

Pollutant	Annual	Averaging time (hours)			
		24	8	3	1
SO <sub>2</sub> .....	1.0 µg/m <sup>3</sup> .....	5 µg/m <sup>3</sup> .....	.....	25 µg/m <sup>3</sup> .....	.....
PM <sub>10</sub> .....	1.0 µg/m <sup>3</sup> .....	5 µg/m <sup>3</sup> .....	.....	.....	.....
NO <sub>2</sub> .....	1.0 µg/m <sup>3</sup> .....	.....	.....	.....	.....
CO .....	.....	.....	0.5 mg/m <sup>3</sup> .....	.....	2 mg/m <sup>3</sup>

(3) Such a program may include a provision which allows a proposed major source or major modification subject to paragraph (b) of this section to reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions to, at a minimum, compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation of any national ambient air quality standard. The plan shall require that, in the absence of such emission reductions, the State or local agency shall deny the proposed construction.

(4) The requirements of paragraph (b) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as non-attainment pursuant to section 107 of the Act.

[51 FR 40669, Nov. 7, 1986, as amended at 52 FR 24713, July 1, 1987; 52 FR 29386, Aug 7, 1987; 54 FR 27285, 27299 June 28, 1989; 57 FR 3946, Feb. 3, 1992; 57 FR 32334, July 21, 1992]

**§ 51.166 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(s). If a plan revision proposing less restrictive requirements

was submitted after August 7, 1977 but on or before any applicable baseline date and was pending action by the Administrator on that date, no such demonstration is necessary with respect to the area for which a baseline date would be established before final action is taken on the plan revision. Instead, the assessment described in paragraph (a)(4) of this section, shall review the expected impact to the applicable increment(s).

(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 § 51.102.

(6) *Amendments.* (i) Any State required to revise its implementation plan by reason of an amendment to this section, including any amendment adopted simultaneously with this paragraph, shall adopt and submit such plan revision to the Administrator for approval within 9 months after the effective date of the new amendments.

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

sources and modifications the revision is to take effect.

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

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

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

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

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

(c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1)

of this section, as a major stationary source if the change would constitute a major stationary source by itself.

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

(iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

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

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

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

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(l) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(o) Carbon black plants (furnace process);

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants;

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

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(2)(i) *Major modification* means any physical change in or change in the

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method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

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

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

(a) Routine maintenance, repair, and replacement;

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

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

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

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

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

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

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

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

(h) The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the Administrator determines that such addition, replacement,

or use renders the unit less environmentally beneficial, or except:

(1) When the reviewing authority has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of title I, if any, and

(2) The reviewing authority determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.

(i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(1) The State implementation plan for the State in which the project is located; and

(2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(k) The reactivation of a very clean coal-fired electric utility steam generating unit.

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

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

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

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

period (to be specified by the State) before the date that the increase from the particular change occurs.

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

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides, which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to particulate matter, only PM-10 emissions can be used to evaluate the net emissions increase for PM-10.

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

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

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

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

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

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

(4) *Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of ma-

terial combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

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

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

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

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

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

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

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

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

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

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

design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) The area in which the proposed source or modification would construct

is designated as attainment or unclassifiable under section 107(d)(i) (D) or (E) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and

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

(iv) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the reviewing authority may rescind any such minor source baseline date where it can be shown, to the satisfaction of the reviewing authority, that the emissions increase from the major stationary source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.

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

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

(a) Establishes a minor source baseline date; or

(b) Is subject to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166, and would be constructed in the same State as the State proposing the redesignation.

(iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the permit authority

rescinds the corresponding minor source baseline date in accordance with paragraph (b)(14)(iv) of this section.

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

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

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

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

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

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

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(19) *Innovative control technology* means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

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

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

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The reviewing authority may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

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

(iv) For any emissions unit (other than an electric utility steam generating unit specified in paragraph (b)(21)(v) of this section) which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(v) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the source owner or operator maintains and submits to the review-

ing authority, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the reviewing authority if it determines such a period to be more representative of normal source post-change operations.

(22) *Complete* means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the reviewing authority from requesting or accepting any additional information.

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

### POLLUTANT AND EMISSIONS RATE

Carbon monoxide: 100 tons per year (tpy)  
Nitrogen oxides: 40 tpy  
Sulfur dioxide: 40 tpy  
Particulate matter: 25 tpy of particulate matter emissions. 15 tpy of PM<sub>10</sub> emissions.  
Ozone: 40 tpy of volatile organic compounds  
Lead: 0.6 tpy  
Asbestos: 0.007 tpy  
Beryllium: 0.0004 tpy  
Mercury: 0.1 tpy  
Vinyl chloride: 1 tpy  
Fluorides: 3 tpy  
Sulfuric acid mist: 7 tpy  
Hydrogen sulfide (H<sub>2</sub> S): 10 tpy  
Total reduced sulfur (including H<sub>2</sub> S): 10 tpy  
Reduced sulfur compounds (including H<sub>2</sub> S): 10 tpy  
Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans):  $3.2 \times 10^{-6}$  megagrams per year ( $3.5 \times 10^{-6}$  tons per year)  
Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year) Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year)  
Municipal solid waste landfill emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year)

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

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

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

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

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

(27) *Indian Reservation* means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

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

(29) *Volatile organic compounds (VOC)* is as defined in §51.100(s) of this part.

(30) *Electric utility steam generating unit* means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(31) *Pollution control project* means any activity or project undertaken at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:

(i) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(ii) An activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including but not limited to natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions;

(iii) A permanent clean coal technology demonstration project conducted under title II, section 101(d) of the Further Continuing Appropriations Act of 1985 (section 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency, or

(iv) A permanent clean coal technology demonstration project that constitutes a repowering project.

(32) *Representative actual annual emissions* means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within 10 years after that change, where the reviewing authority determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the reviewing authority shall:

(i) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act; and

(ii) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating

unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

(33) *Clean coal technology* means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(34) *Clean coal technology demonstration project* means a project using funds appropriated under the heading "Department of Energy—Clean Coal Technology", up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

(35) *Temporary clean coal technology demonstration project* means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated.

(36)(i) *Repowering* means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magneto-hydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a deriva-

tive of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(iii) The reviewing authority shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Clean Air Act.

(37) *Reactivation of a very clean coal-fired electric utility steam generating unit* means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(i) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(ii) Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(iii) Is equipped with low-NO<sub>x</sub> burners prior to the time of commencement of operations following reactivation; and

(iv) Is otherwise in compliance with the requirements of the Clean Air Act.

(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:	
PM-10, annual arithmetic mean .....	4
PM-10, 24-hr maximum .....	8
Sulfur dioxide:	
Annual arithmetic mean .....	2
24-hr maximum .....	5
3-hr maximum .....	25
Nitrogen dioxide: Annual arithmetic mean .....	2.5
Class II	
Particulate matter:	
PM-10, annual arithmetic mean .....	17
PM-10, 24-hr maximum .....	30
Sulfur dioxide:	
Annual arithmetic mean .....	20
24-hr maximum .....	91
3-hr maximum .....	512
Nitrogen dioxide:	
Annual arithmetic mean .....	25
Class III	
Particulate matter:	
PM-10, annual arithmetic mean .....	34
PM-10, 24-hr maximum .....	60
Sulfur dioxide:	
Annual arithmetic mean .....	40
24-hr maximum .....	182
3-hr maximum .....	700
Nitrogen dioxide: Annual arithmetic mean .....	50

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 section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

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

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

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations

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attributable to existing sources which are included in the baseline concentration; and

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

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

(3) [Reserved]

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

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

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

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

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

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

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

(g) *Redesignation.* (1) 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 § 51.102.

(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 (1) 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), (3)(iii), and (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, not in existence before December 31, 1970, as exceeds good engineering practice, or

(2) Any other dispersion technique not implemented before then.

(i) *Review of major stationary sources and major modifications—source applicability and exemptions*.

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

(2) The plan shall provide that the requirements equivalent to those contained in paragraphs (j) through (r) of this section shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Act

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that it would emit, except as this section would otherwise allow.

(3) The plan shall provide that requirements equivalent to those contained in paragraphs (j) through (r) of this section apply only to any major stationary source or major modification that would be constructed in an area which is designated as attainment or unclassifiable under section 107(a)(1) (D) or (E) of the Act; and

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

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

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

- (a) Coal cleaning plants (with thermal dryers);
- (b) Kraft pulp mills;
- (c) Portland cement plants;
- (d) Primary zinc smelters;
- (e) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;
- (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
- (j) Petroleum refineries;
- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250

million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act; or

(iii) The source or modification is a portable stationary source which has previously received a permit under requirements equivalent to those contained in paragraphs (j) through (r) of this section, if:

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

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

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

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

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

(6) The plan may provide that requirements equivalent to those contained in paragraphs (k), (m), and (o) of this section do not apply to a proposed major stationary source or major modification with respect to a particular pollutant, if the allowable

emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

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

(8) The plan may provide that the reviewing authority may exempt a proposed major stationary source or major modification from the requirements of paragraph (m) of this section, with respect to monitoring for a particular pollutant, if:

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

(a) Carbon monoxide—575  $\mu\text{g}/\text{m}^3$ , 8-hour average;

(b) Nitrogen dioxide—14  $\mu\text{g}/\text{m}^3$ , annual average;

(c) Particulate matter—10  $\mu\text{g}/\text{m}^3$  of PM-10, 24-hour average.

(d) Sulfur dioxide—13  $\mu\text{g}/\text{m}^3$ , 24-hour average;

(e) Ozone;<sup>1</sup>

(f) Lead—0.1  $\mu\text{g}/\text{m}^3$ , 3-month average.

(g) Mercury—0.25  $\mu\text{g}/\text{m}^3$ , 24-hour average;

(h) Beryllium—0.001  $\mu\text{g}/\text{m}^3$ , 24-hour average;

(i) Fluorides—0.25  $\mu\text{g}/\text{m}^3$ , 24-hour average;

(j) Vinyl chloride—15  $\mu\text{g}/\text{m}^3$ , 24-hour average;

(k) Total reduced sulfur—10  $\mu\text{g}/\text{m}^3$ , 1-hour average;

(l) Hydrogen sulfide—0.2  $\mu\text{g}/\text{m}^3$ , 1-hour average;

(m) Reduced sulfur compounds—10  $\mu\text{g}/\text{m}^3$ , 1-hour average; or

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

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

(9) If EPA approves a plan revision under 40 CFR 51.166 as in effect before August 7, 1980, any subsequent revision which meets the requirements of this section may contain transition provisions which parallel the transition provisions of 40 CFR 52.21(i)(9), (i)(10) and (m)(1)(v) as in effect on that date, which provisions relate to requirements for best available control technology and air quality analyses. Any such subsequent revision may not contain any transition provision which in the context of the revision would operate any less stringently than would its counterpart in 40 CFR 52.21.

(10) If EPA approves a plan revision under §51.166 as in effect [before July 31, 1987], any subsequent revision which meets the requirements of this section may contain transition provisions which parallel the transition provisions of §52.21 (i)(11), and (m)(1) (vii) and (viii) of this chapter as in effect on that date, these provisions being related to monitoring requirements for particulate matter. Any such subsequent revision may not contain any transition provision which in the context of the revision would operate any less stringently than would its counterpart in §52.21 of this chapter.

(11) The plan may provide that the permitting requirements equivalent to those contained in paragraph (k)(2) of this section do not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved or promulgated under the Act before the provisions embodying the maximum allowable increase took effect as part of the plan and the

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

permitting authority subsequently determined that the application as submitted before that date was complete.

(12) The plan may provide that the permitting requirements equivalent to those contained in paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM-10 if (i) the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved under the Act before the provisions embodying the maximum allowable increases for PM-10 took effect as part of the plan, and (ii) the permitting authority subsequently determined that the application as submitted before that date was complete. Instead, the applicable requirements equivalent to paragraph (k)(2) shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

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

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

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

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

(4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the least reasonable time which occurs no later than 18 months prior to commencement of construction of each

independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

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

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

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

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

(1) All applications of air quality modeling involved in this subpart shall be based on the applicable models, data bases, and other requirements specified in appendix W of this part (Guideline on Air Quality Models).

(2) Where an air quality model specified in appendix W of this part (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific State program. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures set forth in § 51.102.

(m) *Air quality analysis—(1) Pre-application analysis.* (i) The plan shall provide that any application for a permit under regulations approved pursuant to this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

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

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

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

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

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

(v) The plan may provide that the owner or operator of a proposed major stationary source or major modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51 appendix S, section IV may provide postapproval monitoring data for ozone in lieu of providing preconstruction data as required under paragraph (m)(1) of this section.

(2) *Post-construction monitoring.* The plan shall provide that the owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the reviewing authority determines is necessary to determine

the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) *Operation of monitoring stations.* The plan shall provide that the owner or operator of a major stationary source or major modification shall meet the requirements of appendix B to part 58 of this chapter during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section.

(n) *Source information.* (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.

(o) *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,

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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.

(p) *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, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
PM-10, annual arithmetic mean .....	17
PM-10, 24-hour maximum .....	30
Sulfur dioxide:	
Annual arithmetic mean .....	20
24-hr maximum .....	91
3-hr maximum .....	325
Nitrogen dioxide: Annual arithmetic mean .....	25

(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

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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

(q) *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 construction 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

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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.

(r) *Source obligation.* (1) The plan shall include enforceable procedures to provide that approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the plan and any other requirements under local, State or Federal law.

(2) The plan shall provide that at such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(s) *Innovative control technology.* (1) The plan may provide that an owner or operator of a proposed major sta-

tionary source or major modification may request the reviewing authority to approve a system of innovative control technology.

(2) The plan may provide that the reviewing authority may, with the consent of the Governor(s) of other affected State(s), determine that the source or modification may employ a system of innovative control technology, if:

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

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

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

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

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

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

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

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

(3) The plan shall provide that the reviewing authority shall withdraw any approval to employ a system of innovative control technology made under this section, if:

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

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

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

(4) The plan may provide that if a source or modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with paragraph (s)(3) of this section, the reviewing authority may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

(Secs. 101(b)(1), 110, 160-169, 171-178, and 301(a), Clean Air Act, as amended (42 U.S.C. 7401(b)(1), 7410, 7470-7479, 7501-7508, and 7601(a)); sec. 129(a), Clean Air Act Amendments of 1977 (Pub. L. 95-95, 91 Stat. 685 (Aug. 7, 1977)))

[43 FR 26382, June 19, 1978]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 51.166, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

### Subpart J—Ambient Air Quality Surveillance

AUTHORITY: Secs. 110, 301(a), 313, 319, Clean Air Act (42 U.S.C. 7410, 7601(a), 7613, 7619).

#### § 51.190 Ambient air quality monitoring requirements.

The requirements for monitoring ambient air quality for purposes of the plan are located in subpart C of part 58 of this chapter.

[44 FR 27569, May 10, 1979]

### Subpart K—Source Surveillance

SOURCE: 51 FR 40673, Nov. 7, 1986, unless otherwise noted.

#### § 51.210 General.

Each plan must provide for monitoring the status of compliance with any rules and regulations that set forth

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any portion of the control strategy. Specifically, the plan must meet the requirements of this subpart.

#### § 51.211 Emission reports and record-keeping.

The plan must provide for legally enforceable procedures for requiring owners or operators of stationary sources to maintain records of and periodically report to the State—

(a) Information on the nature and amount of emissions from the stationary sources; and

(b) Other information as may be necessary to enable the State to determine whether the sources are in compliance with applicable portions of the control strategy.

#### § 51.212 Testing, inspection, enforcement, and complaints.

The plan must provide for—

(a) Periodic testing and inspection of stationary sources; and

(b) Establishment of a system for detecting violations of any rules and regulations through the enforcement of appropriate visible emission limitations and for investigating complaints.

(c) Enforceable test methods for each emission limit specified in the plan. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, the plan must not preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. As an enforceable method, States may use:

(1) Any of the appropriate methods in appendix M to this part, Recommended Test Methods for State Implementation Plans; or

(2) An alternative method following review and approval of that method by the Administrator; or

(3) Any appropriate method in appendix A to 40 CFR part 60.

[51 FR 40673, Nov. 7, 1986, as amended at 55 FR 14249, Apr. 17, 1990; 62 FR 8328, Feb. 24, 1997]