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(Catalog of Federal Domestic Assistance No. 13647, Social Services Research.)

Dated: June 6, 1978.

ERNEST L. OSBORNE,
Acting Commissioner,
Administration for Public Services.

Approved: June 14, 1978.

ARABELLA MARTINEZ,
Assistant Secretary for
Human Development Services.

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MONDAY, JUNE 19, 1978
PART V



**ENVIRONMENTAL
PROTECTION
AGENCY**



**1977 CLEAN AIR ACT;
PREVENTION OF
SIGNIFICANT AIR
QUALITY
DETERIORATION**

**State Implementation Plans;
Requirements**

**Register
of
Proposed
Rules**

[6560-01]

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL
PROTECTION AGENCY

Subchapter C—Air Programs

[FRL 904-3]

PART 51—REQUIREMENTS FOR PREP-
ARATION, ADOPTION, AND SUB-
MITTAL OF IMPLEMENTATION
PLANSPrevention of Significant Air Quality
DeteriorationAGENCY: Environmental Protection
Agency.

ACTION: Final rule.

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

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

FOR FURTHER INFORMATION
CONTACT:

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SUPPLEMENTARY INFORMATION:

PRE-1977 Amendments

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

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

EPA initially designated all clean areas of the Nation as class II. States, Indian Governing Bodies, and officials having control over Federal lands

(Federal land managers) were given authority to redesignate their lands under specified procedures. The area classification system was administered and enforced through a preconstruction permit program for nineteen specified types of stationary air pollution sources. This preconstruction review in addition to limiting future air quality deterioration required that any source subject to the requirements would apply best available control technology (BACT).

1977 AMENDMENTS

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

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

PROTECTION OF INCREMENTS

New section 163(b) of the act sets forth immediately effective ambient air increments for particulate matter and sulfur dioxide in class I, class II, and class III areas. EPA specifically solicited public comments as to whether the PSD "increments" were to be

protected only through the preconstruction review process of section 165 of the act. Section 161 of the act requires that each implementation plan "contain emission limits and such other measures as may be necessary * * * to prevent significant deterioration * * *." Section 163 requires plans to "contain measures assuring protection of ambient increments and ceilings."

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

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

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

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

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

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

A marketable permit program would allow, among other things, a permitted

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

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

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

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

PERMIT REVIEW PROCESS

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

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

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

BACT

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

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

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

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

MONITORING AND MODELING

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

REDESIGNATION

In response to comments, a number of changes have been made regarding redesignations of areas. The analysis and public hearing requirement have been modified to conform to the language in the 1977 Amendments. The requirement for public availability of information relating to sources which may be permitted only if an area is redesignated has been limited to sources for which an ambient impact analysis must be done. Finally, this rulemaking removes the provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during startup of the new PSD program. All areas were then class II. Now Congress has specifically designated Federal class I areas and States have had considerable opportunity to designate any others. States may establish such a requirement at their own discretion.

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

FINAL ACTION

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

tions of nationwide scope and effect. Therefore, under section 307(b)(1) of the Act, judicial review may be sought only in the U.S. Court of Appeals for the District of Columbia. Petitions for judicial review must be filed on or before August 18, 1978.

(Secs. 101(b)(1), 110, 114, 123, 125(e), 160-169, 301(a) of the Clean Air Act, as amended (42 U.S.C. 7401(b)(1), 7410, 7414, 7423, 7425(e), 7470-7479, 7601(a)).)

Dated: June 9, 1978.

DOUGLAS M. COSTLE,
Administrator.

Title 40, Part 51 of the Code of Federal Regulations is amended by adding § 51.24 as follows:

§ 51.24 Prevention of significant deterioration of air quality.

(a) (1) *Plan requirements.* In accordance with the policy of section 101(b)(1) of the act and the purposes of section 160 of the Act, each applicable State implementation plan shall contain emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality.

(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.

(3) *Required plan revision.* If the State or the Administrator determines that a plan is substantially inadequate to prevent significant deterioration or that an applicable increment is being violated, the plan shall be revised to correct the inadequacy or the violation. The plan shall be revised within 60 days of such a finding by a State or within 60 days following notification by the Administrator, or by such later date as prescribed by the Administrator after consultation with the State.

(4) *Plan assessment.* The State shall review the adequacy of a plan on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated.

(5) *Public participation.* Any State action taken under this paragraph shall be subject to the opportunity for public hearing in accordance with procedures equivalent to those established in § 51.4.

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

(1) "Major stationary source" means:

(i) Any of the following stationary sources of air pollutants which emit, or have the potential to emit, 100 tons per year or more of any air pollutant regulated under the Clean Air Act (the "Act"): Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input,

coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination 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; and

(ii) Notwithstanding the source sizes specified in paragraph (b)(1)(i) of this section, any source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant regulated under the Act.

(2) "Major modification" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the Act (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since regulations were approved under this section, or since the time of the last construction approval issued for the source pursuant to such regulations approved under this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

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

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

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

(b) An increase in the hours of operation;

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

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

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

(f) Change in ownership of the source.

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

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

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

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

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

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

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

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

(9) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal air quality control laws and regu-

lations and those air quality control laws and regulations which are part of the applicable State implementation plan.

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

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

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

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

(12) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the de-

partment with authority over such lands.

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

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

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

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

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

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

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

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

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

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

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

Pollutant	Maximum allowable increase (micrograms per cubic meter)
CLASS I	
Particulate matter:	
Annual geometric mean	5
24-hr maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
CLASS II	
Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	29
24-hr maximum	91
3-hr maximum	512
CLASS III	
Particulate matter:	
Annual geometric mean	37
24-hr maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700

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

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

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

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

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

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

- (i) International parks,
- (ii) National wilderness areas which exceed 5,000 acres in size,
- (iii) National memorial parks which exceed 5,000 acres in size, and
- (iv) National parks which exceed 6,000 acres in size.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) The plan may provide that the State may submit to the Administrator a proposal to redesignate areas of

the State Class I or Class II: *Provided, That:*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) Any other dispersion technique implemented before then.

(i) *Review of major stationary sources and major modifications—Source applicability and general exemptions.* (1) The plan shall provide that no major stationary source or

major modification shall be constructed unless, as a minimum, requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), and (r) of this section, have been met. The plan may provide that such requirements shall apply to a proposed source or modification only with respect to those pollutants for which the proposed construction would be a major stationary source or major modification.

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

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

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

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

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

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

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

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

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

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

(2) A major stationary source or major modification shall apply best available control technology for each applicable pollutant, unless the increase in allowable emissions of that pollutant from the source would be less than 50 tons per year, 1,000

pounds per day, or 100 pounds per hour, whichever is most restrictive.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) All estimates of ambient concentrations required under paragraph (l) shall be based on the applicable air quality models, data bases, and other requirements specified in the *Guidelines on Air Quality Models* (OAQPS

1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978).

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

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

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

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

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

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

(n) *Monitoring.* The plan shall provide that—

(1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the reviewing authority determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a national ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a national am-

bient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the Administrator's satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air quality standard.

(o) *Source information.* (1) The plan shall provide that the owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with this section.

(2) The plan may provide that such information shall include:

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

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

(iii) A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied;

(3) The plan shall provide that upon request of the State, the owner or operator shall also provide information on:

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

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

(p) *Additional impact analyses.* The plan shall provide that—

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

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

(q) *Sources impacting Federal Class I areas—additional requirements—*

(1) *Notice to EPA.* The plan shall provide that the reviewing authority shall transmit to the Administrator a copy of each permit application relating to a major stationary source or major modification and provide notice to the Administrator of every action related to the consideration of such permit.

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

(3) *Denial—impact on air quality related values.* The plan shall provide a mechanism whereby a Federal Land Manager of any such lands may present to the State, after the reviewing authority's preliminary determination required under procedures developed in accordance with paragraph (r) of this section, a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of any Federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the State concurs with such demonstration, the reviewing authority shall not issue the permit.

(4) *Class I Variances.* The plan may provide that the owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies to the State, the reviewing authority may: *Provided*, That applicable requirements are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable in-

creases over baseline concentration for such pollutants:

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

(5) *Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence.* The plan may provide that—

(i) The owner or operator of a proposed source or modification which cannot be approved under procedures developed pursuant to paragraph (q)(4) of this section may demonstrate to the Governor that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility);

(ii) The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase; and

(iii) If such variance is granted, the reviewing authority may issue a permit to such source or modification in accordance with provisions developed pursuant to paragraph (q)(7) of this section: *Provided*, That the applicable requirements of the plan are otherwise met.

(6) *Variance by the Governor with the President's concurrence.* The plan may provide that—

(i) The recommendations of the Governor and the Federal Land Manager shall be transferred to the President in any case where the Governor recommends a variance in which the Federal Land Manager does not concur;

(ii) The President may approve the Governor's recommendation if he finds that such variance is in the national interest; and

(iii) If such a variance is approved, the reviewing authority may issue a permit in accordance with provisions developed pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of the plan are otherwise met.

(7) *Emission Limitations for Presidential or Gubernatorial Variance.* The plan shall provide that in the case of a permit issued under procedures

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

Maximum Allowable Increase
[Micrograms per cubic meter]

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

(r) *Public participation.* The plan shall provide that—

(1) The reviewing authority shall notify all applicants within a specified time period as to the completeness of the application or any deficiency in the application or information submitted. In the event of such a deficiency, the date of receipt of the application shall be the date on which the reviewing authority received all required information.

(2) Within one year after receipt of a complete application, the reviewing authority shall:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(ii) Make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant, the Administrator and to officials and agencies having cognizance over the location where the proposed construc-

tion would occur as follows: any other State or local air pollution control agencies, the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. The reviewing authority shall make all comments available for public inspection in the same locations where the reviewing authority made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the reviewing authority made available preconstruction information and public comments relating to the source.

(s) *Source obligation.* The plan shall include legally enforceable procedures to provide that approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the plan and any other requirements under local, State or Federal law.

NOTE.—Incorporation by reference provisions approved by the Director of the Federal Register April 27, 1978.

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[FRL 904-3A]

PART 52—APPROVAL AND PROMULGATION OF STATE IMPLEMENTATION PLANS

1977 Clean Air Act Amendments to Prevent Significant Deterioration

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: By these final regulations, EPA amends its regulations relating to prevention of significant air

quality deterioration (PSD) in order to implement the new PSD requirements of the Clean Air Act Amendments of 1977 (Pub. L. 95-95). As amended, the PSD regulations are now more comprehensive and stringent than they were. States may substitute comparable requirements through implementation plan revisions pursuant to regulations also being published today.

DATES: See § 52.21(i) of the regulations.

FOR FURTHER INFORMATION CONTACT:

Darryl Tyler, Chief, Standards Implementation Branch, Control Programs Development Division, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711.

SUPPLEMENTARY INFORMATION:

INTRODUCTION

In 1974, EPA promulgated regulations under Section 101(b)(1) of the Clean Air Act (Act) to prevent emissions of sulfur dioxide (SO₂) and particulate matter (PM) from significantly deteriorating air quality in areas where concentrations of those pollutants were lower than the applicable national ambient air quality standards (NAAQS). 39 FR 42510 (codified at 40 CFR 52.21). EPA incorporated those regulations into the implementation plan (SIP) of each State. The regulations, as amended before August 7, 1977, prohibited construction of any stationary source in any of nineteen specified categories, unless EPA or a delegate State had issued a permit evidencing that the source would apply "best available control technology" (BACT) for SO₂ and PM and that emissions of those pollutants from the source would not cause significant deterioration of air quality in any area. For determining what levels of deterioration were significant, the regulations set out an area classification system. Under it, clean air areas could be classified as Class I, II, or III. In Class I areas, small increases of SO₂ and PM would be significant; in Class II areas, moderate increases; and in Class III areas, increases up to a NAAQS. The regulations classified all clean areas as Class II, but gave States, Indian Governing Bodies and Federal Land Managers the opportunity to reclassify their lands under specified requirements.

On August 7, 1977, the President signed into law new PSD requirements as part of the Clean Air Act Amendments of 1977 (1977 Amendments). These requirements follow the outline of the pre-existing regulations, but are in general more comprehensive and stringent. The permit requirements and classification system remain; but, among other things, many more

sources are covered, Class II increments are different and sometimes more restrictive, Class III increments are now specifically defined, ambient ceiling requirements apply, BACT applies to all pollutants regulated under the Act, certain lands are permanently Class I, the procedures for reclassifying to Class III are more rigorous, the scope of the ambient impact analysis is much broader, and the opportunity for public comment on a proposed permit must include an opportunity for a public hearing. See Clean Air Act Sections 160-169 42 U.S.C. §§ 7470-79 (Clean Air Act Amendments of 1977, Pub. L. 95-95, § 127(a), 91 Stat. 731), as amended, Pub. L. 95-190, Sections 14(a)(40)-(54), 91 Stat. 1401-02 (November 16, 1977) (technical and conforming amendments).

On November 3, 1977, EPA announced in the FEDERAL REGISTER several specific actions. The first was a final decision not to implement the new PSD requirements of Section 165 of the Act as of August 7, 1977, 42 FR 57459. The second, which embodied the first, was the promulgation of amendments to the pre-existing PSD regulations conforming them, not to Section 165, but primarily to Sections 162(a), 163(b) and 164(a) of the Act in accordance with Section 168(b). Id. Section 162(a) sets forth the new mandatory Class I areas; Section 163(b) identifies the new Class II and Class III increments and the ambient ceilings requirement; and Section 164(a) lists those areas which may not be reclassified as Class III and outlines the new Class III reclassification procedures. The third action EPA announced was the proposal of regulations giving guidance for the preparation of SIP revisions which would meet the new PSD requirements. Id. at 57471. The fourth action was the proposal of further, comprehensive amendments to the pre-existing PSD regulations. Id. at 57479. In announcing the proposals, EPA said that it intended to promulgate final regulations no later than March 1, 1978. Id. at 57459, 57471, 57479. Because Section 406(d)(2) of the 1977 Amendments directs the States to submit required SIP revisions within nine months of the promulgation of regulations giving guidance for their preparation, EPA also said that SIP revisions incorporating the new PSD requirements would be due no later than December 1, 1978. Id. at 57471, 57479.

On December 8, 1977, EPA published a supplement to the November 3 proposals. In the supplement, EPA clarified what sources the proposed amendments would exempt from the new PSD requirements, solicited comments on two additional issues, notified the public that technical and conforming amendments to the 1977 Amendments had been enacted on No-

vember 16, 1977, and stated that it would hold public hearings on January 9, 1978. 42 FR 52020.

On December 23, 1978, EPA extended, from January 3, 1978, to January 31, 1978, the deadline for submitting written comments on the November 3 proposals and on the Air Quality Modeling Conference held on December 14-15, 1978. 42 FR 64378. The conference was announced at 42 FR 58542 and 58561 (November 10, 1977). EPA noted in the December 23, 1977 notice that it might not be able to promulgate the new PSD regulations by March 1, 1978, and that it nevertheless intended to maintain "the previously-announced 'permit deadline' of March 1, 1978, for determining whether sources will be subject to the new PSD rules * * *."

On January 9, 1978, public hearings on the proposals took place in Washington, Chicago and Denver and are included as part of the written record. Transcripts have been made of the oral comments. On January 31, the comment period ended. EPA received more than 250 written comments on the proposals. EPA has considered in preparing the final regulations not only the oral and written comments on the proposals, but also the comments submitted in connection with the modeling conference. EPA has also had occasion to measure the proposals against concrete problems arising during and after the comment period.

The discussion which follows focuses on the important issues raised by the proposed amendments to the pre-existing regulation, summarizes the comments relating to each issue, and presents EPA's resolution. Elsewhere in today's FEDERAL REGISTER, EPA is announcing the promulgation of the necessary requirements for the preparation, adoption and submittal of State PSD programs. Since those regulations parallel these, both preambles should be read together. States should submit their SIP revisions no later than nine months from today.

HIGHLIGHTS

The regulations made final today apply to any source in any of 28 categories with a potential emissions increase of 100 tons per year or more of any pollutant regulated under the Act and to any source with a potential emissions increase of 250 tons per year or more of any pollutant regulated under the Act, including a source which would have been in one of the 28 categories if it were not under the applicable size cutoff. Potential emissions mean uncontrolled emissions.

Not all covered sources will receive full PSD review. Only those which would have allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, or would impact a Class I

area or an area where the increment is known to be violated, will receive such review. However, the combined impact of sources not receiving full review will be determined periodically.

In general, only those sources with allowable emissions of 50 tons per year, 1,000 pounds per day, or 100 pounds per hour or more will undergo case-by-case review for BACT, and then only as to those pollutants regulated under the Act for which the source would be major.

To avoid duplicating State new source review, EPA will in general review a source which has allowable emissions under an enforceable SIP permit of less than 50 tons per year, 1,000 pounds per day or 100 pounds per hour, and which would impact no Class I area or area where an increment is known to be violated, only to the extent of ensuring that it would meet any applicable emission limitation and has undergone adequate public scrutiny.

Where PSD and nonattainment reviews both apply, the State must act first before EPA can issue final construction approval under PSD.

PSD applies irrespective of where a source would locate, except that it does not apply to any source which with respect to a particular pollutant is subject to the nonattainment requirements and would impact no clean air area.

The PSD increments must be protected through both preconstruction review and the SIP review process. If an increment is exceeded, the applicable plan must be revised. SIP relaxations submitted after today that would cause significant deterioration cannot be approved.

A Governor can upon written request exempt certain emission increases from consuming an applicable increment while EPA implements the PSD program. The State must submit an approvable PSD SIP revision incorporating the exemption within 9 months to retain the exemption.

Additional guidance is provided on what constitutes commencement of construction, particularly for sources constructing in several distinct phases.

PSD sources submitting applications after August 7, 1978, may have to provide extensive air quality monitoring data.

SOURCE APPLICABILITY

A. TRANSITION

In passing the 1977 Amendments, Congress left standing contradictory indications as to when it intended the new PSD requirements to be effective. On the one hand, Section 168 of the Act provides that the pre-existing PSD regulations, with amendments conforming them only to Section 162(a), 163(b) and 164(a), are to remain in

effect as to a particular area until the applicable SIP is revised to include the rest of the new requirements. Section 406(b) of the 1977 Amendments reinforces Section 168. It provides in pertinent part:

All * * * regulations * * * duly issued * * * pursuant to the Clean Air Act as in effect immediately prior to the date of enactment of this Act * * * shall continue in full force and effect after the date of enactment of this Act until modified or rescinded in accordance with the Clean Air Act as amended by this Act.

See also 1977 Amendments section 406(c). In effect, Section 168, and Section 406(b), say that, until EPA or the States revise the SIP's to include the new requirements, construction may commence after August 7, 1977, so long as it meets the requirements of the pre-existing regulations, as amended.

On the other hand, Section 165(a) can be read as prohibiting, until its requirements were met, most of the post-enactment construction that Section 168 would permit. It provides in pertinent part that "[n]o major emitting facility on which construction is commenced after the date of the enactment of this part, may be constructed in any area to which this part applies, unless" all of the new permit requirements are met. Also, Section 165(a) would have imposed a lengthy moratorium on new construction, since Sections 165(a)(2) and (e) require an analysis in accordance with regulations that as of August 7, 1977, had not even been proposed. Section 168 would not have imposed such a moratorium.

Because of the contradiction between Section 165 and 168, EPA had no choice but to fashion a reasonable program for the transition from the old to the new requirements. Accordingly, on November 3, 1977, it announced its final decision not to implement the requirements of Section 165 as of August 7, 1977, and its promulgation of the Section 168 amendments to the pre-existing regulations. Then, in the subsequent November 3 proposal and the December 8 supplement, it proposed to apply the requirements of Section 165 as of March 1, 1978. Under the proposal, the requirements would apply to construction of a major stationary source or major modification occurring on or after March 1, 1978, unless the source or modification had received certain permits before March 1 and construction commenced before December 1, 1978. The permit that a source subject to the pre-existing regulations would have to get was a permit under those regulations. A source not subject to the pre-existing regulations would have to get the permit or permits required under the applicable SIP.

In their comments on this proposal, industries asserted that EPA was with-

out legal justification to implement any regulations prior to the submittal of SIP revisions. At the other extreme, some environmental groups contended that EPA was acting improperly in not making Section 165 effective as of August 7, 1977. State agencies generally indicated approval of the proposal.

Today, EPA is announcing that it has promulgated the proposed program with only a minor change. For the December 1, 1978 date, it has substituted a date nine months from today.

Three major considerations have shaped this transition program. One is that the rate of consumption of the increments should be minimized. A paramount goal of both the House and the Senate was to give the States a full opportunity to revise and implement their own PSD programs. The value and significance of this opportunity diminishes as the increments are consumed during the period from August 7, 1977, to the time EPA has approved any PSD revisions to the SIP. Hence, during that period, the rate of consumption of the increments should be minimized. The other two major considerations are that economic disruption should be minimized and that orderly administration of the new requirements should be maximized.

The first of the relevant considerations pulls sharply in the direction of implementing the new requirements as of August 7, 1977. The more sources that must apply BACT, the slower the rate of consumption of the increments. The new PSD requirements might subject up to twenty-four times¹ as many sources to a more restrictive control technology review as did the old requirements. In doing so, the new requirements will capture approximately 230,000 tons of PM, and 570,000 tons of SO₂, per year, beyond what the old requirements would have captured.² While such capture is clear-

ly significant to increment consumption on a national basis, it could be even more significant to individual localities where more than one of the affected sources might construct and consume a large portion of the available increment. Hence, the sooner EPA implements the new requirements, the slower will be the rate of increment consumption. Other less compelling considerations pull in that direction, too. Until the new requirements are implemented, mandatory Class I areas will not have the protection Section 165(d) affords nor will variances to the Class I increments be available. In addition, until then, Federal Land Managers will continue to have the power to reclassify Federal lands, and EPA will continue to be able to disapprove reclassifications on other than procedural grounds.

The other two major considerations, however, suggest the opposite conclusion. Immediate implementation of the new requirements would have resulted in severe economic disruption. As stated above, Section 165(a) would have imposed, because of Sections 165(a)(2) and (e), a moratorium on new construction equal to the length of time required to promulgate the necessary regulations.³ Even if Sections 165(a)(2) and (e) were ignored, undue economic disruption would have resulted from sudden imposition of the new requirements. Applicants had designed major construction projects to meet the old PSD requirements and the State new source review requirements as applicable. Many of them had not commenced construction by August 7, 1977, but had either obtained a permit or were about to obtain one. Reevaluation under the new requirements would have meant that construction could not have commenced until long after the time originally planned. The applicant would often have had to repropose control technology and provide analyses of the direct and indirect total environmental effects of the source. EPA would then have had to redetermine the necessary control equipment and open any redeterminations to public comment, including a public hearing.

Immediate implementation also would have promoted disorderly administration, since it would have precluded normal notice and comment and the attending opportunity to better understand the statute, anticipate its effects and establish generic ground rules. Each issue would have been reargued with each new application. In the absence of generic rules, inconsistency and confusion in the

treatment of applications throughout the country might well have occurred.

The transition program promulgated today is reasonable. It has equitably accommodated these competing considerations. It has allowed informed development of generic rules and minimized economic disruption by avoiding entirely a lengthy moratorium on new growth and amply forewarning the public of the time when the new requirements would have to be met. At the same time, the program has minimized the period of time during which the new requirements were not working to slow consumption of the increments. It has also minimized the time during which mandatory Class I areas lacked the protection of Section 165(d), Class I increment variances were unavailable, Federal Land Managers were able to reclassify Federal lands, and EPA was able to disapprove reclassifications on other than procedural grounds.

Four aspects of the program require further explanation. First, why is EPA implementing the new requirements as of March 1, 1978, rather than the date of promulgation? In effect, EPA has suspended the issuance of PSD permits from March 1 to the date of promulgation. The consequence of implementing them as of promulgation would have been that sources would have consumed the increments to a much greater extent than they have. In addition, the public has received early and ample warning of the March 1 deadline and therefore an adequate opportunity to plan for this short-term impact on construction schedules. Finally, in accordance with a directive dated February 22, 1978, from the Assistant Administrator for Air and Waste Management and the Assistant Administrator for Enforcement, EPA has upon request reviewed certain applications as to their approvability under the proposed regulations.

Second, why exempt from the new requirements those sources which have received a PSD permit before March 1, 1978, even though construction on the source may not have commenced by then? Arguably, to exempt only those sources on which construction had commenced before this date would have paralleled the approach in Section 165, better served the policy of slowing increment consumption and not disserved the policy of ensuring an adequate opportunity for public comment. It would not, however, have minimized economic disruption. In October of 1977, many sources for which PSD applications had been completed and were pending could not have both received a permit and commenced construction before March 1, 1978. Their potential consumption of the increment beyond what they would have consumed under the new requirements was not so great as to warrant denying

¹The pre-existing regulations applied to sources belonging to any of nineteen specified categories, or approximately 165 per year. The new requirements apply to any source in any of 28 specified categories which has the potential to emit 100 tons per year or more of any pollutant regulated under the Act and to any other source which has the potential to emit 250 tons per year or more of any such pollutant. Defining "potential to emit" as maximum capacity in the absence of control equipment, as do these regulations, the annual number of covered sources is estimated to be about 4,000 with approximately 1,600 sources being subject to a detailed BACT and ambient air quality review.

²Under the old requirements, annual emissions from all new and modified sources, whether covered or not, totalled approximately 770,000 tons of PM and 1,220,000 tons of SO₂. EPA estimates that for these same sources under the new requirements annual emissions will be reduced to 540,000 tons for PM and 650,000 tons for SO₂.

³The legislative history contains strong indications that Congress intended not to impose a moratorium on development. See H.R. Rep. No. 95-294, at 171 (1977); Congressional Record—House, August 4, 1977.

them an opportunity for exemption. Hence, EPA proposed, and has decided, to exempt sources for which a PSD permit had been obtained before March 1, 1978, so long as construction commences by the time SIP revisions are due.

Third, EPA as previously proposed has also decided to exempt sources not subject to the pre-existing regulations if they have received before March 1, 1978, all permits required under the applicable SIP, even though construction may not have commenced by then. Not to exempt these sources, arguably, would have better served the policy of slowing increment consumption. Nevertheless, there were many such sources in circumstances not significantly different from those of sources with PSD permits pending in October of 1977. Hence, out of fairness, EPA has decided to exempt such sources, so long as construction commences by the time SIP revisions are due.

Finally, in establishing a deadline for commencement of construction, why is EPA using a date nine months from today, instead of December 1, 1978, as proposed? EPA originally set the deadline nine months from March 1, not because March 1 was the date of implementation, but rather because it was the anticipated date of promulgation. EPA selected the nine month period after promulgation because it provided ample opportunity to commence construction and it is the period within which Section 406(d) in effect requires States to submit their SIP revisions. Consequently, the Administration has revised the December 1, 1978, date to coincide with a date nine months from promulgation of these regulations.

B. EDF V. COSTLE

On February 17, 1978, the Environmental Defense Fund, Inc. (EDF) brought an action in the District Court for the District of Columbia challenging EPA's November 3, 1977 decision not to implement the new PSD requirements as of August 7, 1977. On February 24, 1978, the Court issued an order which governed the further processing of pending applications to EPA for PSD permits under the pre-existing regulations and will affect the application of the March 1, 1978, and commence construction deadlines. The order expired on March 28, 1978. It provided in pertinent part:

2. EPA shall process all applications for PSD permits that do not comply with the requirements of Section 165 according to its existing procedures *except that*, in the case of any permit which EPA concludes it would issue (but for the existence of this order), EPA shall, on the date on which EPA so concluded, mark every such permit:

This permit would issue this date (date), but for the order entered in *Environmental De-*

fense Fund v. Douglas M. Costle, No. 78-281 (D.D.C.) (Entered on February 24, 1978).

EPA shall give prompt notice of the above action to the permittee and all appropriate State and local authorities. The above action shall not constitute permission to commence construction, nor shall it constitute final action for purposes of judicial review.

3. If and when any permit marked as described in paragraph 2 is issued, such permit shall be effective and considered to have been issued as of the date on which it was so marked and shall be subject to the relevant regulations applicable on such date.

4. In addition, any deadline which determines the applicability of EPA regulations under the Clean Air Act to any facilities receiving such permits shall be extended by a period of time equal to the number of days between the time EPA marks the permit as described in Paragraph 2 and the date when EPA releases the permit as described in Paragraph 7.

In accordance with paragraph 3 of the order, EPA will treat any permit marked pursuant to paragraph 2 and released after the order expired as having been issued as of the date it was marked for the purpose of determining whether the source is exempt from the new PSD requirements under the March 1, 1978, program. Also, in accordance with paragraph 4, construction on a source which has received or will receive a marked permit need commence, not within nine months from today, but rather within a period equal to nine months from today plus the number of days between the time the permit was marked and the time it was released.

C. SPECIAL EXEMPTIONS

In the March 8, 1978, FEDERAL REGISTER (42 FR 9529), EPA announced a final decision, made on February 28, 1978, to exempt from the new PSD requirements any source the evaluation of which EPA would have completed before March 1, 1978, but for an extension of the public comment period pursuant to a meritorious request for such an extension. The Administrator communicated this final decision to each of the Regional Administrators. His statement to them, which appeared in the FEDERAL REGISTER on March 8, 1978, follows:

As some of you are aware, significant public comment has been generated in the case of certain sources that have submitted applications for PSD permits. In some of these cases, interested persons have requested additional time to comment on the propriety of granting the permit. While I do not believe that the situations are many, I am concerned about the completion of any PSD review of any case where an extension of the comment period has been requested on meritorious grounds. Accordingly, by this notification I am announcing a policy change regarding the March 1 PSD deadline. This policy change will be applicable only to those situations where the normal public comment period has ended and EPA review of a permit would have been com-

pleted by March 1, were it not for a request for additional comment time requested by interested parties.

In the case of any such situation, described above, the comment period involved may be extended as provided by EPA's current PSD regulations. Where such an extension is granted, the March 1 date now designated as the effective date of the new PSD requirements will not apply to that permit application. Instead, the permit application may continue to be processed (and granted or denied) under EPA's current PSD regulations.

I intend to put a notice in the FEDERAL REGISTER to the above effect. I wish to reemphasize that the policy set forth above only applies to those situations where review would have been completed by March 1 absent our action granting a request for additional comment time.

D. POTENTIAL EMISSIONS

Section 165 of the Act requires that each new or modified "major emitting facility" undergo preconstruction or premodification review for PSD. Section 169(1) defines "major emitting facility" in terms of a source's "potential to emit." On November 3, 1977, EPA proposed to define "potential emissions" as "those emissions expected to occur without control equipment * * * 42 FR 57479, 57483.

Virtually every comment spoke to the issue of subjecting sources to PSD review on the basis of their uncontrolled emissions. Industry and State pollution control agency comments noted that the Agency's interpretation would needlessly force through PSD review several sources whose allowable emissions would be relatively insignificant. Allowable emissions are those that would occur after the application of the controls required under any air pollution control laws and regulations or more stringent controls under an enforceable permit. Many State and local agencies expressed a deep concern that subjecting sources to the PSD requirements solely on the basis of uncontrolled emissions would result in an unmanageable number of detailed and costly reviews. The organization representing State air pollution control agencies, State and Territorial Air Pollution Program Administrators (STAPPA), urged the Agency to consider both uncontrolled emissions and allowable emissions in determining which sources would be subject to review. It suggested that EPA assess the air quality impact of only those sources whose allowable emissions would be significant. Industry comments uniformly urged the Agency to interpret "potential to emit" as referring to allowable emissions.

The Agency has decided to apply PSD solely on the basis of what a source might emit without control. The final regulations published today define "potential to emit" as the "capability at maximum capacity to emit a pollutant in the absence of air pollu-

tion control equipment." See § 52.21(b)(3).

The Agency has concluded that Congress intended "potential to emit" to refer to uncontrolled, not allowable, emissions. If Congress had intended PSD to apply on the basis of allowable emissions, it would not have included Section 165(b) in the Act. Section 165(b) provides that an applicant for a PSD permit for a modification to certain major emitting facilities need not show that the modification will not cause or contribute to a violation of a Class II increment, if the "allowable emissions" of SO₂ and PM from the modification would after the application of BACT "be less than fifty tons per year" and would not cause or contribute to a violation of the applicable NAAQS. Section 169(1) defines "major emitting facility" as a source with the "potential to emit" either, depending on its type, 100 or 250 tons per year or more. If Section 169(1) were read to subject to PSD only those modifications with allowable emissions equal to or greater than 100 or 250 tons per year before the application of BACT, no owner or operator whose modification would emit less than 50 tons per year after BACT would need the relief Section 165(b) provides. This is because, if BACT or some less stringent control could reduce the emissions of the modification to less than 50 tons per year, the owner or operator would apply it in order to reduce the emissions of the modification to below the applicable 100 or 250 ton cutoff and thereby avoid PSD altogether. Congress, however, did include Section 165(b). Hence, it appears that Congress did not intend PSD to apply on the basis of allowable emissions. See also Sen. Rep. No. 95-127, at 33 (1977) (last paragraph). Since the only other concept to which Congress could have been referring is that of uncontrolled emissions, it must have intended PSD to apply on the basis of such emissions.

There is another similar reason for reaching that conclusion: if Congress had intended PSD to apply on the basis of emissions after controls, it would not have used the phrase "potential to emit" in Section 169(1).⁴ First, Congress would not have used two different phrases to refer to the same concept, and it had already used "allowable emissions" in Section 165(b). Second, Congress knew that EPA had already established in its offset policy for nonattainment areas (41 FR 55524 (December 21, 1976)) the phrase "allowable emissions" as denot-

ing emissions after controls. Pub. L. 95-95, section 129(a)(1), 91 Stat. 745 (1977). Indeed, Congress has been careful to distinguish "allowable emissions" from at least one other concept. Prior to the enactment on November 16, 1977, of technical and conforming amendments to the 1977 Amendments, Section 165(b) contained the phrase "actual allowable emissions." Id. section 127(a), at 736. The November 16 amendments deleted the word "actual" in order to "eliminate an apparent inconsistency." 123 Cong. Rec. H11955, H11957 (November 1, 1977). Finally, the legislative history indicates that Congress knew that in the air pollution field the phrase "potential emissions" has traditionally been understood to denote uncontrolled emissions. See e.g. Sen. Rep. No. 95-127, at 45, 96-97 (1977).

The Agency has decided to apply PSD on the basis of uncontrolled emissions also for an important practical reason. In enforcement programs, reporting systems have been and must be based on uncontrolled emissions. Otherwise a source with controls to capture 90 percent of the potential emissions might well be below the cutoff for reporting, but could virtually turn off the control equipment, emit 10 times the allowed level and not be tracked.

In its November 3 definition of "potential emissions," EPA indicated that, in determining the potential emissions of a source, it would not take into account emissions that "necessary" or "integral" control equipment would capture. Equipment was "necessary" or "integral" if business or production consequences would follow, independently of applicable air pollution laws and regulations, from removing or not using the equipment. Several comments pointed out that such a general credit could not realistically be implemented, since the permitting authority would be faced frequently with having to make difficult case-by-case factual determinations. Considerable time would be lost by both the applicant and the permitting authority in making such case-by-case decisions.

In view of these comments, the Agency will interpret the phrase "air pollution control equipment" in the definition of "potential to emit" as referring to control equipment which is not, aside from air pollution control requirements, vital to production of the normal product of the source or to its normal operation. The Agency will consider equipment vital if the source could not produce its normal product or operate without it.

E. TWO-TIERED REVIEW

By the proposed regulations, EPA indicated its intention to subject each new major stationary source and major modification to full PSD review.

Full review would have consisted of (1) a case-by-case BACT determination as to each pollutant regulated under the act for which the source or modification would be considered major, (2) ambient impact analyses of whether the source or modification would cause or contribute to a violation of the applicable increments and NAAQS, (3) an assessment of the direct and indirect effects of the source or modification on visibility, soils, and vegetation, and (4) public comment, including an opportunity for a public hearing, on each material determination. Full review might also have entailed an analysis of the effects of the source or modification on air quality related values in a class I area. Finally, full review might have required the applicant to submit extensive air quality monitoring data and to commit to post-construction monitoring.

As noted above, STAPPA predicted that the States would find PSD applications too numerous, and their review too costly, to manage. STAPPA and others asserted that full PSD review would contribute unduly to the construction costs experienced by small, otherwise well-controlled sources.

In response to these comments, EPA attempted to quantify the effects of full PSD review under the proposal. It estimated that the new requirements would cover approximately 4,000 sources and modifications per year. The old PSD regulations, by contrast, covered only 165 sources per year. EPA also projected that permitting authorities would have to devote approximately 279 more man-years of new source review effort to conduct full PSD review of these new sources (or an additional 65 percent of their present effort on new source review), and that applicants would have to spend up to \$6 million on modeling and \$24 million on monitoring (or \$30 million in total) to obtain PSD permits for these sources.

Applicants would also have to spend additional time and money meeting the requirements of a detailed PSD review. Considerable delay costs are expected from the increased planning and construction costs as well as the foregone return on investment from delaying start-up for a new source. Although it is not possible to accurately quantify the amount of these costs due to their site-specific nature, such costs could be greater than the monitoring and modeling costs of \$30 million. In addition the changeover from reviewing 165 sources to 4,000 sources per year would probably lead to delays in the start-up of new sources.

Section 165(b) of the act shows that Congress shared the concern of STAPPA and the other commentators. As noted above, section 165(b) exempts certain modifications with allowable emissions of less than 50 tons

⁴Part D of the Act parallels Part C in its usage of the phrases "allowable emissions" and "potential to emit." Section 173(1)(A) refers to "allowable emissions," whereas the section defining those sources to which Part D applies, Section 320(j), uses the phrase "potential to emit."

per year after the application of BACT from demonstrating that they would not cause or contribute to a violation of any applicable class II increment, and thus from substantial expenditures on modeling and monitoring. The Senate Committee explained:

Section [165(b)] exempts smaller, well-controlled sources which are expansions of existing facilities from having to demonstrate compliance with the class II increments. Many such sources which are *small and relatively insignificant with respect to air quality* would otherwise be brought under the requirements of [Part C] by the "major emitting facility" definition of 100 tons per year potential emissions of any pollutant.

Sen. Rep. No. 95-127, at 33 (1977) (emphasis added).

Following Congress lead, EPA attempted to quantify the effects of expanding the exemption in section 165(b) to all new sources and modifications with less than 50 tons per year allowable emissions. Analysis revealed that under such an exemption only 1,600 of the 4,000 sources per year are likely to undergo full PSD review, that permitting authorities would need to devote only an additional 112 man-years to the effort of reviewing those 1,600 sources fully if the remaining 2,400 are first reviewed under the State new source review program, and that applicants might now have to spend only about \$2 million on modeling and \$7 million on monitoring (or \$9 million in total).

Delay costs would also be reduced significantly. The sources exempted from the full PSD review would typically be small. The average size of the investment for these sources is thought to be about \$1 million. If delays of two months occur for each of these 2,400 sources, this could lead to delay costs from foregone returns on investment of about \$16 million. (This is based on an estimated four percent difference between the rate of return for a new source and the investor's next best alternative, an average two-month delay and an average new source investment of \$1 million.) Delay costs would be higher in those cases where the delay leads to increased construction and planning costs.

Subsequent analysis indicated that the costs of making a case-by-case BACT determination each year for each of the 2,400 sources with allowable emissions under an enforceable SIP construction permit of less than 50 tons per year far outweighed the benefits of such a determination. EPA estimated that the applicable SIP would in many cases impose its own BACT requirement. To conduct a PSD BACT review of those sources would be pointless. In the other cases, applicants would incur the expense of preparing a BACT proposal and the asso-

ciated delay for review and approval by the permitting authority. Permitting authorities would have to expend the necessary time and effort to make the BACT determination. For EPA, this determination would in general require it to duplicate much of the effort that the State permitting authority had already expended in becoming knowledgeable about the source. The benefits, in contrast, are relatively insignificant. EPA estimates that BACT applied by virtue of PSD review to the 2,400 50-ton sources would capture annually only 300 tons more of SO₂ and 8,000 tons more of PM than what those controls that the source would install in order to meet the 50 tons per year cutoff would capture. 300 tons is less than 1 percent of the estimated total new emissions of SO₂ per year, while 8,000 tons is less than 2 percent of the estimated total new emissions of PM per year.

In light of section 165(b) and these findings, EPA has decided generally to exempt from full PSD review any new major stationary source or major modification (hereafter, a "major new source") which would have allowable emissions of less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is more restrictive (hereafter, a "50-ton source"). The 100 pounds per hour criterion, it should be noted, would apply only with respect to a pollutant for which an increment or standard for a period less than 24 hours had been established. For example, the criterion would apply to a source with respect to SO₂, but not PM.

In accordance with the decision, under § 52.21(j), no 50-ton source need apply BACT in order to get a PSD permit. An applicant must demonstrate, however, that the source would meet all applicable emission limitations under the SIP and all applicable emission standards and standards of performance under 40 CFR part 60 and part 61. An applicant may demonstrate that the source would meet those limitations and standards by presenting an enforceable SIP permit under which the source would have to meet them. Any major new source with allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour would be subject to the case-by-case BACT requirement.

Under § 52.21(k), no applicant for a PSD permit for a 50-ton source would have to demonstrate that the source would not cause or contribute to a violation of an applicable increment or NAAQS, to assess the direct and indirect effects of the source on visibility, soils and vegetation, and to provide monitoring data, unless the source would impact a class I area or an area where an applicable increment is known to be violated.

To ensure that air quality does not deteriorate beyond the level of any increment, EPA will periodically assess increment consumption in an area. For the same purpose, it has, in the part 51 regulations also published today, imposed on each State the same obligation as well as the obligation to revise its SIP to cure the violation of any increment. It should be noted, too, that the assessment of increment consumption must be subject to public comment and an opportunity for a public hearing.

Finally, under § 52.21(r), the issuance of a PSD permit to a 50-ton source would be subject to public scrutiny only if and to the extent that the underlying determinations had not been previously subject to public scrutiny. For example, if the State in granting a SIP permit provided an opportunity for only written comment on whether the source would meet the applicable emission limitations and standards, then EPA would require an opportunity for a public hearing on those questions and an opportunity for written comment and a public hearing on whether the source would impact a class I area or an area where the increment is known to be violated. The purpose of this public participation exemption is to avoid duplication of effort. Applicants should be prepared to prove to what extent the public had an opportunity to scrutinize the issuance of the SIP permit.

The general exemption for 50-ton sources is consistent with the relevant purposes of the new PSD requirements as set forth in sections 101(b)(1) and 160 of the act: to prevent significant deterioration of air quality, to "preserve, protect and enhance" air quality over class I areas, and to assure that any decision to permit increased air pollution is made only after careful evaluation and informed public participation. Nondeterioration is assured since increment consumption will be assessed periodically and SIPs revised to cure any violation. Class I areas are fully protected, since the exemption does not apply as to them. Finally, each material determination behind the issuance of a PSD permit will be subject to at least one round of public participation.

The exemption, moreover, is within the spirit of section 165(b). Each year it will avoid imposing an unnecessary expenditure of up to \$21 million on approximately 2,400 controlled sources of relatively insignificant air quality impact. It will, in addition, conserve substantial Federal and State resources for other, more important air pollution control tasks. Finally, the exemption will encourage improvements in control technology, since potential applicants will strive to reduce their emissions below 50 tons per year in order to be eligible for the streamlined review process.

EPA has included the short-term criteria of pounds per day or per hour to ensure that seasonal or intermittent operation of sources which have significant short-term emissions will be subject to review. Industries which commented uniformly felt that the Agency was without legal ability to implement the short-term criteria. The act does not, however, preclude the use of short-term criteria and, in fact, seems to require their use in those cases where short-term increments and NAAQS have been established. The short-term criteria would not apply under the regulations where no counterpart increment or standard had been established. State agency comments agreed that short-term criteria would be an important and necessary mechanism to assist in the protection of short-term increments and national ambient air quality standards.

F. OTHER EXEMPTIONS

The regulations promulgated today incorporate several other review exemptions. These exemptions will streamline the review process so that the review will focus on those sources of real air quality significance.

The exemptions are effective only when the public has been afforded an opportunity to comment on any material determinations. Also, protection of increment is assured by, first, not allowing a review exemption that might affect a class I area or an area where an applicable increment is known to be violated and, second, by EPA (or the State when implementing PSD) periodically reviewing the aggregate air quality impacts of unreviewed sources. Such periodic reviews of aggregate impacts, as mentioned above, shall be subject to public comment and an opportunity for public hearing. Additionally, the relevant impact of emissions of all previously unreviewed sources must be included in the review of any source subject to ambient air impact analysis.

Under the first exemption, any major source subject to nonattainment offset requirements for a particular pollutant which would impact no clean air area is not subject to PSD review for that pollutant. Review of such a source would be pointless. The nonattainment requirements would impose LAER, a limitation more stringent than BACT, and would ensure that the source would not contribute to a violation of any applicable NAAQS. Since the source would impact no clean air area, ambient review would be unnecessary to forestall any significant deterioration.

Temporary sources are also exempt from full PSD review, since their ambient air impacts are short-lived. Temporary emissions include, but are not limited to, those from a pilot plant, portable facility, construction or ex-

ploration. Emissions occurring for less than 2 years at one location would generally be considered temporary. Emissions for longer periods of time might also be considered to be temporary (such as the emissions related to the construction of power plants or other large sources), but should be dealt with on a case-by-case basis. Additionally, once a portable facility has received a PSD permit, it may relocate without undergoing PSD review: *Provided*, That the source notifies the reviewing agency of such relocation 30 days in advance, the proposed relocation would impact no class I area and no area where the increment is known to be violated, and emissions from the facility would not exceed allowable emissions.

The Agency's proposed PSD regulations stated that if an emitting unit within a source were modified so as to increase potential emissions by 250 tons per year (100 tons for certain listed source types), the unit be required to install best available control technology even if accompanying emission reductions within the source totally offset the new emissions. Industry roundly criticized this proposal as an unauthorized extension of the PSD program to situations where no threat of worsening air quality would exist. After a careful review of the meaning of "modification" in the PSD provisions of the act and consideration of the potential air quality effects of intrasource pollutant tradeoffs, the Agency has decided to adopt a regulatory scheme that in part accommodates industry's expressed concerns.

The regulations apply the definition of "modification" to the entire source (plant), with the result that if net emissions from the source do not increase when an existing unit is revamped, the source would not require full PSD review. This exemption would not be applicable as to BACT in situations where a major facility is added to or is reconstructed at a source, whether the addition is to replace previous production capacity or for growth.

The Agency believes that this approach is consistent with Congress' use of the term "modification" in section 169(2)(C). In adopting that section, one of the November 1977 "technical and conforming amendments" to the 1977 amendments, Congress said that it was honoring the conference agreement by conforming the terminology to its use in section 111, the provision on new source performance standards. At the time the conferees reached agreement and at the time the technical amendments were enacted, "modification" in section 111 had been interpreted by EPA regulation to allow source owners and operators to avoid the application of new source performance standards to

changed existing facilities whose emissions would increase, if that increase were totally offset elsewhere in the source. Although the EPA interpretation was overturned by a United States court of appeals in early 1978 (*ASARCO v. EPA*, 11 ERC 1129 (D.C. Cir.)), there is no reason to believe that the Congress in late 1977 did not regard the definition, which had existed as law since 1975, as being well-suited to its purposes in the PSD program.

Under the regulations, source owners or operators who claim to be undertaking a modification exempt from the PSD program because of intrasource tradeoffs will typically not be allowed to obtain credit for reducing emissions from stacks while increasing emissions from roof monitors or other low-level emission points. Stack and nonstack emissions generally have very different impacts on air quality in areas near a source. Since the PSD program is ultimately concerned with effects on air quality, EPA does not feel bound to apply mechanically the pre-*ASARCO* case definition of "modification" in section 111, a section directed toward technology, so as to frustrate the air quality protection purpose of PSD.

The effects of treating "modifications" as discussed above will be that modifications to existing facilities will not require installation of best available control technology determined on a case-by-case basis, if the owner or operator demonstrates that zero net emissions would attend the change. The delay and expense involved in those determinations will, therefore, be avoided. Any applicable new source performance standards will, however, apply to modified facilities in accordance with the *ASARCO* decision.

The Administrator intends to use the following criteria in determining whether a no net increase exemption for a modified facility from the BACT requirement would apply: (1) All emission reductions from sources included in the baseline will be credited in terms of actual emissions using reasonable assumptions for operating conditions, except in two cases. Where a SIP revision was pending as of August 7, 1977, the applicable SIP as later relaxed would represent the baseline for crediting emission reduction. Changes in allowable emissions will also be used to credit reductions from major construction which commenced before January 6, 1975, but was not yet operating by August 7, 1977. For emission reductions from major construction previously approved to consume portions of an increment, allowable emissions as expressed in the PSD permit will be the basis for determining reduction credit. (2) All reductions must be enforceable (e.g., contained in the permit) and proposed in conjunc-

tion with the source undergoing preconstruction review. Proposed reductions must occur or have occurred before construction is complete. In determining whether no net increase would occur, credit will be given only for emission reductions accomplished in conjunction with the proposed modification. (3) The reduction(s) must equal or exceed those allowable emissions approved for the proposed construction. This determination will generally be made on a pounds-per-hour basis when all facilities involved are operating at their maximum expected production rate. When reductions are proposed on a tons-per-year basis, actual annual operating hours for the previous 1- or 2-year period will be used, as appropriate. (4) All proposed emission reductions must not be otherwise needed to provide for additional growth already approved. Finally, (5) air quality need not improve at every location affected by the proposed construction but on balance the affected area should not be adversely impacted.

The Administrator further believes that all new or modified facilities within sources without a net emission increase should generally be exempt on a pollutant-specific basis from the detailed ambient review requirements. In most cases no useful purpose is served by requiring an air quality impact review of sources that would obviously not degrade air quality. This exemption is not intended to apply when the source would impact a class I area or an area where the increment is known to be violated. The Administrator generally intends to use the same criteria as mentioned above for BACT exemptions in determining if a zero emission increase exemption for ambient review would apply. However, in contrast to the analysis required in the case of modified facilities seeking exemption from BACT review, the no net emission increase analysis employed for purposes of exemption from the ambient review shall take into account all emission increases and decreases occurring at the source since August 7, 1977.

G. FUGITIVE DUST

Several comments from representatives of strip mine and other surface mining interests questioned whether Congress intended dust emissions from surface mines resulting from mobile source activity and the action of the wind on exposed surfaces to be taken into account in reviewing the mines for PSD. The commentators contended that Congress only intended PSD review to apply to "stationary" sources and that mobile source activity and the action of the wind were not stationary sources. While Congress apparently did intend PSD to apply to stationary sources only, surface mines

are stationary sources. Consequently, dust emanating from them should not be excluded from PSD review merely on the basis of what causes it to become airborne.

It was also argued that surface mines should receive some relief from strict consideration of ambient particulate concentrations associated with surface mining activities. A number of arguments were presented: that a large majority of the associated particulate matter is nonrespirable; that mining activity occurs in areas with limited population; that the particulate matter arises at ground level and falls out within very short distances; that visibility is not affected because the light scattering which hinders visibility is caused by smaller particles; and that even after the application of BACT, short-term particulate standards for NAAQS and PSD increments might not be met.

In view of these comments and other studies,⁵ EPA has decided to exclude from any air quality impact assessment of a source or modification any fugitive dust that would emanate from it. "Fugitive dust", as defined in the regulations, consists of particles of native soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may come from haul roads or exposed surfaces through the action of man or the wind or both.

Additional support for this exclusion can be found in the legislative history. It points to the utilization of "administrative good sense" regarding fugitive dust (see S. Rep. No. 95-127, at 98 (1977)) and suggests that Congress did not intend PSD to prohibit surface mines of an economically viable size (see H. Rep. No. 95-294, at 165-66 (1977)). In addition, accurately assessing the short-term ambient impact of fugitive dust is often not possible. The Agency will continue its efforts to develop better short-term modeling techniques for fugitive dust.

Certain aspects of this exclusion for fugitive dust should be noted. First, the burden of showing to what extent emissions from the proposed source or modification would be made up of fugitive dust rests with the applicant. Second, the regulations do not exclude fugitive dust from the determination of potential emissions. Any source or modification which, taking into account emissions of fugitive dust, would have potential emissions equal to or greater than 250 tons per year would be subject to the applicable PSD re-

quirements, especially in many instances the BACT requirement. Finally, EPA will treat emissions of fugitive dust as not consuming increment for the purpose of evaluating other sources under PSD.

The Administrator would like to emphasize that EPA intends to implement the above policy of excluding the fugitive dust only on an interim basis. EPA will reassess the implications of the policy and any possible technical improvements in modeling fugitive dust, and will adjust the policy as appropriate.

H. COMMENCE CONSTRUCTION

It is important in many cases to determine whether a source has commenced construction by a certain date. If a source commenced construction before June 1, 1975, it would be exempt (or "grandfathered") from PSD review altogether. 40 CFR 52.21(d). If a source commenced construction before August 7, 1977, it would be exempt from the amendments that EPA promulgated on November 3, 1977. 42 FR 57459. Finally, certain major stationary sources or major modifications will be exempt from today's final regulations if they obtained all applicable air pollution permits by March 1, 1978, and commence construction before 9 months from today.

In determining whether construction has "commenced," as that term is defined in section 169(2) of the act, it is first necessary to determine whether the owner or operator has obtained and continues to hold all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations under the applicable State implementation plan. If all such permits have not been obtained or maintained, the inquiry can stop; this requirement is a prerequisite for finding that construction has commenced.

Assuming that the permit requirement is satisfied, it is still necessary to determine whether the source meets one of two additional requirements. The first requirement is that a continuous, physical on-site construction program has begun by the date in question and will be completed within a reasonable time. The words "continuous" and "on-site" are key to this test. It will not suffice merely to have begun erection of auxiliary buildings or construction sheds unless there is clear evidence (through contracts or otherwise) that construction of the entire facility will definitely go forward in a continuous manner (no breaks greater than 18 months). Nor will it suffice that erection of certain components began off-site.

The second requirement is that by the date in question binding agree-

⁵ NW Colorado Environmental Impact Statement, Department of Interior, 1976; Survey of Fugitive Dust from Coal Mines, EPA 908/1-78-003, February, 1978; Impact of Significant Deterioration Proposals Upon Western Surface Coal Mining Operations, Federal Energy Administration, May 5, 1976.

ments were established for construction of the facility to be completed within a reasonable time. From the legislative history, it is clear that boiler contracts, even those with penalty clauses, will typically not suffice. See S. Rep. No. 95-127, at 32-33 (1977). The source must enter into a site-specific commitment through contracts.

The act specifies that the agreements must be ones "which cannot be cancelled or modified without substantial loss". The word "substantial" is clearly key to this test. EPA proposed for public comment on November 3, 1977, a "10 percent" test. Under this test, if the amount the owner would have had to pay to cancel construction agreements as of the date in question would have totalled more than 10 percent of the total project cost, the loss would be deemed "substantial."

Several comments were received, particularly from industry, on the "10 percent" test. Many of the commentators thought that the 10 percent rule was arbitrary since they regarded even smaller percentage losses on a \$100,000,000 project as clearly being substantial. In response to these comments, EPA has abandoned the proposed 10 percent test as a firm rule. However, in order to help minimize administrative burdens and to provide some certainty, the Administrator will consider a loss as being substantial if it would be more than 10 percent of the total project cost. Whether a loss equal to or less than 10 percent is substantial will be determined on a case-by-case basis. The dominant consideration will be whether the "source has so committed itself, financially and otherwise, to the use of a particular site for a particular facility that relocation is not an option and delay or substantial modification would be severely disruptive." *Id.* at 32.

For a phased construction project for which a permit has been given for a number of phases (additional guidance below), EPA will apply the 10 percent guide to each phase of the project. Thus, if the loss for a phase would exceed 10 percent of the total cost of the phase, then EPA will treat the substantial loss criterion as having been met for that phase.

I. PHASED CONSTRUCTION PROJECTS

Multifacility sources approved for construction in distinct phases require special guidance. In general, if the phases of the major facilities involved are mutually dependent⁶ and one of

the major facilities has, by an applicable grandfather date, commenced construction, then all other dependent facilities specifically approved for construction at the same time will also hold such status. Conversely, each independent facility must individually commence construction by the prescribed grandfather date(s). For example, if a power company commenced construction on the first boiler of a three-boiler project in 1977 and plans to commence construction on the second in 1980, and on the third in 1982, the fact that there may be a phased construction process at the same general site does not mean that the boilers to be constructed in 1980 and 1982 can escape the new PSD requirements promulgated today.

The Administrator is concerned about the issuance of permits for phased construction projects that would have the effect of "reserving" the increment for a single source, thereby limiting growth options in the area. The options are to not issue phased construction permits at all or to limit the conditions under which a phased construction may reserve an increment well into the future. The Administrator intends to implement the latter option when plans for a phased project are certain and well-defined. One mechanism to be used is to reassess the BACT determination for the later phases of the project prior to construction to ensure that the most up-to-date control technology will be used. The Administrator will specify at the time that the original permit is issued which BACT determinations will be reassessed. The Administrator may also adopt regulations in the future to deal with this issue more comprehensively.

Also, for phased construction projects, the Administrator does not generally intend to limit the time for construction of the project. However, the first phase must be commenced within 18 months after permit approval, and each construction phase thereafter must commence within 18 months of the date approved in the permit and must not have breaks exceeding 18 months. The Administrator will further evaluate the 18 month criteria as it applies to breaks in construction to determine if a shorter time period (e.g., 6 months) should be used.

J. MISCELLANEOUS SOURCE APPLICABILITY QUESTIONS

EPA also sought comments as to the applicability of PSD to proposed sources below the stated size cutoffs present on the list of 28 source types. The Administrator specifically asked

pulp mill is an example of a source with dependent facilities, whereas a three-boiler power plant is a typical example of a source with major independent facilities.

in the December 8, 1977 supplement to the November 3 proposal if fossil-fuel fired steam electric plants rated at or below 250 million British thermal units per hour heat input, municipal incinerators charging not more than 250 tons per day of refuse, fossil-fuel boilers rated at or below 250 million British thermal units per hour heat input, and petroleum storage and transfer units with a capacity of 300,000 barrels or less should be subject to PSD review under the general 250 tons per year potential emission applicability criterion.

EPA has decided that the 250 tons per year criterion should apply even though a source may be below a stated size cutoff. For example, a modification that increases capacity by more than 300,000 barrels for a petroleum storage unit would be subject to review if it has 100 tons per year potential emissions. Also, if a modification increases capacity by only 290,000 barrels but would have more than 250 tons per year potential emissions, then it, too must be reviewed. It should also be noted that the capacity size cutoff like the increased potential emission criteria for defining major modification is cumulative in nature. This approach prevents the "sized" sources from avoiding PSD review merely by limiting an increase to just below the size cutoff. It also ensures that all sources with potential emissions of 250 tons per year or more are treated equally.

In the November 3, 1977 proposal, EPA proposed not to treat a voluntary switch to an alternative fuel or raw material as a modification, if, prior to January 6, 1975, the source were capable of accommodating such fuel or material. Environmentalists opposed this treatment of voluntary fuel switches on the ground that Congress intended all such switches to be treated as modifications. EPA disagrees with this contention. Section 169(2)(C) of the Act by its reference to Section 111(a) in effect adopts the definition of "modification" under Section 111(a) for the purposes of PSD. In adding Section 169(2)(C) to the Act, Congress indicated that it intended to conform the meaning of "modification" to "usage in other parts of the Act." 123 Cong. Rec. H11955, 11957 (November 1, 1977). At the time, regulations promulgated under Section 111 had defined "modifications" to exclude voluntary fuel switches when the source, "prior to the date any standard under this part becomes applicable to that source type . . . [.] was designed to accommodate that alternative use." 40 CFR 60.14(e)(4) (1977). Apparently, Congress intended voluntary fuel switches to be treated similarly for PSD purposes. The PSD regulations first became applicable on January 6, 1975. Consequently, it would appear

⁶The dependence of facilities within a source will be determined on an individual basis. Two or more facilities will generally be considered dependent if the construction of one would necessitate the construction of the other facility(ies) at the same site in order to complete a given project or provide a given type (not level of) service. A kraft

that Congress did not intend voluntary fuel switches to be treated as modifications for PSD purposes, if the source could have accommodated the fuel prior to January 6, 1975. In any event, the proposed treatment of voluntary fuel switches has been an integral part of the PSD regulations since their original promulgation in 1974. See 39 FR 42510 (December 5, 1974) § 52.01(d)(2)(iii).

Since the proposed treatment of voluntary switches is consistent with Congressional intent and since that treatment was already a part of the pre-existing regulations, EPA has retained it in the revisions promulgated today. It should be noted, however, that although such switches will not be subject to PSD review, they will consume increment.

EPA also asked on November 3 whether it should treat a conversion to an alternative fuel by reason of an order under the Energy Supply and Environmental Coordination Act of 1974 or a natural gas curtailment plan pursuant to the Federal Power Act as a modification or not. Shortly thereafter, Congress answered this question. On November 16, it enacted technical and conforming amendments to the 1977 Amendments. Among those amendments was Section 169(2)(C). It in effect defined a modification as not including such conversions. See Clean Air Act Sections 111(a)(8) and 169(2)(C) (the latter added by Pub. L. 95-190, Sections 14(a)(54), 91 Stat. 1393, 1402 (November 16, 1977)).

In order to conform the final regulation to the Act and avoid confusion, EPA has further qualified the definition of "major modification" by adding the provision that a switch to an alternative fuel by reason of an order or rule under Section 125 of the Act is not a modification. See Clean Air Act Section 125(e).

BEST AVAILABLE CONTROL TECHNOLOGY

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

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

Comments received indicated that if a source were subject to PSD on the basis of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT would be required only for those pollutants for which the potential emissions exceed 250 tons per year). The Administrator agrees with this argument and appro-

priate changes are made in the regulations set forth below.⁷

Some questions have been raised regarding what "subject to regulation under this Act" means relative to BACT determinations. The Administrator believes that the proposed interpretation published on November 3, 1977, is correct and is today being made final. As mentioned in the proposal, "subject to regulation under the Act" means any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type. This then includes all criteria pollutants subject to NAAQS review, pollutants regulated under the Standards of Performance for new Stationary Sources (NSPS), pollutants regulated under the National Emission Standards for Hazardous Air Pollutants (NESHAP), and all pollutants regulated under Title II of the Act regarding emission standards for mobile sources.

BACT determinations are to be made on a case-by-case basis by the reviewing authority, taking into account several factors, including cost, energy, and technical feasibility. Efforts are now underway within EPA to assist States (and EPA itself in the interim) in making BACT determinations when they assume responsibility for implementing the PSD program. The Agency is preparing and will distribute a guidance document to assist reviewing authorities in implementing the BACT requirement. In addition, the Agency, in response to numerous comments, will establish a national clearinghouse for distributing BACT determinations. The Administrator intends that such a clearinghouse will serve to advise reviewing authorities of each other's determinations and thereby promote a consistent basis of experience. The clearinghouse is not, however, intended to substitute for a case-by-case analysis on the part of the reviewing authority to assess what control technology is required under BACT for the specific source undergoing review.

Other questions have arisen concerning the possibility for requiring control technology transfer for installing control technology to meet the BACT requirement. In general, the BACT requirement does not preclude consideration of technology used in other types of sources but not yet demonstrated for the specific source type undergoing review. However, due consideration of the other factors (economic costs, energy, etc.) must also be given before requiring such technology transfer in order to comply with the BACT requirement.

⁷It should be remembered that a 50-ton source is exempt from BACT review only as to the pollutant for which it is such a source.

In addition, some questions, predominantly from the industrial sector, were raised during the public comment period concerning EPA's ability to impose a design, equipment, work practice, or operational standard under the review for BACT. The Administrator continues to believe that using such a standard is well within the intent of Congress. Under Section 111 (Standards of Performance for New Stationary sources (NSPS)) such a standard, or a combination of such standards, can be promulgated by the Administrator if in his judgment such a standard is achievable and a conventional standard of performance is not feasible. Since an applicable NSPS forms the minimum BACT requirement, it follows that the Administrator should be able to prescribe a design, equipment, work practice, or operational standard for BACT. In addition, EPA's Interpretative Ruling of December 21, 1976 (41 FR 55524) to Section 110 governing new source review in nonattainment situations includes an opportunity for the Administrator to prescribe such a standard where emission limits are not feasible. The Administrator should also have this ability under PSD. It should be emphasized that the Administrator will prescribe a design, equipment, work practice, or operational standard only when technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible.

Finally, it has come to the Administrator's attention that it may be appropriate to make the innovative technology waiver for NSPS under Section 111(j) of the Act applicable to BACT determinations under the PSD program. Briefly, Section 111(j) allows additional time for a source to comply with an applicable NSPS if: (1) The source plans to use innovative technology which has a substantial likelihood of meeting the NSPS at lower cost in terms of energy, economic, or non-air quality environmental impacts; and (2) the source would not cause an unreasonable risk to public health or welfare in its operation or malfunction. The addition of similar provisions to the PSD regulations would seem consistent with Congressional intent under NSPS and perhaps necessary to avoid the BACT determinations from negating the provisions of Section 111(j). Comments are solicited on this issue.

GEOGRAPHIC APPLICABILITY

The regulations made final today require any major source that affects air quality in areas with air quality cleaner than NAAQS (both internal and external to areas designated as nonattainment under Section 107) to meet

the applicable preconstruction requirements of Section 165. In this respect, the Section 107 designations are not binding on source obligations. This reflects a continuation of EPA's policy of reviewing sources in nonattainment areas to prevent the transport of any emissions which would cause significant deterioration in an affected clean area. Conversely, any source which can make a specific demonstration, subject to public comment and opportunity for public hearing, that no impact will occur in a clean area (whether the area in question is designated as attainment or nonattainment) is exempt from PSD preconstruction review for the applicable pollutant.

Due to several comments received regarding the applicability of the PSD review in rural areas impacted by dust consisting of native soil, the Administrator wishes to reaffirm Agency policy that PSD preconstruction review generally applies to these areas. In general, a new major source to be located in a rural area with infrequent short-term violations of the total suspended particulate matter NAAQS should be allowed to construct after applying the required controls provided that the dust in question is uncontaminated by pollutants from industrial activity and the emissions of the source in conjunction with emissions from other sources in the vicinity (excluding such dust) would not cause a violation of the applicable increment(s) or the applicable NAAQS, assuming as to the NAAQS an appropriate "non-urban" background concentration.²

MODELING

In the regulations published today, EPA's assessment of the air quality impacts of new major sources and modifications will be based on EPA's "Guideline on Air Quality Models," OAQPS 1.2-080, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, April, 1978. This guideline is incorporated by reference into the regulations. Sources may request approval from the Administrator to use air quality dispersion models other than those noted in the "Guideline." If the Administrator determines that the model recommended in the "Guideline" and the model proposed by a source are comparable, the proposed model may be used. Methods outlined in EPA's "Workbook for the Comparison of Air Quality Models," U.S. EPA, Research Triangle Park, N.C. 27711, November 1977, may be used to determine comparability of models.

²Guideline on Air Quality Models, OAQPS 1.2-080, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, 1978.

The comments on the "Guideline" received in connection with the November 3 proposal and the Modeling Conference addressed three basic policy issues regarding implementation of the modeling guidelines. The first is whether a preliminary screening technique should be used to determine if full scale modeling would be necessary for preconstruction review. The second is whether the modeled estimate of source impact should be limited to a certain distance or a minimum numerical impact or both. Finally, the need to create an arbitration board to resolve modeling disputes was raised.

Industry and State agency comments on the first issue favored the use of some type of screening technique to alleviate resource burdens, i.e., the costs and time involved in sophisticated computer modeling of ambient air impacts. For screening purposes, conservative estimates of emission characteristics and ambient impacts would be modeled using relatively straightforward mathematical formula. However, industry comments stated that the specific screening techniques proposed on November 3, 1977, would be of little real value because of what they considered undue conservatism in the techniques. Environmental groups, however, felt screening techniques would improperly allow deterioration beyond increment allowances.

EPA intends to retain the screening procedures set forth in "Guidelines for Air Quality Maintenance Planning and Analysis, Vol. 10 (Revised), Procedures for Evaluating Air Quality Impact of New Stationary Sources," (October 1977, U.S. EPA, Office of Air

Quality Planning and Standards, Research Triangle Park, N.C. 27711). The purpose of such procedures is to reduce resource burdens where there is little or no threat to the PSD increments or NAAQS. However, as the threat to the increment increases, more sophisticated techniques would be used. If these procedures indicate that the ambient concentration increase would exceed one-half of the remaining ambient increment or ceiling allowance, then refined analytical techniques would be used. Thus, as the available increment becomes smaller, sources that can be quickly estimated as impacting less than half the remaining increment will necessarily be those with smaller and smaller impacts.

As a result of comments received on the second policy issue, the Administrator intends to limit generally the application of air quality models to a downwind distance of no more than 50 kilometers. This is because dispersion parameters commonly in use are based on experiments relatively close to sources, and extending these parameters to long downwind distances results in great uncertainty as to the accuracy of the model estimates at such distances. Also, since the air quality impact of many sources falls off rapidly to insignificant levels, EPA does not intend to analyze the impact of a source beyond the point where the concentrations from the source fall below certain levels (which are generally based on the Class I increments). These levels shown below are therefore interpreted by the Administrator as representing the minimum amount of ambient impact that is significant.

Pollutant	Annual	Averaging time			
		24-Hour	8-Hour	3-Hour	1-Hour
SO ₂	1 ug/m ³	5 ug/m ³		25 ug/m ³	
TSP	1 ug/m ³	5 ug/m ³			
NO _x	1 ug/m ³				
CO			0.5 mg/m ³		2 mg/m ³

However, since the 1977 Amendments provide special concern for Class I areas, any reasonably expected impacts for these areas must be considered irrespective of the 50 kilometer limitation or the above significance levels.

Comments were also received urging the creation of an arbitration board to resolve disputes in situations where refined assessment techniques are not readily available and where significant professional judgment must be made on a case-by-case basis, such as those involving fugitive dust and complex

terrain problems, and long range transport. The Agency feels that such an approach would serve to unduly delay the decision making process. The Agency realizes that special concern will have to be addressed to these situations and that EPA Regional Office consistency will have to be assured. EPA intends to use the requirements under section 301(a)(2) of the Act as the mechanism for ensuring Regional consistency. Additionally, the Agency intends to establish an external advisory group to review periodically the modeling guidance and rec-

commend proposed changes as necessary.

Many other comments of a technical nature were made regarding the Agency's modeling guidance. In many cases, solutions to the issues raised must rely on further scientific development. Some inherently must rely on case-by-case technical judgments by qualified scientists. EPA is actively working in the areas of model validation and improvement, turbulence characterization and the use of representative meteorological data and will provide additional guidance on these areas as it becomes available. Any proposed revisions to the currently issued "Guideline on Air Quality Models" will be subjected to review by the scientific community and interested and affected parties. Procedural mechanisms for effecting a thorough review are currently being investigated. It is anticipated that the "Guideline on Air Quality Models" will be reviewed and updated every 18-24 months. Notice of any proposed revisions will at a minimum be published in the *FEDERAL REGISTER* for review and comment prior to final issuance.

MONITORING REQUIREMENTS

Another issue frequently raised in the comments was that of the proposed monitoring requirements. Through sections 165 (a)(2) and (e) of the Act, Congress imposed on the owner or operator of a proposed major source who submits an application after August 7, 1978, the task of gathering and analyzing air quality monitoring data for inclusion in the application. Such data must be related to and gathered over the year preceding submittal of the complete application. In addition, through section 165(a)(7), the owner or operator may be required to conduct such post-construction monitoring as may be necessary to determine the effect the source or modification may have or is having on air quality in any area it might affect. It is apparent that Congress included the monitoring requirements as a means of checking the accuracy of the modeling results. However, in many cases, monitoring data may not provide an adequate "real world" check on the accuracy of modeling as it applies to increment consumption.

As proposed, EPA has decided generally not to require preconstruction or postconstruction ambient monitoring to determine how much of the increment has been used up. First, the year-to-year variability of air quality data limits the usefulness of certain data collected. Next, the increments are generally consumed by new or modified sources on the basis of allowable emissions, whereas ambient monitoring will measure air quality as it is affected by changes in actual emissions. Moreover, several emission

changes that would be detected by an ambient monitor may not consume increment. That is because certain emissions which do or will affect air quality levels do not count against the increments (e.g., emissions from any source commencing construction prior to January 6, 1975, but completed at some later date; emissions resulting from compliance with an order under section 125). In addition, the State may exempt certain emission changes which otherwise would consume a portion of the available PSD increment (e.g., Federally-ordered fuel switches, temporary emissions, and new sources outside the United States). Finally, the stack height provisions of section 123 of the Act require in any case where a source uses a stack the height of which exceeds good engineering practice that dispersion modeling efforts assume a good engineering practice stack height. In actual practice, assessment of the available increment will normally be accomplished through an accounting procedure whereby atmospheric modeling of individual sources will be used to keep track of changes in actual and allowable emissions as appropriate.

Although increment consumption must of necessity be tracked through modeling, EPA does not intend that there be no "real world" checks on the accuracy of modeling. If an applicant or other party believes that a model used by EPA has either overpredicted or underpredicted the air quality impact of a source, EPA welcomes the submission of data which will more precisely define the impact of the source. For isolated sources, air quality monitoring may be sufficient for this purpose. However, model validation using air quality monitoring is generally expensive, since a complex monitoring network is usually required to ensure that maximum concentrations are measured. Other model validation methods may be less expensive and more reliable (e.g., tracer studies and wind tunnel experiments), especially where more than one source may contribute to the increment consumption. In any case, where subsequent data demonstrate to EPA's satisfaction that the modeling is in error, EPA will make appropriate adjustments so as to provide more (or less) of the increment for future use.

Since PSD review now includes a review against the applicable NAAQS, EPA intends to focus the preconstruction and postconstruction monitoring requirements on obtaining the necessary data for this purpose. To that end existing air quality data will be used to the maximum extent practicable and preconstruction monitoring will only be required as necessary. Also, if preliminary modeling or other data indicate that the new source would not pose a threat to a NAAQS, EPA will

exempt the source from the preconstruction monitoring requirements altogether. For example, if an SO₂ source plans to construct in an area with no other SO₂ sources, no preconstruction monitoring for SO₂ would be required. On the other hand, because of the long range transport of oxidants, if a major source of volatile organic compounds intends to locate in an attainment or unclassified area for photochemical oxidant, EPA will routinely require that the source submit oxidant monitoring data. Finally, since certain sources with allowable emissions of less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, are exempt from an air quality impact analysis, air quality monitoring would not be required for such sources.

All air quality monitoring must adhere to EPA's monitoring procedures in effect at the time of the monitoring. Currently, these requirements include criteria for siting monitors and instrument probes, the specification of reference methods and equivalent methods, and a minimum quality assurance program. EPA will implement the monitoring requirements promulgated in this rulemaking primarily through guidance found in "Ambient Air Monitoring Guidelines for Prevention of Significant Deterioration," OAQPS 1.2-096, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May 1978. EPA encourages permit applicants to consult with the reviewing authority regarding the need for and implementation of the monitoring requirements.

The number of monitors will be based on a case-by-case determination considering source emission characteristics, terrain and meteorology. In some cases, one instrument per pollutant may be adequate. The source will be permitted to use existing data where appropriate. Judgments on the representativeness of existing data taken near the source must be made on a case-by-case basis.

Twenty-four hour samples for SO₂ (bubbler method) will not be acceptable, since 3-hour values would not be available for comparison with the 3-hour secondary NAAQS standard and increment. Also, if bubblers were to be used, detailed quality assurance requirements would be required because of known temperature instability problems with the bubbler methods. In most situations, the cost of running a bubbler may not be significantly different from a continuous analyzer due to the more rigid quality assurance procedures and the need for laboratory support.

Existing 24-hour particulate samples on 6-day intervals will generally be acceptable. In many areas, such data have been collected for a period of

years. As to such areas, additional monitoring will generally be unnecessary. However, the Administrator may require sample collection more often than every sixth day.

BASILINE CONCENTRATION

The term "baseline concentration" is used in an abstract sense to establish the starting point for defining significant deterioration. This term is applicable for only sources of SO₂ and PM. Changes in the emission levels of these pollutants from sources contributing to the baseline concentration will in turn affect the amount of air quality increment that remains available to accommodate additional growth.

On November 3, 1977, EPA proposed a definition of baseline concentration that reflected a January 6, 1975, starting date for most sources. Additionally, this proposal contained specific guidance on how a baseline concentration might be established in a given area. Due to several implementation and legal concerns raised during the public comment period, the proposal of November 3 has been amended in three respects. The regulations promulgated today reflect an August 7, 1977, baseline date, place primary emphasis on tracking emission changes rather than on establishing a baseline concentration, and provide additional guidance as to what emission levels contribute to the baseline concentration.

Section 169(4) of the Act generally defines baseline in terms of the ambient concentration existing at the time of the first application for a permit in an area. However, major construction commencing after January 6, 1975, is specifically acknowledged to consume increment and cannot be considered as contributing to the baseline concentration. Both the November 3 proposal and the regulations promulgated today recognize the severe technical and administrative problems with implementing a definition of baseline concentration that relates to the date of first permit application in an area. The Administrator believes that a strict interpretation of the Act's language would create thousands of different areas each with different baseline starting points. Moreover, these areas would eventually overlap as more and more sources applied for PSD permits. The final regulations and those proposed on November 3, 1977, resolve those problems by establishing a uniform starting date for defining the baseline concentration in all areas. The November 3 proposal, however, differs with the final regulations as to what the starting date should be.

The Administrator believes that an August 7, 1977, baseline date rather than one of January 6, 1975, better fulfills the requirements of the Act and is the earliest possible time that

could be used as a uniform starting date. This date coincides with the time that PSD review under some of the new Act provisions could have taken place and with the time that States were given affirmative responsibility to protect the applicable PSD increments in their plans. As required by the Act, major source construction commencing after January 6, 1975, is not included in the baseline. Such activities consume increments as discussed below.

The November 3, 1977, proposal also contained guidance for establishing a baseline concentration through the use of existing air quality data. That proposal also suggested an alternative means to construct a baseline concentration using air quality dispersion modeling when appropriate air quality data did not exist. The regulations promulgated today no longer suggest that the baseline concentration be formally established. The Administrator feels that increment consumption can be best tracked by tallying changes in the emission levels of sources contributing to the baseline concentration and increases in emissions due to new sources. Data to establish baseline air quality in an absolute sense would be needed only if increment consumption were to be tracked using ambient measurements. Thus, to implement the air quality increment approach set forth in the Act, the reviewing authority needs to verify that all changes from baseline emission rates (decreases or increases as appropriate) in conjunction with the increased emissions associated with approved new source construction will not violate an applicable increment or NAAQS. However, before this concept can be carried out, some additional guidance must be given regarding the type of emission changes that must be tracked.

EPA generally intends to use an actual emissions concept in implementing the above baseline approach. The concept of an actual emissions baseline has been used in implementing EPA's previous PSD regulations, and the Administrator believes that the Act intends for this concept to be continued. Section 169(4) defines baseline concentration in terms of existing air quality. In carrying out an actual emissions baseline, EPA will use reasonable assumptions for various factors affecting the level of source operation. 1977 values will generally be used for hours of operation, capacity utilization, and the types of materials combusted, processed and/or stored, unless another previous year would be more representative or such use would not be allowed under established permit conditions. Actual emissions also includes into the baseline any future increases in hours of operation or capacity utilization as they occur if such are allowed to the source as of

August 7, 1977, and if the source could have been reasonably expected to make these increases on this date. This policy is consistent with the intent of the Act to base increment consumption on all emission increases from new and modified sources, but to allow consumption of the increment to occur from only certain non-modification activities (e.g., some fuel-switches) of existing sources. Thus, with the exceptions mentioned below, the Administrator will implement an actual emissions baseline in the regulations promulgated today.

An actual emissions baseline would be inappropriate to address situations where a SIP relaxation had been submitted to EPA, and was still pending, on August 7, 1977. Application of an actual emissions baseline would penalize those States that required sources which the SIP relaxation would affect to comply with the allowable rates under the existing SIP while EPA was in the process of reviewing the proposed SIP revision. Such States should not be forced to lose substantial portions of the applicable increments when other States allowed their sources to emit at the relaxed SIP level in advance of formal EPA approval. Therefore, the regulations promulgated today require that contributions to the baseline concentration from existing sources affected by a SIP relaxation pending as of August 7, 1977, would be based on the allowable emissions under the SIP as revised.

In addition, the actual emissions concept does not apply to those sources on which construction commenced before January 6, 1975, but which were not in operation by August 7, 1977. In such cases, the allowable emissions as defined in the construction approval will be used to define the contribution of those sources to baseline.

INCREMENT CONSUMPTION

The comments raised a number of specific issues related to the consumption of PSD increments. The Administrator wishes to clarify first that increment consumption occurs in general as a result of new major stationary sources and major modifications commencing construction after January 6, 1975. The degree of such consumption is in general determined on the basis of approved allowable emissions. This procedure is consistent with the Act language of Part C to restrict increases in ambient concentration above baseline levels less than certain specified increments. Increases in the baseline emissions of sources contributing to the baseline concentration will also consume increment (see discussion on baseline concentration). Conversely, reductions in the baseline emissions of sources existing in 1977 generally expand the available PSD

increment(s). As indicated above, the degree of increment expansion that is creditable will generally be determined through air quality dispersion modeling of the source's emission clean-up beyond its 1977 actual emissions level. For a new source permitted under PSD before August 7, 1977, any renegotiated emission limits more restrictive than those previously permitted will count toward expanding the PSD increment available for other new source construction. States are free to choose the mechanisms for allocating the allowable increment to sources, including reversing any expansion of the increment achieved by control of existing sources for those sources which have installed additional controls.

In addition, offsets (i.e., additional control of existing sources) may be permitted in order to allow the construction of a new source in an area where the increment would not otherwise permit the construction of the source. Such offsets have always been acceptable under the Agency's PSD regulations, and the regulations promulgated below do not change this policy. To be acceptable, such reductions must be expressed in terms of actual emissions when the offsetting source has its emissions included in the baseline. An exception to this would be a major source commencing construction prior to January 6, 1975, but not yet operating by August 7, 1977. For such sources and for situations involving reductions from major construction projects commencing construction after January 6, 1975, offsets are to be transacted on the basis of allowable emissions.

In an area where the PSD increments are known to be exceeded, then the plan must be revised to correct any such violation. Applicable SIP revisions may include the use of economic incentives such as emission charges or the development of offset markets. In such areas major construction cannot continue to be approved unless all increment violations significantly impacted by the proposed emission increase are corrected prior to operation of the proposed source. Accordingly, if acceptable offsets are secured by the proposed source, then such source can be approved for construction. Alternatively, the SIP can be revised by the State to restore an increment and thus accommodate the new construction. Where a proposed major construction project would cause a new violation of the applicable increment, offsetting reductions must be obtained that are sufficient to avoid causing the violation.

The Administrator intends that any increment analysis as appropriate include the effects of growth and reduction in emissions of other sources in the area affected by the proposed

source occurring since the date of the effective baseline. Sources will be generally required to obtain such information, but the information will be available from the State air pollution control agency.

Questions have also arisen regarding how SIP relaxations are to be taken into account in terms of consuming available PSD increments. As stated above, increments are consumed as allowable emissions are increased, and this is true whether those increases are a result of new source growth or SIP relaxations. The regulations promulgated elsewhere in today's *FEDERAL REGISTER* require that any SIP relaxation that would affect a PSD area must include a determination that the applicable increment will not be exceeded. Whether a plan relaxation would consume the available increment would be typically determined through modeling the difference between the allowable emissions resulting from the new relaxed SIP limit and the emissions of the applicable source(s) which were included in the baseline.

SIP relaxations received by EPA after August 7, 1977, but before today's *FEDERAL REGISTER* do consume increment. However, EPA believes that such revisions require special consideration due to the uncertainty of how the new Act would apply to such SIP relaxations. To review these proposed revisions as to the degree of anticipated increment consumption without advance notice would have caused considerable delay and economic disruption. Therefore, the Administrator feels that these SIP relaxations need not be individually assessed to determine the precise amount of consumed increment before such relaxations may be approved. The periodic assessment requirement to verify that the applicable increments have not been exceeded is thought to be sufficient protection. This assessment would result in revisions to the SIP if an increment were found to have been violated. All SIP relaxations received after today will be individually reviewed against the available PSD increments. If deterioration beyond that allowed under the available increments would occur under a SIP relaxation, then such a SIP revision would be disapproved to the extent that it would cause significant deterioration.

The Administrator is concerned that while States are developing their own PSD regulations and EPA is implementing the PSD program, EPA should not make decisions which would have a significant impact upon future growth options of the States. In the interim, EPA generally will allocate use of the increments on a first-come, first-served basis as has been done under the previous PSD regulations. The Administrator recognizes

that this approach may not be adequate on a long-term basis to achieve the purposes of the Act. Other options are available and should be pursued by the States in the development of their plans for PSD. Under 40 CFR 51.24, published today, States are required to develop a program for increment allocation and a number of program options are suggested for their consideration. EPA will be assessing the merits and feasibility of several allocation options (including first-come, first-served) and thereafter issue guidance for the submission of revised State implementation plans. This evaluation will consider alternatives in which carefully designed economic incentives serve as an adjunct to or a replacement for an administrative permitting procedure. The economic incentive programs to be considered include marketable permits, emission fees, and emissions density zoning.

While EPA is administering the PSD permit program, the Administrator will solicit and give careful consideration during the permit process to the views of State and local officials regarding the impact of proposed permit decisions on an area's potential for economic development. Additionally, where a source is expected to consume the entire remaining increment, the Administrator will notify the Governor of this proposed action.

In response to comments from the Department of Energy, EPA while implementing the PSD program will exclude, if so requested by a Governor, certain concentrations in calculating increment usage as provided in section 163(c) of the Act. These concentrations include ambient impacts from federally ordered fuel switches, fuel switches caused by gas curtailment plans, temporary emissions and new sources outside the United States. The Administrator will assume that all fuel conversion operations consume portions of the available increment unless otherwise requested by the Governor.

The Governor's ability to effect exclusions under section 163(c) will not automatically extend beyond nine months from today. No exclusion beyond this time will occur unless the Governor has submitted a plan which meets all requirements of 40 CFR 51.24 (published elsewhere in today's *FEDERAL REGISTER*). The Administrator would also like to point out that exclusions under section 163(c) are not always of a permanent nature. Exclusions from increment consumption for stationary sources affected by a natural gas curtailment plan or by orders under the Energy Supply and Environmental Coordination Act of 1974 may occur no later than 5 years after the effective date of the applicable plan or order. A Governor should realize that full use of such exclusions may lead to plan revisions in the future in order to

preserve the PSD increment. The exclusions will allow more sources to be approved than could be otherwise in the interim. Consequently, when the exclusions expire, the excluded concentrations may well cause exceedences.

To allow the Governor to make use of section 163(c) prior to plan approval reflects a change from the Agency's preliminary position. In the November 3, 1977, proposal, the Agency stated that the Act does not appear to make such exclusions available as to a particular State until EPA has approved a PSD SIP revision for that State. Behind that position was the Agency's perception that Congress had conditioned the availability of the exclusions on approval of such revisions in order to give the States added incentive for submitting them. The Agency still believes that that was Congress' purpose. It has concluded, however, that making the exclusions unavailable nine months from today to States which have failed to submit an approvable PSD revision will serve that purpose as well as making them available at that time only to States which have submitted such a revision. A State will have as much reason to submit a plan revision under the present rule as it would have had under the old. In addition, making the exclusions available now will give the States more flexibility than they would have had for permitting growth.

Another issue related to increment consumption and EPA involvement concerns the review of major construction that would impact interstate areas. The Administrator is pursuing various mechanisms to allocate the amount of increment consumption to such sources when affected States are in disagreement. If an interstate dispute arises before more definitive guidance can be prepared, the Administrator intends to restrict increment consumption to equal amounts at the State line. In other words, when two States are involved in an interstate dispute over increment consumption, no source or series of sources in either State can be approved for construction if they would consume over one-half of the total applicable increment at the State line. Applicable increment here refers to that increment applying in the State where such construction would occur.

FEDERAL LANDS

A number of comments suggested that EPA prepare and publish guidance on determining the impacts a source may have on "air quality related values." Such general guidance is not currently available and, until such time as it is, determinations should be made on a case-by-case basis. Sources which may impact Federal Class I areas should consult with the EPA Re-

gional Offices on questions concerning the possibility of adverse impacts on air quality values and the type of analysis that must be included with the permit application.

Environmental groups pointed out that the proposed regulations did not specifically require Federal Land Managers to protect "affirmatively" air quality related values in Federal Class I areas. Federal Land Managers do have such a responsibility, and the regulations now say so explicitly. It was also suggested that a Federal Land Manager is obligated to withhold any other permits for which he or she is the issuing authority or over which he or she may have control, if EPA did not concur with the Federal Land Manager's determination that air quality related values would be adversely impacted. Part C of the Act and therefore the regulations promulgated today do not require this, but neither do they prohibit a Federal Land Manager from withholding a permit.

Section 165(d)(2)(C)(ii) of the Act would bar the issuance of a PSD permit "[i]n any case where the Federal Land Manager (of lands in a Class I area) demonstrates to the satisfaction of the State" that the proposed source or modification would adversely impact the air quality related values of such lands. Section 165(d)(2)(C)(iii), on the other hand, would allow the "State" to issue a permit if the Federal Land Manager were to certify that the source or modification would not adversely impact such values, even though it would cause or contribute to a violation of the applicable Class I increments. Both sections presuppose that the "State" would be the permitting authority. The final regulations published today contain provisions (§ 52.21(q) (3) and (4)) which for the most part parallel Sections 165(d)(2)(C) (ii) and (iii). The regulations, however, treat the "Administrator" as the permitting authority, not the "State". This is appropriate. Congress must have recognized that there would be instances in which EPA, and not a State, would be the permitting authority. Furthermore, Congress would have expected, in such instances, that the safeguard of Section 165(d)(2)(C)(ii) and the variance of Section 165(d)(2)(C)(iii) would be available.

NATIONAL AMBIENT AIR QUALITY STANDARDS

Under the regulations published today, no PSD permit for a source whose increased allowable emissions are equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour may be granted without assurance that emissions from the source will not cause or contribute to a violation of a NAAQS. If an initial de-

termination shows that such a source may interfere with an applicable ambient standard, the owner or operator must reduce emissions or secure appropriate emission offsets from other nearby sources. While EPA is implementing the PSD program, it does not intend to be involved directly in approving emission offsets for a proposed source except where EPA is also implementing a State new source review program. Thus, the owner or operator would first have to obtain offsets through the State agency new source review program before EPA could approve the source under PSD. An EPA permit cannot be issued until the State permit is granted. Sources are encouraged to seek concurrent review from the State when applying for a PSD permit to minimize review delays. Such action will assist the source to commence construction on schedule as required under the PSD permit.

OTHER ISSUES

A number of other important concerns were raised by comments, including undue review delays, the effects of pending reclassifications on preconstruction reviews, guidance on other impact analyses, the definition of source and the high costs of required newspaper advertisements.

Several comments raised the concern that PSD review might be unduly long, especially for those sources which would have only minimal air quality impacts. The Administrator will take steps to expeditiously evaluate permit applications and will inform applicants as to the completeness of their submittals within 30 days or less of receiving the application. In addition, the exemption for 50-ton sources discussed above will greatly reduce the permit delays that were possible under the proposed regulation. The Administrator expects that such sources will satisfy most, if not all, their PSD requirements by going through the State new source review programs. Although such a source must still obtain a PSD permit the Administrator does not intend generally to duplicate the analyses and determinations made during the State new source review. In reviewing a 50-ton source, every effort will be made to complete the required analyses within 30 days after receiving a complete application and the public participation process to the extent necessary within 45 days thereafter. If a public comment period is necessary, it will run for 30 days from the first day of the 45-day period. On that day EPA will give due notice of the Agency's determinations and tentative decision. At this time, EPA will also solicit comment on the need to conduct a public hearing, if one is necessary. If no response to the latter is received by day

15, no public hearing will be held. If no supportable concerns are received during the scheduled 30-day public comment period (or the public hearing if one is held), the Administrator intends to issue final approval to construct within 15 days after the public comment period has ended. These are current estimates of the maximum time required for PSD review of smaller sources. Every effort will be made to shorten this review time.

In response to comments received, EPA has excluded from the final regulations the proposed provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during start-up of the new PSD program. Under the previous PSD regulations, all areas were initially class II. Now Congress has designated several mandatory class I areas. Moreover, States have had considerable opportunity to designate any others. Thus, this provision is no longer necessary. States may establish such a requirement as part of their own implementation plans.

The analysis related to a source's impact on soils, vegetation, and visibility should focus primarily on such impacts in class I areas, since final approval may turn on the effects of the source on air quality related values in class I areas. Where there would be no class I impacts, impacts elsewhere may affect the BACT determination, but would typically not have a significant bearing on the final approval decision. The impact assessment should generally be qualitative in nature and designed to inform the general public of the relative impact of the source on those values. It should be noted, too, that the Administrator intends to base approval or disapproval of a major source regarding its ambient air quality impact on both the direct emissions of that source and those secondary emissions that can be accurately quantified.⁹ All secondary emissions that cannot be accurately estimated during the preconstruction review will consume the applicable increment(s) as they occur.

⁹ Where a new source will result in specific and well defined secondary emissions which can be accurately quantified, the reviewing authority should consider such secondary emissions in determining whether the source would cause or contribute to a violation of an ambient ceiling or increment. However, since EPA's authority to perform or require indirect source review relating to mobile sources regulated under Title II of the Act (motor vehicles and aircraft), has been restricted by statute, consideration of the indirect impacts of motor vehicles and aircraft traffic is not required under this Ruling.

Pursuant to comments on the November 3, 1977, proposal, the Administrator is revising the definition of source to mean any structure, building, facility, equipment, installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and owned or operated by the same person or persons under common control. This precludes a large plant from being separated into individual production lines for purposes of determining applicability of the PSD requirements. This in turn resolves the issue raised in the proposal regarding PSD applicability to a facility which is constructed at the site of, but is different than, a source listed in the 28 categories. Such a facility would be part of the source under the above definition, and thus would be subject to PSD review as a modification to it.

A number of State agencies commented that the cost of "prominent newspaper advertisement" of the opportunity for public comment at a hearing could become prohibitively expensive, especially if the number of PSD reviews under the act increases as expected. Therefore, the regulations have been changed to remove the requirement for "prominent" newspaper advertisement. Nevertheless, whatever notice is given must provide a meaningful opportunity for public comment.

FINAL ACTION

The following regulatory amendments are nationally applicable, and this action is based upon determinations of nationwide scope and effect. Therefore, under section 307(b)(1) of the act, judicial review may be sought only in the United States Court of Appeals for the District of Columbia. Petitions for judicial review must be filed on or before August 18, 1978.

(Sec. 101(b)(1), 110, 114, 123, 125(e), 160-169, and 301(a) of the Clean Air Act, as amended (42 U.S.C. 7401(b)(1), 7410, 7414, 7423, 7425(e), 7470-7479, 7601(a)).)

Dated June 9, 1978.

DOUGLAS M. COSTLE,
Administrator.

Title 40, Part 52 of the Code of Federal Regulations is amended as follows:

1. Section 52.21 is revised as follows:

§ 52.21 Prevention of significant deterioration of air quality.

(a) *Plan disapproval.* The provisions of this section are applicable to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in subparts B

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

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

(1) "Major stationary source" means—

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

(ii) Notwithstanding the source sizes specified in paragraph (b)(1)(i) of this section, any source which emits, or has the potential to emit, 250 tons per year or more of any pollutant regulated under the Act.

(2) "Major modification" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the act (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since August 7, 1977, or since the time of the last construction approval issued for the source pursuant to this section, which-

ever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

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

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

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

(b) An increase in the hours of operation;

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

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

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

(f) Change in ownership of the source.

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

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

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

(6) "Fugitive dust" means particulate matter composed of soil which is uncontained by pollutants resulting from industrial activity. Fugitive

dust may include emissions from haul roads, wind erosion of exposed soil surfaces and soil storage piles and other activities in which soil is either removed, stored, transported, or redistributed.

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

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

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

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

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

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

pliance by means which achieve equivalent results.

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

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

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

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

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

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

(15) "Indian Reservation" means any Federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

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

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

40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR part 60 is applicable to such source.

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

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

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

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

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

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

Maximum allowable increase

(Micrograms per cubic meter)

Class I	
<i>Pollutant</i>	
<i>Particulate matter:</i>	
Annual geometric mean.....	5
24-h maximum.....	10
<i>Sulfur dioxide:</i>	
Annual arithmetic mean.....	2
24-h maximum.....	5
3-h maximum.....	25
CLASS II	
<i>Particulate matter:</i>	
Annual geometric mean.....	19
24-h maximum.....	37
<i>Sulfur dioxide:</i>	
Annual arithmetic.....	20
24-h maximum.....	91
3-h maximum.....	512
CLASS III	
<i>Particulate matter:</i>	
Annual geometric mean.....	37
24-h maximum.....	75
<i>Sulfur dioxide:</i>	
Annual arithmetic mean.....	40
24-h maximum.....	182
3-h maximum.....	700

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

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

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

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

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

(i) International parks,

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

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

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

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

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

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

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

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

(f) *Exclusions from increment consumption.* (1) Upon written request of the Governor, made after notice and opportunity for at least one public hearing to be held in accordance with procedures established in 51.4 of this chapter, the Administrator shall exclude the following concentrations in determining compliance with a maximum allowable increase:

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

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

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

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

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

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

(3) No exclusion under paragraph (f) of this section shall occur after March 19, 1979, if a State implementation plan revision meeting the requirements of 40 CFR 51.24 has not been submitted to the Administrator by that time.

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

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

(i) At least one public hearing has been held in accordance with procedures established in § 51.4 of this chapter;

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

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

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

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

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

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

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

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

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

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

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

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

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

(6) If the Administrator disapproves any proposed redesignation, the State

or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

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

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

(ii) Any other dispersion technique.

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

(i) *Review of major stationary sources and major modifications—Source applicability and general exemptions.* (1) No major stationary source or major modification shall be constructed unless the requirements of paragraphs (j) through (r) of this section, as applicable, have been met. The requirements of paragraphs (j) through (r) shall apply to a proposed source or modification only with respect to those pollutants for which it would be a major stationary source or major modification.

(2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to the review requirements of 40 CFR 52.21(d)(1) for the prevention of significant deterioration as in effect before March 1, 1978, if the owner or operator—

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

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

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

(3) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was not subject to 40 CFR 52.21 as in effect before March 1, 1978, if the owner or operator—

(i) Obtained all final Federal, State and local preconstruction permits necessary under the applicable State implementation plan before March 1, 1978;

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

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

(4) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to 40 CFR 52.21 as in effect before March 1, 1978, if review of an applica-

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

(5) The requirements of paragraphs (j), (l), (n) and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that—

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

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

(6) The requirements of paragraphs (j) through (r) of this section shall not apply, upon written request of the Governor of a State, to a nonprofit health or education institution to be located in that State.

(7) A portable facility which has previously received construction approval under the requirements of this section as applicable may relocate without again being subject to those requirements if—

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

(ii) Emissions from the facility would impact no Class I area and no area where an applicable increment is known to be violated; and

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

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

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

(i) The preceding hourly and daily rates shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period less than 24 hours or for a

24 hour period, as appropriate, has been established.

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

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

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

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

(k) *Exemptions from impact analyses.* (1) The requirements of paragraphs (l), (n), and (p) shall not apply to a major stationary source or major modification with respect to a particular pollutant, if—

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

(ii) The increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1000 pounds per day, or 100 pounds per hour, whichever is more restrictive; or

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

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

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

(3) In determining for the purpose of paragraph (k)(1)(ii) of this section

whether and to what extent the modification would increase allowable emissions, there shall be taken into account no emission reduction achieved elsewhere at the source at which the modification would occur.

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

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

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

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

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

(m) *Air quality models.* (1) All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models" (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978). This document is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register library.

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment under paragraph (r) of this section. Written approval of the Administrator must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models" (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May, 1978) should be used to determine the comparability of air quality models.

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

(n) *Monitoring.* (1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the Administrator determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a national ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a national ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the Administrator's satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air quality standard.

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

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

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

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

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

mine that best available control technology would be applied.

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

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

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

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

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

(q) *Sources impacting Federal Class I areas—additional requirements.*—(1) *Notice to Federal Land Managers.* The Administrator shall provide notice of any permit application for a proposed major stationary source or major modification the emissions from which would affect a Class I area to the Federal Land Manager, and the Federal official charged with direct responsibility for management, of any lands within any such area. The Administrator shall provide such notice promptly after receiving the application. The Administrator shall also provide the Federal Land Manager and such Federal officials with a copy of the preliminary determination required under paragraph (r) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes it.

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

(3) *Denial—impact on air quality related values.* The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related

values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

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

	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	61
3-hr maximum	325

(5) *Sulfur dioxide variance by Governor with Federal Land Manager's concurrence.* The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That

the applicable requirements of this section are otherwise met.

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

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

Period of exposure	Maximum Allowable Increase (Micrograms per cubic meter)	
	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(r) *Public participation.* (1) Within 30 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this section, the date on which the Administrator received all required information.

(2) Within 1 year after receipt of a complete application, the Administrator shall make a final determination on the application. This involves performing the following actions in a timely manner:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(ii) Make available in at least one location in each region in which the proposed source or modification would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: State and local air pollution control agencies, the chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making a final decision. The Administrator shall make all comments available for public inspection in the same locations where the Administrator made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Administrator made available preconstruction information and public comments relating to the source or modification.

(3) The requirements of paragraph (r) of this section shall not apply to any major stationary source or major modification which paragraph (k) would exempt from the requirements of paragraphs (l), (n), and (p), but only to the extent that, with respect to each of the criteria for construction approval under the applicable State implementation plan and for exemption under paragraph (k), requirements providing the public with at least as much participation in each material determination as those of paragraph (r) have been met in the granting of such construction approval.

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

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

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

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

(u) *Disputed permits or redesignations.* If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State,

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

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

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

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

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

(3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the

State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.

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

§ 52.01 [Amended]

2. In § 52.01, paragraph (f), which defines "best available control technology," is deleted and reserved.

3. In §§ 52.60 (AL), 52.96 (AK), 52.144 (AZ), 52.181 (AR), 52.270 (CA), 52.343 (CO), 52.382 (CT), 52.432 (DE), 52.499 (DC), 52.530 (FL), 52.581 (GA), 52.632 (HI), 52.683 (ID), 52.738 (IL), 52.793 (IN), 52.833 (IA), 52.884 (KS), 52.931 (KY), 52.986 (LA), 52.1029 (ME), 52.1116 (MD), 52.1165 (MA), 52.1180 (MI), 52.1234 (MN), 52.1280 (MS), 52.1339 (MO), 52.1382 (MT), 52.1436 (NB), 52.1485 (NV), 52.1529 (NH), 52.1603 (NJ), 52.1634 (NM), 52.1689 (NY), 52.1778 (NC), 52.1829 (ND), 52.1884 (OH), 52.1919 (OK), 52.1987 (OR), 52.2058 (PA), 52.2083 (RI), 52.2131 (SC), 52.2178 (SD), 52.2233 (TN), 52.2303 (TX), 52.2346 (UT), 52.2380 (VT), 52.2451 (VA), 52.2497 (WA), 52.2528 (WV), 52.2581 (WI), 52.2630 (WY), 52.2676 (GU), 52.2729 (PR), 52.2779 (VI), and 52.2827 (AmS),

paragraphs (a) and (b) are revised to read as follows:

(a) The requirements of sections 160 through 165 of the Clean Air Act are not met, since the plan does not include approvable procedures for preventing the significant deterioration of air quality.

(b) *Regulation for preventing significant deterioration of air quality.* The provisions of § 52.21 (b) through (v) are hereby incorporated and made a part of the applicable State plan for the State of —.

[FR Doc. 78-16890 Filed 6-14-78; 4:15 pm]