstruction rule were promulgated. Among the exemptions suggested were: (1) current NSPS exemptions for modifications, (2) Fuel-Use Act exemptions, (3) involuntary replacement of damaged equipment, and (4) voluntary fuel switches. The Administrator is not promulgating any of these exemptions into the reconstruction provision. First, the current NSPS exemptions and involuntary replacement of damaged equipment do not avoid applicability of NSPS under 40 CFR 60.15 when a unit would have been reconstructed. Therefore, it would be inconsistent to establish such a concept under nonattainment NSR. In addition, 40 CFR 60.15, which governs how the reconstruction rule will apply in the affected NSR programs (*see e.g.*, 40 CFR Part 51 Appendix S, section II. A(12)), allows the Administrator, in paragraph (f), some case-by-case discretion in determining when a reconstruction would occur. Thus, no specific exemptions such as those suggested appear warranted at this time.

K. Exclusions

In September, EPA proposed to exclude "routine maintenance, repair and replacement" from the category "physical change" which appeared in the proposed PSD and nonattainment definitions of "major modification." At the same time EPA proposed to exclude the following events from the category "change in method of operation," unless previously limited by enforceable permit conditions: (1) a fuel switch due to an order under the Energy Supply and Environmental Coordination Act of 1974 (ESECA) (or any superseding legislation) or due to a natural gas curtailment plan under the Federal Power Act; (2) a voluntary switch to an alternative fuel or raw material that the source prior to January 6, 1975, was capable of accommodating; (3) a fuel switch due to an order or rule under section 125 of the

Clean Air Act; (4) a switch to "refuse derived fuel generated from municipal solid waste" (RDF), and (5) a change in the ownership of a source.

EPA received few comments on the proposed exclusions. Certain commenters expressed reservations about the legal and policy basis of the RDF exclusion. Another commenter urged EPA to expand the exclusion for voluntary switches to an alternative fuel or raw material. Specifically, the commenter urged the Agency to drop the provisions which limited the exclusion to switches that would not require a change in permit conditions and to sources that were capable of accommodating the fuel or material before January 6, 1975. The commenter agreed with the position EPA took in the preamble to the 1978 Part 52 PSD regulations that Congress in enacting section 169(2)(C) intended that voluntary switches to an alternative fuel or raw material should be treated in the same way that they were being treated under section 111. See 43 FR 26396 (June 19, 1978). At the time Congress enacted section 169(2)(e), the regulations promulgated under section 111 excluded any such switch if the source could accommodate the fuel or material before the relevant NSPS applied to the source type. Whether a permit condition would restrict the switch was immaterial. See 40 CFR 60.14(e)(4) (1979). In view of this, the commenter argued that Congress intended the exclusion in the PSD and nonattainment regulations to look only at whether the source was capable of accommodating the fuel or material before those regulations first applied to it.

After considering the comments on the RDF exclusion, EPA has decided to promulgate it. The Resource Conservation and Recovery Act of 1974, 42 U.S.C. 3251 *et seq.*, firmly supports the exclusion. In that statute, Congress expressed a strong interest in the development and use of RDF. In addition, the exclusion has a sound policy basis, in view of the importance of reducing the nation's dependence on foreign oil.

In promulgating the exclusion, however, EPA has drawn it, by way of clarification, somewhat more tightly. It now excludes only a switch to RDF by a "steam generating unit." EPA intends that term to have the same meaning for the purposes of PSD and nonattainment NSR as it does for the purposes of the new NSPS for certain electric utility "steam generating units." For the NSPS definition of that term, see 40 CFR 60.41a (1979).

In response to the comment on the voluntary fuel and raw material switch

provision, EPA has retained the language which limited it to sources which were capable of accommodating the fuel or material before January 6, 1975 (or December 21, 1976, for the Offset Ruling and 40 CFR 51.18; or July 1, 1979, for the construction moratorium) and the language which limited the exclusion to those not requiring a permit alteration. First, EPA disagrees that the cutoff date in the counterpart NSPS exclusion is analogous to the date the particular preconstruction permit regulations applied to a particular source. To the contrary, the NSPS counterpart is more broadly drawn; it focuses on the date the NSPS first applied to the *source type*. Second, EPA disagrees that the counterpart governs whether the NSR exclusions must ignore permit conditions. The NSPS program does not involve assessments of the impact of a source on air quality. In EPA's view, any switch to another fuel or raw material that would distort a prior assessment of a source's air quality impact should have to undergo scrutiny.

It should be noted that EPA has added a new clause to the exclusion for voluntary fuel switches. It provides that a switch which the relevant reviewing authority has already approved is not a "physical change" or "change in the method of operation" for NSR purposes. Obviously, a second evaluation of the air quality impact of the switch would be unnecessary.

The comment relating to voluntary switches has prompted EPA to add one more exclusion. It would exclude any increase in hours or rate of operation, as long as the increase would not require a change in any preconstruction permit condition established under the SIP (including PSD permits) after the relevant date of concern.

This exclusion stems largely from EPA's decision that the definitions of "major modification" should focus on changes in "actual emissions." While EPA has concluded that as a general rule Congress intended any significant net increase in such emissions to undergo PSD or nonattainment review, it is also convinced that Congress could not have intended a company to have to get a NSR permit before it could lawfully change hours or rate of operation. Plainly, such a requirement would severely and unduly hamper the ability of any company to take advantage of favorable market conditions. The emphasis of the relevant statutory provisions on "construction" strongly supports EPA's interpretation of Congress' intent. See, *e.g.*, section 165(a), 42 U.S.C. 7475. At the same time, any

change in hours or rate of operation that would disturb a prior assessment of a source's environmental impact should have to undergo scrutiny.

Because of the absence of any significant comments on the other four exclusions, EPA has promulgated them as proposed.

L. Example of How the Definitions Work

The way in which the definition of modification works is best illustrated by an example. The example also demonstrates the relationship among a source's potential to emit, its actual emissions, and its allowable emissions.

In December 1980, a new source (Source A) that will emit SO₂ and PM files a PSD application to locate in an area that is attainment for SO₂ and PM. At maximum operating capacity including application of best available control technology, and assuming year-round continuous operation, the source can emit 700 tons of SO₂ per year. Seven hundred tons per year (tpy) is the source's physical potential to emit SO₂. Its physical potential to emit PM is 15 tpy. Provided that the 15 tpy of PM emissions is made federally enforceable, PM emissions will not be significant (*i.e.*, less than 25 tpy) and are, therefore, not subject to PSD review.

In the course of review, modeling reveals the SO₂ increment will be violated in the source's area of impact if it emits 700 tons SO₂ per year. The source, therefore, decides to limit its operation so as to decrease its emissions to 600 tons SO₂ per year. This reduction proves sufficient to eliminate the predicted violation. The source is issued a PSD permit that sets an SO₂ emissions limitation of 600 tpy, which reflects the revised source operation (approximately 20 hours a day, seven days a week). This emissions rate is the source's legal potential to emit. It is also the source's allowable emissions, since it is the emissions rate specified as a federally enforceable permit condition. See *e.g.*, § 52.21(b)(15)(iii).

During the first three years of operation, from March 1982 to March 1985, the demand for the source's product is less than anticipated. As a result, the source's actual emissions are 250 tpy during the first year and 300 tpy during the next two years.

In April 1985, another new source of SO₂ (Source B) proposes to locate in the area of impact of Source A. Consequently, in calculating its impact on ambient standards and its increment consumption, Source B is required to model the emissions of Source A. Under EPA's increment consumption policy (see Increment Consumption), Source

A's actual emissions should be modeled. Because Source A has an individually-tailored PSD permit, the definition of actual emissions allows the reviewing authority to presume that the allowable emissions in Source A's PSD permit reflects its actual emissions, unless the reviewing authority or source applicant has reason to believe that allowable emissions are not representative of actual source emissions.

In the case of Source A, allowable emissions, in fact, differ from actual emissions. Assuming that the reviewing authority is aware of this difference as a result of its periodic assessment or because Source B has presented this information in its application, Source A is modeled at its actual emissions rate representative of normal source operation during a two-year period preceding the date of concern. In this case, the date of concern would be approximately the date Source B submits its application. The reviewing authority should, therefore, look to the two-year period preceding that date unless that period of time was atypical of normal source operation. For Source A, the two-year period preceding Source B's application can be considered representative of normal source operation. Source A's actual emissions during that period, on an average annual basis, are approximately 300 tpy. The modeling of increment consumption for Source B should assume that emissions rate for Source A.

Unless Source A's permit is revised at this point to reflect its actual emissions rate of 300 tpy, Source A could attempt to use the decrease in its actual emissions in the future to offset a future emissions increase of its own. This would result in a large net increase in actual emissions for the area which could violate the applicable PSD increment. The potential problem of double counting of emissions decreases is discussed in more detail in Increment Consumption.

Assume that in June 1987, Source A decides to modify its facility. Demand for its product has increased and Source A wants to add a new emissions unit that will emit 60 tpy SO₂. In addition, Source A plans to increase the hours of operation at the units which began production in March 1982, to result in an actual emissions increase of 75 tpy at those units. If no contemporaneous decreases have occurred, both changes will result in significant net increases in actual emissions. Both changes then qualify as modifications. The addition of a new unit is a physical change. The increase in hours of operation is a change in the method of operation,

assuming that the reviewing authority revised Source A's permit to reflect its actual emissions of 300 tpy at the time Source A's actual emissions were used by Source B in modeling increment consumption.

If Source A was able to decrease sufficiently its actual emissions at another unit at the source, it would be able to avoid PSD review for one or both modifications. Assume, for example, that in April 1986, Source A applied additional control equipment and decreased actual SO₂ emissions across the facility by 100 tpy. In June 1987, Source A can use those decreases to offset its proposed contemporaneous increases provided the decreases are made federally enforceable. If Source A's proposed increase in hours of operation for the units which began operation in March 1982 would result in an emissions increase of 75 tpy and the emissions from the proposed new unit are 60 tpy, Source A can use its 100 tpy decrease to avoid PSD review for both changes. Seventy-five tons of the decrease can be used to offset the increase in hours of operation and 25 tons of the decrease can offset 25 tons of the increase due to the new unit. Since the net emissions increase of 35 tons is not significant, it would not be a major modification requiring PSD review.¹²

Suppose Source A then plans to increase its emissions by 150 tpy in November 1990 and to decrease emissions by 80 tpy in February 1989. The increases and decreases since April 1986 are all contemporaneous because they occurred within the same five-year period. Now, assume Source A revises its permit to reflect only 50 tons of the 80-ton decrease in February 1989. Source A can receive credit for only 50 tons of the 80-ton decrease, since only this amount was made federally enforceable. However, Source A does receive credit for the April 1986 decrease of 100 tpy, assuming that decrease was made federally enforceable at the time of the June 1987 increase, or is made federally enforceable prior to commencement of construction on the November 1990 increase. Source A's total creditable decreases are then 150 tpy. Its increases are 135 tpy in June 1987 and 150 tpy in November 1990, for a total increase of 285 tpy. The net emissions increase is 135 tpy, which is significant for SO₂. Source A must get a PSD permit for the change leading to the 150 tpy increase in November 1990. However, it is not

¹² Under the provisions of 40 CFR Part 51 Appendix S, 40 CFR 51.18(j), and 40 CFR 52.24, the emissions increases at Source A would probably be subject to review as modifications, notwithstanding the contemporaneous decreases at the source.

required to get a PSD permit for the June 1987 increases.

If, from March 1982 to March 1985, Source A had exceeded its allowable rate of 700 tpy, Source A could not receive full credit for its April 1986 decrease. For example, assume Source A's actual emissions from March 1982 to March 1986 were 800 tpy, 100 tpy over its allowed rate. None of the 100 tpy reduction in April 1986 would then be creditable. The amount of Source A's creditable decrease could also be reduced if the designation of the area where Source A is located were changed from attainment to nonattainment in March 1985 and Source A became subject to a new, more stringent SIP requirement in March 1986. If, for example, the SIP required Source A to reduce emissions from 700 to 600 tpy by December 1988, none of the 100 tpy decrease in April 1986 would again be creditable.

XI. De Minimis Exemptions

In the *Alabama Power* decision, the court indicated that emissions from certain small modifications, and emissions of certain pollutants at new sources, could be exempted from some or all PSD review requirements on the grounds that such emissions would be *de minimis*. In other words, the Administrator may determine levels below which there is no practical value in conducting an extensive PSD review. The court also indicated that the Agency could establish exemptions based on administrative necessity (e.g., the inability of reviewing authorities to provide the necessary work force to properly review a very large number of permit applications). The September 5 proposal incorporated the *de minimis* concept and requested comments on the approach taken. At that time, the Administrator noted that because of the urgency associated with the proposal, the *de minimis* numbers published were not supported by extensive analysis, and that a more thorough analysis would be undertaken prior to promulgation.

The proposal included two tables, one for defining significant emissions changes (in tons per year) and one for defining significant air quality changes (in micrograms per cubic meter). Values lower than those in the proposed tables were recommended as being *de minimis*. These tables, with respect to criteria pollutants, were generally based on the "significance" levels published in the preamble to the June 19, 1978 PSD regulations (43 FR 26398) and in the Offset Ruling (44 FR 3283). These significance levels in turn were derived from the Class I increment values listed

in Part C of Title I of the Clean Air Act. For noncriteria pollutants, a similar approach was taken: the Agency extrapolated emissions rates from documented air quality guideline numbers, where available.

In the proposal, the tables were presented as preamble guidelines to be used in the following manner. For PSD, any new source subject to review was to be analyzed for the application of BACT for each pollutant whose emissions would exceed the value in Table 1. In addition, an air quality analysis to determine the impact of these pollutants was required. For modifications, any pollutant for which the source was major and for which there was a contemporaneous net increase equal to or greater than the applicable value(s) in Table 1 would trigger PSD review of the modification; as in the case of new sources, BACT and air quality impact analyses were required for each pollutant whose net emissions increased by greater than a *de minimis* amount. Table 2 was proposed to provide an exemption from air quality impact analysis (including monitoring) for those sources and modifications which could demonstrate that their maximum expected air quality impact would be less than the values listed. Sources, including modifications, claiming to be exempt from reviews on the basis of *de minimis* emissions would be required to so notify the Administrator. The *de minimis* requirements also would apply to nonattainment sources, but would be restricted to the pollutant(s) for which the area is nonattainment.

The Agency received extensive comments on the proposed *de minimis* approach. In all there were 121 comments addressing this issue. While there was almost universal endorsement of the concept, a large number of commenters (65) criticized the proposed values as being too low. Some of these commenters stated that there was a lack of support for the numbers presented and felt that the emissions table was more restrictive than the table of air quality concentrations; others claimed that the low *de minimis* levels made the applicability of the review process inequitable for modifications in comparison to new sources. A consistent theme was that the proposed values would necessitate unproductive review in terms of environmental benefit while consuming applicant and reviewing authority resources. Although there were suggestions concerning how big the emissions numbers should be (100 tons per year was a popular choice), little specific guidance was given on how to develop alternative

numbers. Suggestions generally were limited to using various percentages of the national ambient air quality standards or the amount of existing emissions. One commenter did suggest the use of an equation that accounted for variability in stack height.

Only one commenter criticized the *de minimis* levels for being too high. This commenter also believed that exemptions from review because of emissions less than the *de minimis* rate should not be automatic, but should be allowed only after a case-by-case review of source impact. In addition, the commenter stated that in areas where the increment is almost entirely consumed, sources should be subject to PSD review for any increase in emissions.

A frequently addressed aspect was the perceived need to incorporate any *de minimis* values in the regulations, as opposed to leaving them as guidelines in the preamble. Forty-eight of fifty-six commenters favored such a change. The general concern was that since the preamble is omitted from the Code of Federal Regulations, the regulations as written would appear to be ambiguous as to the term "significant." Those that favored leaving the tables as guidelines did so generally to provide more flexibility either for sources to demonstrate that they should be exempt or for states to develop alternative *de minimis* values.

There were several other meaningful comments. Sixteen commenters recommended that *de minimis* coverage be limited to criteria pollutants. Eighteen commenters contended that the need to accumulate *de minimis* changes was burdensome, environmentally unnecessary, and should be dropped; some questioned the legislative basis for this requirement. Several commenters cited the difficulty, if not impossibility, of monitoring for all regulated pollutants. These commenters were especially concerned regarding monitoring for noncriteria pollutants, indicating that the requisite technology was not available in some cases. Other commenters questioned how the term "no impact," which is used in the regulations to protect Class I areas, relates to the Table 2 *de minimis* values.

Mindful of the comments received, the Administrator has undertaken a reassessment of the *de minimis* issue. This reassessment is described in two documents. One is a report entitled "Impact of Proposed and Alternative *De Minimis* Levels for Criteria Pollutants," EPA-450/2-80-072, and the other is a staff paper entitled "Approach to Developing *De Minimis* Values for Noncriteria Air Pollutants." These are

available for examination in the rulemaking docket. In addition, copies may be obtained by writing to the Air Information Center, U.S. EPA Library Services, MD-35, Research Triangle Park, NC 27711.

Obviously, a significant part of the reassessment involved the use of reasonable judgment. The task requires consideration of an area in which not only is data limited, but criteria for decision making is almost non-existent. The first task of the reevaluation was to identify the basic objectives to be met in selecting *de minimis* values. The primary objectives identified were: (1) provide effective Class I area protection; (2) guard against excessive "unreviewed" consumption of the Class II or III increments; and (3) assure meaningful permit reviews. "Meaningful" in this context implies that there would be a possibility of obtaining useful air quality information or obtaining greater emission reductions as a result of BACT analysis than would be expected from normal state permit or NSPS/NESHAP processing.

The proposed *de minimis* air quality values, which stemmed from the legislated Class I increments, caused concern for two reasons. First, if a modification occurs near enough to a Class I area, almost any *de minimis* emissions level could impact the area. Thus, proximity rather than emissions level appears to be more important in Class I area protection. Second, the general imposition of Class I criteria on the review process for Class II and III areas may be overly stringent. These concerns were examined as part of the *de minimis* reassessment.

As a result of this examination, the Administrator has decided that higher *de minimis* emissions rates than those used in the proposal could apply to review of sources which would not construct within a specified distance of a Class I area. However, a proposed source or modification that would construct close to a Class I area must be prepared to demonstrate for each regulated pollutant that it would emit that it would not have a significant impact on such area (defined as one microgram per cubic meter ($\mu\text{g}/\text{m}^3$) or more, 24-hour average), even if the proposed emissions increases are below the applicable *de minimis* threshold. The effect of this change is to require less review for many sources through higher *de minimis* values (compared to the proposal), while adding a limited air quality analysis requirement for only a few sources. Such a change is consistent with the objectives of protecting Class I

areas while limiting PSD review to projects with significant impact.

There were three basic alternatives available for specifying *de minimis* cutoffs—one based solely on air quality impact, one based solely on emissions rate, and one based on a combination of these, such as was proposed on September 5. The Administrator has chosen to specify *de minimis* cutoffs in terms of emissions rate for applicability, BACT and air quality analysis purposes, with no provisions for case-by-case demonstration of a source's air quality impact. This is a departure from the proposal in that, as proposed, a source could avoid air quality analysis requirements for a given pollutant by demonstrating that it would produce a maximum impact less than the air quality concentrations listed for that pollutant. An air quality concentration *de minimis* level for each pollutant for which measurement methods are available is included in the regulations only for the purpose of providing a possible exemption from monitoring requirements.

This approach has been adopted for several reasons. First, the Congress specified emissions rates, not projected air quality impacts, in the Clean Air Act as the criteria for determining which sources are major and therefore subject to PSD review. Moreover, the court, in the *Alabama Power* decision, continually refers to emissions rate rather than air quality concentration in its discussion of the *de minimis* issue. Therefore, it would be inconsistent with the existing guidance to abandon the emissions rate concept.

Second, if applicability decisions depended on confirming a demonstration by the source that its impact would be less than a given air quality level, it is the Administrator's opinion that the review process would become excessively complex and greatly increase the resources needed by reviewing authorities to carry out the program. In addition, such an approval would create an atmosphere of uncertainty as to whether individual sources needed to apply for a permit or not, and could lead to uneven application of the regulations from state to state. Third, the task of establishing *de minimis* air quality levels for noncriteria pollutants, with proper consideration of threshold levels and factors of safety (if any), is very complex and could not be done in the time available.

Finally, given the inclusion of a *de minimis* exclusion for monitoring, it serves little purpose to have a separate table to permit an exclusion from the remaining air quality impact analysis

requirement. (A separate table would be required because monitoring capability and concern for potential effects are unlikely to be associated with the same air quality concentrations.) Besides making the regulations more complicated, this resultant demonstration necessary to earn an exemption from air quality impact analysis would in itself be an air quality impact analysis.

In analyzing the basis for *de minimis* emissions rates, it was apparent that two distinct classes of pollutants were involved. The first consists of the criteria pollutants for which extensive health and welfare information has been developed and documented in the respective criteria documents. The other class consists of the noncriteria pollutants for which, as the name implies, no criteria on ambient effects exist. Rather, these pollutants are covered by either New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP), both of which are based on a national emissions standard, rather than an air quality management approach. That is, the regulations developed pursuant to both these legislative requirements generally specify emissions limitations and/or equipment performance standards as opposed to threshold air quality levels that must be achieved as for the criteria pollutants. Thus, it appeared reasonable to develop *de minimis* cutoffs from separate perspectives—to base criteria pollutant *de minimis* emissions cutoffs on air quality "design values" and to base the noncriteria pollutant *de minimis* values on the emissions rates embodied in the NSPS and NESHAP.

The first step in developing *de minimis* emissions rates for the criteria pollutants, therefore, was the establishment of air quality "design values." Such design values were then converted to emission rates in accordance with EPA modeling procedures,¹³ using data on sources permitted under the PSD program. The latter provided modeling parameters associated with sources of the type expected to be most affected by the *de minimis* requirements. Ambient concentrations representing percentages of the primary 24-hour air quality standard, as well as percentages of the Class II increment, were evaluated for particulate matter (PM) and sulfur dioxide (SO₂). Similarly, various

percentages of the primary standard for the other criteria pollutants were examined.

The primary standard was chosen as the basis for design values because, except for PM and SO₂, none of the criteria pollutants have a secondary standard that is different than the primary standard. The 24-hour standard instead of the annual standard was used for PM and SO₂ since short term rather than the long term impact tends to be the controlling factor in determining whether air quality increments are exceeded. In addition, levels higher than five percent of the primary standard were not seriously considered because that percentage equates to approximately 35 percent of the TSP Class II increment. The Administrator does not believe that a source which, due to its own emissions, could potentially consume more than that amount of increment should be exempt from review.

Two factors had an important influence on the choice of *de minimis* emissions levels within the resulting range of annual emissions rates. The primary one was the cumulative effect on increment consumption of multiple sources in an area each making the maximum *de minimis* emissions increase (thereby going unreviewed under PSD at the time of the change). The other, and secondary one, was the projected consequence of a given *de minimis* level on administrative burden. To determine the cumulative effect on increment consumption expected from several sources, all making maximum *de minimis* increases (a rather unlikely event) in the same area, actual source distributions in the Dayton, Ohio, area were used. Dayton was chosen because it is a fairly representative industrialized community, and source data suitable for modeling was readily available. To check the impact of the various *de minimis* levels on administrative burden, data from past permitting experience were again used, in this case to prepare curves showing the number of sources expected to require review at various *de minimis* emissions levels. A description of these analyses is found in the *de minimis* report on criteria pollutants cited earlier.

As a result of the reevaluation, the Administrator has decided to use four percent of the 24-hour primary standard as a design value for both PM and SO₂. These ambient levels correspond to emissions rates of 25 tons per year for PM and 40 tons per year for SO₂ (except for lead, all emissions rates predicted from the modeling for criteria pollutants were rounded to the nearest five tons).

¹³ Guidelines for Air Quality Maintenance Planning and Analysis, Volume 10 (Revised): Procedures for Evaluating Air Quality Impact of New Stationary Sources, OAQPS No. 1.2-029R, October 1977.

Four percent of the lead standard was also used, yielding an emissions rate of 0.6 tons per year. The emissions rate for carbon monoxide (CO) in all cases was greater than 100 tons per year, the limit set in the Clean Air Act to define major for many source categories. Therefore, as proposed, the *de minimis* emissions rate for CO is established at 100 tons per year.

Because the nitrogen dioxide standard is expressed only as an annual average, a factor of two percent was used to determine the design value. There were two reasons for this decision. First, for a given level of emissions, a predicted annual concentration will be smaller than a short-term value. Conversely, therefore, a lower percentage for the annual standard than for a shorter term standard is indicated if one is to maintain a reasonably consistent rationale for emissions rates. Second, the emissions rate corresponding to two percent of the standard is 40 tons per year, which is comparable to the rate established for SO₂. Both these pollutants are frequently emitted from the same source, in roughly equivalent amounts; for example, a typical power plant meeting the NSPS with low sulfur coal would emit about 1300 tons per year of nitrogen oxides and about 1500 tons per year of SO₂.

Finally, models for use in establishing a relationship between individual source hydrocarbon (VOC) emissions and ozone concentrations are not presently available. Thus, it was not possible to model an emissions rate from an air quality design value. However, in view of the link between VOC and NO_x emissions in the formation of ozone, the emissions rate for VOC was also set at 40 tons per year.

It should be recognized that several sources or modifications can be allowed in the same area even though each might consume up to four percent of the standard (about 16 percent of the Class II increment for SO₂ and about 28 percent for PM). This is because the source specific concentration occurs in only a limited area (often one point) and the temporal and spatial conditions which lead to maximum consumption by one source are seldom the same for other sources that may be making similar *de minimis* changes. To reinforce this understanding, a modeling analysis of 37 sources in the Dayton area was conducted. The maximum aggregate increment consumption projected to occur as a result of all major sources each making a *de minimis* emissions increase equal to 40 tons per year (e.g., that for SO₂) was less than 1.5 µg/m³ on a 24-hour basis. While representative of

only one set of conditions, this result could probably be expected in most industrialized areas.

Excessive increment consumption is unlikely, given the safeguards existing in the regulations. Although such sources would not get PSD permits, they do not go unreviewed. Most, if not all, will be permitted under ongoing state NSR programs pursuant to 40 CFR 51.18. Moreover, their contribution to increment consumption will be evaluated either by the next major source undergoing PSD review, or during the periodic assessment of source growth. Nevertheless, in atypical situations there might still be concern with the *de minimis* levels causing accelerated increment consumption. This can be controlled by a state, upon taking the program, through the establishment of smaller *de minimis* levels.

To determine a proximity cutoff that gives assurance of protection of Class I areas, a modeling analysis was performed to identify the effect of the *de minimis* emissions levels on such areas using Volume 10 screening procedures. For the purpose of this analysis, the effect of varying stack height and meteorology, as well as the influence of terrain features, was considered. Significant impact was taken to be one µg/m³, 24-hour average. The results indicate that sources locating more than 10 kilometers from a Class I area would not have such an impact as a result of making *de minimis* changes. Therefore, the regulations promulgated here require that any new or modified major stationary source within that distance from a Class I area will be subject to review if the source would have an impact on the area equal to or greater than one µg/m³, 24-hour average. It must be pointed out that while the preceding responds to those commenters concerned about how to judge whether a source has "no impact" on a Class I area, the analysis of impact on such an area from major sources subject to PSD review must be done on a case-by-case basis. Further, such sources may be subject to an evaluation by the appropriate Federal Land Manager as described in the regulations.

Noncriteria pollutant emissions rates were developed from the existing emission standards (NSPS and NESHAP). In general, a fraction of the applicable standard was used. In the Administrator's judgment, since the NSPS represents the best adequately demonstrated control technology on a nationwide basis, and the NESHAPs are established with an ample margin of safety to prevent unreasonable risk to

the public health from hazardous pollutants, a small percentage of these standards would, for PSD purposes, prevent a significant change from escaping review.

Levels generally representing 20 percent of a NSPS emissions standard and, because of their greater impact on health, ten percent of a NESHAP emissions standard, were evaluated. The air quality impacts of the resulting NSPS emissions rates were then calculated in a manner similar to that used for the criteria pollutants. These concentrations were compared to available health and welfare data to assure that significant adverse effects were avoided. In the case of fluorides, this check resulted in a reduction of the emissions rate originally indicated. No adjustment based on resultant effect was made for the hazardous pollutants since the NESHAP emissions rate, as noted above, is itself intended to protect the public health with an ample margin of safety; therefore, ten percent of such a value is in the Administrator's judgment sufficiently stringent for use as a *de minimis* level.

A brief discussion of the rationale for each noncriteria pollutant emissions rate is given below. For more information, see the staff paper cited earlier.

Hazardous Pollutants (NESHAP):

Asbestos—Reevaluation of existing data indicates that trying to establish a quantitative link between emissions and potential effects is not possible. No level of exposure can be presumed *de minimis*. Therefore, a theoretical *de minimis* emissions rate of zero was considered. Such a value is not practical, however, since changes of any kind at sources using materials containing even traces of asbestos could trigger review regardless of the amount of asbestos emitted. Therefore, an estimate was made of the emissions from well controlled sources from which asbestos can be emitted. Although data is very limited, rough estimates of emissions from four source categories were developed. Three categories are covered by the NESHAP regulations: asbestos milling, manufacturing using asbestos in the process (e.g., textiles, asbestos tile), and asbestos asphalt manufacture. Rock crushing, a fourth category not covered by the NESHAP, was also examined. Emissions rates from these four categories, using available data, were respectively 0.2 tons per year (TPY), 0.07 TPY, 0.04 TPY, and 0.06 TPY. Because asbestos is carcinogenic, a conservative approach to establishing the *de minimis* emissions rate has been taken. The *de minimis* level is based on a source category

which has relatively small asbestos emissions, and which includes the majority of asbestos emitting sources—manufacturing operations using asbestos. Therefore, the promulgated asbestos *de minimis* rate is 0.007 TPY, based on ten percent of the emissions estimated from asbestos manufacturing sources.

Beryllium—The NESHAP emissions rate is ten grams per day or 0.004 tons per year. Ten percent of this yields a *de minimis* emission rate of 0.0004 tons per year.

Mercury—The NESHAP emissions rate is 2300 grams per day which equates to approximately one ton per year. At ten percent, the promulgated *de minimis* emissions rate is 0.1 tons per year.

Vinyl chloride—The NESHAP standard is expressed in parts per million of the effluent stream. It was therefore necessary to assume model plant characteristics in order to develop expected emissions from a well controlled plant. As in the case of asbestos, the Administrator believes that it is prudent to base these calculations on a small model plant considering the suspected carcinogenicity of this pollutant. Such plants, well controlled, emit about 10 tons per year. Based on this value, the promulgated *de minimis* emissions rate is one ton per year.

NSPS Pollutants:

Fluorides—The proposed *de minimis* emissions rate for fluorides was extremely conservative, and was strongly criticized as being too low by several commenters. Upon reevaluation, the Administrator agrees with the comments. A *de minimis* emissions rate based on the NSPS for aluminum plants is 30 tons per year—a well controlled, moderate sized, plant emits about 150 tons per year of fluorides. At a rate of 30 tons per year, the predicted maximum 24-hour ambient concentration is approximately ten micrograms per cubic meter. That concentration is about ten times the level that has been observed to produce effects on vegetation (about one microgram). In order to limit the potential for such damage, a *de minimis* emissions rate of three tons per year, corresponding to a one microgram impact, is promulgated.

An alternative would have been to base the emissions rate on the NSPS for phosphate fertilizer plants. Fertilizer plants typically emit much less than aluminum plants (i.e., about two tons per year controlled). A 20 percent *de minimis* value would then be less than 0.5 tons, which is unrealistic in view of other sources such as aluminum plants. Moreover, changes at a fertilizer plant

that resulted in a fluoride emissions increase of 0.5 tons per year would probably get reviewed under state new source review and/or NSPS requirements.

Sulfuric Acid—A model plant of 1300 tons per day of production was used. The NSPS-emissions limit is 0.15 pounds of sulfuric acid per ton of product processed. Thus, the model plant would emit about 35 tons per year. This yielded a *de minimis* emissions rate of seven tons per year using the 20 percent factor.

Total Reduced Sulfur, Reduced Sulfur—These pollutant classes include hydrogen sulfide (H₂S) and are regulated primarily to avoid nuisance (odor) problems. Total reduced sulfur (TRS) emissions are based on a representative kraft pulp mill (900 tons of pulp per day) which at 20 percent yields a *de minimis* emissions rate of 10 tons per year. Similarly, using a model refinery of about 100 long tons per day, the reduced sulfur (RS) compound emissions rate is 10 tons per year.

(The emissions rates calculated on the above model plants were 8.3 tons per year for TRS and 9.4 tons per year for RS. Both values were rounded to 10 tons per year for administrative purposes.)

Hydrogen Sulfide—Regulated under the refinery NSPS only. Specified as one thirtieth of reduced sulfur emissions, in major part as a check on control efficiency. Since concern, at the NSPS emissions levels, for TRS, RS, and H₂S is the same (nuisance rather than health impact) the *de minimis* emissions rate for H₂S alone is set at ten tons per year.

Methyl Mercaptan, Dimethyl Sulfide, Dimethyl Disulfide, Carbon Disulfide, Carbonyl Sulfide—*De minimis* emissions rates were proposed for these compounds. However, none of them are individually regulated under the Act. Rather, they are described as constituents of either TRS or RS. Therefore, since *de minimis* emissions rates are promulgated for TRS and RS, individual *de minimis* for the five compounds have been dropped.

The complete list of the emissions levels promulgated today, and where applicable, the *de minimis* air quality design values from which they are derived, is given below in Table A:

Table A.—*De Minimis Values*

Pollutant	De Minimis emissions rate	Design air quality value (average time)
	(TPY)	($\mu\text{g}/\text{m}^3$)
Carbon monoxide	100	
Nitrogen oxides	40	2 (annual).
Sulfur dioxide	40	14.6 (24-hour).
Total suspended particulates	25	10.4 (24-hour).
Ozone (volatile organic compounds)	40	

Table A.—*De Minimis Values*—Continued

Pollutant	De Minimis emissions rate	Design air quality value (average time)
	(TPY)	($\mu\text{g}/\text{m}^3$)
Lead	0.6	0.06 (3 month).
Asbestos	0.007	
Beryllium	0.0004	
Mercury	0.1	
Vinyl chloride	1.0	
Fluorides	3	
Sulfuric acid mist	7	
Total reduced sulfur (including H ₂ S)	10	
Reduced sulfur (including H ₂ S)	10	
Hydrogen sulfide	10	

The air quality design values are not included in the regulations. *De minimis* emissions levels are included for use in defining the term "significant." As in the proposal, these values determine the need to review modifications and determine which pollutants require BACT and air quality impact analyses for any new source or modification requiring review.

The Administrator does not believe that the promulgated *de minimis* levels will produce an extraordinary administrative burden on reviewing authorities. Based on the data available, it is estimated that approximately 700 more sources will be subject to PSD review annually, all for small modifications not heretofore reviewed.

The regulations also include a list of air quality concentrations for each pollutant as criteria for exempting sources from the monitoring requirements at the discretion of the reviewing authority. Table B summarizes the applicable air quality values by pollutant type.

Table B.—*Monitoring Exemption*

Pollutant	Air quality value (averaging time)
	($\mu\text{g}/\text{m}^3$)
Carbon monoxide	575 (8-hour).
Nitrogen dioxide	14 (24-hour).
Sulfur dioxide	13 (24-hour).
Total suspended particulates	10 (24-hour).
Ozone	(?)
Lead	0.1 (24-hour).
Asbestos	(?)
Beryllium	0.0005 (24-hour).
Mercury	0.25 (24-hour).
Vinyl chloride	15 (24-hour).
Fluorides	0.25 (24-hour).
Sulfuric acid mist	(?)
Total reduced sulfur (including H ₂ S)	10 (1-hour).
Reduced sulfur (including H ₂ S)	10 (1-hour).
Hydrogen sulfide	0.023 (1-hour).

¹All cases where emissions of VOC are less than 100 tons per year.

²No satisfactory monitoring technique available at this time.

Several Table B values are somewhat different from the design air quality numbers shown in Table A. This is because the Table B values are based on the current capability to provide a

meaningful measurement of the pollutants. The values promulgated represent five times the lowest detectable concentration in ambient air that can be measured by the instruments available for monitoring each pollutant. The factor of five was chosen after reviewing test data for the various methods considered reasonably available. The decision was based in part on considerations of instrument sensitivity, potential for sampling error, problems with instrument variability (e.g., zero drift) and the capability to read recorded data. For a more thorough discussion of this determination, see the memorandum from K. Rehme to W. Peters dated May 20, 1980, which is available in the rulemaking docket and from the address given for the other reports.

There also are several changes in the use of Table B from the Table 2 proposed on September 5. First, a source deemed subject to review may claim the *de minimis* air quality impact exemption from only the monitoring requirement for the reasons noted earlier. Next, under the proposal, a source had to demonstrate that its ambient impact would be *de minimis* to obtain an exemption from monitoring. As promulgated, the regulation allows a source to be exempted from the preapplication monitoring requirement if it shows either that existing air pollution in the source impact area or its projected impact in the affected area is *de minimis*. In most cases, little is to be gained from preconstruction monitoring in situations where either condition applies.

Finally, because there will be situations where monitoring will be necessary even if modeling predicts *de minimis* conditions, the exemption is not automatic but rather must be with the approval of the reviewing authority. For example, Table B values should not be used when (1) there is an apparent threat to an applicable PSD increment or NAAQS based on modeling alone or (2) when there is a question of adverse impact on a Class I area. Questions of adverse impact on a Class I area are to be decided on a case-by-case basis with the objectives of the affected Federal Land Manager in mind.

Some of the suggestions made in the comments have not been adopted. For the reasons stated earlier, many of the *de minimis* values have been increased. The automatic exemption on the basis of emissions rate is retained, although the exemption from monitoring has been made discretionary. The Administrator believes that a clear indication of applicability is necessary. It is not

reasonable to expect a potential applicant to have continuous knowledge of the status of increment consumption and thus know when an application is required and when it is not. Nor have the *de minimis* values been promulgated as a guide only, with a screening review of all sources made mandatory as suggested by one commenter. The Administrator does not believe that there is a substantial programmatic benefit to be derived from such a stringent requirement.

Accumulation of *de minimis* values has not been dropped, because for most pollutants the promulgated *de minimis* emissions levels are now substantially higher than those proposed. The suggestion to allow sources with greater than *de minimis* emissions to make a showing that their air quality impact was *de minimis* and escape review was considered and then rejected. The higher emissions levels promulgated will offer much of the requested relief. Moreover, such an approach would not streamline the review process (i.e., a detailed air quality analysis would still be necessary), and several sources with taller stacks might avoid review and the BACT requirement. Variations in actual impact because of stack height can be a factor in the BACT review. Similarly, an equation considering stack height to determine the *de minimis* emissions rate cutoff has not been promulgated. It is questionable whether such an equation could be developed for application nationwide that would be any less judgmental than the fixed *de minimis* emissions rates promulgated. Moreover, that approach would be little more than a case-by-case applicability assessment which the Administrator believes is inadvisable for reasons already described.

Other suggestions not accepted were to raise the *de minimis* emissions levels to 100/250 tons per year for the criteria pollutants, and to limit the *de minimis* concept to only the criteria pollutants. In developing an approach to defining *de minimis* for PSD purposes and consequently calculating the specific *de minimis* values under the guidance given within the Act and *Alabama Power*, emissions levels as high as 100 tons per year could not be justified for most criteria pollutants. Use of the *de minimis* concept with respect to only the criteria pollutants suggests that any increase (i.e., a zero *de minimis* value) would be significant for noncriteria pollutants and must be reviewed. As mentioned earlier, a zero *de minimis* is not practical for this program.

XII. Geographic and Pollutant Applicability

A. Background

Alabama Power held that in determining the applicability of PSD review, EPA must look to whether a source locates in an area to which Part C of the Act applies, rather than to the impact the source would have upon such an area. Accordingly, EPA proposed on September 5 to apply PSD review to a source if the source locates in an area designated attainment or unclassifiable for a pollutant which the source emits in major amounts. Each pollutant emitted by the source would be subject to PSD review, unless the pollutant was one for which an area is designated nonattainment and the source emitted that pollutant in major amounts. A modification to a source would be subject to PSD review under the September 5 proposal if it would result in a significant net increase in the emissions of any regulated pollutant for which the source is major and for which the area is designated attainment or unclassifiable. In addition, EPA proposed on September 5 to apply PSD review to a source or modification that would significantly affect an area in another state designated as attainment or unclassifiable for a pollutant for which the source or modification would be major. See 44 FR 5190-41, 51949 (§ 51.24(i)(2)), 5193-54 (§ 52.21(i)(8)).

On January 30, 1980, EPA stated that it intended not to apply PSD review based solely on interstate impact, because the court's final interpretation of the Act in *Alabama Power* suggested that PSD review was not appropriate in such circumstances. EPA also noted that under its September 5 proposal, a source or modification would be exempt from PSD review if it emitted in major amounts only pollutants for which an area had been designated nonattainment. EPA solicited comments on whether this exclusion should be retained, as well as on its proposal to delete PSD review based solely on interstate impacts. See 45 FR 6803 (January 30, 1980).

B. PSD Applicability

After further evaluation of its proposed approach, and consideration of the comments submitted in response to the September 5, 1979, and January 30, 1980, notices (see discussion below), EPA has decided to modify the September 5 proposal somewhat. Under today's action, except with respect to nonattainment pollutants, PSD review will apply to any source that emits any pollutant in major amounts, if the source would locate in an area designated

attainment or unclassifiable for *any* criteria pollutant. If the source is subject to PSD review, then PSD review will be applied to each pollutant the source emits in greater than *de minimis* amounts, unless the area is designated as nonattainment under section 107(d)(1) for the particular pollutant. It should be noted that in order for PSD review to apply to a source, the source need not be major for a pollutant for which an area is designated attainment or unclassifiable; the source need only emit *any* pollutant in major amounts (i.e., the amounts specified in section 169(1) of the Act) and be located in an area designated attainment or unclassifiable for that or any other pollutant. Therefore, sources that are major only for pollutants for which an area is designated nonattainment will not be exempt from PSD review unless the source is located in an area which is designated nonattainment for all criteria pollutants or unless all of the regulated pollutants emitted by the source in greater than *de minimis* amounts are nonattainment pollutants.

The applicability of the PSD regulations to modifications mirrors that for new sources (see Modification). PSD review will apply to any modification to a source which emits any pollutant subject to regulation under the Act in major amounts, if the modification would result in a significant net increase in the emissions of *any* pollutant, and if the source is located in an area designated attainment or unclassifiable for any criteria pollutant. PSD review would not apply to any nonattainment pollutant. Unlike the approach proposed on September 5, in order for PSD review to apply, the modification need not increase emissions of a pollutant for which the source is major, nor need the source be major for a pollutant for which the area is designated attainment or unclassifiable.

EPA believes that this approach is required by *Alabama Power* and sections 165(a) and 169(1) of the Act. Section 165(a) states that "[n]o major emitting facility on which construction is commenced after the date of the enactment of [Part C of the Act], may be constructed in any area to which this part applies unless" the conditions set out in section 165(a) are met. *Alabama Power* held that this provision must be interpreted literally and that, in particular, EPA should focus on the *location* of the source, not its impact. See 13 ERC at 2012-2016. Today's action provides the necessary literal interpretation. A "major emitting facility" is defined in section 169(1) as a source which would emit at least 100 or

250 tons per year (tpy) (depending on the type of source) of "any" pollutant. This would cover both criteria pollutants, for which national ambient air quality standards have been promulgated, and non-criteria pollutants subject to regulation under the Act. Section 165 refers to an "area to which this part [part C] applies," which the Court in *Alabama Power* interpreted to mean "clean air areas," i.e. areas designated pursuant to section 107 as attainment or unclassifiable for a particular air pollutant 13 ERC at 2013. See also sections 161, 162, and 167 of the Clean Air Act. But neither section 165 nor section 169(1) links the pollutant for which the source is major and the pollutant for which an area is designated attainment or unclassifiable. Read literally, section 165(a) applies PSD preconstruction review to all sources that are major for any pollutant subject to regulation under the Act and locate in an area designated attainment or unclassified for any pollutant.

Section 165(a) also does not link review of a particular pollutant to the attainment status for that pollutant or limit review to pollutants for which a source is major. Rather, read literally, section 165(a) applies PSD review to *all* pollutants subject to regulation under the Act emitted by the source provided that the source is major for *some* pollutant and is located in a clean air area for *some* pollutant. However, implicit in *Alabama Power* and the structure of the Act is a recognition that where nonattainment pollutants are emitted in major amounts (i.e., where a source emits in major amounts a pollutant for which the area in which the source would locate is designated nonattainment), Part D NSR rather than Part C PSD review should apply to these pollutants (see below). PSD review does not apply to the nonattainment pollutants emitted by the source otherwise subject to review.

C. Nonattainment Applicability

On May 13, 1980, 45 FR 31307, EPA promulgated a final rule setting out the applicability of nonattainment review of new and modified sources. In brief, EPA clarified that the construction moratorium under section 110(a)(2)(I) and NSR under the Offset Ruling and section 173 apply to all major construction proposed in such areas. This applicability is unaffected by the particular air quality levels within the designated nonattainment area which would be caused or impacted by the proposed major source or major modification. States still are required under section 110(a)(2)(D) to review new or modified sources locating outside of

nonattainment areas, but causing or contributing to a violation of an ambient air quality standard; however, review need not meet all of the nonattainment requirements under section 173 and the offset policy.

The current regulations concerning pollutant applicability in nonattainment areas have not been changed. These rules are different from the PSD pollutant applicability rules. Major sources are subject to review under the Offset Ruling, section 173, and the construction moratorium only if they emit in major amounts the pollutant(s) for which the area is designated nonattainment. In addition, only those nonattainment pollutants which the source emits in major amounts are subject to review or the construction moratorium. Similarly, only if a modification increases emissions of a pollutant for which the source is major and for which the area is designated nonattainment do nonattainment requirements apply. The basic rationale for these restrictions is that section 110(a)(2)(I), which contains the construction moratorium, restricts the construction moratorium to pollutants for which the source is major and for which the area is designated nonattainment. Since there is no requirement similar to the one in section 165(a) that subjects a source to review for all regulated pollutants it emits once it is subject to review for one pollutant, preconstruction review under the Offset Ruling and section 173 is restricted in the same manner as the construction moratorium.

For example, construction of a new plant with potential emissions of 500 tpy PM and 50 tpy SO₂ in an area designated nonattainment for both PM and SO₂ would be subject to nonattainment requirements for PM only, since the source is minor for SO₂. Similarly, modification of this plant resulting in a net increase in emissions of 50 tpy in SO₂ would not be subject to nonattainment requirements. See also examples (3), (4), and (7).

D. Case Examples

The following additional examples illustrate how applicability of PSD requirements will work under today's final regulations:

(1) Construction of a new plant with potential emissions of 500 tpy PM and 50 tpy SO₂ in an area designated attainment for both PM and SO₂ would be subject to PSD review for both PM and SO₂.

(2) Construction of the same plant as in example (1), but in an area designated attainment for SO₂ and nonattainment for PM, would be subject to PSD review

for SO₂ and nonattainment requirements for PM.

(3) Construction of the same plant as in example (1), but in an area designated attainment for PM and nonattainment for SO₂, would be subject to PSD review for PM only. PSD review would not apply for SO₂, since SO₂ is a nonattainment pollutant.

(4) Construction of the same plant as in example (1), but in an area designated nonattainment for both PM and SO₂, would be subject to no PSD review and to nonattainment requirements for PM. This would be the case even if the SO₂ emissions would have an impact on a nearby Class I area for SO₂ or on an area located in another state which is designated attainment or unclassifiable for PM.

(5) Modification to the plant in example (1), where the plant is located in an area designated attainment for both PM and SO₂ resulting in a 30 tpy net increase in PM emissions, would be subject to PSD review for PM.

(6) Modification to the plant in example (1), where the plant is located in an area designated attainment for SO₂ and nonattainment for PM, resulting in increased emissions of 50 tpy in SO₂, would be subject to PSD review for SO₂. (It is a significant increase at a major source located in an attainment area.) But if the modification only were to increase the emissions of PM by 30 tpy, only nonattainment requirements would apply, since this is a modification of a major source for a nonattainment pollutant.

(7) Modification to the plant in example (1), where the plant is located in an area designated attainment for PM and nonattainment for SO₂, resulting in increased emissions of 50 tpy SO₂, would be subject to neither PSD review, nor the nonattainment NSR requirements. Nonattainment NSR would not apply since the 50 tpy increase in the nonattainment pollutant does not occur at an existing major stationary source for that pollutant. PSD does not apply since the only change is to a nonattainment pollutant. Instead, the general NSR under the SIP would typically apply to this pollutant, and the new emissions of SO₂ would be accommodated in the SIP's allowance for area and minor source growth.

(8) Construction of a new plant with potential emissions of 500 tpy hydrogen sulfide (H₂S) in an area designated attainment for PM would be subject to PSD review for H₂S. If, in addition, the plant had potential emissions of 50 tpy PM, PSD review would be applied to both H₂S and PM.

(9) Construction of a new plant with potential emissions of 500 tpy CO and 50

tpy H₂S in an area designated nonattainment for CO and attainment for SO₂ would be subject to PSD review for H₂S and to nonattainment requirements for CO. If this plant were later modified, resulting in a net increase in emissions of 30 tpy in H₂S, PSD review would apply for H₂S.

(10) Construction of a new plant with potential emissions of 500 tpy H₂S in an area designated nonattainment for all criteria pollutants would not be subject to either PSD review or nonattainment requirements. Part D applies only to criteria pollutants, and the area here is not subject to Part C, since it is not designated attainment or unclassifiable for any criteria pollutant.

E. Interstate Pollution

The September 5 proposal, in response to the *per curiam Alabama Power* decision issued on June 18, 1979, would have required PSD review for a major source locating or modifying in a designated nonattainment area only if such construction would substantially impact a clean air area in another state. In its final opinion issued on December 14, 1979, the court reversed its earlier position regarding the need for a PSD review of all interstate impacts to a neighboring state's clean air area. Under both rulings, PSD review would apply in all cases where the construction would take place in a clean area. Pursuant to the court's revised ruling in *Alabama Power*, EPA will not apply PSD review to a pollutant emitted by a source locating in an area designated nonattainment for that pollutant, even where the source would impact a PSD area in another state. Sixteen of the nineteen comments received by EPA supported this decision. Three commenters requested EPA to propose regulations pursuant to sections 110(a)(2)(E) and 161. EPA is now evaluating how best to control interstate pollution, and may propose regulations some time in the future.

F. Geographic Applicability for VOC Sources

On September 5, EPA proposed to delete the "36 hour rule," which subjected a source of volatile organic compounds (VOC) to review, if the source proposed construction within 36 hours pollutant travel time of an ozone nonattainment area. Pollutant travel time was to be calculated using wind conditions associated with concentrations exceeding the ambient standard for ozone. Most commenters agreed with the proposal to delete this requirement. One commenter who disagreed focused on the need for the

rule as a means of determining which sources locating outside a designated nonattainment area should be subject to nonattainment review. Another argued that without the rule EPA will end up unnecessarily reviewing sources in remote rural areas whose impact on the ozone nonattainment problem is insignificant, since ozone is a regional problem.

For the reasons expressed on September 5 (44 FR 51940), EPA has decided to delete the 36 hour rule. The commenters' concerns are taken care of by the rules on geographic applicability for nonattainment areas, as set out at 45 FR 31307 (May 13, 1980). Thus, all major VOC sources locating in a designated ozone nonattainment area will be subject to review under section 173. Major VOC sources locating outside a designated nonattainment area will be subject to PSD review and will be required to monitor for ozone. If the monitoring indicates that the area of source location is nonattainment, then the provisions of the Offset Ruling or State plans adopted pursuant to section 110(a)(2)(D) of the Act shall apply until the area is redesignated as nonattainment and a SIP revision has been approved. Of course, a source of VOC may choose to accept nonattainment review requirements immediately (i.e., LAER, offsets, statewide compliance of other sources under the same ownership) and conduct post-approval monitoring as presently permitted under the PSD regulations.

G. Response to Comments

Additional responses to comments regarding applicability of nonattainment requirements can be found at 45 FR 31307. Comments concerning interstate pollution and the geographic applicability of VOC sources, are responded to above.

With regard to PSD review, several commenters argued that EPA's approach would be overly complex and would impose great administrative burdens with few corresponding benefits to air quality. EPA does not agree. Applicability of PSD review as outlined above is required by the Act. Congress believed that such broad applicability was needed to adequately guard against significant deterioration in existing clean areas. EPA cannot restrict applicability and override Congressional intent simply because of an added administrative burden such applicability might impose. For similar reasons, EPA disagrees with the suggestion that it should restrict PSD review to only those pollutants that a source emits in major amounts.

Fourteen commenters argued that EPA should not apply PSD review to noncriteria pollutants, because the lack of NAAQS and increments for noncriteria pollutants indicates that Congress did not consider these pollutants to be able to cause significant deterioration and felt that the extent of harm by these pollutants has yet to be demonstrated. They claimed noncriteria pollutant sources are already subject to NSPS and NESHAP regulation. However, as other commenters have correctly noted, section 169(1) refers to sources with the potential to emit "any" pollutant above certain amounts. Moreover, section 165(a)(4) states that BACT must apply to "each pollutant subject to regulation under this Act" emitted by a source. Neither of these provisions is limited to criteria pollutants. See also *Alabama Power*, 13 ERC at 2045.

Two commenters urged that if EPA decides to regulate sources with minor but significant emissions of criteria pollutants and sources of noncriteria pollutants, it should do so only if there already exists a SIP emission limit for the "minor" pollutants or only if section 111 or 112 (NSPS and NESHAP, respectively) has been made applicable after appropriate rulemaking to such sources of noncriteria pollutants. The difficulty with this approach is that the Act requires PSD review, regardless of whether another rule already applies to the source except in the case of nonattainment pollutants (see above). Moreover, the suggested approach could allow an unacceptably large number of sources to escape review, since many sources may not have an applicable SIP emissions limit or NSPS or NESHAP limit.

While most commenters endorsed the September 5 proposal that PSD permitting should be limited to instances where greater than *de minimis* changes in a major pollutant would occur, one commenter argued that *Alabama Power* did not restrict PSD applicability to modifications involving the pollutant(s) which the source emits in major amounts. This commenter claimed that section 111(a)(4) of the Act defines "modification" as "any physical change in, or change in the method of operation of a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." (Emphasis added.) As mentioned above in the Modification section, the Administrator agrees with this interpretation. Thus, today's final rule, with the exception of nonattainment pollutants, requires a

PSD preconstruction review for greater than *de minimis* net increases in the potential to emit of a major stationary source for any pollutant subject to regulation under the Act.

Twenty-three commenters supported exempting nonattainment pollutants from PSD review. However, three commenters argued that PSD review should apply to nonattainment pollutants emitted in minor amounts, claiming that review in nonattainment areas should be as broad as that in PSD areas. EPA agrees with the former comments. As noted earlier, sections 165(a) and 169(1) apply to "any" pollutant regulated under the Act. The only restraint on PSD review, then, is section 173 in Part D, which governs the specific review of sources emitting nonattainment pollutant(s) in major amounts. In addition, sources emitting the nonattainment pollutants in minor amounts are subject to the general NSR contained in SIPs, and the impacts of such sources are accounted for in demonstrations of reasonable further progress and within the growth allowance provisions of the SIP. Thus, there is no need to apply PSD review to either type of nonattainment pollutant which already faces adequate review.

Twenty-three commenters also supported exempting from PSD review sources which emit only nonattainment pollutants in major amounts, but PSD pollutants in minor amounts, citing *Alabama Power* for support. Neither *Alabama Power* nor the Act support such an exemption. *Alabama Power* held that, at a minimum, PSD review does not apply to major sources which locate in an area designated nonattainment for all criteria pollutants. But the court did not take into account the fact that the same source may emit both PSD and nonattainment pollutants. Since, as noted above, section 165(a) does not link the pollutant for which the source is major and the pollutant for which an area is designated attainment or unclassifiable, EPA interprets section 165(a) as requiring PSD review for each source that is major for some pollutant and locates in an area designated attainment or unclassifiable for that or any other pollutant and that this review encompasses PSD pollutants whether or not emitted in major amounts.

Finally, some commenters perceived an inconsistency in requiring broader pollutant applicability for PSD review than for nonattainment review, yet using a broader definition of "source" for nonattainment areas than for PSD areas. However, EPA's actions are consistent with the Act. The scope of PSD review applicability and the nonattainment

definition of source are separate issues and there is no basis for requiring that they be resolved in such a way as to in some manner equalize their effects.

XIII. Baseline Concentration, Baseline Area, and Baseline Date

EPA's June 1978 PSD regulations generally define baseline concentration as the ambient concentration level reflecting actual air quality as of August 7, 1977, including projected emissions of major sources commencing construction or modification before January 6, 1975, but not in operation by August 7, 1977, and excluding emissions from major sources commencing construction (including modification) after January 6, 1975. (40 CFR 51.24(b)(11), 52.21(b)(11) (1979).) Emissions from major source construction commencing after January 6, 1975, as well as most emissions increases occurring from existing sources after the baseline date are counted against the applicable PSD increments. (A more detailed discussion of the relationship between baseline concentration and increment consumption is provided in Increment Consumption.) Actual air quality includes emissions increases after the baseline date at existing sources whose emissions are counted in the baseline concentration, if the increases are due to increased hours of operation or capacity utilization authorized under the SIP and reasonably anticipated to occur on the baseline date. The baseline concentration also includes emissions increases allowed under a SIP relaxation pending final EPA approval on the baseline date, if the allowable emissions under the revision were higher than the source's actual emissions on the baseline date. The June 1978 regulations established a uniform baseline date of August 7, 1977 for all clean air areas. A definition of baseline area was unnecessary since all PSD areas were covered by the August 7, 1977 baseline date.

The *Alabama Power* decision held that a uniform baseline date was not authorized by section 169(4). It required the baseline date to be established at the time of the first application for a permit in an area subject to PSD requirements. EPA's regulations were consequently remanded for change.

The *Alabama Power* decision, however, supports EPA's definition of baseline concentration. In holding that monitoring data is required under section 165(e)(2), the court confirmed that actual air quality data should be used to determine baseline concentrations. See 13 ERC 2022. Since monitoring data provide information on actual air quality concentrations from

existing sources and since section 169(4) explicitly states that required monitoring data should be used in establishing baseline concentrations, the court's decision supports EPA's requirement that baseline concentrations reflect actual air quality. In addition, the court implicitly affirmed EPA's approach in ruling that EPA correctly excluded from baseline concentrations emissions increases due to voluntary fuel switches after the baseline date. Since actual air quality on the baseline date would not reflect these increases, their exclusion from baseline concentrations is consistent with EPA's actual air quality approach to baseline concentrations. Finally, the court noted Congress' rejection of a House bill that would have allowed certain source emissions to be included in baseline concentrations, even though the emissions have not occurred by the baseline date. *See* 13 ERC 2026. The court concluded that Congress considered and rejected an approach that would depart from actual air quality in calculating baseline concentrations, except in the limited circumstances set forth in section 169(4).

In its September 5, 1979 response to the court's decision, EPA proposed to delete the uniform August 7, 1977 baseline date and to define baseline date as the date of the first complete application, after August 7, 1977, for a PSD permit to construct or modify a major stationary source in an area subject to PSD requirements. As part of that definition, EPA proposed to define baseline area as all parts of an Air Quality Control Region (AQCR) designated as attainment or unclassifiable under section 107(d) of the Act. Under that definition, an application of a major stationary source to construct in any part of an AQCR designated as attainment or unclassifiable would trigger the baseline date for both SO₂ and PM in all portions of the AQCR.

EPA's proposed definition of baseline area was based in part on its consistency with the term "area" as used in section 107, which requires air quality designations for AQCRs or portions thereof. The definition was also intended to avoid implementation problems that might result from having different baseline areas and dates within the same AQCR. EPA proposed, however, to allow states some flexibility in defining baseline area. *See* discussion at 44 FR 51942.

EPA further proposed to retain its current definition of baseline concentration but asked for comment on a particular problem specific to the Gulf Coast areas (*see* 44 FR 57107, October 4,

1979 and discussion in Increment Consumption). EPA's September 5 proposal specifically asked for comment on two aspects of its proposal: (1) whether baseline area should be defined as clean portions of the AQCR in which a source applies for a permit, and (2) whether a permit application should trigger the baseline date only in the clean portions of the AQCR in which the source would locate or also in clean areas of any AQCR which would be impacted by the source.

After issuance of the court's full opinion in December, EPA proposed and asked for comment on three changes to its September 5 proposal (45 FR 6802, January 30, 1980). First, EPA stated it was considering defining baseline area as any area designated attainment or unclassifiable under section 107(d) in which a source subject to PSD requirements would locate or impact, rather than all clean portions of an AQCR in which a source would locate or impact. Second, EPA's solicited comment on whether states should be allowed to redefine the boundaries of areas designated as attainment or unclassifiable. EPA suggested, however, that states should be limited to redesignations no smaller than the source's area of impact. Third, EPA indicated it was considering adoption of a pollutant-specific baseline date and area. Under that approach, a source would trigger the baseline only for the pollutants it emitted. Thus, if the source would emit neither SO₂ nor PM, it would not trigger any baseline. EPA also requested comment on whether a source which would be major for SO₂ and minor for PM would trigger a baseline date only for SO₂ or for both pollutants.

EPA's final action and response to comments on each of the issues is discussed below. For simplification, the discussion focuses on the four basic issues of baseline concentration, baseline area, baseline date, and pollutant-specific baseline. Issues related to increment consumption are discussed in the next section.

A. Baseline Concentration

As proposed, EPA is continuing its current definition of baseline concentration as the ambient concentration levels at the time of the first permit application in an area subject to PSD requirements. Baseline concentration generally includes actual source emissions from existing sources but excludes emissions from major sources commencing construction after January 6, 1975. Actual source emissions are generally estimated from source records and any other information reflecting actual source operation over

the two-year time period preceding the baseline date. The baseline concentration also includes projected emissions from major sources commencing construction (including modification) before January 6, 1975, but not in operation by August 7, 1977.

Unlike the June 1978 policy, baseline concentration will no longer routinely include those emissions increases after the baseline date from sources contributing to the baseline concentration, which are due to increased hours of operation or capacity utilization. Existing policy permitted this grandfathering, provided such increases were allowed under the SIP and reasonably anticipated to occur as of the baseline date. Today's policy which normally excludes such increases is consistent with using actual source emissions to calculate baseline concentrations. An actual emissions policy, however, does allow air quality impacts due to production rate increases to sometimes be considered as part of the baseline concentration. If a source can demonstrate that its operation after the baseline date is more representative of normal source operation than its operation preceding the baseline date, the definition of actual emissions allows the reviewing authority to use the more representative period to calculate the source's actual emissions contribution to the baseline concentration. EPA thus believes that sufficient flexibility exists within the definition of actual emissions to allow any reasonably anticipated increases or decreases genuinely reflecting normal source operation to be included in the baseline concentration.

EPA is also promulgating a change in its current policy on SIP relaxations. Under that policy, emissions allowed under SIP relaxations pending on August 7, 1977 are included in the baseline concentration if the allowed source emissions were higher than actual source emissions. EPA adopted that policy in June 1978 in recognition of the fact that some states with SIP revisions pending on August 7, 1977 had allowed sources to increase emissions prior to final EPA approval of the relaxations, while other states with pending relaxations had required sources to comply with the lower emissions limitations in the existing SIP until final approval occurred. *See* 43 FR 26401 col. 3. To avoid penalizing sources in states that did not allow increases prior to approval, EPA provided that baseline concentrations include the allowable emissions under revised SIPs, if the relaxation was pending on August 7, 1977 and the allowed emissions exceeded the source's actual emissions.

The effect was to allow sources to avoid increment consumption analyses for the emissions increase allowed in the revision. EPA considered the exemption justified because states and sources were unaware that EPA would establish a uniform baseline date of August 7, 1977, and those emissions increases after that date would consume increment.

EPA believes this exemption from increment consumption analyses is no longer necessary. States and sources have been on notice since June 1978 that emissions increases at existing sources due to SIP relaxations must be evaluated for possible increment consumption. No state or source has been uncertain as to the applicable baseline date, or been placed in an inequitable position as to other states or sources. Therefore, today's regulations do not exempt from increment consumption analyses those SIP relaxations not finally approved by EPA prior to the baseline date in the affected area.

One commenter suggested that EPA extend the transition provision within the June 1978 regulations for assessing increment consumption. 43 FR 26401 col. 2. This provided that increased emissions from plan relaxations received after the August 7, 1977 baseline date but before the June 19, 1978 promulgation would consume the applicable increment but could be reviewed as part of the periodic assessment rather than assessed individually for increment consumption prior to plan approval.

EPA does not believe that a similar exception is required under today's regulations. EPA considered the exception necessary in June 1978 due to uncertainty as to how the 1977 Amendments would affect pending SIP relaxations. Such uncertainty no longer exists, since sources have been on notice since June 1978 that SIP relaxations after that date must be individually reviewed for increment consumption. Therefore, emissions increases due to plan relaxations received after June 19, 1978 must be individually evaluated for increment consumption prior to EPA approval.

EPA is concerned, however, that the new definition of baseline concentration may work a hardship on states with SIP relaxations pending when a PSD application is filed in an area. A state may submit a SIP relaxation affecting a source, or group of sources, located in an area where the baseline date has not been set, and would not be required to provide an increment consumption analysis. If prior to final EPA approval, a source filed a PSD application in the

area, the application would establish a baseline date and the state would have to withdraw the revision until it has conducted the necessary increment analysis. To prevent such burdensome delays, EPA is exempting from individual increment analyses SIP relaxations pending at the time a baseline date is established in the area affected by the revision. However, increment consumption due to emissions from these relaxations must be evaluated as part of a state's periodic assessment. Exemptions from individual analyses is analogous to the previous relief provided for sources subject to SIP relaxations submitted after August 7, 1977, but before EPA's June 1978 promulgation. The exemption is therefore consistent with prior EPA policy.

B. Baseline Area.

In response to the September 5, 1979 proposal, fifty-three commenters felt that an AQCR definition of baseline area would not produce a great deal of administrative relief and would, simultaneously, limit an area's growth options. These commenters favored defining baseline area as the area of significant source impact, based on required modeling and monitoring analysis. Such an approach was claimed to provide just as much administrative relief, more growth options, and elimination of the problem of a small PSD source triggering the baseline date for a large area. Seventeen commenters favored a baseline area definition geared to areas designated as clean or unclassified under section 107. Those favoring this alternative strongly preferred a "redesignation" procedure to accompany this option. Other commenters objecting to the AQCR approach suggested: county boundary lines (three), and the entire state (one).

In response to EPA's January 30 notice, fourteen of sixteen commenters favored a source impact area definition of baseline area. One of the remaining two commenters favored retention of the AQCR approach while the other commenter desired a county or some other legal boundary approach. All eighteen comments received favored triggering a baseline only in the area in which a source would locate, and not in those other areas which it would impact. Nineteen of twenty-nine commenters favored permitting state redesignation but to areas no smaller than a source impact area. Seven other commenters favored no limitations on the redesignation procedure. The remaining three commenters opposed allowing states to redefine baseline areas through redesignation.

EPA has determined that baseline area should be defined as the area designated as attainment or unclassifiable under section 107(d) in which a source or modification subject to PSD review would construct or on which it would have an impact equal to or greater than $1 \mu\text{g}/\text{m}^3$ on an annual basis. EPA has concluded that "an area subject to this part," as used in section 169(4), refers to areas designated attainment or unclassifiable under section 107(d).

This view is strongly suggested by Judge Robinson's opinion on baseline concentration in the December 1979 *Alabama Power* ruling. Referring to Congress' intent to use actual air quality data to establish baseline concentrations, Judge Robinson states that "the task of monitoring existing ambient pollution levels in attainment areas is assigned to the first permit applicant, who will provide the information essential to calculation of the baseline." (Emphasis added) 13 ERC 1993, 2022. The footnote which follows that sentence discusses a state's obligation under section 107(d)(1) to submit area designations to EPA and the fact that section 107 lists submitted to date by the states indicate that many areas lack acceptable air quality information. *Id.* The references to attainment areas and section 107(d) designated areas indicate that the court interprets the statute as requiring that baseline concentrations be calculated for each clean area designated under section 107(d)(1).

EPA thus believes that neither the statute nor the court opinion support the proposed AQCR approach. The majority of comments also opposed defining baseline area as AQCR. Opposition was based on the view that it would do little to alleviate administrative problems, offered no flexibility in states, and would often limit an area's growth options by encompassing too large an area.

EPA has also determined that a PSD source should trigger the baseline in all intrastate clean areas that it impacts as well as the area it locates in. One objective of PSD is to track air quality changes in clean air areas. If a major source significantly affects any clean air area in the same state the purposes of PSD will be served if air quality deterioration from minor/area source growth and actual changes in baseline source emissions are tracked from the time significant SO_2 or PM emissions from a new or modified major source impact a clean area. Such a policy is also consistent with the language of section 165(e)(1) of the Act which

requires an air quality analysis of the affected area, not just the area of immediate location. The Administrator does not believe that such a policy should transcend state boundaries. Since triggering baseline dates is an important factor in managing growth, EPA has concluded that states should have jurisdiction over their own baseline dates. On the other hand, establishment of baseline dates does not affect increment consumption across state borders by major source construction commencing after January 6, 1975.

EPA has concluded that baseline areas may be redefined by the states through area redesignations. Section 107(d) specifically authorizes states to submit redesignations to the Administrator. Consequently, states may submit redefinitions of the boundaries of attainment or unclassifiable areas at any time. If EPA agrees that the available data support the change, it will redefine the areas as requested. As long as no PSD source has located in, or significantly impacted on a clean area being considered for redesignation, the area can be redesignated as a new attainment or unclassifiable area, even if the area were previously part of a larger clean area in which the baseline date had been set.

Area redesignations are subject to certain restrictions. The boundaries of any area redesignated by a state cannot intersect the area of impact of any major stationary source or major modification that established or would have established a baseline date for the area proposed for redesignation or that is otherwise required to obtain a PSD permit. In addition, area redesignations can be no smaller than the area of impact of such sources. These restrictions comport with the PSD objective of tracking air quality effects in an area once a major source or modification has affected an area. By setting the baseline date at the time a major source or modification impacts an area and preventing the date from being changed by subsequent area redesignations, the system ensures that future growth in the area will be assessed for its air quality effects from that date forward. Moreover, if states could define baseline areas as small as the immediate area in which a source is located and not include the source impact area, air quality could deteriorate or increments could be violated in a nearby area impacted by the source, but neither the state nor EPA would review the air quality impact. The source could therefore affect air quality

but the reviewing authority would be unaware of the deterioration. In addition to jeopardizing air quality, "postage stamp" baseline areas would be difficult to administer.

A source will be considered to impact an area if it has an impact of $1 \mu\text{g}/\text{m}^3$ or more of SO_2 or PM on an annual basis. This figure has been selected because it corresponds to levels of significance used in previous Agency determinations for SO_2 and PM. The annual average was selected over the short term value due to its ease of implementation. That is, the shape of source impact areas is less complex and the $1 \mu\text{g}/\text{m}^3$ annual average provides ample area coverage of the source impact area.

The Administrator believes that defining baseline area as section 107 areas and allowing state redesignation will satisfy most of the commenters who objected to the proposed AQCR definition and favored state flexibility in designations. The redesignation process partially meets the concerns of commenters who preferred defining baseline area as source impact area. Where a baseline date is established for an area that is large relative to the impact area of the triggering source, the state has the option of redefining the area to reflect more accurately the area affected by the source.

C. Baseline Date

Consistent with the Agency's proposal, today's promulgation defines baseline date as the date after August 7, 1977 on which the first complete application for a PSD permit is filed with the appropriate reviewing authority. Section 51.24(b)(14), 52.21(b)(14). As discussed in the September 5 notice, EPA has determined that this definition is mandated by the court's interpretation of section 169(4), which requires a baseline concentration to be set on the date, after August 7, 1977, "of the first application for a permit in an area subject to this part." See 44 FR 51941 col. 3. Consequently, the first complete PSD permit application by a major source to construct in a baseline area, as that term is defined in § 51.24(b)(15) and 52.21(b)(15), and explained above, will trigger a baseline date.

As discussed below, under *Pollutant-Specific Baseline*, the regulation further requires that a baseline date be set for each pollutant emitted by the applicant source in greater than *de minimis* amounts, if increments or other equivalent measures under section 166 have been established for the pollutant. At present, increments are established only for SO_2 and PM, and no increments or equivalent measures for other pollutants have been established.

Section 166 requires EPA to adopt regulations establishing increments or other equivalent measures for other criteria pollutants. Section 166 does not by its terms require EPA to apply section 169(4) in determining baseline dates for criteria pollutants other than SO_2 and PM. EPA is now conducting rulemaking under section 166 to develop increments or equivalent measures for the other criteria pollutants. As part of that rulemaking, EPA is considering how to establish baseline dates for those pollutants.

While comments supported EPA's proposal to establish the time of the first complete application in an area as the baseline date, eight commenters suggested that the date be set at the time of the first application after August 7, 1978, rather than August 7, 1977. This review is consistent with other comments noting that section 165(e)(2) requires permit applicants after August 7, 1978 to provide one year's monitoring or other equivalent air quality analysis to determine a baseline concentration for the area. These commenters claimed that since baseline concentration is to be established through actual ambient air quality data and no applicant can gather the necessary monitoring data before one year after the effective date of the part, the baseline date should not be triggered by applications filed before that date.

EPA understands the commenter's concerns. However, EPA believes Congress was aware that prior to August 7, 1978, applicants could not provide a full year of monitoring data, as evidenced by the fact that the monitoring requirement in section 165(e)(2) is not effective until August 7, 1978. Congress nonetheless provided that baseline concentrations be established by the first permit application, an event which could occur at any time after August 7, 1977. Congress therefore considered that baseline concentrations and increment consumption could be determined with less than a full year's monitoring data. The need to accept less data is reflected in the provision of section 169(4) that baseline concentrations be based on available air quality data and on such monitoring data as the applicant is required to submit. The provision suggests that calculations of baseline and increment use may have to be made with limited data, if available data, such as that from the state agencies, is not appropriate. EPA interprets the requirements for monitoring data after August 7, 1978, and not August 7, 1977, as intended to provide a grace period for sources, rather than evidencing intent to

postpone the establishment of baseline dates.

One commenter questioned whether baseline dates would be triggered by permit applications previously filed by sources that were major under the June 1978 PSD regulations, but no longer major under the regulations promulgated today, even if the permit applicant failed to apply for a permit rescission. EPA concurs in the commenter's suggestion that a subsequent permit applicant in any area may inform the permitting authority that the baseline date was not triggered on the date that a source which no longer qualifies as major applied for a PSD permit. As the commenter points out, this eliminates the need for an immediate rescission of all past permits affecting sources no longer subject to PSD review. It also avoids penalizing permit applicants if a source that is no longer major fails to apply for a permit rescission.

The Administration wishes to clarify another point related to a change in review status for the source which has triggered the baseline date. If the applicant that established the baseline date is later denied a PSD permit or voluntarily withdraws its PSD application, a question arises as to whether the baseline date has been triggered. In the Administrator's judgment the applicable baseline date remains in place, since no change in date is authorized under the Act. Section 169(4) establishes source application as the baseline triggering mechanism and does not qualify this by the later issuance of a permit. This policy is consistent with the establishment of a baseline concentration which is based on the available monitoring data, typically that gathered by the source applicant. The data to establish the baseline concentration would be available regardless of the eventual permit status of the baseline triggering application. Using source application also stabilizes the NSR permitting process. Later applicants can determine whether a baseline date has been set in an area by looking to whether a previous application has been filed, rather than needing to determine if the permit has been or will be issued.

Finally, the Administrator wishes to point out that it is the first PSD application submitted under either 40 CFR 52.21 or state PSD regulations developed pursuant to 40 CFR 51.24 which triggers a baseline date. When states assume responsibility for implementing the PSD program, several PSD baseline dates may well have been triggered. However, as mentioned above, states can minimize the impact of

early baseline dates by redesignating the size of the baseline area which is affected by a previously established baseline date.

D. Pollutant-Specific Baseline

The Agency has concluded that a pollutant-specific baseline is consistent with section 169(4) and the statutory structure. Section 169(4) requires that a baseline concentration be established "with respect to a pollutant * * * in an area subject to (Part C)." Therefore, by the terms of the statute, a baseline concentration is established for individual pollutants. Moreover, such concentrations are established for areas subject to PSD. Section 107(d), which provides that areas designated attainment or unclassifiable are subject to PSD, requires designations to be made on a pollutant-specific basis. Section 107(d)(1)(D) and (E). To be consistent, both baseline date and baseline area (and any subsequent redesignations under section 107 of the Act) must also be pollutant-specific.

The comments that favored a pollutant-specific baseline generally did so on two grounds: the reference to "pollutant" in section 169(4) and the statutory requirement to use monitoring data to establish baseline concentration. Since monitoring and increment consumption are pollutant-specific, baseline concentrations must be as well. The Administrator agrees that the monitoring requirement supports pollutant-specific baselines. Four of the thirty-eight commenters that opposed pollutant-specific baselines did so primarily for implementation reasons. Although pollutant-specific baselines may add some complexity to the PSD program, EPA has concluded that the statutory structure contemplates pollutant-specific area designations.

The following example illustrates the concept of pollutant-specific baseline dates. If a major source of NO_x that would also emit SO₂ in significant amounts and PM in less than significant amounts submits a complete application for a permit to construct in an area designated under section 107(d)(1) as attainment for all pollutants, and no previous source has triggered any baseline dates, the source would establish the baseline date for SO₂ but not PM. If a later modification to the source results in a significant net increase in PM emissions and no other application previously triggered the PM baseline date, the proposed PSD application for the modification would then establish the PM baseline date.

XIV. Increment Consumption

There are two basic issues in the area of increment consumption: (1) which source emissions consume increment and (2) how to calculate the amount of increment consumed by those emissions. The *Alabama Power* decision addressed neither question. EPA, therefore, proposed in September to continue its current approach. Under the approach, four categories of source emissions affect increment: (1) as provided by section 169(4), emissions from major source construction (including modification) commencing after January 6, 1975. This group includes emissions from sources issued PSD permits and state new source review (NSR) permits (including those issued in accordance with section 51.18(j) and the Offset Ruling) as well as emissions from non-permitted sources; (2) emissions changes occurring after the baseline date at sources whose previous emissions on the baseline date are included in the baseline concentration; (3) emissions changes due to SIP revisions that are approved after the baseline date; and (4) minor and area source growth occurring after the baseline date. EPA's current regulations provide that the first and third category of sources affect increment on the basis of emissions allowed under the permit and emissions allowed under the SIP as revised, respectively. The second and fourth categories affect increment on the basis of actual emissions changes from the emissions included in the baseline concentration.

Since its proposal, EPA has reevaluated its current policy in light of both the December opinion of the court and the Gulf Coast problem (discussed below). EPA has concluded that increment consumption and expansion should be based primarily on actual emissions increases and decreases, which can be presumed to be allowable emissions for sources subject to source-specific emissions limitations. This change principally affects increment calculations for major source construction not subject to source-specific permits or SIP requirements and for sources whose allowable limits are demonstrated not to reflect actual emissions. PSD applications pending today before EPA or a state agency authorized to review or issue PSD permits will be reviewed for increment consumption on the basis of the revised policy.

A. Use of Actual Emissions

1. Rationale for Use of Actual Emissions.

As discussed in the *Baseline Concentration* section, the *Alabama Power* decision supported EPA's requirements that baseline concentrations reflect actual air quality in an area. Increment consumption or expansion is directly related to baseline concentration. Any emissions not included in the baseline are counted against the increment. The complementary relationship between the concepts supports using the same approach for calculating emissions contributions to each. Since the *Alabama Power* decision and the statute both provide that actual air quality be used to determine baseline concentrations, but provide no guidance on increment consumption calculations, EPA has concluded that the most reasonable approach, consistent with the statute, is to use actual source emissions, to the extent possible, to calculate increment consumption or expansion.

EPA's decision is also based on concerns raised by the Gulf Coast problem, discussed below. In that area, and possibly others, source emissions allowed under permits and SIP provisions in many cases are higher than actual source emissions. Sources could therefore increase their emissions without being subject to PSD review or the SIP revision process. However, if increment calculations were based on allowable emissions, EPA believes increment violations would be inappropriately predicted and proposed source construction would be delayed or halted. In practice, EPA expects that few, if any, sources will increase their emissions to allowable levels.

EPA believes it is unwise to restrict source growth based only on emissions a source is permitted to emit but which, in many instances, have not been and are not likely to ever be emitted. Increment calculations based on the best prediction of actual emissions links PSD permitting more closely to actual air quality deterioration than calculations based on allowable "paper" emissions. In addition, use of actual emissions for increment consumption is consistent with using an actual emissions baseline for defining a major modification and for calculating emissions offset baselines.

2. Calculation of Increment Consumption Using Actual Emissions.

To determine how much increment remains available to a proposed major source or modification, the source owner or operator must analyze several types of emissions changes as of its application date. These changes generally include: (1) emissions changes that have occurred at baseline sources

and emissions from new minor and area sources since the baseline date; (2) emissions that have occurred or will occur at sources which have submitted complete PSD applications as of thirty days prior to the date that the proposed source files its application; and (3) emissions changes reflected in SIP relaxations submitted after August 7, 1977, and pending as of thirty days prior to the date the source files its application, or emissions changes reflected in SIP relaxations which have been approved since August 7, 1977, but which have not yet occurred. (See, discussion below on calculation of increment consumption for SIP relaxations.) The thirty-day cutoffs are specified to stabilize the review process by preventing new applications and SIP relaxation proposals from invalidating otherwise adequate increment consumption analyses without warning.

Increment calculations will generally be based on actual emissions as reflected by normal source operation for a period of two years. EPA has selected two years based on its recent experience in reviewing state-NSR programs for nonattainment areas. The state submittals use periods of between one and three years to evaluate source emissions. In EPA's judgment, two years represents a reasonable period for assessing actual source operation. Since the framework for nonattainment NSR programs will generally form the basis for a state's PSD plan, EPA believes it is appropriate to use the same time period for evaluating actual source emissions in the PSD program. Two years is also being used to calculate the emissions offset baseline for modifications in nonattainment areas.

The two-year period of concern should generally be the two years preceding the date as of which increment consumption is being calculated, provided that the two-year period is representative of normal source operation. The reviewing authority has discretion to use another two-year period, if the authority determines that some other period of time is more typical of normal source operation than the two years immediately preceding the date of concern. In general, actual emissions estimates will be derived from source records. Actual emissions may also be determined by source tests or other methods approved by the reviewing authority. Best engineering judgments may be used in the absence of acceptable test data.

EPA believes that, in calculating actual emissions, emissions allowed under federally enforceable source-

specific requirements should be presumed to represent actual emission levels. Source-specific requirements include permits that specify operating conditions for an individual source, such as PSD permits, state NSR permits issued in accordance with § 51.18(j) and other § 51.18 programs, including Appendix S (the Offset Ruling), and SIP emissions limitations established for individual sources. 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 the permit.

EPA believes two factors support the presumption that source-specific requirements represent actual source emissions. First, since the requirements are tailored to the design and operation of the source which are agreed on by the source and the reviewing authority, EPA believes it is generally appropriate to presume the source will operate and emit at the allowed levels. Second, the presumption maintains the integrity of the PSD and NSR systems and the SIP process. When EPA or a state devotes the resources necessary to develop source-specific emissions limitations, EPA believes it is reasonable to presume those limitations closely reflect actual source operation. EPA, states, and sources should then be able to rely on those emissions limitations when modeling increment consumption. In addition, the reviewing authority must at least initially rely on the allowed levels contained in source-specific permits for new or modified units, since these units are not yet operational at a normal level of operation. EPA, a state, or source remains free to rebut the presumption by demonstrating that the source-specific requirement is not representative of actual emissions. If this occurs, however, EPA would encourage states to revise the permits or the SIP to reflect actual source emissions. Such revisions will reduce uncertainty and complexity in the increment tracking system, since it will allow reviewing authorities and sources to rely on permits and SIP emissions limitations to model increment consumption.

Review of increment usage due to SIP relaxations will also be based initially on emissions allowed under the SIP as revised (provided this allowed level is higher than the source emissions contributing to the baseline concentration). Calculations will generally be made on the difference between the source emissions included in the baseline concentration and the

emissions allowed under the revised SIP. Initial use of allowable emissions is necessary because the increment calculation generally occurs before the source has actually increased its emissions. Therefore, at the time the revision is reviewed, increment consumption must be based on the predicted source operation under the revision. In addition, since SIP revisions are commonly based on source requests, it is reasonable to assume such sources will actually emit at levels permitted by the relaxation.

Subsequent to the initial review process, increment calculations for SIP relaxations may depart from allowable emissions under the SIP, if the source has not actually increased its emissions. For example, three years after approval of a SIP relaxation, if it is found that the source has not increased its emissions to levels allowed in the SIP, estimates of increment usage should be revised to reflect actual source emissions. If this occurs, EPA would also encourage states to revise the emissions levels allowed in the SIP to represent the source's actual emissions.

Finally, the required increment consumption analysis can be amended by the applicant after the PSD review process has begun. For example, an applicant would normally revise its analysis to reflect increment made available by the withdrawal of PSD applications previously considered in the applicant's calculation of increment consumption. In no event, however, will the source be required to take account of emissions changes or changes due to pending PSD applications or SIP relaxations that could increase the amount of increment consumed by other sources.

B. Exclusions From Increment Consumption

1. Exclusions Requested by Governors.

Section 163(c) authorizes four exclusions from increment consumption upon the request of a governor. Exemptions are available for federally-ordered fuel switches under the Energy Supply and Environmental Coordination Act of 1974 or superseding legislation, fuel switches due to natural gas curtailment plans under the Federal Power Act, temporary emissions of particulate matter due to construction and related activities, and new sources constructing outside the United States. In the cases of the federally-ordered switches and natural gas curtailment plans, the exclusion is limited to a maximum of five years after the effective date of the order or plan.

The statute provides that these exclusions are available only if the state has an EPA-approved PSD plan. Section 163(c). In its June 1978 regulations, however, EPA permitted governors to use the exclusions during the nine-month period between promulgation of the regulations and the date plan revisions were required to be submitted. See § 52.21(f)(3) (1979). As discussed in the preamble to the June 1978 regulations, EPA concluded that prohibiting use of the exclusions after the nine-month period would be an adequate incentive to states to submit PSD plans. See 43 FR 26402 (Col. 1).

EPA has decided to extend this policy to today's regulations. In view of the many changes in the regulations resulting from the court's decision, states which have already submitted plans will have to submit revised provisions and states which have not yet submitted plans will have to develop plans based on the new regulations. As with the June 1978 requirements, EPA believes that disallowing the exclusions nine months from today will provide sufficient encouragement to states to submit plans, and will offer states more flexibility for growth in this interim period. Therefore, governors may request the exclusions until nine months from today's promulgation, even if no PSD plan has been submitted to or approved by EPA. Thereafter, the exclusions will be unavailable unless the state has submitted an approvable PSD plan to EPA.

2. Temporary Emissions

EPA's June 1978 regulations and the September 1979 proposal provided that temporary emissions from new sources or modifications would be exempt from impact analysis requirements §§ 51.24(k)(iii), 52.21(k)(iii) (1979); 51.24(k)(1), 52.21(k)(1) (proposed). Temporary emissions typically include, but are not limited to, emissions from a pilot plant, a portable facility, construction or exploration activities. Similarly, EPA proposed to exempt from increment analyses the impacts on the PSD increments from the temporary emissions associated with the development of an approved innovative control technology system, provided the applicable ambient standards were not jeopardized. The regulations, however, did not provide a comparable exemption for temporary emissions resulting from short-term SIP relaxations.

Only three commenters addressed the concern of temporary emissions and increment consumption. These commenters offered suggestions in light of the proposed position on innovative control systems. These commenters

supported the existing policy of exempting temporary emissions from increment air quality analyses when no Class I areas or areas with known increment violations would be impacted.

Temporary SIP relaxations are comparable to temporary emissions from new and modified major stationary sources since both affect air quality for a limited period of time. Therefore, the Administrator has decided that the existing policy of exempting temporary emissions should be extended to those associated with certain SIP relaxations. A SIP relaxation will be eligible for such relief if it meets the following five conditions. These conditions are intended to ensure that the emissions increase associated with the SIP relaxation will be limited in duration and that no residual harm will occur to the environment as a result of the relaxation. (1) The SIP revision allows an emissions increase for a temporary period only. As stated in the preamble to the June 1978 regulations, temporary emissions generally would last no more than two years at one location, although emissions for a longer period of time may be considered temporary if an appropriate demonstration is made. See 43 FR 26394 col. 2. (2) The revision is nonrenewable. This condition is intended to prevent sources from indefinitely postponing compliance with emissions limitations necessary to prevent PSD increment violations. (3) The temporary emissions will not cause or contribute to the violation of any applicable NAAQS. (4) At the expiration of the temporary SIP relaxation, the source must be required to comply with an emissions limitation that ensures the post-exemption emissions will be equal to or less than the emissions existing before the exemption was granted. (5) The temporary emissions from the revision do not impact any Class I area and any area where an increment is known to be violated. Restricting the exemption to sources impacting Class II or III areas conforms to Congress' intent to provide maximum protection of air quality values in Class I areas and meets the commenter's concerns.

In addition to SIP relaxations for individual sources, the exemption will be available for temporary emissions due to SIP relaxations that apply to several sources, if the state provides adequate assurances that no standards will be violated.

C. Increment Expansion Due to Emissions Reductions Prior to the Baseline Date

EPA's policy under the June 1978 regulations is unclear as to whether emissions reductions prior to the

baseline date increase the amount of available increments. The policy allows decreases after January 6, 1975, and prior to the baseline date, to be used by sources to offset subsequent increases and exempt the increases from the requirement for an ambient air quality assessment. In effect, EPA treats such decrease as expanding available increments, since the decreases permit later emissions increases at the same source to avoid the otherwise required air quality assessment. The policy did not state, however, whether isolated decreases not made in conjunction with intrasource increases were considered to expand available increments. In contrast, the policy is clear that emissions reductions after the baseline date increase available increments.

As a result of the revised definition of modification which permits offset credit for emissions reductions occurring within a moving five-year period, EPA has decided to clarify its existing policy. All emissions reductions prior to the baseline date at major stationary sources will now be considered to expand available increments. Since contemporaneous emissions reductions accomplished before the baseline date can be used by a source to offset a contemporaneous post-baseline emissions increase, and thereby avoid PSD review, it is also reasonable to allow these contemporaneous pre-baseline date reductions to expand the increment. Without this change, source owners that reduce emissions by retiring or controlling old equipment before the baseline date will be penalized by having increases after the baseline date count against increments even though the pre-baseline decrease might offset the later increase and eliminate the need for PSD review. In contrast, source owners that postpone the reductions and increases until after the baseline date is set would both secure contemporaneous offsets and avoid increment consumption.

EPA believes that this inequity should be eliminated to encourage early retirement of old equipment. Section 169(4) provides that emissions from major emitting facilities that commenced construction after January 6, 1975, shall be counted against available increments. The provision implies that both emissions increases and decreases should be considered for their impact on available increments. In view of the statutory language and policy considerations, EPA has determined that decreases made prior to a baseline date can expand available increments in the same manner as decreases made after a baseline date. However, to ensure that

the emissions reductions remain effective, reductions will add to available increments only if the lower emissions limitations are federally enforceable.

The changed policy is reflected in a new definition of "construction" which is any physical change or change in the method of operation of a stationary source resulting in a change in the actual emissions of the source (including fabrication, erection, installation, demolition, or modification). Any construction commencing at a major source since January 6, 1975, may result in an increase or decrease in actual source emissions. If an actual decrease involving construction at a major stationary source occurs before the baseline date, the reduction will expand the available increment if it is included in a federally enforceable permit or SIP provision. An actual increase associated with construction activities at a major stationary source will consume increment.

The Administrator would also like to clarify that changes in fugitive emissions levels (to the extent quantifiable) at major stationary sources, resulting from construction commenced since January 6, 1975, will consume or expand the available increment. This is true even if such changes occurred prior to the baseline date.

D. Gulf Coast Problem.

In the September 5 proposal, and in an October 4, 1979 correction notice, EPA solicited comments on how to calculate increment consumption by gas-fired boilers in the Gulf Coast area that had received state approval to burn oil in the event of a future natural gas shortage. See 44 FR 51942 (September 5, 1979), and 44 FR 57107 (October 4, 1979). The affected units include both boilers that could accommodate such a fuel-switch before January 6, 1975 and boilers that were altered to accommodate the fuel-switch after that date. All affected units were permitted to switch fuel before August 7, 1977, the earliest possible baseline date. Assuming the baseline date is set in the area where these sources are located, which EPA believes is the case for most of the sources, each group of sources may cause increment violations.

For sources that could burn alternative fuels prior to January 6, 1975, the problem is posed by the fact that if all sources made the switch to oil allowed under their permits, SO₂ increment violations would occur. Since neither a SIP revision nor a PSD Permit would be required for the sources to make the fuel switches, EPA and the state could be unaware of the violations

until another source applied for a PSD permit or until a periodic assessment was made. If actual increment violations were discovered during the PSD review process for the proposed source, the source would not be permitted to build or modify until the violations were corrected. If violations were found during a periodic assessment, the state would have to suspend further growth until its plan was revised to correct the violations. Consequently, the inadequacy of the existing permits to prevent increment violations could result in increment violations which would delay, and possibly prevent, additional growth in the area.

A similar problem is posed by sources that could not accommodate oil before January 6, 1975. Since these sources increased their potential to emit after January 6, 1975, under EPA's June 1978 policy, this change would have constituted "construction" at a major stationary source after January 6, 1975. Therefore, under section 169(4), any emissions increases caused by the "construction" would have consumed increment. As noted above, EPA's June 1978 policy required increment calculations to be based on emissions allowed under a permit or SIP and not on actual source emissions. If a PSD source applied to locate in an area and these Gulf Coast sources were modeled based on emissions increases due to fuel switches allowed by their permits, EPA believes several SO₂ increment violations would be predicted. Under existing policy, the proposed PSD source would then be required to correct the violations prior to receiving construction approval. Future growth in the area could, therefore, be delayed or prevented.

The problem posed by the second group of sources is reduced to some extent by the increment consumption policy promulgated today. Since increment usage will now be based on changes in actual source emissions, increment violations will not occur in the area unless the sources actually switch to oil from natural gas. Because natural gas is expected to remain less expensive and more available than oil, EPA believes few, if any, switches are likely. Therefore, while the increments may still be jeopardized due to inadequate permit conditions, PSD review can proceed as long as actual emissions increases at existing sources and actual emissions from sources with PSD or NSR permits are not predicted to cause increment violations.

If an actual increment violation has occurred, EPA's June 1978 policy imposes a PSD permit moratorium until

the violation is corrected. 43 FR 26401 (col. 1), June 19, 1978. This policy is continued in today's regulations. Therefore, if an increment violation is predicted to occur within the significant impact area of a proposed source ($1 \mu\text{g}/\text{m}^3$ on an annual average), a PSD permit cannot be issued to the source, unless the state or source obtains sufficient emissions reductions to restore the increment. The issue of how to deal with potential increment violations due to inadequate permit conditions is addressed in the next discussion.

Several comments were received in response to EPA's request for comments on the Gulf Coast problem. Although EPA believes its revised policy of using actual emissions to calculate increment consumption resolves the immediate Gulf Coast dilemma, and similar potential problems in other states, EPA is responding below to suggestions made by commenters.

EPA's notices questioned whether the Agency should or may include in the baseline concentration emissions increases due to fuel switches. Twelve of thirteen commenters on the issue supported including increases due to fuel switches in the baseline concentration and the majority of the commenters favored including in the baseline concentration other emissions increases approved prior to the baseline date but not occurring by that date. Commenters also proposed using allowable emissions in all cases to calculate baseline concentrations.

As discussed above and in Baseline Concentration, EPA has determined that both baseline concentrations and increment consumption should be based on actual air quality impacts. This decision is consistent with the suggestion of some commenters that EPA consider increment consumption to occur only when actual emissions increase and not when the permit or SIP allowing the increase is approved. As a result of EPA's revised policy, emissions increases due to fuel switches cannot be included in the baseline concentration unless the increase occurred prior to the baseline date and at a source which could accommodate this switch prior to January 6, 1975 without physical change or received approval under a PSD permit to make the switch.

One commenter was particularly concerned that unless allowable emissions were included in the baseline concentration, utilities with SIP relaxations approved shortly before the baseline date would be penalized if the utilities were unable to make the allowed increase by the baseline date. The commenter argued that some

utilities would be unable to make the technical changes necessary to accommodate the fuel switch prior to the baseline date. Such utilities would, therefore, be required to do an increment consumption analysis, in contrast to other sources that made the switch before the baseline date. The commenter suggested that accounting for the allowed emissions increase in the baseline concentration would resolve this inequity and would be consistent with EPA's June 1978 policy of including in the baseline concentration emissions allowed under SIP relaxations pending before EPA on the baseline date.

While appreciating the commenter's concerns, EPA has concluded that no exemption from increment consumption analyses is appropriate in these cases. First, as discussed in Baseline Concentration, EPA has changed its June 1978 policy to provide that increment is consumed by emissions increases due to SIP relaxations pending EPA approval on the baseline date. Therefore, the exemption cited by the commenter no longer applies. Second, the June 1978 exemption was provided for sources whose emissions increases were delayed by the administrative process and not by physical limitations at the source. Therefore, the June 1978 exemption would not have applied to these utilities. Third, under the regulations promulgated today, if significant construction is necessary to make the allowed emissions increase, the change is a modification and would be subject to PSD review, including increment consumption analysis, in any case.

Other commenters suggested that prospective application of the definitions of major emitting facility and modification promulgated today would resolve the Gulf Coast problem. Under this approach, emissions increases that occurred after January 6, 1975, and would otherwise be considered modifications that consume increment under today's regulations, would not be evaluated under the new definitions. These commenters argued that the Gulf Coast problem is due to increment consumption from emissions increases not subject to the PSD permitting process at the time the increases were approved. The commenters stated that EPA has flexibility in deciding the effective date of the definitions.

EPA believes that section 169(4) requires emissions from all major emitting facilities (as defined in the Act and not as defined in the old PSD regulations) commencing construction after January 6, 1975 to count against

increment. The statute provides no discretion to exempt these emissions from increment consumption. EPA also notes that under the PSD regulations effective from January 6, 1975 to August 7, 1977, emissions increases at such sources would have consumed increment to the extent the fuel switches occurred. (See 39 FR 42510).

E. Potential Increment Violations

1. Inadequate SIP and Permit Provisions. While the use of actual emissions to calculate increment consumption partially resolves the Gulf Coast problem, the potential for increment violations remains, due to inadequate SIP and permit provisions. As stated in the preceding discussion, many sources in the Gulf Coast area, and in other states as well, have permits or SIP requirements that allow actual emissions increases without subjecting the source to PSD review or the SIP revision process. For example, sources may be allowed to burn fuels with higher sulfur contents, as in the Gulf Coast area, or may have high allowable limits that would permit sources to relax existing pollution controls. If all sources in an area increased actual emissions to levels allowed under the SIP or permits, EPA believes increment violations would occur. Because no PSD review or SIP revision would be required, neither the state nor EPA would know of the violations until a PSD application was filed or a periodic assessment occurred. Growth would be halted until the violation was corrected.

At present, increment violations due to allowed but unreviewed emissions increases, and consequent construction delays, are only potential problems. EPA has therefore concluded that it is premature to promulgate remedial regulations to prevent such theoretical violations. EPA, however, encourages states to be alert to emissions increases that affect the increment. EPA urges states to closely monitor emissions increases from baseline sources and from new or modified sources not subject to PSD review which affect the available increment. States should consider requiring sources to report any emissions increases after the baseline date, including increases reflecting changed operating conditions that will continue for an extended period of time, perhaps six months. States would then learn of increases that consume increments and could take those increases into account in PSD permit reviews and periodic increment assessments. In addition, states are encouraged to revise SIPs and/or issue operating permits so that SIP requirements and permits reflect actual

source operating conditions. This will protect against large unreviewed emissions increases. While EPA is not promulgating a reporting requirement today, it will reconsider the need for a notification system if it finds that unreviewed emissions increases are causing or contributing to increment violations.

2. Double Counting of Emissions Decreases.

EPA is concerned about another potential problem: double counting of emissions decreases. The problem could arise if an existing source (Source A) reduces its actual emissions and a new source (Source B) seeking to locate in the area proposes to use the decrease when modeling increment consumption. Source B would do this by including the emissions decrease in its modeling of actual emissions from Source A. If the reviewing authority does not require Source B to ensure that the decrease at Source A is federally enforceable and does not record Source B's use of the decrease at the time Source B conducts its modeling, Source A may well use the same decrease to offset a future contemporaneous increase at Source A and thereby avoid PSD review for the increase. The use of one emissions decrease to offset two emissions increases could lead to air quality deterioration, and possible increment violations that would require correction before more PSD permits could be issued.

While EPA believes double counting of decreases should not be permitted, it is not promulgating regulations today to address the problem. EPA is uncertain how often, if ever, the problem will arise. Certainly it will be difficult for a new source to prove to the satisfaction of the reviewing authority the value of an emissions decrease accomplished at another source. Moreover, while EPA believes double counting of decreases should not occur, it is uncertain what solution is equitable for affected sources. In the absence of a formal increment banking system, or other provisions regulating increment allocation, the reviewing authority would have no basis for denying Source B use of any available increment. This could result in hardship to Source A if it deprives Source A of use of its decrease as an offset for future increases.

The issue of double counting is part of the broader question of increment management and allocation of air quality rights. EPA intends to develop banking regulations, which will include guidance to states on methods of increment allocation and regulating use of emissions decreases. To this end, EPA solicits suggestions on how to

prevent double counting of decreases and on methods of increment allocation and management.

XV. Best Available Control Technology

Section 165 of the Act provides in part that any "major emitting facility" constructed in a PSD area must apply best available control technology (BACT) "for each pollutant subject to regulation under this Act emitted from, or which results from, such facility." Section 169(3) of the Act defines BACT and specifically requires that it not be applied in a manner so as to result in emissions in excess of those that are allowed by standards established pursuant to sections 111 or 112 of the Act. 42 U.S.C. 7479(3). The Agency's existing regulations required BACT only for each pollutant for which a source or modification would be "major." 40 CFR 51.24(i)(1), 52.21(i)(1)(1978).

The *Alabama Power* decision held that the Act requires that BACT be applied to all pollutants subject to regulation under the Act, not only those for which the source is major, and that EPA is without authority to circumscribe the requirement in this manner. 13 ERC 1993, 2046. The court did conclude, however, that EPA has authority to set *de minimis* thresholds for BACT applicability, in order to alleviate economic and administrative burdens. *Id.*

In response to the court's decision, EPA proposed and is now promulgating regulations regarding application of BACT. 40 CFR 51.24(k)(1), 52.21(k)(1). With respect to new major stationary sources, BACT will be required for each regulated pollutant emitted in excess of specified *de minimis* amounts. Application of BACT is also required, in the case of major modifications, for each regulated pollutant emitted for which there is a significant net emission increase (greater than *de minimis* amounts) at the source. The BACT requirement applies to only the modified units and added units at the source whose construction results in a source-wide significant net increase in the emissions of the regulated pollutant. The new BACT requirements apply only to the owner or operator of a PSD source or modification whose application for a PSD permit was not complete before today's promulgation. (*See Transition*).

The *de minimis* emissions rates promulgated by the Administrator (*see De Minimis Exemption*) will apply to both BACT and LAER requirements. The Agency specifically solicited comments on the need to specify *de minimis* levels for BACT, since the case-by-case BACT determinations would presumably take *de minimis* levels and such related

issues as cost into account. Twenty-six commenters addressed this issue. Seventeen agreed in principle but generally considered the proposed levels too low and requested special consideration for pollutants emitted in less than major amounts. Eight of nine dissenters preferred case-by-case BACT determinations, with no *de minimis* values.

The Administrator is implementing the proposed *de minimis* approach for determining BACT applicability, although several values have been increased. (*See De Minimis Exemptions*.) This action should alleviate the concerns of those commenting about the need for BACT review of those pollutants emitted in small amounts. The Agency also solicited comments on the potential problem of a source obtaining lenient BACT determinations and later applying better controls to offset additional expansion plans. Twelve of thirteen commenters addressing this issue concluded that no such problem would arise. They claimed that it would be implausible to suppose that state programs and EPA regional offices would evade such responsibility, especially since loose BACT determinations would result in accelerated consumption of increment. The Administrator agrees that there appears to be adequate protection against loose BACT determinations.

Each of the three comments that addressed a need to phase in the BACT requirement favored a six month to one year grace period because of the complexity of the program. However, the Administrator believes that the case-by-case flexibility of BACT determinations is sufficient to phase in these regulations. Moreover, sources have effectively had a one year notice, in that the original *Alabama Power* decision, published June 18, 1979, informed them of the new BACT requirements. (*See Transition*).

An additional issue, regarding the pollutant applicability of the BACT requirement, arose during the comment period. The proposal required BACT for the new or modified emissions units which were associated with the modification and not for those unchanged emissions units at the same source. Thus, if an existing boiler at a source were modified or a new boiler added in such a way as to significantly increase particulate emissions, only that boiler would be subject to BACT, not the other emissions units at the source. However, the proposal could be interpreted as requiring BACT for certain pollutants where the

Administrator did not intend to require BACT. For example, the proposal could be interpreted as requiring BACT review for any pollutant emitted from a source that was modified, regardless of whether the emissions of the pollutant increased. However, that was not the Agency's intent.

If a new unit were added or if a modification were made to a unit at a source, but there are contemporaneous decreases in emissions elsewhere at the source, BACT is required only for the pollutants for which there is a net significant plant-wide increase. For example, consider the addition of a boiler whose emissions of PM, SO₂, and NO_x each exceed *de minimis* levels. If, at the same time, an emission unit of SO₂ elsewhere at the source were shut down, such that plant-wide emissions of SO₂ either do not increase or increase by less than a *de minimis* amount, BACT is required for the new boiler only for PM and NO_x. Of course, BACT will not be required if there is no significant plant-wide increase in emissions of any pollutant. Similarly, if an existing emissions unit of a source were modified such that there is an emissions increase for one or more pollutants, but not all, BACT is required only for the pollutants for which there is both a net increase at the unit and a net significant plant-wide increase.

The above final policy governing the applicability of BACT to modifications is also consistent with existing policy under section 111, which the court said should govern modification concerns. The applicable regulation, 40 CFR 60.14(a), states that "any physical or operational change to an existing facility which results in an increase in the emissions rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emissions rate to the atmosphere." (Emphasis added.)

The regulation cited above makes two important statements about the applicability requirements. First, the BACT requirements apply only with regard to those pollutants for which there has been a net significant increase. This was emphasized by the Alabama Power decision: "Congress wished to apply the permit process, then only where industrial changes might increase pollution in an area, not where an existing plant changed its operations in ways that produced no pollution increase * * *. The interpretation of

'modification' as requiring a net increase is thus consistent with the purpose of the Act * * *. The EPA has properly exempted from best available control technology (BACT) and ambient air quality review those 'modifications' of a source that do not produce a net increase in any pollutant." 13 ERC at 2043.

Second, BACT is required for net significant increases of any pollutant regulated under the Act, regardless of the category of source involved or the emissions standards generally applicable to it. Section 165(a)(4) of the Act requires application of BACT "for each pollutant subject to regulation under this Act" emitted from a subject facility. 42 U.S.C. 7475(a)(4). This includes not only criteria pollutants but also all pollutants regulated under NSPS or NESHAP. In this manner, BACT can complement the NSPS process by extending coverage to additional source types and units and perhaps identifying candidates for future NSPS and NESHAP regulations.

XVI. Monitoring

In *Alabama Power*, the court held that section 165(e)(1) of the Act requires an ambient air quality analysis for each pollutant subject to regulation under the Act that a proposed source or modification would emit, prior to applying for a PSD permit. Since existing PSD regulations require monitoring only for criteria pollutants emitted in major amounts, EPA responded to the June 18, 1979 *per curiam* opinion by proposing to require, for criteria and noncriteria pollutants, an air quality analysis that would generally include monitoring data. In order to gather and analyze the appropriate data necessary to apply for a PSD permit, a proposed source would have to establish an appropriate monitoring network or would have to gather and analyze representative air monitoring data resulting from ongoing monitoring activities.

As proposed, preconstruction monitoring data was required as part of the air quality analysis when: (1) the estimated ambient impact of any new pollutant emissions from the stationary source or modification would be larger than the pollutant specific *de minimis* air quality concentration (Table B); or (2) the new emissions or net emissions increases for the pollutant would be major (100/250 tons per year). In addition to this rule, EPA proposed that a case-by-case analysis of the proposed stationary source or modification which would impact on a Class I area be conducted even though the anticipated impact would fall below the *de minimis* level. Later, in October 1979, EPA

provided further guidance for applying these requirements in the draft revision of the *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, OAQPS 1.2-096, U.S. EPA, Office of Air Quality Planning and Standards and Office of Research and Development, RTP, NC 27711.

The proposal stated that certain noncriteria pollutants (sulfuric acid mist, carbon disulfide, carbonyl sulfide, methyl mercaptan, dimethyl disulfide, and dimethyl sulfide) were lacking measurement methods approved by EPA. Until such time as approved techniques would become available, the Agency proposed to use mathematical modeling to estimate the air quality resulting from the emissions of these pollutants. Considering these limitations and the general lack of experience in monitoring on a routine basis, the Administrator proposed to implement noncriteria pollutant monitoring requirements on a case-by-case basis.

In addition to the pre-application monitoring requirements already described, EPA's proposal included discretionary authority for requiring post-construction monitoring to determine the effects of the new emissions on existing air quality. For cases in which larger pollutant emission impacts are anticipated, post-construction monitoring can be a particularly useful aid in adjusting modeling results used to predict concentrations resulting from the source's operation. The approach was thought to be responsive to the *Alabama Power* decision which required EPA to use monitors to help refine modeling techniques. Accordingly, EPA proposed to generally require post-construction monitoring from large sources of particulate matter and sulfur dioxide. Other sources whose emissions are estimated to result in air quality levels approaching an allowable increment or a NAAQS could also be required to submit post-construction monitoring data. The rule promulgated today is consistent with the proposal.

The Administrator believed that the required monitoring data would be most productive in checking the accuracy of models and, in some cases, could be used to calculate increment consumption. If an applicant or other party believes that a model required by EPA had either overpredicted or underpredicted the air quality impact of a source, EPA stated that monitoring data would be evaluated to the extent possible to determine whether adjustments would be necessary. EPA anticipated that the future development of more sophisticated monitoring

techniques may permit increased use of monitoring data to track increment consumption and establish ambient baselines, as well as improve the level of confidence in modeling.

Lastly, EPA considered the approach needed to smoothly usher in the new monitoring requirements. The September 5 Federal Register indicated that EPA intended to require any additional monitoring requirements, as now necessary under *Alabama Power*, to be phased in. Later, in October 1979, the draft ambient monitoring guidelines specified that a three-month allowance would be subtracted from the time interval over which the owner must monitor to allow for procuring and setting up the necessary monitoring equipment. (See Transition).

There was a large response to EPA's proposal and draft monitoring guidelines—nearly 100 public comments and over 800 requests for the guidance document were received. The comments indicated general agreement with EPA's interpretation of the court's preliminary opinion. But some concern was expressed over certain specific portions of the proposal: (1) the limited technology available to monitor the noncriteria pollutants in the ambient air; (2) the large cost associated with gathering all the required air quality data for all regulated pollutants; (3) the identification process for "representative" data; and (4) the need for post-construction monitoring.

Subsequent to the publication of the September 5, 1979 proposal and the receipt of the public comment, the court issued its final decision on December 14, 1979. One important change the court made upon reconsideration of the June 18 opinion was "that section 165(e)(1) requires that an analysis be conducted, and that it be conducted for each pollutant regulated under the Act. But * * * that section 165(e)(1), standing alone does not require monitoring as the method of analysis to be employed in the fulfillment of its requirements." 13 ERC 1993, 2019. This ruling gave EPA more flexibility in defining the minimum requirements for a proper analysis of the noncriteria pollutants. "EPA might * * * choose either monitoring or modeling as the method of analysis * * *". *Id.* In other monitoring issues the court essentially affirmed its preliminary opinions.

Today, the Administrator is promulgating the proposed monitoring requirements with the noted exceptions. (See 40 CFR 51.24(m), 52.21(m)). EPA will generally require one year's worth of monitoring data as part of the air quality analysis for only the criteria pollutants. For the noncriteria and

hazardous pollutants, modeling, not monitoring, will be the mechanism used to perform most detailed air quality analyses. However, there may be certain circumstances where monitoring may be the only option available to perform an adequate analysis for the noncriteria pollutants (e.g., when little or no data on emission inventories for the area of concern exist). In that case, EPA will require ambient monitoring for the noncriteria pollutants if there is an acceptable method for the monitoring of that pollutant. Presently, the Administrator has acceptable methods for measuring ambient concentrations of: (1) all the criteria pollutants; (2) mercury; (3) beryllium; (4) vinyl chloride; (5) fluorides; and (6) hydrogen sulfide. A list of acceptable methods and copies of the method description are available by writing to: U.S. EPA, Environmental Monitoring Systems Laboratory, Quality Assurance Division (MD-77), Research Triangle Park, N.C. 27711. Also, techniques to measure ambient total reduced sulfur and reduced sulfur compounds have been chosen and will be added to the list within the next several months. At this time there are no acceptable methods for measuring ambient levels of asbestos and sulfuric acid mist.

As EPA gains more experience from the PSD program with respect to noncriteria pollutant analysis and as the technology develops, the Administrator will consider an increased role for ambient monitoring within the required air quality analysis.

In addition to the exemptions given in the *de minimis* section of this Federal Register publication, EPA may not always require a source owner to establish a monitoring network when the data would not validate or improve the estimates made by the mathematical models. When the existing air pollution levels are conservatively estimated to be quite small and a monitoring network could not reliably measure the predicted background concentrations, EPA will generally not require the source owner to generate preconstruction monitoring data. Also, if the source owner has submitted preconstruction data for the source site, and the post-construction monitoring network could not measure a predicted degradation in the air quality, then EPA will generally not require the source owner to collect further monitoring data. More guidance for meeting all the monitoring requirements is given in the *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, EPA-450/4-80-012, July 1980, available from the Monitoring and Data Analysis Division, OAQPS,

(MD-14), U.S. EPA, Research Triangle Park, N.C. 27711.

In the September 5, 1979 proposed regulations and the October 1979 draft of *Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)*, EPA solicited comments on the use of representative air quality data to satisfy PSD monitoring requirements. Thirty-nine comments were received on the various aspects of the use of representative air quality data. The major responses were as follows: twenty-four commenters supported the use of existing representative air quality data, especially for remote areas. Five commenters wanted EPA to allow the use of bubbler data in lieu of continuous monitoring data, seven respondents believed that data older than two years should be allowed, and three objected to the quality assurance requirements for the representative data.

EPA has considered all of the comments and has taken the following actions:

(1) The use of existing representative air quality data will be permitted in lieu of monitoring, provided that the data meet the criteria in the above reference guideline.

(2) No bubbler data will be permitted because the data should be of the same quality as that obtained if the applicant monitored according to the requirements in the above referenced guideline. This guideline specifies monitoring must be done with continuous instruments to eliminate measurement biases associated with bubbler data. Continuous measurements are also more suitable for routine monitoring purposes in checking for compliance with short-term standards.

(3) EPA will allow the use of data, for preconstruction purposes only, collected in the three-year period preceding the permit application provided reference/equivalent quality assurance procedures were followed during the measurement period. The draft guideline has previously specified a two-year requirement.

(4) EPA reaffirms the intent that all monitoring data collected must have been collected in accordance with acceptable quality assurance procedures. The specifics of the minimum quality assurance program needed for collecting air quality data are contained in the referenced guideline.

Finally, the court held that EPA had failed to provide concrete guidance to the states for designating when less than one year of monitoring data would meet the required air quality analysis, as specifically allowed under section 165(e)(2). Such guidance is given under

PSD SIP Revisions located elsewhere in today's Federal Register publication.

XVII. Notification

The proposal contained a requirement that certain construction projects exempt from PSD permit rules file a report at least 90 days in advance of the time that the exempted construction would commence. Notification requirements similar to those in the PSD proposal were also included in the proposed nonattainment rules, under 40 CFR 51.18(j) and 52.24, and Appendix S of Part 51 (the Emission Offset Interpretative Ruling). These notice requirements would apply to source construction which would not be subject to NSR solely because (1) the increase in emissions was offset by a contemporaneous decrease so as not to cause a significant net increase at the source (*see* Modification), or (2) the application of air pollution controls not generally required by the applicable SIP or 40 CFR 60 or 61, would lower the "potential to emit" of the source below the applicable threshold for permitting. The proposal would have required the submittal of comprehensive data for both new and existing emissions units at the stationary source and all other information needed by the reviewing authority to determine if the exemption reported by the source was proper. No formal applicability determination, however, was to be made and no major delays in the construction program of any such source were intended.

The Administrator believed such reporting was necessary because of the additional complexity of such determinations and the decreased number of sources subject to PSD due to changes in applicability rules. A need was apparent to record unreviewed emission increases and reductions occurring years apart at the same plant, in order to assess their impacts on air quality as well as to simply register in advance claims for reduction credits. For these reasons the Administrator proposed to use his authority under section 114 to monitor these determinations of offsetting emissions reductions and increased control efficiency. Section 114 authorizes the Administrator to require a source owner to provide such information as he may reasonably require in order to carry out Part C of the Act or to determine if a source owner is in violation of a SIP requirement.

Fifty-nine comments were received on the notification requirements. Only two comments completely supported the Agency proposal. Thirty-eight of the commenters felt that the requirements were unnecessary and not authorized by

the Clean Air Act. Many stated that the requirements were burdensome and equivalent to a preconstruction permit process. Twenty-four commenters specifically stated that section 114 does not allow such a comprehensive data gathering requirement, although reasonable data gathering is allowed.

Those who thought the requirements unnecessary cited the adequacy of existing state permitting programs to deal with these problems and the possibility of post-construction recordkeeping to accomplish the same objectives. EPA was advised to take enforcement action against the few source owners who would incorrectly exempt a source from review and then construct the source without obtaining a permit, rather than risk pervasive construction delays of properly exempted sources. Many commenters felt that the administrative burden to both the reviewing agency and the source outweighed its benefits. Seventeen commenters specifically stated that the extra cost to source owners would remove the real incentives for early cleanup and would act to perpetuate the operation of older units with high air pollutant emissions.

The Administrator maintains that reporting similar to the preconstruction notice is needed and can be required under section 114. However, the comments, particularly those concerning the potential of existing state programs to accomplish this function, have caused EPA to reconsider the need at this time for a preconstruction notification requirement. State comments and meetings with several state representatives in Atlanta (*see* Docket account of III-D-4) indicate that all states currently learn of all proposed emission units and changes before such would commence construction. Most states acquire such knowledge through their existing general NSR procedures, approved under 40 CFR 51.18, even if a net decrease would occur at the source. Other states learn of proposed emission increases through notification letters filed by the source pursuant to a formal applicability determination.

Many states do not routinely require sources to record emission decreases, especially when such would occur well in advance of related emission increases. While a preconstruction notice would be desirable to document these decreases, the requirements for contemporaneous emission reduction credit (*see* Modification) are sufficient to fulfill this need. That is, emission reductions, in order to be creditable in offsetting any contemporaneous increase at the same stationary source,

must be enforceable before the associated unit(s) with the emissions increase(s) commence construction. Such reductions, to be enforceable, must generally be made part of an enforceable operating or construction permit or be processed as a formal SIP revision. Although the Administrator is still concerned that sufficient information may not be available when a source owner wishes to document previous emissions reductions, he is opting for a "wait-and-see" approach in order to alleviate the concerns of the majority of the commenters who felt the notification requirements were unjustified and burdensome.

Also, since states will soon be administering the PSD program, it is best to allow them the flexibility to integrate notification requirements into their existing permit programs. The notification requirements in each state will be different, depending upon whether the state has an emission banking system and how it operates, the type of emission inventory system, and the information available from operating and construction permits. PSD increment tracking systems will also be set up by states, which can tailor informational requirements to their own tracking systems.

While today's regulations do not contain a formal preconstruction notice requirement, owners and operators are hereby put on notice for the following: (1) Sufficient records regarding the details of contemporaneous emission increases and decreases or applicable source determinations of "potential to emit" should be maintained so as to verify that no permit was required should the Administrator so require under section 114; (2) If experience in implementing the "no net increase" provisions of PSD applicability indicates that a more comprehensive notification system is required, the Administrator will promulgate an amendment to PSD and nonattainment regulations similar to the deleted provisions of the September 5 proposal; and (3) Any source which improperly avoids review and commences construction will be considered in violation of the applicable SIP and will be retroactively reviewed under the applicable NSR regulation.

XVIII. PSD SIP Revisions

Comments have been solicited on three aspects of the development of acceptable PSD plans by states. The issues are: (1) the authority of states to submit different but equally effective PSD programs, (2) state flexibility in defining baseline areas, and (3) state flexibility in allowing monitoring exemptions.

A. Equivalent State Programs. Under existing regulations, the Administrator cannot approve proposed state PSD regulations unless the state requirements are identical to or individually more stringent than the corresponding 40 CFR 51.24 regulations. While the Act does contain specific requirements for several major aspects of PSD programs, it does not prohibit states from using, in other areas, approaches equivalent to those of the federal regulations in order to meet the statutory objectives. Accordingly, the Administrator proposed on September 5, 1979 that states be given some flexibility in preparing PSD plans. The Administrator requested comment on such an approach and suggested portions of the PSD requirements for which equivalent approaches might be acceptable, and others for which alternative regulations would not be approvable. Where SIPs were allowed to differ, a test of overall equivalence was to be used based on the ability of the state system to capture as many emissions as would the 40 CFR 51.24 regulations.

All forty-nine comments on this topic strongly endorsed the general approach of giving states flexibility in developing PSD programs, although several commenters expressed the desire for a more extended area for SIP flexibility. Among those areas are: (1) the entire PSD program, (2) fugitive dust applicability, (3) modeling techniques, and (4) treatment of minor modifications and exempted sources. Another commenter asserted that EPA could hold the states responsible only for plans that addressed minimal requirements, such as maximum increment consumption.

After consideration of the comments, the Administrator has decided to treat PSD SIP revisions generally in the manner proposed. This means that states will be permitted to meet the following requirements of 40 CFR 51.24 with different but equivalent regulations, or implement the federal regulations with considerable discretion:

- a. Baseline area.
- b. Type and amount of data needed for monitoring purposes.
- c. Temporary exclusions from increment consumption.
- d. Defining "contemporaneous" as a reasonable period that may be greater or shorter than 5 years.
- e. Banking of emissions reductions for future offsets.
- f. Source information and analysis required of the applicant.
- g. Public participation after providing the opportunity for public hearing.
- h. Alternatives to first-come-first-served permit processing.

State PSD programs must follow the federal regulations in other matters. This includes, but is not limited to the following:

- a. Maximum allowable increments.
- b. Modeling techniques.
- c. Class I area protection.
- d. Notice to the Administrator or the applicable Federal Land Manager for prospective permit actions.
- e. New (grass roots) major stationary source applicability.
- f. NSPS, NESHAP minimum requirements for BACT determinations.
- g. Definitions generally as contained in 40 CFR 51.24(b). (State definitions need not be verbatim translations, but must have the same effect).

The Agency is not expanding the area of state program flexibility to those four areas, noted earlier, that were suggested by the commenters. First, the Administrator does not believe that complete program flexibility is allowable under the Act, nor does he find a basis for the comment that EPA is without authority to require that SIPs include more than skeletal program components. The second suggestion, regarding fugitive dust, is not feasible at this time for reasons detailed elsewhere (*see* Fugitive Dust Exemption). With regard to the third comment, the Act specifically directs the Administrator to specify air quality models. Section 165(e)(3), 42 U.S.C. 7475(e)(3). In addition, national consistency is important for such air quality impact analysis in order to standardize how increment would be consumed or enhanced across the country.

With regard to the degree of state flexibility in exempting additional types of new and modified sources, EPA believes that adequate exemptions have been provided in today's regulations and no further ones are authorized under the Act. The Administrator wishes to note that today's rules allow a state the opportunity to change the time period defining contemporaneous emissions increases. This change affects the definition of major modification and thereby affects the number of PSD reviews.

The opportunity for states to change the time period within which emissions changes would be considered contemporaneous is not constrained by a test of equivalency. Rather, it should be considered by states in developing PSD SIPs in conjunction with their deliberations on alternatives to first-come-first-served permitting and emission offset banking. The Administrator believes these issues are related to the state's inherent flexibility under the Act to manage increment consumption.

B. Baseline Area

This aspect of the equivalent state program issue deals with the definition of the area for which the baseline data is triggered by a PSD permit application and, specifically, with whether this definition must be the same under a PSD SIP as it is in 40 CFR 52.21. The proposal defined baseline area for both 40 CFR 51 and 52 as every part of an affected AQCR designated attainment or unclassified on the baseline date. Comments were solicited concerning the desirability of allowing states to define "area" as any *portion* of an AQCR that had been designated as attainment or unclassified, or, conversely, to allow states to define "area" as the entire state.

All commenters specifically addressing the issue of allowing states to have flexibility in defining baseline area were in favor of that approach. Many were more specific, suggesting that 107 designated areas or source impact areas be used.

The Administrator has decided to allow flexibility to states, not by accepting alternative definitions in SIPs, but by defining baseline area in such manner as to allow flexibility. This change in definition arises from a revised legal interpretation of what meaning "area" may be given under the Act. (*see* Baseline Concentration). Baseline area is now defined as all areas (and every part therein) within the state that are designated attainment or unclassified under section 107(d)(1) (D) or (E) of the Act in which the source establishing the baseline date would locate or would have an air quality impact equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) for the pollutant (SO_2 and/or TSP) for which the baseline date is established. Flexibility is inherent in state authority to redesignate areas under section 107. Thus, large tracts of land belonging to one clean or unclassified PSD area can later be divided into several smaller PSD baseline areas with potentially different baseline dates. Other than the limitations associated with processing 107 area redesignations as SIP revisions, EPA requires that area redesignations under section 107 cannot intersect or be smaller than the area of impact of any major stationary source or major modification which establishes a baseline date or is subject to PSD and would be constructed in the same state as the state proposing the redesignation. A baseline date will, therefore, be triggered for the entire designated section 107 area unless nonimpacted portions are redesignated to smaller areas.

This approach allows the flexibility requested by the commenters, but precludes "postage-stamp" designations designed to trigger baseline only in the immediate vicinity of the source. It also avoids the difficult area boundary problems which would arise from defining area as the PSD source impact area. States are cautioned to carefully weigh any inclination to postpone baseline dates through area redesignations against increased difficulties associated with tracking increment consumption.

C. State Monitoring Exemption
Alabama Power remanded to EPA that portion of the monitoring requirements which allowed states to accept less than one year of preconstruction monitoring data for cases in which a shorter period would be sufficient to perform a complete and adequate analysis. The court ruled that EPA had not provided adequate guidance to the states for making this determination. 13 ERC 1993, 2020.

The proposal contained concrete guidance for use by states in determining if less than one year of monitoring data is sufficient. That guidance provided that as little as four months of monitoring data for the criteria pollutants was acceptable if the applicant demonstrated that the maximum pollutant concentrations would occur within that time.

Fourteen comments were received on various aspects of this proposal. Thirteen commenters supported the flexibility of requiring less than one year of monitoring data under specified circumstances. Two commenters addressed ozone monitoring requirements where there were more than four months with average daily maximum temperatures greater than 20°C (68°F).

The Administrator has decided to promulgate the proposed regulations except for the following:

(1) Less than one year of monitoring data will be permitted for all regulated pollutants, rather than for just the criteria pollutants. However, it must be demonstrated through historical data or dispersion models that the data for such shorter periods of time, but not less than four months, will be obtained during a time period when maximum air quality levels can be expected.

(2) Guidance for monitoring ozone during the warmest four months of the year has been deleted. Monitoring for ozone, as well as other pollutants, will still be required during the time period when maximum air quality levels can be expected. Ozone concentrations will generally be higher during the warmest four months of the year. However, ozone

monitoring must also be conducted when the yearly maximum ozone concentrations are likely to occur during months other than the warmest four months of the year. This will ensure that ozone monitoring will cover the expected maximum concentrations.

XIX. Additional Issues

A. Innovative Technology

In the September 5, 1979, Federal Register the Agency proposed a new paragraph (u) which sets out specific requirements for reviewing sources that wish to utilize innovative control technologies. The new paragraph sets out criteria to be used by the Administrator in determining whether a proposed control technology is innovative, in addition to establishing specific provisions for implementing the BACT and modeling requirements.

All of the commenters recognized the need to encourage the development of technology and generally approved of EPA's approach. One large environmental group commented that while it approved of the added flexibility in specifying BACT for innovative technologies, it was concerned that Class I areas might be compromised if increment violations were allowed to occur during the period of testing. We share this concern of the environmental group and are today promulgating a regulation which ensures full protection of Class I areas.

Today's amendments provide that, for a source whose technology has been designated as "innovative" by the Administrator, the BACT requirement should insure the installation of the innovative system and the adoption of a compliance schedule for meeting a final emission limitation. This final emission limitation must at least represent the BACT level that would have been initially defined under § 52.21(j), assuming the use of proven state-of-the-art technology. The compliance schedule may extend no more than 7 years after permit issuance or 4 years after startup of the source. The regulations also provide that the Administrator may withdraw his approval if a source: (1) fails to meet the final emissions limitation by the specified date, (2) fails to protect the public health, welfare, or safety, or (3) shows an indication that the innovative control system will not be successful. The source will then be given a period of no more than 3 years to come into compliance with the BACT level determined with the use of the demonstrated system of control.

The September 5 Federal Register proposed that with the consent of the governor an "innovative technology"

source could conduct the increment impact analysis using the final emission limitation specified in the permit, provided that no interference with applicable NAAQS would result during the interim period. EPA reasoned that any increased level of emissions which might occur during the interim period would be temporary and would not significantly impact the increments. However, one of the commenters pointed out that Class I areas require protection even from temporary violations. We agree with the concerns of this commenter and cite § 52.21(i)(7) in their support. That section exempts temporary sources from the modeling requirements except when they impact Class I areas or areas where the increment is known to be violated. Today's regulations allow an "innovative" source to use its final emission limitation for increment modeling purposes, but only if there is no impact on any Class I area or any area with a known increment violation. As in the proposal, the final rules requiring modeling for the purpose of evaluating the impact on NAAQS must take into account interim emission projections. Under no condition may a source be approved if it would cause a violation of the NAAQS, even a temporary violation.

B. Modified Permits

In the September 5, 1979 Federal Register, EPA proposed to add a new paragraph (t) entitled "Modified Permits." The new paragraph provided a simplified approval procedure for sources that make minor changes in design capacity or in the nature of process equipment between the time they obtain a PSD permit and the time they complete construction. It also required prior approval, through permit modifications, of increases in hours of operation.

The comments on this section were mixed. Some commenters felt that the new paragraph was redundant and superfluous, while others generally approved of it but asked for clarification. Upon further consideration, the Agency believes that there is a need to distinguish between situations in which permits would be changed for primarily administrative reasons, such as a change to reflect a revised construction schedule, and situations in which the permit change involves a significant increase in emissions. In the latter case a new permit must be issued; in the former, however, an abbreviated procedure involving modification of the permit might be preferable. There are numerous issues to be considered in implementing

such an approach. These include the means to differentiate between significant and nonsignificant changes, and the specific procedural requirements for modifying a permit. Those issues were not adequately addressed in the proposal and for that reason the Agency has decided that it does not have a sufficient basis for completing rulemaking at this time. However, further rulemaking is being considered for future proposal and comment will be requested on the issues at that time.

C. Nonprofit Institutions

EPA proposed on September 5 to exempt modifications of nonprofit institutions from PSD review requirements as is already done for new construction of this type. This would mean that, upon written request by the governor of the state, a PSD permit would not be required of a major stationary source or major modification that qualifies as a nonprofit health or educational institution. Today the Administrator promulgates this exemption as proposed since no significant public comment was received. It should be noted that although such major new or modified sources would not require a PSD permit, the emissions from these sources would consume the applicable PSD increment(s) after January 6, 1975.

D. Portable Sources

With regard to portable sources, EPA proposed to change the 30 day notice to a 10 day notice for previously permitted PSD sources wishing to relocate. Based on experience in implementing the PSD regulations, and having received no adverse public comments on this proposal, the Administrator is adopting this proposal with one exception. Sources with PSD permits must provide a notice to the reviewing authority not less than ten days before relocation activities would commence, unless the Administrator has previously approved a different minimum time for relocation notice.

The Administrator would also like to clarify that a source is portable only if it would have temporary location and temporary emissions. Existing EPA policy defines temporary emissions as emissions from a stationary source that would be less than two years in duration, unless the Administrator determines that a longer time period would be appropriate. Thus, for a portable source to qualify for the above exemption, it must typically be located at the new location less than two years.

E. Secondary Emissions

Desiring to make the PSD review requirements similar to nonattainment requirements wherever possible, the Administrator proposed to add the definition of secondary emissions found in the offset ruling (44 FR 3274) to the PSD regulations. See 43 FR 26403. Secondary emissions would mean emissions from new or existing sources which occur as a result of the construction and/or operation of a major source or major modification, but do not necessarily come from the source itself. Secondary emissions would include:

(a) emissions from ships or trains coming to or from a source or modification; or

(b) emissions from offsite support sources which would otherwise increase emissions as a result of construction or operation of a major source. Although reasonably quantifiable secondary emissions would be reviewed in the air quality analysis, such emissions would not be included in determining "potential" emissions.

Public reaction to the September 5, 1979 proposal and the final *Alabama Power* opinion regarding EPA's treatment of secondary emissions was small. Generally the commenters favored the exclusion of secondary emissions from the PSD permit process altogether. Their objections centered on the availability and reliability of the emission factor data to "reasonably" quantify secondary emissions. Also the possibility of redundant reviews was highlighted by several commenters. The Administrator, in weighing these comments, has decided to promulgate the regulations addressing secondary emissions as proposed on September 5, 1979. See 40 CFR 51.24(b)(3), 52.21(b)(3), 51.24(b)(20), and 52.21(b)(20).

The Clean Air Act clearly calls for a detailed and extensive air quality impact assessment. For instance, each permit application must include impacts from the growth projected in the area that would occur as a result of the proposed source's construction. See section 165(a)(6). Also, once the baseline date is set, such emissions would consume the maximum allowable increments, so each permit decision must give consideration to all the possible ramifications of allowing a source or modification to construct. See section 165(a)(3) ("cause or contribute"). Secondary emissions must be considered when those emissions are specific, well defined, reasonably quantifiable, and impact the same general area.

F. Baseline for Calculating Offsets Under Section 173(1)(A)

The Offset Ruling sets out rules and guidance for determining the baseline for calculating emissions offset credit, as well as guidance on the location of offsetting emissions. See 40 CFR Part 51, Appendix S, Sections IV.C. and D. To aid the states in developing their NSR regulations for nonattainment areas, or in revising those regulations, EPA has decided to promulgate those rules and guidance in § 51.18(j)(3).¹⁴ The language promulgated today is identical to that used in the Offset Ruling, except as explained below.

On January 16, 1979, EPA modified the Offset Ruling to conform to section 129(a)(1) of the Act by setting the baseline for determining emissions offset credit at the emissions level specified for the source in the applicable SIP. EPA is retaining this baseline level for the Offset Ruling. However, the approach for NSR programs adopted pursuant to section 173 is slightly different. Section 173(1)(A) sets the baseline as the "allowable" emissions of the source, but it further specifies that the offsets obtained by the source must be sufficient to represent reasonable further progress (RFP). Some Part D SIP revisions approved by EPA have demonstrated attainment and RFP based on the allowable emissions of sources in a nonattainment area. However, many Part D SIP revisions have based their demonstrations on the *actual* emissions of the sources in a nonattainment area, rather than the sources' allowable emissions. This means that to be consistent with RFP, sources must reduce their actual, rather than their allowable, emissions. Otherwise, sources could claim credit for offsets in situations where the offset would actually interfere with RFP.¹⁵

To accommodate the different approaches to RFP, EPA has provided that the baseline for determining emissions offset credit shall be the

¹⁴On January 16, 1979, EPA solicited comments on certain aspects of the Offset Ruling, none of which directly concerned the matters published today. EPA will respond to those comments after today's promulgation.

¹⁵For example, suppose a source's allowable emissions are 1,000 tpy, and its actual emissions are 500 tpy. Now suppose it wants to add a new emissions unit, thereby adding 100 tpy, and the SIP requires a 100 tpy reduction for RFP. The source might achieve both objectives by decreasing its total allowable emissions to 900 tpy, i.e., it adds the 100 tpy for the new facility, but makes other reductions in allowable emissions of 200 tpy. This is adequate if the RFP demonstration relies upon allowable emissions, since the source started at 1,000 tpy and now is at 900 tpy. But if RFP is based on actual emissions, then there is a loss of 100 tpy, because RFP assumed 500 tpy and now the source emits 600 tpy.

allowable emissions of the source, where the SIP relies upon allowable emissions to demonstrate RFP; but the baseline must be actual emissions where the demonstration is based on reductions in actual emissions. EPA believes for the reasons discussed above that this approach is necessary to assure RFP towards attainment of ambient air quality standards.

G. Economic Impact Assessment

In the September 5 proposal, it was stated that the Agency would prepare an economic impact assessment of the proposed changes after the final court opinion was issued, which took place on December 14, 1979. The Agency further indicated that it would make the report available for public comment prior to promulgation, and that any resulting comments would be taken into account in the promulgated regulations.

Although the results of the impact assessment released today have been considered in developing the regulations, primarily for understanding *de minimis* effects, it has not been possible to complete the assessment in time to get comments prior to promulgation. In fact, because of the inherent complexity of the program, it has not been possible to do a true economic impact assessment (*i.e.*, one which considers impacts on market positions, prices, closures, etc.).

The document made available today presents an assessment of the overall impact of the proposed regulations with respect to several of the major issues or changes in the proposed regulations. The assessment does not attempt to quantify the impact of every issue nor does it attempt to assess the overall impact associated with the implementation of the PSD regulations in general. It is designed to provide a relative assessment of the impact of the September 5 proposal versus the June 1978 regulations in terms of: sources to be affected, their associated emissions, major requirements which must be met (or which are no longer required to be met), and estimated cost savings for sources no longer subject to PSD review as a result of the proposed regulations. In short, the analysis provides an estimate of differential cost impact of the 1978 versus the proposed PSD regulations and an assessment of the major issues associated with the proposed PSD regulations.

As noted, the assessment focused on the difference between the June 1978 regulations and those proposed on September 5. However, there are significant changes in the promulgated regulations compared to those proposed, especially with regard to the *de minimis*

values. Since these values have a major impact on expected cost, a projection of the impact of the final regulations was also made.

It is estimated that there will be a savings as a result of the promulgation for sources which would have been subject to the old regulations but which would not be subject to the new. This would represent an annual savings of \$2.2 to 6.1 million assuming the sources which have received permits from April 1978 to November 1979 are representative of those which will receive permits in the future.

Although there is an overall savings for sources which would not longer be subject to PSD review, the new regulations require more extensive review for some sources, as well as review of sources which were not previously covered; that is, modified sources with uncontrolled emissions of less than 100 or 250 tons per year but which have controlled emissions greater than *de minimis*. Since these sources are not now subject to PSD review, they would be required to prepare a PSD permit, conduct the necessary air quality impact assessments, incur some delays in construction as a result of undergoing PSD review in addition to state NSR review, and install BACT instead of just meeting the emissions limits required by the State Implementation Plan or New Source Performance Standards as applicable. As a result of the additional cost incurred because of more extensive review and by the sources not currently subject to PSD, the overall effect of the promulgated regulations (including the savings described above) is an increase of approximately \$12.4 to 24.5 million per year.

The complete analysis is contained in the document entitled *Regulatory Impact Assessment for the September 5, 1979 Proposed Prevention of Significant Deterioration Regulations*, EPA-450/2-80-073. This document is available for inspection in the rulemaking docket. Copies may be obtained by writing to the Air Information Center, U.S. EPA Library Services, (MD-35), Research Triangle Park, NC 27711.

H. Consolidated Permit Regulations

As mentioned in the section on TRANSITION, EPA recently promulgated regulations, known as the Consolidated Permit Regulations, which now generally govern the processing of applications for permits under Part 52 PSD regulations. Among the regulatory amendments announced here are three minor changes to the Consolidated Permit Regulation. First, EPA has deleted the substantive language of 40 CFR 124.3(b) and put "Reserved" in its

place. Section 124.3(b) related primarily to the 50-ton exemptions of the 1978 Part 52 regulations. With the deletion of those exemptions, § 124.3(b) would have become superfluous. Second, EPA has conformed 40 CFR 124.5(g)(2) to the numbering in the new Part 52 regulations. Finally, the agency has corrected 40 CFR 124.42(b) by substituting "submitted" for "requested."

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 Circuit. Petitions for judicial review must be filed on or before October 6, 1980.

(Sections 101(b)(1), 110, 160-169, 171-178, and 301(a) of the Clean Air Act as amended (42 U.S.C. 7401(b)(1), 7410, 7470-7479, 7501-7508, and 7601(a)); Section 129(a) of the Clean Air Act Amendments of 1977 (Pub. L. No. 95-95, 91 Stat. 685 (August 7, 1977)))

Dated: July 31, 1980.

Douglas M. Costle,
Administrator.

State Plans For New Source Review For PSD Purposes

1. Section 51.24 of Title 40 of the Code of Federal Regulations is amended by deleting paragraph (k) and redesignating paragraphs (1) through (s) as (k) through (r) and then by revising paragraphs (a)(2), (b), (f), (i)-(k), (m) and (r) and adding new paragraphs (a)(6) and (s) to read as follows:

§ 51.24 Prevention of significant deterioration of air quality.

(a)(1) *Plan Requirements*

* * * * *

(2) *Plan Revisions.* If a State Implementation Plan revision would result in increased air quality deterioration over any baseline concentration, the plan revision shall include a demonstration that it will not cause or contribute to a violation of the applicable increment(s). If a plan revision proposing less restrictive requirements was submitted after August 7, 1977 but on or before any applicable baseline date and was pending action by the Administrator on that date, no such demonstration is necessary with respect to the area for which a baseline date would be established before final action is taken on the plan revision. Instead, the assessment described in paragraph

(a)(4) shall review the expected impact to the applicable increment(s).

* * * * *

(6) *Amendments.* (i) Any state required to revise its implementation plan by reason of an amendment to this section, including any amendment adopted simultaneously with this paragraph, shall adopt and submit such plan revision to the Administrator for approval before May 7, 1981.

(ii) Any revision to an implementation plan that would amend the provisions for the prevention of significant air quality deterioration in the plan shall specify when and as to what sources and modifications the revision is to take effect.

(iii) Any revision to an implementation plan that an amendment to this section required shall take effect no later than the date of its approval and may operate prospectively.

(b) *Definitions.* All state plans shall use the following definitions for the purposes of this section. Deviations from the following wording will be approved only if the state specifically demonstrates that the submitted definition is more stringent, or at least as stringent, in all respects as the corresponding definitions below:

(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)(a) 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) as a major stationary source if the change would constitute a major stationary source by itself.

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

(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 any 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 plan 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 40 CFR 51.18 or 40 CFR 51.24; or

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.24;

(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 40 CFR 51.18 or 40 CFR 51.24.

(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 the 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 within a reasonable period (to be specified by the state) before the date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if the reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual emissions from the particular change occurs.

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

(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) 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 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). 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 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 construction" 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 of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

(12) "Best available control technology" means an emissions limitation (including a visible emissions 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 reviewing 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 combination 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 reviewing authority 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 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 baseline date, except as provided in paragraph (b)(13)(ii);

(b) The allowable emissions of major stationary sources which commenced

construction before January 6, 1975, but were not in operation by the applicable baseline date.

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

(a) Actual emission from any major stationary source on which construction commenced after January 6, 1975; and

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

(14)(i) "Baseline date" means the earliest date after August 7, 1977, that:

(a) A major stationary source or major modification subject to 40 CFR 52.21 submits a complete application under that section; or

(b) A major stationary source or major modification subject to regulations approved pursuant to 40 CFR 51.24 submits a complete application under such regulations.

(ii) 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 or under regulations approved pursuant to 40 CFR 51.24; 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 baseline date would construct or would have an air quality impact equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) of the pollutant for which the baseline date is established.

(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 baseline date; or

(b) Is subject to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.24, 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 Implementation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition.

(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, and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24.

(18) "Secondary emissions" means emissions which 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 purposes of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas the stationary source modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

(i) Emissions from ships or trains coming to or from the new or modified stationary source; and

(ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(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 subparagraphs (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 reviewing authority may 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 reviewing authority 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 the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the reviewing authority from requesting or accepting any additional information.

(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:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)
 Nitrogen oxides: 40 tpy
 Sulfur dioxide: 40 tpy
 Particulate matter: 25 tpy
 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 (H₂S): 10 tpy
 Total reduced sulfur (including H₂S): 10 tpy
 Reduced sulfur compounds (including H₂S): 10 tpy

(ii) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Act that paragraph (b)(23)(i) does not list, any emissions rate.

(iii) Notwithstanding paragraph (b)(23)(i), "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 $\mu\text{g}/\text{m}^3$ (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.

* * * * *

(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 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 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 or particulate matter from stationary sources which are affected by plan revisions approved by the Administrator as meeting the criteria specified in paragraph (f)(4).

(2) If the plan provides that the concentrations to which paragraph (f)(1) (i) or (ii) refers shall be excluded, it shall also provide that 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. 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 51.24 has been submitted to the Administrator.

(4) For purposes of excluding concentrations pursuant to paragraph (f)(1)(v), the Administrator may approve a plan revision that:

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

(ii) Specifies that the time period for excluding certain contributions in accordance with paragraph (f)(4)(i) is not renewable;

(iii) Allows 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) Requires limitations to be in effect the end of the time period specified in accordance with paragraph (f)(4)(i) 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.

* * * * *

(i) *Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions.*

(1) The plan shall provide that no major stationary source or major modification shall begin actual construction unless, as a minimum, requirements equivalent to those contained in paragraphs (j) through (r) of this section have been met.

(2) The plan shall provide that the requirements equivalent to those contained in 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 would otherwise allow.

(3) The plan shall provide that requirements equivalent to those contained in paragraphs (j) through (r) of this section apply only to any major

stationary source or major modification that would be constructed in an area which is designated as attainment or unclassifiable under section 107(a)(1) (D) or (E) of the Act; and

(4) The plan may provide that requirements equivalent to those contained in paragraphs (j) through (r) of this section do not apply to a particular major stationary source or major modification if:

(i) The major stationary source would be a nonprofit health or nonprofit educational institution or a major modification that would occur at such an institution; or

(ii) 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 such source does not belong to any 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;

(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

(iii) The source or modification is a portable stationary source which has

previously received a permit under requirements equivalent to those contained in paragraphs (j) through (r) of this section, if:

(a) The source proposes to relocate 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 reviewing authority 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 reviewing authority not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the reviewing authority.

(5) The plan may provide that requirements equivalent to those contained in paragraphs (j) through (r) of this section do 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 plan may provide that requirements equivalent to those contained in paragraphs (k), (m), and (o) of this section do not apply to a proposed major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

(7) The plan may provide that requirements equivalent to those contained in paragraphs (k), (m), and (o) of this section as they relate to any maximum allowable increase for a Class II area do not apply to a modification of a major 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 plan may provide that the reviewing authority may exempt a proposed major stationary source or major modification from the requirements of paragraph (m) with

respect to monitoring for a particular pollutant, if:

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

(a) Carbon monoxide—575 ug/m³, 8-hour average;

(b) Nitrogen dioxide—14 ug/m³, annual average;

(c) Total suspended particulates—10 ug/m³, 24-hour average;

(d) Sulfur dioxide—13 ug/m³, 24-hour average;

(e) Ozone¹

(f) Lead—0.1 ug/m³, 24-hour average;

(g) Mercury—0.25 ug/m³, 24-hour average;

(h) Beryllium—0.0005 ug/m³, 24-hour average;

(i) Fluorides—0.25 ug/m³, 24-hour average;

(j) Vinyl chloride—15 ug/m³, 24-hour average;

(k) Total reduced sulfur—10 ug/m³, 1-hour average;

(l) Hydrogen sulfide—0.04 ug/m³, 1-hour average;

(m) Reduced sulfur compounds—10 ug/m³, 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 (i)(8)(i); or

(iii) The pollutant is not listed in paragraph (i)(8)(i).

(9) If EPA approves a plan revision under 40 CFR 51.24 as in effect before August 7, 1980, any subsequent revision which meets the requirements of this section may contain transition provisions which parallel the transition provisions of 40 CFR 52.21(i)(9), (i)(10) and (m)(1)(v) as in effect on that date, which provisions relate to requirements for best available control technology and air quality analyses. Any such subsequent revision may not contain any transition provision which in the context of the revision would operate any less stringently than would its counterpart in 40 CFR 52.21.

(j) *Control Technology Review.* The plan shall provide that:

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

¹No *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 and ambient impact analysis, including the gathering of ambient air quality data.

(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 be 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 least 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 plan shall provide that 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 reduction (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.

(1) *Air Quality Models.*

* * * * *

(m) *Air Quality Analysis.* (1) Preapplication analysis.

(i) The plan shall provide that any application for a permit under regulations approved pursuant to 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 emit in a significant amount;

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

(ii) The plan shall provide that, 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 reviewing authority determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(iii) The plan shall provide that 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) The plan shall provide that, in general, the continuous air monitoring data that is required shall have been gathered over a period of one year and shall represent the year preceding receipt of the application, except that, if the reviewing authority 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) The plan may provide that the owner or operator of a proposed major stationary source or major modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51 Appendix S, section IV may provide postapproval monitoring data for ozone in lieu of providing preconstruction data as required under paragraph (m)(1).

(2) *Post-construction monitoring.* The plan shall provide that 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 reviewing authority 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) *Operation of monitoring stations.* The plan shall provide that the owner or operator of a major stationary source or major 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.*

* * * * *

(o) *Additional Impact Analyses.*

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(p) *Sources Impacting Federal Class I Areas—Additional Requirements.*

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(q) *Public Participation.*

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(r) *Source Obligation.* (1) The plan shall include 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.

(2) The plan shall provide that 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 of 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) *Innovative Control Technology.* (1) The plan may provide that an owner or operator of a proposed major stationary source or major modification may request the reviewing authority to approve a system of innovative control technology.

(2) The plan may provide that the reviewing authority may, with the consent of the governor(s) of other 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) by a date specified by the reviewing authority. 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 equivalent to those in paragraphs (j) and (k) 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 reviewing authority;

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

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

(b) Impact any Class I area; or

(c) Impact any area where an applicable increment is known to be violated;

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

(3) The plan shall provide that the reviewing authority 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 reviewing authority 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) The plan may provide that if a source or modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with paragraph (s)(3), the reviewing authority 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.

New Source Review For PSD Purposes

2. (a) Section 52.21 of Title 40 of the Code of Federal Regulations is amended by deleting paragraph (k) and redesignating paragraphs (l) through (v) as (k) through (u) and then by revising paragraphs (b), (f), (i), (j), (k) and (g) and adding new paragraphs (r)(4), (v) and (w) as follows:

§ 52.21. Prevention of significant deterioration of air quality.

* * * * *

(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) 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.

(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 40 CFR 51.18 or 40 CFR 51.24; or

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.24;

(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 40 CFR 51.18 or 40 CFR 51.24.

(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 or particulate matter which occurs before the applicable baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(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.

(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 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). 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 construction" 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 activities 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 and 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 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 baseline date, except as provided in paragraph (b)(13)(ii);

(b) The allowable emissions of major stationary sources which commenced construction before January 6, 1975, but were not in operation by the applicable baseline date.

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

(a) Actual emissions from any major stationary source on which construction commenced after January 6, 1975; and

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

(14)(i) "Baseline date" means the earliest date after August 7, 1977, on which the first complete application under 40 CFR 52.21 is submitted by a major stationary source or major modification subject to the requirements of 40 CFR 52.21.

(ii) 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)(i) (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 baseline date would construct or would have an air quality impact equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) of the pollutant for which the baseline date is established.

(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 baseline date; or

(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 Implementation 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, and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 and 40 CFR 51.24.

(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 may include, but are not limited to:

(i) Emissions from ships or trains coming to or from the new or modified stationary source; and

(ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(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 subparagraphs (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 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:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)
 Nitrogen oxides: 40 tpy
 Sulfur dioxide: 40 tpy
 Particulate matter: 25 tpy
 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 (H₂S): 10 tpy
 Total reduced sulfur (including H₂S): 10 tpy
 Reduced sulfur compounds (including H₂S): 10 tpy

(ii) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Act that paragraph (b)(23)(i) does not list, any emissions rate.

(iii) Notwithstanding paragraph (b)(23)(i), "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 $1 \mu\text{g}/\text{m}^3$ (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 selfgovernment.

* * * * *

(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 51.4, the Administrator shall exclude the following concentrations 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 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 or particulate matter from stationary sources which are affected by plan revisions approved by the Administrator as meeting the criteria specified in paragraph (f)(4).

(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) 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 later than 9 months after August 7, 1980, unless a State Implementation Plan revision meeting the requirements of 40 CFR 51.24 has been submitted to the Administrator.

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

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

(ii) Specify that the time period for excluding certain contributions in accordance with paragraph (f)(4)(i) 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) 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.

* * * * *

(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)(i) 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 discontinue 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;

(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.

(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) 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:

Carbon monoxide—575 $\mu\text{g}/\text{m}^3$, 8-hour average;

Nitrogen dioxide—14 $\mu\text{g}/\text{m}^3$, annual average;

Total suspended particulate—10 $\mu\text{g}/\text{m}^3$, 24-hour average;

Sulfur dioxide—13 $\mu\text{g}/\text{m}^3$, 24-hour average;

Ozone;²

Lead—0.1 $\mu\text{g}/\text{m}^3$, 24-hour average;

Mercury—0.25 $\mu\text{g}/\text{m}^3$, 24-hour average;

Beryllium—0.0005 $\mu\text{g}/\text{m}^3$, 24-hour average;

Fluorides—0.25 $\mu\text{g}/\text{m}^3$, 24-hour average;

Vinyl chloride—15 $\mu\text{g}/\text{m}^3$, 24-hour average;

Total reduced sulfur—10 $\mu\text{g}/\text{m}^3$, 1-hour average;

Hydrogen sulfide—0.04 $\mu\text{g}/\text{m}^3$, 1-hour average;

Reduced sulfur compounds—10 $\mu\text{g}/\text{m}^3$, 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), or the pollutant is not listed in paragraph (i)(8)(i).

(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) 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)-(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

²No *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.

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)-(iv) 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)-(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)-(iv).

(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.

(1) *Air Quality Models.*

* * * * *

(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 paragraph (m)(1)(iii) and (iv), between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii) 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) 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 required under paragraph (m)(1).

(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 stations. The owner or operator of a major stationary source or major 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.*

* * * * *

(o) *Additional Impact Analyses.*

* * * * *

(p) *Sources Impacting Federal Class I Areas—Additional Requirements.*

* * * * *

(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.*

(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.*

(t) *Disputed Permits or Redesignations.*

(u) *Delegation of Authority.*

(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) 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) 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

(b) Impact any Class I area; or

(c) 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.

(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), 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 June 19, 1978, may request that the Administrator rescind the permit or a particular portion of the permit.

(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.

2. (b) In § 52.60 (AL), § 52.96 (AK), § 52.144 (AZ), § 52.131 (AR), § 52.270 (CA), § 52.343 (CO), § 52.383 (CT), § 52.432 (DE), § 52.499 (DC), § 52.530 (FL), § 52.632 (HI), § 52.683 (ID), § 52.738 (IL), § 52.793 (IN), § 52.833 (IA), § 52.884 (KS), § 52.931 (KY), § 52.986 (LA),

§ 52.1116 (MD), § 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), § 52.1884 (OH), § 52.1929 (OK), § 52.1987 (OR), § 52.2058 (PA), § 52.2083 (RI), § 52.2131 (SC), § 52.2178 (SD), § 52.2303 (TX), § 52.2346 (UT), § 52.2451 (VA), § 52.2497 (WA), § 52.2528 (WV), § 52.2581 (WI), § 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) *Regulations for preventing significant deterioration of air quality.* The provisions of 52.21(b) through (w) are hereby incorporated and made a part of the applicable state plan for the State of _____.

Emission Offset Interpretative Ruling

3. Sections I, II, III and IV of the Emission Offset Interpretative Ruling, 40 CFR Part 51 Appendix S, as revised 44 FR 3274 (January 16, 1979) and 45 FR 31307 (May 13, 1980), are amended as follows:

A. By adding a new third paragraph to Section I, to read as follows:

I. Introduction

The requirement of this Ruling shall not apply to any major stationary source or major modification that was not subject to the Ruling as in effect on January 16, 1979, if 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 discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

B. By revising Section II, subsection A, to read as follows:

II. Initial Screening Analyses and Determination of Applicable Requirements.

A. *Definitions*—For the purposes of this Ruling:

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

2. "Building, structure, or facility" 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). 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 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 4101-0086 and 003-005-00176-0, respectively).

3. "Installation" means an identifiable piece of process equipment.

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 amount of material combusted, stored, or processed, shall be treated as part of its design only 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.(i) "Major stationary source" means:

(a) Any stationary source 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; or

(b) Any physical change that would occur at a stationary source not qualifying under paragraph 5.(i)(a) as a major stationary source, if the change 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.

6.(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 considered 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 plan 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 December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24; or

(2) The source is approved to use under any permit issued under this ruling;

(f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24;

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

7.(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 the 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 Ruling which permit is in effect when the increase in actual emissions from the particular change occurs.

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

(v) 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;

(c) The reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR 51.18; and

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

(vi) 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.

8. "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.

9. "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceeds 50 per cent of the fixed capital cost of a comparable entirely new stationary source. 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 stationary source will be treated as a new stationary source for

purposes of this Ruling. In determining lowest achievable emission rate for a reconstructed stationary source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a new source performance standard is applicable to such stationary source.

10. "Fixed capital cost" means the capital needed to provide all the depreciable components.

11. "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 Ruling, 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 may include, but are not limited to:

(i) Emissions from ships or trains coming to or from the new or modified stationary source and

(ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

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

13.(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:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy

Ozone: 40 tpy of volatile organic compounds

Lead: 0.6 tpy

14. "Allowable emissions" means the emissions rate 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) Applicable standards as set forth in 40 CFR Parts 60 and 61;

(ii) Any applicable State Implementation 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.

15. "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, and any permit requirements established pursuant to this Ruling, 40 CFR 52.21, or under regulations approved pursuant to 40 CFR 51.18 or 51.24.

16.(i) "Actual emissions" means the actual rate of emissions of a pollutant from an

emissions unit as determined in accordance with subparagraphs (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 reviewing authority 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 reviewing authority 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.

17. "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.

18. "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.

19. "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.

20. "Begin actual construction" 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 of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

21. "Lowest achievable emission rate" means, for any source, the more stringent rate of emissions based on the following:

(i) The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(ii) The most stringent emissions limitation which is achieved in practice by such class or

category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

22. "Resource recovery facility" means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Energy conversion facilities must utilize solid waste to provide more than 50 percent of the heat input to be considered a resource recovery facility under this Ruling.

C. By amending Section II, subsection C by deleting footnote 2 and the second paragraph. The first paragraph is revised to read as follows:

C. Review of specified sources for air quality impact.

In addition, the reviewing authority must determine whether the major stationary source or major modification would be constructed in an area designated in 40 CFR 81.300 *et seq.* as nonattainment for a pollutant for which the stationary source or modification is major.

D. By revising Section II, subsection F to read as follows:

F. Fugitive emissions sources. Section IV.

A. of this Ruling shall not apply to a source or modification that 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:

- (1) Coal cleaning plants (with thermal dryers);
- (2) Kraft pulp mills;
- (3) Portland cement plants;
- (4) Primary zinc smelters;
- (5) Iron and steel mills;
- (6) Primary aluminum ore reduction plants;
- (7) Primary copper smelters;
- (8) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (9) Hydrofluoric, sulfuric, or nitric acid plants;
- (10) Petroleum refineries;
- (11) Lime plants;
- (12) Phosphate rock processing plants;
- (13) Coke oven batteries;
- (14) Sulfur recovery plants;
- (15) Carbon black plants (furnace process);
- (16) Primary lead smelters;
- (17) Fuel conversion plants;
- (18) Sintering plants;
- (19) Secondary metal production plants;
- (20) Chemical process plants;
- (21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (23) Taconite ore processing plants;

- (24) Glass fiber processing plants;
- (25) Charcoal production plants;
- (26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(27) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

E. By deleting Footnote 3 of subsection C of Section III and revising the third paragraph as follows:

C. Review of specified sources of air quality impact.

For ozone, sources of volatile organic compounds, located outside a designated ozone nonattainment area, will be presumed to have no significant impact on the designated nonattainment area. If ambient monitoring indicates that the area of source location is in fact nonattainment, then the source may be permitted under the provisions of any state plan adopted pursuant to section 110(a)(2)(D) of the Act until the area is designated nonattainment and a State Implementation Plan revision is approved. If no state plan pursuant to section 110(a)(2)(D) has been adopted and approved, then this Ruling shall apply.

F. By adding a new subsection F. to IV., to read as follows:

IV. Sources That Would Locate in a Designated Nonattainment Area

F. Source Obligation.

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 of this Ruling shall apply to the source or modification as though construction had not yet commenced on the source or modification.

State Plans For New Source Review For Nonattainment Purposes.

4. Section 40 CFR 51.18(j) is amended to read as follows:

§ 51.18 Review of new stationary sources modifications.

(j) State Implementation Plan provisions satisfying sections 172(b)(6) and 173 of the Act shall meet the following conditions:

(1) All such plans shall use the specific definitions. Deviations from the following wording will be approved only if the state specifically demonstrates that the submitted definition is more stringent, or at least as stringent, in all respects as the corresponding definition below:

(i) "Stationary source" means any building, structure, facility, or installation which emits or may emit

any air pollutant subject to regulation under the Act.

(ii) "Building, structure, or facility" 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). 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 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).

(iii) "Installation" means an identifiable piece of process equipment.

(iv) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only 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.

(v)(a) "Major stationary source" means:

(1) Any stationary source 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; or

(2) Any physical change that would occur at a stationary source not qualifying under paragraph (v)(a)(1) as a major stationary source, if the change would constitute a major stationary source by itself.

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

(vi)(a) "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.

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

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

(1) Routine maintenance, repair and replacement;

(2) 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 plan pursuant to the Federal Power Act;

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

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

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

(i) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24; or

(ii) The source is approved to use under any permit issued under regulations approved pursuant to this section;

(6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24.

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

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

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

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

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs.

(c) An increase or decrease in actual emissions is creditable only if:

(1) It occurs within a reasonable period to be specified by the reviewing authority; and

(2) The reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section which permit is in effect when the increase in actual emissions from the particular change occurs.

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

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

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

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

(3) The reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR 51.18 or the state has not relied on it in demonstrating attainment or reasonable further progress.

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

(f) 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.

(viii) "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.

(ix) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost of a comparable entirely new stationary source. 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 stationary source will be treated as a new stationary source for purposes of this subsection. In determining lowest achievable emission rate for a reconstructed stationary source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a new source performance standard is applicable to such stationary source.

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

(xi) "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 may include, but are not limited to:

(a) Emissions from ships or trains coming to or from the new or modified stationary source; and

(b) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

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

(xiii) "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:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy

Ozone: 40 tpy of volatile organic compounds

Lead: 0.6 tpy

(xiv) "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:

(a) The applicable standards set forth in 40 CFR Parts 60 or 61;

(b) Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or

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

(xv)(a) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit as determined in accordance with subparagraphs (b)-(d) below.

(b) 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 reviewing authority 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.

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

(d) 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.

(xvi) "Lowest achievable emission rate" means, for any source, the more stringent rate of emissions based on the following:

(a) The most stringent emissions' limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(b) The most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

(xvii) "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, and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to this section, 40 CFR 51.18, or 51.24.

(xviii) "Begin actual construction" 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 of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(xix) "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:

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

(b) 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.

(xx) "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.

(xxi) "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.

(2) Each plan shall adopt a preconstruction review program to satisfy the requirements of sections 172(b)(6) and 173 of the Act for any area designated nonattainment for any national ambient air quality standard under 40 CFR 81.300 *et seq.* Such a program shall apply to any new major stationary source or major modification that is major for the pollutant for which the area is designated nonattainment, if the stationary source or modification would locate anywhere in the designated nonattainment area.

(3)(i) Each plan shall provide that for sources and modifications subject to any preconstruction review program adopted pursuant to this subsection the baseline for determining credit for emissions reductions is the emissions limit under the applicable State Implementation Plan in effect at the time the application to construct is filed, except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained where:

(a) The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within a designated nonattainment area for which the preconstruction review program was adopted; or

(b) The applicable State Implementation Plan does not contain an emissions limitation for that source or source category.

(ii) The plan shall further provide that:

(a) Where the emissions limit under the applicable State Implementation

^a Plan allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below this potential;

(b) For an existing fuel combustion source, credit shall be based on the allowable emissions under the applicable State Implementation Plan for the type of fuel being burned at the time the application to construct is filed. If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable (or actual) emissions for the fuels involved is not acceptable, unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a dirtier fuel at some later date. The reviewing authority should ensure that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches;

(c) Emissions reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels may be credited, provided that the work force to be affected has been notified of the proposed shutdown or curtailment. Source shutdowns and curtailments in production or operating hours occurring prior to the date the new source application is filed generally may not be used for emissions offset credit. However, where an applicant can establish that it shut down or curtailed production after August 7, 1977, or less than one year prior to the date of permit application, whichever is earlier, and the proposed new source is a replacement for the shutdown or curtailment credit for such shutdown or curtailment may be applied to offset emissions from the new source;

(d) No emissions credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds." (42 FR 35314, July 8, 1977);

(e) All emission reductions claimed as offset credit shall be federally enforceable;

(f) Procedures relating to the permissible location of offsetting emissions shall be followed which are at least as stringent as those set out in 40 CFR Part 51 Appendix S, section IV.D.

(g) Credit for an emissions reduction can be claimed to the extent that the reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR 51.18 or the state has not relied on it in

demonstrating attainment or reasonable further progress.

(4) Each plan may provide that the provisions of this subsection do not apply to a source or modification that 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;

(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.

(5) Each plan shall include enforceable procedures to provide that:

(i) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provision of the plan and any other requirements under local, state or federal law.

(ii) 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 enforcement 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 of regulations approved pursuant to this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Restrictions on Construction For Nonattainment Areas

5. 40 CFR 52.24 is amended by adding new paragraphs (f), (g), (h) and (i) to read as follows:

§ 52.24 Statutory restriction on new stationary sources.

* * * * *

(f) The following definitions shall apply under this section.

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

(2) "Building, structure, or facility" 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). 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 two-digit code) as described in the following document, *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0088 and 003-005-00176-0, respectively).

(3) "Installation" means an identifiable piece of process equipment.

(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 amount of material combusted, stored, or processed, shall be treated as part of its design only 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)(i) "Major stationary source" means:

(a) Any stationary source 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; or

(b) Any physical change that would occur at a stationary source not qualifying under paragraph (5)(i)(a) as a major stationary source, if the change would constitute a major stationary source by itself.

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

(6)(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 considered 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 plan 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 July 1, 1979, unless such change would be prohibited under any federally enforceable permit condition which was established after July 1, 1979 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24; or

(2) The source is approved to use under any permit issued under regulations approved pursuant to 40 CFR 51.18;

(f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after July 1, 1979 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 or 40 CFR 51.24.

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

(7)(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 the 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 regulations approved pursuant to 40 CFR 51.18 which permit is in effect when the increase in actual emissions from the particular change occurs.

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

(v) 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 construction on the particular change begins; and

(c) The Administrator or reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR 51.18 or the State has not relied on it in demonstrating attainment or reasonable further progress.

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

(vi) 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.

(8) "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.

(9) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost of a comparable entirely new stationary source. 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 stationary source will be treated as a new stationary source for purposes of this subsection.

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

(11) "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 may include, but are not limited to:

(i) Emissions from ships or trains coming to or from the new or modified stationary source and

(ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

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

(13) "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:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy

Ozone: 40 tpy of volatile organic compounds

Lead: 0.6 tpy

(14) "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 set forth in 40 CFR Parts 60 and 61;

(ii) Any applicable State Implementation 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.

(15) "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; and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.18 and 51.24.

(16)(i) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with subparagraphs (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 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.

(17) "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.

(18) "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.

(19) "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.

(20) "Begin actual construction" 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 of underground pipework, and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(g) This section shall not apply to a major stationary source or major modification if the source or modification was not subject to 40 CFR Part 51 Appendix S, as in effect on January 16, 1979, and the owner or operator:

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

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

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

(h) This section shall not apply to a source or modification that 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:

(1) Coal-cleaning plants (with thermal dryers);

(2) Kraft pulp mills;

(3) Portland cement plants;

(4) Primary zinc smelters;

(5) Iron and steel mills;

(6) Primary aluminum ore reduction plants;

(7) Primary copper smelters;

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

(9) Hydrofluoric, sulfuric, or nitric acid plants;

(10) Petroleum refineries;

(11) Lime plants;

(12) Phosphate rock processing plants;

(13) Coke oven batteries;

(14) Sulfur recovery plants;

(15) Carbon black plants (furnace

process);

(16) Primary lead smelters;

(17) Fuel conversion plants;

(18) Sintering plants;

(19) Secondary metal production plants;

(20) Chemical process plants;

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

(22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(23) Taconite ore processing plants;

(24) Glass fiber processing plants;

(25) Charcoal production plants;

(26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(27) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(i) 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:

(1) If the construction moratorium imposed pursuant to this section is still in effect for the nonattainment area in which the source or modification is located, then the permit may not be so revised; or

(2) If the construction moratorium is no longer in effect in that area, then the requirements of 40 CFR 51.18(j) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Consolidated Permit Regulations

6. 40 CFR Part 124 is amended as follows:

a. 40 CFR 124.3(b) is deleted and reserved as follows:

§ 124.3 Application for a permit.

* * * * *

(b) [Reserved]

* * * * *

§ 124.5 [Amended]

b. 40 CFR 124.5(g)(2) is revised as follows:

* * * * *

(g) * * *

(2) PSD permits may be terminated only by rescission under § 52.21(w) or by automatic expiration under § 52.21(r). Applications for rescission shall be processed under § 52.21(w) and are not subject to this Part.

§ 124.42 [Amended]

c. The first sentence of 40 CFR 124.42(b) is amended by substituting "submitted" for "requested."

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