Sec. 51.300  Purpose and applicability.

(a) Purpose. The primary purposes of this subpart are (1) to require States to develop programs to assure reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from man-made air pollution, and (2) to establish necessary additional procedures for new source permit applicants, States, and Federal Land Managers to use in conducting the visibility impact analysis required for new sources under §51.166. This subpart sets forth requirements addressing visibility impairment in its two principal forms: "reasonably attributable" impairment (i.e., impairment attributable to a single source or small group of sources) and regional haze (i.e. widespread haze from a multitude of sources which impairs visibility in multiple direction over a large area).

(b) Applicability. (1) General Applicability. The provisions of this subpart are applicable to:

(i) Each State which has a mandatory Class I Federal area
identified in part 81, subpart D, of this title, and

(ii) Each State in which there is any source the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area.

(2) The provisions of this subpart pertaining to implementation plans to address reasonably attributable visibility impairment are applicable to the following States:

(i) Alabama
(ii) Alaska
(iii) Arizona
(iv) Arkansas
(v) California
(vi) Colorado
(vii) Florida
(viii) Georgia
(ix) Hawaii
(x) Idaho
(xi) Kentucky
(xii) Louisiana
(xiii) Maine
(xiv) Michigan
(xv) Minnesota
(xvi) Missouri
(xvii) Montana
(xviii) Nevada
(xix) New Hampshire
(xx) New Jersey
(xxi) New Mexico
(xxii) North Carolina
(xxiii) North Dakota
(xxiv) Oklahoma
(xxv) Oregon
(xxvi) South Carolina
(xxvii) South Dakota
(xxviii) Tennessee
(xxix) Texas
( xxx) Utah
( xxxi) Vermont
( xxxii) Virginia
( xxxiii) Virgin Islands
( xxxiv) Washington
( xxxv) West Virginia
( xxxvi) Wyoming

(3) The provisions of this subpart pertaining to implementation
plans to address regional haze visibility impairment are applicable to all States as defined in section 302(d) of the Clean Air Act except Guam, Puerto Rico, American Samoa, and the Northern Mariana Islands.

Sec. 51.301 Definitions.

For purposes of this subpart:

(a) Adverse impact on visibility means, for purposes of section 307, visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairments, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility. This term does not include effects on integral vistas.

(b) Agency means the U.S. Environmental Protection Agency.

(c) Best Available Retrofit Technology (BART) means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(d) Building, structure, or facility means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities must 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).
(e) Existing stationary facility means any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation prior to August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit 250 tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted.

(1) Fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input,
(2) Coal cleaning plants (thermal dryers),
(3) Kraft pulp mills,
(4) Portland cement plants,
(5) Primary zinc smelters,
(6) Iron and steel mill plants,
(7) Primary aluminum ore reduction plants,
(8) Primary copper smelters,
(9) Municipal incinerators capable of charging more than 250 tons of refuse per day,
(10) Hydrofluoric, sulfuric, and nitric acid plants,
(11) Petroleum refineries,
(12) Lime plants,
(13) Phosphate rock processing plants,
(14) Coke oven batteries,
(15) Sulfur recovery plants,
(16) Carbon black plants (furnace process),
(17) Primary lead smelters,
(18) Fuel conversion plants,
(19) Sintering plants,
(20) Secondary metal production facilities,
(21) Chemical process plants,
(22) Fossil-fuel boilers of more than 250 million British thermal units per hour heat input,
(23) Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels,
(24) Taconite ore processing facilities,
(25) Glass fiber processing plants, and
(26) Charcoal production facilities.

(f) Federal Class I area means any Federal land that is classified or reclassified Class I.

(g) Federal Land Manager means the Secretary of the department with authority over the Federal Class I area (or the Secretary’s designee) or, with respect to Roosevelt-Campobello International Park, the Chairman of the Roosevelt-Campobello International Park Commission.
(h) Federally enforceable means all limitations and conditions which are enforceable by the Administrator under the Clean Air Act including those requirements developed pursuant to parts 60 and 61 of this title, requirements within any applicable State Implementation Plan, and any permit requirements established pursuant to $51.163 of this chapter or under regulations approved pursuant to part 51, 52, or 60 of this title.

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

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

(k) In existence means that the owner or operator has obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has (1) begun, or caused to begin, a continuous program of physical on-site construction of the facility or (2) entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the facility to be completed in a reasonable time.

(l) Installation means an identifiable piece of process equipment.

(m) In operation means engaged in activity related to the primary design function of the source.

(n) Integral vista means a view perceived from within the mandatory Class I Federal area of a specific landmark or panorama located outside the boundary of the mandatory Class I Federal area.

(o) Mandatory Class I Federal Area means any area identified in part 81, subpart D of this title.

(p) Major Stationary Source and major modification mean major stationary source and major modification, respectively, as defined in §51.166.

(q) Natural conditions includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.
(r) Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(s) Reasonably attributable means attributable by visual observation or any other technique the State deems appropriate.

(t) Reconstruction will be presumed to have taken place where the fixed capital cost of the new component exceeds 50 percent of the fixed capital cost of a comparable entirely new source. Any final decision as to whether reconstruction has occurred must be made in accordance with the provisions of Sec. 60.15 (f) (1) through (3) of this title.

(u) Secondary emissions means emissions which occur as a result of the construction or operation of an existing stationary facility but do not come from the existing stationary facility. Secondary emissions may include, but are not limited to, emissions from ships or trains coming to or from the existing stationary facility.

(v) Significant impairment means, for purposes of section 303, visibility impairment which, in the judgment of the Administrator, interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the mandatory Class I Federal area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of the visibility impairment, and how these factors correlate with (1) times of visitor use of the mandatory Class I Federal area, and (2) the frequency and timing of natural conditions that reduce visibility.

(w) Stationary Source means any building, structure, facility, or installation which emits or may emit any air pollutant.

(x) Visibility impairment means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.
(y) Visibility in any mandatory Class I Federal area includes any integral vista associated with that area.

(z) Reasonably attributable visibility impairment means visibility impairment that is caused by the emission of air pollutants from one, or a small number of sources.

(aa) Regional haze means visibility impairment that is caused by the emission of air pollutants from numerous sources located over a wide geographic area. Such sources include, but are not limited to, major and minor stationary sources, mobile sources, and area sources.

(bb) Deciview means a measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on the following equation:

\[
\text{deciview haze index} = 10 \ln (b_{\text{ext}}/10 \text{ Mm}^{-1})
\]

where \(b_{\text{ext}}\) = atmospheric light extinction coefficient

For the purposes of calculating deciview for this regulation, the atmospheric light extinction coefficient must be calculated from aerosol measurements.

(cc) State means “State” as defined in section 302(d) of the Clean Air Act.

(dd) Most impaired days means the average visibility impairment (measured in deciviews) for the twenty percent of monitored days in a calendar year with the highest amount of visibility impairment.

(ee) Least impaired days means the average visibility impairment (measured in deciviews) for the twenty percent of monitored days in a calendar year with the lowest amount of visibility impairment.

(ff) Implementation plan means, for the purposes of this part, any State Implementation Plan, Federal Implementation Plan, or Tribal Implementation Plan.

(gg) Indian tribe or Tribe means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village, which is federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.
(hh) BART-eligible source means an existing stationary facility as defined in section 51.301(e).

(ii) Geographic enhancement for the purpose of section 308 means a method, procedure, or process to allow a broad regional strategy, such as an emissions trading program designed to achieve greater reasonable progress than BART for regional haze, to accommodate BART for reasonably attributable impairment.

Sec. 51.302 Implementation control strategies for reasonably attributable visibility impairment.

(a) Plan Revision Procedures. (1) Each State identified in section 300(b)(2) must have submitted, not later than September 2, 1981, an implementation plan meeting the requirements of this subpart pertaining to reasonably attributable visibility impairment.

(2) (i) The State, prior to adoption of any implementation plan to address reasonably attributable impairment required by this subpart, must conduct one or more public hearings on such plan in accordance with §51.102.

(ii) In addition to the requirements in §51.102, the State must provide written notification of such hearings to each affected Federal Land Manager, and other affected States, and must state where the public can inspect a summary prepared by the Federal Land Managers of their conclusions and recommendations, if any, on the proposed plan revision.

(3) Submission of plans as required by this subpart must be conducted in accordance with the procedures in §51.103.

(b) State and Federal Land Manager Coordination. (1) The State must identify to the Federal Land Managers, in writing and within 30 days of the promulgation of these regulations, the title of the official to which the Federal Land Manager of any mandatory Class I Federal area can submit a recommendation on the implementation of this subpart including, but not limited to:

(i) A list of integral vistas that are to be listed by the State for the purpose of implementing section 304,

(ii) Identification of impairment of visibility in any mandatory Class I Federal area(s), and

(iii) Identification of elements for inclusion in the visibility monitoring strategy required by §51.305.
(2) The State must provide opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the plan, with the Federal Land Manager on the proposed SIP revision required by this subpart. This consultation must include the opportunity for the affected Federal Land Managers to discuss their:

(i) Assessment of impairment of visibility in any mandatory Class I Federal area, and

(ii) Recommendations on the development of the long-term strategy.

(3) The plan must provide procedures for continuing consultation between the State and Federal Land Manager on the implementation of the visibility protection program required by this subpart.

(c) General Plan Requirements for reasonably attributable visibility impairment.

(1) The affected Federal Land Manager may certify to the State, at any time, that there exists reasonably attributable impairment of visibility in any mandatory Class I Federal area.

(2) The plan must contain the following to address reasonably attributable impairment:

(i) A long-term (10-15 years) strategy, as specified in section 305 and section 306, including such emission limitations, schedules of compliance, and such other measures including schedules for the implementation of the elements of the long-term strategy as may be necessary to make reasonable progress toward the national goal specified in section 300(a).

(ii) An assessment of visibility impairment and a discussion of how each element of the plan relates to the preventing of future or remedying of existing impairment of visibility in any mandatory Class I Federal area within the State.

(iii) Emission limitations representing BART and schedules for compliance with BART for each existing stationary facility identified according to paragraph (c)(4) of this section.

(3) The plan must require each source to maintain control equipment required by this subpart and establish procedures to ensure such control equipment is properly operated and maintained.
(4) For any existing reasonably attributable visibility impairment the Federal Land Manager certifies to the State under paragraph (c)(1) of this section, at least 6 months prior to plan submission or revision:

(i) The State must identify and analyze for BART each existing stationary facility which may reasonably be anticipated to cause or contribute to impairment of visibility in any mandatory Class I Federal area where the impairment in the mandatory Class I Federal area is reasonably attributable to that existing stationary facility. The State need not consider any integral vista the Federal Land Manager did not identify pursuant to section 304(b) at least 6 months before plan submission.

(ii) If the State determines that technological or economic limitations on the applicability of measurement methodology to a particular existing stationary facility would make the imposition of an emission standard infeasible it may instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof, to require the application of BART. Such standard, to the degree possible, is to set forth the emission reduction to be achieved by implementation of such design, equipment, work practice or operation, and must provide for compliance by means which achieve equivalent results.

(iii) BART must be determined for fossil-fuel fired generating plants having a total generating capacity in excess of 750 megawatts pursuant to "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Existing Stationary Facilities" (1980), which is incorporated by reference, exclusive of appendix E, which was published in the Federal Register on February 6, 1980 (45 FR 8210). It is EPA publication No. 450/3-80-009b and is for sale from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. It is also available for inspection at the Office of the Federal Register Information Center, 800 North Capitol NW., suite 700, Washington, DC.

(iv) The plan must require that each existing stationary facility required to install and operate BART do so as expeditiously as practicable but in no case later than five years after plan approval or revision.

(v) The plan must provide for a BART analysis of any existing stationary facility that might cause or contribute to impairment of visibility in any mandatory Class I Federal area identified
under this paragraph (c)(4) at such times, as determined by the Administrator, as new technology for control of the pollutant becomes reasonably available if:

(A) The pollutant is emitted by that existing stationary facility,

(B) Controls representing BART for the pollutant have not previously been required under this subpart, and

(C) The impairment of visibility in any mandatory Class I Federal area is reasonably attributable to the emissions of that pollutant.

Sec. 51.303 Exemptions from control.

(a) (1) Any existing stationary facility subject to the requirement under §51.302 to install, operate, and maintain BART may apply to the Administrator for an exemption from that requirement.

(2) An application under this section must include all available documentation relevant to the impact of the source's emissions on visibility in any mandatory Class I Federal area and a demonstration by the existing stationary facility that it does not or will not, by itself or in combination with other sources, emit any air pollutant which may be reasonably anticipated to cause or contribute to a significant impairment of visibility in any mandatory Class I Federal area.

(b) Any fossil-fuel fired power plant with a total generating capacity of 750 megawatts or more may receive an exemption from BART only if the owner or operator of such power plant demonstrates to the satisfaction of the Administrator that such power plant is located at such a distance from all mandatory Class I Federal areas that such power plant does not or will not, by itself or in combination with other sources, emit any air pollutant which may reasonably be anticipated to cause or contribute to significant impairment of visibility in any such mandatory Class I Federal area.

(c) Application under this §51.303 must be accompanied by a written concurrence from the State with regulatory authority over the source.

(d) The existing stationary facility must give prior written notice to all affected Federal Land Managers of any application for exemption under this §51.303.
(e) The Federal Land Manager may provide an initial recommendation or comment on the disposition of such application. Such recommendation, where provided, must be part of the exemption application. This recommendation is not to be construed as the concurrence required under paragraph (h) of this section.

(f) The Administrator, within 90 days of receipt of an application for exemption from control, will provide notice of receipt of an exemption application and notice of opportunity for public hearing on the application.

(g) After notice and opportunity for public hearing, the Administrator may grant or deny the exemption. For purposes of judicial review, final EPA action on an application for an exemption under this §51.303 will not occur until EPA approves or disapproves the State Implementation Plan revision.

(h) An exemption granted by the Administrator under this §51.303 will be effective only upon concurrence by all affected Federal Land Managers with the Administrator's determination.

Sec. 51.304 Identification of integral vistas.

(a) On or before December 31, 1985 the Federal Land Manager may identify any integral vista. The integral vista must be identified according to criteria the Federal Land Manager develops. These criteria must include, but are not limited to, whether the integral vista is important to the visitor's visual experience of the mandatory Class I Federal area. Adoption of criteria must be preceded by reasonable notice and opportunity for public comment on the proposed criteria.

(b) The Federal Land Manager must notify the State of any integral vistas identified under paragraph (a) of this section, and the reasons therefor.

(c) The State must list in its implementation plan any integral vista the Federal Land Manager identifies at least six months prior to plan submission, and must list in its implementation plan at its earliest opportunity, and in no case later than at the time of the periodic review of the SIP required by section 306(c), any integral vista the Federal Land Manager identifies after that time.

(d) The State need not in its implementation plan list any integral vista the identification of which was not made in accordance with the criteria in paragraph (a) of this section. In making this finding, the State must carefully consider the
expertise of the Federal Land Manager in making the judgments called for by the criteria for identification. Where the State and the Federal Land Manager disagree on the identification of any integral vista, the State must give the Federal Land Manager an opportunity to consult with the Governor of the State.

Sec. 51.305 Monitoring for Reasonably Attributable Visibility Impairment.

(a) For the purposes of addressing reasonably attributable visibility impairment, each State containing a mandatory Class I Federal area must include in the plan a strategy for evaluating reasonably attributable visibility impairment in any mandatory Class I Federal area by visual observation or other appropriate monitoring techniques. Such strategy must take into account current and anticipated visibility monitoring research, the availability of appropriate monitoring techniques, and such guidance as is provided by the Agency.

(b) The plan must provide for the consideration of available visibility data and must provide a mechanism for its use in decisions required by this subpart.

Sec. 51.306 Long-term strategy requirements for reasonably attributable visibility impairment.

(a) (1) For the purposes of addressing reasonably attributable visibility impairment, each plan must include a long-term (10-15 years) strategy for making reasonable progress toward the national goal specified in section 300(a). This strategy must cover any existing impairment the Federal Land Manager certifies to the State at least 6 months prior to plan submission, and any integral vista of which the Federal Land Manager notifies the State at least 6 months prior to plan submission.

(2) A long-term strategy must be developed for each mandatory Class I Federal area located within the State and each mandatory Class I Federal area located outside the State which may be affected by sources within the State. This does not preclude the development of a single comprehensive plan for all such areas.

(3) The plan must set forth with reasonable specificity why the long-term strategy is adequate for making reasonable progress toward the national visibility goal, including remedying existing and preventing future impairment.

(b) The State must coordinate its long-term strategy for an
area with existing plans and goals, including those provided by the affected Federal Land Managers, that may affect impairment of visibility in any mandatory Class I Federal area.

(c) The plan must provide for periodic review and revision, as appropriate, of the long-term strategy for addressing reasonably attributable visibility impairment. The plan must provide for such periodic review and revision not less frequently than every three years until the date of submission of the State’s first plan addressing regional haze visibility impairment in accordance with sections 51.308(b) and (c). On or before this date, the State must revise its plan to provide for review and revision of a coordinated long-term strategy for addressing reasonably attributable and regional haze visibility impairment, and the State must submit the first such coordinated long-term strategy. Future coordinated long-term strategies must be submitted consistent with the schedule for periodic progress reports set forth in section 51.308(g). Until the State revises its plan to meet this requirement, the State must continue to comply with existing requirements for plan review and revision, and with all emission management requirements in the plan to address reasonably attributable impairment. This requirement does not affect any pre-existing deadlines for State submittal of a long-term strategy review (or element thereof) between [the date of promulgation of regional haze rules] and the date required for submission of the State’s first regional haze plan. In addition, the plan must provide for review of the long-term strategy as it applies to reasonably attributable impairment, and revision as appropriate, within 3 years of State receipt of any certification of reasonably attributable impairment from a Federal land manager. The review process must include consultation with the appropriate Federal Land Managers, and the State must provide a report to the public and the Administrator on progress toward the national goal. This report must include an assessment of:

(1) The progress achieved in remedying existing impairment of visibility in any mandatory Class I Federal area;

(2) The ability of the long-term strategy to prevent future impairment of visibility in any mandatory Class I Federal area;

(3) Any change in visibility since the last such report, or, in the case of the first report, since plan approval;

(4) Additional measures, including the need for SIP revisions, that may be necessary to assure reasonable progress toward the national visibility goal;
(5) The progress achieved in implementing BART and meeting other schedules set forth in the long-term strategy;

(6) The impact of any exemption granted under §51.303;

(7) The need for BART to remedy existing visibility impairment of any integral vista listed in the plan since the last such report, or, in the case of the first report, since plan approval.

(d) The long-term strategy must provide for review of the impacts from any new major stationary source or major modifications on visibility in any mandatory Class I Federal area. This review of major stationary sources or major modifications must be in accordance with §51.307, §51.166, and §51.160 and any other binding guidance provided by the Agency insofar as these provisions pertain to protection of visibility in any mandatory Class I Federal areas.

(e) The State must consider, at a minimum, the following factors during the development of its long-term strategy:

(1) Emission reductions due to ongoing air pollution control programs,

(2) Additional emission limitations and schedules for compliance,

(3) Measures to mitigate the impacts of construction activities,

(4) Source retirement and replacement schedules,

(5) Smoke management techniques for agricultural and forestry management purposes including such plans as currently exist within the State for these purposes, and

(6) Enforceability of emission limitations and control measures.

(f) The plan must discuss the reasons why the above and other reasonable measures considered in the development of the long-term strategy were or were not adopted as part of the long-term strategy.

(g) The State, in developing the long-term strategy, must take into account the effect of new sources, and the costs of compliance, the time necessary for compliance, the energy and
nonair quality environmental impacts of compliance, and the remaining useful life of any affected existing source and equipment therein.

Sec. 51.307 New source review.

(a) For purposes of new source review of any new major stationary source or major modification that would be constructed in an area that is designated attainment or unclassified under section 107(d)(1)(D) or (E) of the Clean Air Act, the State plan must, in any review under §51.166 with respect to visibility protection and analyses, provide for:

(1) Written notification of all affected Federal Land Managers of any proposed new major stationary source or major modification that may affect visibility in any Federal Class I area. Such notification must be made in writing and include a copy of all information relevant to the permit application within 30 days of receipt of and at least 60 days prior to public hearing by the State on the application for permit to construct. Such notification must include an analysis of the anticipated impacts on visibility in any Federal Class I area,

(2) Where the State requires or receives advance notification (e.g. early consultation with the source prior to submission of the application or notification of intent to monitor under §51.166) of a permit application of a source that may affect visibility the State must notify all affected Federal Land Managers within 30 days of such advance notification, and

(3) Consideration of any analysis performed by the Federal Land Manager, provided within 30 days of the notification and analysis required by paragraph (a)(1) of this section, that such proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area. Where the State finds that such an analysis does not demonstrate to the satisfaction of the State that an adverse impact will result in the Federal Class I area, the State must, in the notice of public hearing, either explain its decision or give notice as to where the explanation can be obtained.

(b) The plan shall also provide for the review of any new major stationary source or major modification:

(1) That may have an impact on any integral vista of a mandatory Class I Federal area, if it is identified in accordance with §51.304 by the Federal Land Manager at least 12 months before submission of a complete permit application, except where
the Federal Land Manager has provided notice and opportunity for public comment on the integral vista in which case the review must include impacts on any integral vista identified at least 6 months prior to submission of a complete permit application, unless the State determines under section §51.304(d) that the identification was not in accordance with the identification criteria, or

(2) That proposes to locate in an area classified as nonattainment under section 107(d)(1)(A), (B), or (c) of the Clean Air Act that may have an impact on visibility in any mandatory Class I Federal area.

(c) Review of any major stationary source or major modification under paragraph (b) of this section, shall be conducted in accordance with paragraph (a) of this section, and §51.166(o), (p) (1) through (2), and (q). In conducting such reviews the State must ensure that the source's emissions will be consistent with making reasonable progress toward the national visibility goal referred to in §51.300(a). The State may take into account the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.

(d) The State may require monitoring of visibility in any Federal Class I area near the proposed new stationary source or major modification for such purposes and by such means as the State deems necessary and appropriate.

§51.308 Regional Haze Program Requirements

(a) What is the purpose of this section? This section establishes requirements for implementation plans, plan revisions, and periodic progress reviews to address regional haze.

(b) When are the first implementation plans due under the regional haze program? Except as provided in sections 51.308(c) and 51.309(c), each State identified in section 51.300(b)(3) must submit an implementation plan for regional haze meeting the requirements of sections 51.308(d) and (e) by the following dates:

(1) For any area designated as attainment or unclassifiable for the national ambient air quality standard (NAAQS) for fine particulate matter (PM$_{2.5}$), the State must submit a regional haze implementation plan to EPA within 12 months after the date of designation.
(2) For any area designated as nonattainment for the PM$_{2.5}$ NAAQS, the State must submit a regional haze implementation plan to EPA at the same time that the State’s plan for implementation of the PM$_{2.5}$ NAAQS must be submitted under section 172 of the Clean Air Act, that is, within 3 years after the area is designated as nonattainment, but not later than December 31, 2008.

(c) Options for regional planning. If at the time the SIP for regional haze would otherwise be due, a State is working with other States to develop a coordinated approach to regional haze by participating in a regional planning process, the State may choose to defer addressing the core requirements for regional haze in section 51.308(d) and the requirements for BART in section 51.308(e). If a State opts to do this, it must meet the following requirements:

(1) The State must submit an implementation plan by the earliest date by which an implementation plan would be due for any area of the State under section 51.308(b). This implementation plan must contain the following:

(i) A demonstration of ongoing participation in a regional planning process to address regional haze, and an agreement by the State to continue participating with one or more other States in such a process for the development of this and future implementation plan revisions;

(ii) A showing, based on available inventory, monitoring, or modeling information, that emissions from within the State contribute to visibility impairment in a mandatory Class I Federal Area outside the State, or that emissions from another State contribute to visibility impairment in any mandatory Class I Federal area within the State.

(iii) A description of the regional planning process, including a list of the States which have agreed to work together to address regional haze in a region (i.e. the regional planning group), the goals, objectives, management, and decisionmaking structure of the regional planning group, deadlines for completing significant technical analyses and developing emission management strategies, and a schedule for State review and adoption of regulations implementing the recommendations of the regional group;

(iv) A commitment by the State to submit an implementation plan revision addressing the requirements in sections 51.308(d) and(e) by the date specified in section 51.308(c)(2).
addition, the State must commit to develop its plan revision in coordination with the other States participating in the regional planning process, and to fully address the recommendations of the regional planning group.

(v) A list of all BART-eligible sources within the State.

(2) The State must submit an implementation plan revision addressing the requirements in sections 51.308(d) and (e) by the latest date an area within the planning region would be required to submit an implementation plan under section 51.308(b), but in any event, no later than December 31, 2008.

(d) What are the core requirements for the implementation plan for regional haze? The State must address regional haze in each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State which may be affected by emissions from within the State. To meet the core requirements for regional haze for these areas, the State must submit an implementation plan containing the following plan elements and supporting documentation for all required analyses:

(1) Reasonable progress goals. For each mandatory Class I Federal area located within the State, the State must establish goals (expressed in deciviews) that provide for reasonable progress towards achieving natural visibility conditions. The reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period.

(i) In establishing a reasonable progress goal for any mandatory Class I Federal area within the State, the State must:

(A) Consider the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources, and include a demonstration showing how these factors were taken into consideration in selecting the goal.

(B) Analyze and determine the rate of progress needed to attain natural visibility conditions by the year 2064. To calculate this rate of progress, the State must compare baseline visibility conditions to natural visibility conditions in the mandatory Federal Class I area and determine the uniform rate of visibility improvement (measured in deciviews) that would need to be maintained during each implementation period in order to
attain natural visibility conditions by 2064. In establishing the reasonable progress goal, the State must consider the uniform rate of improvement in visibility and the emission reduction measures needed to achieve it for the period covered by the implementation plan.

(ii) For the period of the implementation plan, if the State establishes a reasonable progress goal that provides for a slower rate of improvement in visibility than the rate that would be needed to attain natural conditions by 2064, the State must demonstrate, based on the factors in section 51.308(d)(1)(i)(A) above, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable. The State must provide to the public for review as part of its implementation plan an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the State as reasonable.

(iii) In determining whether the State’s goal for visibility improvement provides for reasonable progress towards natural visibility conditions, the Administrator will evaluate the demonstrations developed by the State pursuant to sections 51.308(d)(1)(i) and 51.308(d)(1)(ii).

(iv) In developing each reasonable progress goal, the State must consult with those States which may reasonably be anticipated to cause or contribute to visibility impairment in the mandatory Class I Federal area. In any situation in which the State cannot agree with another such State or group of States that a goal provides for reasonable progress, the State must describe in its submittal the actions taken to resolve the disagreement. In reviewing the State’s implementation plan submittal, the Administrator will take this information into account in determining whether the State’s goal for visibility improvement provides for reasonable progress towards natural visibility conditions.

(v) The reasonable progress goals established by the State are not directly enforceable but will be considered by the Administrator in evaluating the adequacy of the measures in the implementation plan to achieve the progress goal adopted by the State.

(vi) The State may not adopt a reasonable progress goal that represents less visibility improvement than is expected to result from implementation of other requirements of the Clean Air Act during the applicable planning period.
(2) **Calculations of baseline and natural visibility conditions.** For each mandatory Class I Federal area located within the State, the State must determine the following visibility conditions (expressed in deciviews):

(i) Baseline visibility conditions for the most impaired and least impaired days. The period for establishing baseline visibility conditions is 2000 to 2004. Baseline visibility conditions must be calculated, using available monitoring data, by establishing the average degree of visibility impairment for the most and least impaired days for each calendar year from 2000 to 2004. The baseline visibility conditions are the average of these annual values. For mandatory Class I Federal areas without onsite monitoring data for 2000-2004, the State must establish baseline values using the most representative available monitoring data for 2000-2004, in consultation with the Administrator or his or her designee;

(ii) For an implementation plan that is submitted by 2003, the period for establishing baseline visibility conditions for the period of the first long term strategy is the most recent 5-year period for which visibility monitoring data are available for the mandatory Class I federal areas addressed by the plan. For mandatory Class I Federal areas without onsite monitoring data, the State must establish baseline values using the most representative available monitoring data, in consultation with the Administrator or his or her designee;

(iii) Natural visibility conditions for the most impaired and least impaired days. Natural visibility conditions must be calculated by estimating the degree of visibility impairment existing under natural conditions for the most impaired and least impaired days, based on available monitoring information and appropriate data analysis techniques; and

(iv)(A) for the first implementation plan addressing the requirements of section 51.308(d) and (e), the number of deciviews by which baseline conditions exceed natural visibility conditions for the most impaired and least impaired days; or

(B) for all future implementation plan revisions, the number of deciviews by which current conditions, as calculated under section 51.308(f)(1), exceed natural visibility conditions for the most impaired and least impaired days.

(3) **Long-term strategy for regional haze.** Each State listed in §51.300(b)(3) must submit a long-term strategy that addresses regional haze visibility impairment for each mandatory Class I
Federal area within the State and for each mandatory Class I Federal area located outside the State which may be affected by emissions from the State. The long-term strategy must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by States having mandatory Class I Federal areas. In establishing its long-term strategy for regional haze, the State must meet the following requirements:

(i) Where the State has emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal area located in another State or States, the State must consult with the other State(s) in order to develop coordinated emission management strategies. The State must consult with any other State having emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal area within the State.

(ii) Where other States cause or contribute to impairment in a mandatory Class I Federal area, the State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to meet the progress goal for the area. If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process.

(iii) The State must document the technical basis, including modeling, monitoring and emissions information, on which the State is relying to determine its apportionment of emission reduction obligations necessary for achieving reasonable progress in each mandatory Class I Federal area it affects. The State may meet this requirement by relying on technical analyses developed by the regional planning organization and approved by all State participants. The state must identify the baseline emissions inventory on which its strategies are based. The baseline emissions inventory year is presumed to be the most recent year of the consolidate periodic emissions inventory.

(iv) The State must identify all anthropogenic sources of visibility impairment considered by the State in developing its long-term strategy. The State should consider major and minor stationary sources, mobile sources, and area sources.

(v) The State must consider, at a minimum, the following factors in developing its long-term strategy:

(A) Emission reductions due to ongoing air pollution control
programs, including measures to address reasonably attributable visibility impairment;
  (B) Measures to mitigate the impacts of construction activities;
  (C) Emissions limitations and schedules for compliance to achieve the reasonable progress goal
  (D) Source retirement and replacement schedules
  (E) Smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the State for these purposes;
  (F) Enforceability of emissions limitations and control measures; and
  (G) The anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy.

  (4) Monitoring strategy and other implementation plan requirements. The State must submit with the implementation plan a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the State. This monitoring strategy must be coordinated with the monitoring strategy required in section 51.305 for reasonably attributable visibility impairment. Compliance with this requirement may be met through participation in the Interagency Monitoring of Protected Visual Environments network. The implementation plan must also provide for the following:

  (i) The establishment of any additional monitoring sites or equipment needed to assess whether reasonable progress goals to address regional haze for all mandatory Class I Federal areas within the State are being achieved.

  (ii) Procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at mandatory Class I Federal areas both within and outside the State.

  (iii) For a State with no mandatory Class I Federal areas, procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at mandatory Class I Federal areas in other States.

  (iv) The implementation plan must provide for the reporting of all visibility monitoring data to the Administrator at least annually for each mandatory Class I Federal area in the State.
To the extent possible, the State should report visibility monitoring data electronically.

(v) A statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any mandatory Class I Federal area. The inventory must include emissions for a baseline year, emissions for the most recent year for which data are available, and estimates of future projected emissions. The State must also include a commitment to update the inventory periodically.

(vi) Other elements, including reporting, recordkeeping, and other measures, necessary to assess and report on visibility.

(e) Best Available Retrofit Technology (BART) requirements for regional haze visibility impairment. The State must submit an implementation plan containing emission limitations representing BART and schedules for compliance with BART for each BART-eligible source that may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area, unless the State demonstrates that an emissions trading program or other alternative will achieve greater reasonable progress toward natural visibility conditions.

(1) To address the requirements for BART, the State must submit an implementation plan containing the following plan elements and include documentation for all required analyses:

(i) A list of all BART-eligible sources within the State.

(ii) A determination of BART for each BART-eligible source in the State that emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area. All such sources are subject to BART. This determination must be based on the following analyses:

(A) An analysis of the best system of continuous emission control technology available and associated emission reductions achievable for each BART-eligible source within the State subject to BART. In this analysis, the State must take into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use at the source, and the remaining useful life of the source; and

(B) An analysis of the degree of visibility improvement that would be achieved in each mandatory Class I Federal area as a
result of the emission reductions achievable from all sources subject to BART located within the region that contributes to visibility impairment in the Class I area, based on the analysis conducted under section 51.308(e)(1)(ii)(A).

(iii) If the State determines in establishing BART that technological or economic limitations on the applicability of measurement methodology to a particular source would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof, to require the application of BART. Such standard, to the degree possible, is to set forth the emission reduction to be achieved by implementation of such design, equipment, work practice or operation, and must provide for compliance by means which achieve equivalent results.

(iv) A requirement that each source subject to BART be required to install and operate BART as expeditiously as practicable, but in no event later than 5 years after approval of the implementation plan revision.

(v) A requirement that each source subject to BART maintain the control equipment required by this subpart and establish procedures to ensure such equipment is properly operated and maintained.

(2) A State may opt to implement an emissions trading program or other alternative measure rather than to require sources subject to BART to install, operate, and maintain BART. To do so, the State must demonstrate that this emissions trading program or other alternative measure will achieve greater reasonable progress than would be achieved through the installation and operation of BART. To make this demonstration, the State must submit an implementation plan containing the following plan elements and include documentation for all required analyses:

(i) A demonstration that the emissions trading program or other alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State. This demonstration must be based on the following:

(A) A list of all BART-eligible sources within the State.

(B) An analysis of the best system of continuous emission control technology available and associated emission reductions
achievable for each source within the State subject to BART. In this analysis, the State must take into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use at the source, and the remaining useful life of the source. The best system of continuous emission control technology and the above factors may be determined on a source category basis. The State may elect to consider both source-specific and category-wide information, as appropriate, in conducting its analysis.

(C) An analysis of the degree of visibility improvement that would be achieved in each mandatory Class I Federal area as a result of the emission reductions achievable from all such sources subject to BART located within the region that contributes to visibility impairment in the Class I area, based on the analysis conducted under section 51.308(e)(2)(i)(B).

(ii) A demonstration that the emissions trading program or alternative measures will apply, at a minimum, to all BART-eligible sources in the State. Those sources having a federally enforceable emission limitation determined by the State and approved by EPA as meeting BART in accordance with section 51.302(c) or 51.308(e)(1) do not need to meet the requirements of the emissions trading program or alternative measure, but may choose to participate if they meet the requirements of the emissions trading program or alternative measure.

(iii) A requirement that all necessary emission reductions take place during the period of the first long-term strategy for regional haze. To meet this requirement, the State must provide a detailed description of the emissions trading program or other alternative measure, including schedules for implementation, the emission reductions required by the program, all necessary administrative and technical procedures for implementing the program, rules for accounting and monitoring emissions, and procedures for enforcement.

(iv) A demonstration that the emission reductions resulting from the emissions trading program or other alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the Clean Air Act as of the baseline date of the SIP.

(v) At the State’s option, a provision that the emissions trading program or other alternative measure may include a geographic enhancement to the program to address the requirement under §51.302(c) related to BART for reasonably attributable
impairment from the pollutants covered under the emissions trading program or other alternative measure.

(3) After a State has met the requirements for BART or implemented emissions trading program or other alternative measure that achieve more reasonable progress than the installation and operation of BART, BART-eligible sources will be subject to the requirements of section 51.308(d) in the same manner as other sources.

(4) Any BART-eligible facility subject to the requirement under section 51.308(e) to install, operate, and maintain BART may apply to the Administrator for an exemption from that requirement. An application for an exemption will be subject to the requirements of section 51.303(a)(2)-(h).

(f) Requirements for comprehensive periodic revisions of implementation plans for regional haze. Each State identified in section 51.300(b)(3) must revise and submit its regional haze implementation plan revision to EPA by July 31, 2018 and every ten years thereafter. In each plan revision, the State must evaluate and reassess all of the elements required in section 51.308(d), taking into account improvements in monitoring data collection and analysis techniques, control technologies, and other relevant factors. In evaluating and reassessing these elements, the State must address the following:

(1) Current visibility conditions for the most impaired and least impaired days, and actual progress made towards natural conditions during the previous implementation period. The period for calculating current visibility conditions is the most recent five year period preceding the required date of the implementation plan submittal for which data are available. Current visibility conditions must be calculated based on the annual average level of visibility impairment for the most and least impaired days for each of these five years. Current visibility conditions are the average of these annual values.

(2) The effectiveness of the long-term strategy for achieving reasonable progress goals over the prior implementation period(s); and

(3) Affirmation of, or revision to, the reasonable progress goal in accordance with the procedures set forth in section 51.308(d)(1). If the State established a reasonable progress goal for the prior period which provided a slower rate of progress than that needed to attain natural conditions by the year 2064, the State must evaluate and determine the
reasonableness, based on the factors in section 51.308(d)(1)(i)(A), of additional measures that could be adopted to achieve the degree of visibility improvement projected by the analysis contained in the first implementation plan described in section 51.308(d)(1)(i)(B).

(g) Requirements for periodic reports describing progress towards the reasonable progress goals. Each State identified in section 51.300(b)(3) must submit a report to the Administrator every 5 years evaluating progress towards the reasonable progress goal for each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State which may be affected by emissions from within the State. The first progress report is due 5 years from submittal of the initial implementation plan addressing sections 51.308(d) and (e). The progress reports must be in the form of implementation plan revisions that comply with the procedural requirements of sections 51.102 and 51.103. Periodic progress reports must contain at a minimum the following elements:

(1) A description of the status of implementation of all measures included in the implementation plan for achieving reasonable progress goals for mandatory Class I Federal areas both within and outside the State.

(2) A summary of the emissions reductions achieved throughout the State through implementation of the measures described in section 51.308(g)(1).

(3) For each mandatory Class I Federal area within the State, the State must assess the following visibility conditions and changes, with values for most impaired and least impaired days expressed in terms of five-year averages of these annual values.

   (i) the current visibility conditions for the most impaired and least impaired days;

   (ii) the difference between current visibility conditions for the most impaired and least impaired days and baseline visibility conditions;

   (iii) the change in visibility impairment for the most impaired and least impaired days over the past five years;

(4) An analysis tracking the change over the past 5 years in emissions of pollutants contributing to visibility impairment from all sources and activities within the State. Emissions changes should be identified by type of source or activity. The
analysis must be based on the most recent updated emissions inventory, with estimates projected forward as necessary and appropriate, to account for emissions changes during the applicable 5-year period.

(5) An assessment of any significant changes in anthropogenic emissions within or outside the State that have occurred over the past 5 years that have limited or impeded progress in reducing pollutant emissions and improving visibility.

(6) An assessment of whether the current implementation plan elements and strategies are sufficient to enable the State, or other States with mandatory Federal Class I areas affected by emissions from the State, to meet all established reasonable progress goals.

(7) A review of the State’s visibility monitoring strategy and any modifications to the strategy as necessary.

(h) Determination of the adequacy of existing implementation plan. At the same time the State is required to submit any 5-year progress report to EPA in accordance with section 51.308(g), the State must also take one of the following actions based upon the information presented in the progress report:

(1) If the State determines that the existing implementation plan requires no further substantive revision at this time in order to achieve established goals for visibility improvement and emissions reductions, the State must provide to the Administrator a negative declaration that further revision of the existing implementation plan is not needed at this time.

(2) If the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources in another State(s) which participated in a regional planning process, the State must provide notification to the Administrator and to the other State(s) which participated in the regional planning process with the States. The State must also collaborate with the other State(s) through the regional planning process for the purpose of developing additional strategies to address the plan’s deficiencies.

(3) Where the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources in another country, the State shall provide notification, along with available information, to the Administrator.
(4) Where the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources within the State, the State shall revise its implementation plan to address the plan’s deficiencies within one year.

(i) What are the requirements for State and Federal Land Manager coordination?

(1) By [insert date 90 days from the effective date of these regulations], the State must identify in writing to the Federal Land Managers the title of the official to which the Federal Land Manager of any mandatory Class I Federal area can submit any recommendations on the implementation of this subpart including, but not limited to:

(i) Identification of impairment of visibility in any mandatory Class I Federal area(s), and

(ii) Identification of elements for inclusion in the visibility monitoring strategy required by sections 51.305 and 51.308.

(2) The State must provide the Federal Land Manager with an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on an implementation plan (or plan revision) for regional haze required by this subpart. This consultation must include the opportunity for the affected Federal Land Managers to discuss their:

(i) Assessment of impairment of visibility in any mandatory Class I Federal area, and

(ii) Recommendations on the development of the reasonable progress goal and on the development and implementation of strategies to address visibility impairment.

(3) In developing any implementation plan (or plan revision), the State must include a description of how it addressed any comments provided by the Federal Land Managers.

(4) The plan (or plan revision) must provide procedures for continuing consultation between the State and Federal Land Manager on the implementation of the visibility protection program required by this subpart, including development and review of implementation plan revisions and 5-year progress reports, and on the implementation of other programs having the potential to contribute to impairment of visibility in mandatory
§51.309 Requirements Related to the Grand Canyon Visibility Transport Commission.

(a) **What is the purpose of this section?.** This section establishes the requirements for the first regional haze implementation plan to address regional haze visibility impairment in the 16 Class I areas covered by the Grand Canyon Visibility Transport Commission Report. For the years 2003 to 2018, certain States (defined below as Transport Region States) may choose to implement the Commission’s recommendations within the framework of the national regional haze program and applicable requirements of the Act by complying with the provisions of this section, as supplemented by an approvable Annex to the Commission Report as required by section 51.309(f). If a transport region state submits an implementation plan which is approved by EPA as meeting the requirements of this section, it will be deemed to comply with the requirements for reasonable progress for the period from approval of the plan to 2018.

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


2. "Transport Region State" means one of the States that is included within the Transport Region addressed by the Grand Canyon Visibility Transport Commission (Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming).


4. "Fire" means wildfire, wildland fire (including prescribed natural fire), prescribed fire, and agricultural burning conducted and occurring on Federal, State, and private wildlands and farmlands.
(5) "Milestone" means an average percentage reduction in emissions, expressed in tons per year, for a given year or for a period of up to five years ending in that year, compared to a 1990 actual emissions baseline.

(6) "Mobile Source Emission Budget" means the lowest level of VOC, NO\textsubscript{x}, SO\textsubscript{2} elemental and organic carbon, and fine particles which are projected to occur in any area within the transport region from which mobile source emissions are determined to contribute significantly to visibility impairment in any of the 16 Class I areas.

(7) "Geographic enhancement" means a method, procedure, or process to allow a broad regional strategy, such as a milestone or backstop market trading program designed to achieve greater reasonable progress than BART for regional haze, to accommodate BART for reasonably attributable impairment.

(c) Implementation Plan Schedule. Each Transport Region State may meet the requirements of section 51.308(b)-(e) by electing to submit an implementation plan that complies with the requirements of section 51.309. Each Transport Region State must submit an implementation plan addressing regional haze visibility impairment in the 16 Class I areas no later than December 31, 2003. A Transport Region State that elects not to submit an implementation plan that complies with the requirements of section 51.309 (or whose plan does not comply with all of the requirements of 51.309) is subject to the requirements of section 51.308 in the same manner and to the same extent as any State not included within the Transport Region.

(d) Requirements of the first implementation plan for States electing to adopt all of the recommendations of the Commission Report. Except as provided for in §51.309(e), each Transport Region State must submit an implementation plan that meets the following requirements:

(1) Time period covered. The implementation plan must be effective for the entire time period between December 31, 2003 and December 31, 2018.

(2) Projection of visibility improvement. For each of the 16 mandatory Class I areas located within the Transport Region State, the plan must include a projection of the improvement in visibility conditions (expressed in deciviews, and in any additional ambient visibility metrics deemed appropriate by the State) expected through the year 2018 for the most impaired and least impaired days, based on the implementation of all measures...
as required in the Commission report and the provisions in §51.309. The projection must be made in consultation with other Transport Region States with sources which may be reasonably anticipated to contribute to visibility impairment in the relevant Class I area. The projection may be based on a satisfactory regional analysis.

(3) Treatment of clean-air corridors. The plan must describe and provide for implementation of comprehensive emission tracking strategies for clean-air corridors to ensure that the visibility does not degrade on the least-impaired days at any of the 16 Class I areas. The strategy must include:

(i) An identification of clean-air corridors. The EPA will evaluate the State’s identification of such corridors based upon the reports of the Commission’s Meteorology Subcommittee and any future updates by a successor organization;

(ii) Within areas that are clean-air corridors, an identification of patterns of growth or specific sites of growth that could cause, or are causing, significant emissions increases that could have, or are having, visibility impairment at one or more of the 16 Class I areas.

(iii) In areas outside of clean-air corridors, an identification of significant emissions growth that could begin, or is beginning, to impair the quality of air in the corridor and thereby lead to visibility degradation for the least-impaired days in one or more of the 16 Class I areas.

(iv) If impairment of air quality in clean air corridors is identified pursuant to subsections 51.309(d)(3)(ii) and (iii), an analysis of the effects of increased emissions, including provisions for the identification of the need for additional emission reductions measures, and implementation of the additional measures where necessary.

(v) A determination of whether other clean air corridors exist for any of the 16 Class I areas. For any such clean air corridors, an identification of the necessary measures to protect against future degradation of air quality in any of the 16 Class I areas.

(4) Implementation of Stationary Source Reductions. The first implementation plan submission must include:

(i) Monitoring and reporting of sulfur dioxide emissions. The plan submission must include provisions requiring the
monitoring and reporting of actual stationary source sulfur
dioxide emissions within the State. The monitoring and reporting
data must be sufficient to determine whether a 13 percent
reduction in actual stationary source sulfur dioxide emissions
has occurred between the years 1990 and 2000, and whether
milestones required by section 51.309(f)(ii) have been achieved
for the transport region. The plan submission must provide for
reporting of these data by the State to the Administrator. Where
procedures developed under section 51.309(f)(2) and agreed upon
by the State include reporting to a regional planning
organization, the plan submission must provide for reporting to
the regional planning body in addition to the Administrator.

(ii) Criteria and Procedures for a Market Trading Program.
The plan must include the criteria and procedures for activating
a market trading program or other program consistent with section
51.309(f)(2) if an applicable regional milestone is exceeded,
procedures for operation of the program, and implementation plan
assessments of the program in the years 2008, 2013, and 2018.

(iii) Provisions for activating a market trading program.
Provisions to activate the market trading program or other
program within 12 months after the emissions for the region are
determined to exceed the applicable emission reduction milestone,
and to assure that all affected sources are in compliance with
allocation and other requirements within 5 years after the
emissions for the region are determined to exceed the applicable
emission reduction milestone.

(iv) Provisions for market trading program compliance
reporting. If the market trading program has been activated, the
plan submission must include provisions requiring the State to
provide annual reports assuring that all sources are in
compliance with applicable requirements of the market trading
program.

(v) Provisions for stationary source NOx and PM. The plan
submission must include a report which assesses emissions control
strategies for stationary source NOx and PM, and the degree of
visibility improvement that would result from such strategies.
In the report, the State must evaluate and discuss the need to
establish emission milestones for NOx and PM to avoid any net
increase in these pollutants from stationary sources within the
transport region, and to support potential future development and
implementation of a multipollutant and possibly multisource
market-based program. The plan submission must provide for an
implementation plan revision, containing any necessary long-term
strategies and BART requirements for stationary source PM and NOx.
(including enforceable limitations, compliance schedules, and other measures) by no later than December 31, 2008.

(5) Mobile Sources. The plan submission must provide for:

(i) Statewide inventories of current annual emissions and projected future annual emissions of VOC, NO\textsubscript{X}, SO\textsubscript{2}, elemental and organic carbon, and fine particles from mobile sources for the years 2003 to 2018. The future year inventories must include projections for the year 2005, or an alternative year that is determined by the State to represent the year during which mobile source emissions will be at their lowest levels within the State.

(ii) A determination whether mobile source emissions in any areas of the State contribute significantly to visibility impairment in any of the 16 Class I Areas, based on the statewide inventory of current and projected mobile source emissions.

(iii) For States with areas in which mobile source emissions are found to contribute significantly to visibility impairment in any of the 16 Class I areas:

(A) The establishment and documentation of a mobile source emissions budget for any such area, including provisions requiring the State to restrict the annual VOC, NO\textsubscript{X}, SO\textsubscript{2}, elemental and organic carbon, and/or fine particle mobile source emissions to their projected lowest levels, to implement measures to achieve the budget or cap, and to demonstrate compliance with the budget.

(B) An emission tracking system providing for reporting of annual mobile source emissions from the State in the periodic implementation plan revisions required by section 51.309(d)(10). The emission tracking system must be sufficient to determine the States’ contribution toward the Commission’s objective of reducing emissions from mobile sources by 2005 or an alternate year that is determined by the State to represent the year during which mobile source emissions will be at their lowest levels within the State, and to ensure that mobile source emissions do not increase thereafter.

(iv) Interim reports to EPA and the public in years 2003, 2008, 2013, and 2018 on the implementation status of the regional and local strategies recommended by the Commission Report to address mobile source emissions.

(6) Programs Related to Fire. The plan must provide for:
(i) Documentation that all Federal, State, and private prescribed fire programs within the State evaluate and address the degree visibility impairment from smoke in their planning and application. In addition the plan must include smoke management programs that include all necessary components including, but not limited to, actions to minimize emissions, evaluation of smoke dispersion, alternatives to fire, public notification, air quality monitoring, surveillance and enforcement, and program evaluation.

(ii) A statewide inventory and emissions tracking system (spatial and temporal) of VOC, NOx, elemental and organic carbon, and fine particle emissions from fire. In reporting and tracking emissions from fire from within the State, States may use information from regional data-gathering and tracking initiatives.

(iii) Identification and removal wherever feasible of any administrative barriers to the use of alternatives to burning in Federal, State, and private prescribed fire programs within the State.

(iv) Enhanced smoke management programs for fire that consider visibility effects, not only health and nuisance objectives, and that are based on the criteria of efficiency, economics, law, emission reduction opportunities, land management objectives, and reduction of visibility impact.

(v) Establishment of annual emission goals for fire, excluding wildfire, that will minimize emission increases from fire to the maximum extent feasible and that are established on cooperation with States, tribes, Federal land management agencies, and private entities.

(7) Area Sources of Dust Emissions from Paved and Unpaved Roads. The plan must include an assessment of the impact of dust emissions from paved and unpaved roads on visibility conditions in the 16 Class I Areas. If such dust emissions are determined to be a significant contributor to visibility impairment in the 16 Class I areas, the State must implement emissions management strategies to address the impact as necessary and appropriate.

(8) Pollution Prevention. The plan must provide for:

(i) An initial summary of all pollution prevention programs currently in place, an inventory of all renewable energy generation capacity and production in use, or planned as of the year 2002 (expressed in megawatts and megawatt-hours), the total
energy generation capacity and production for the State, the percent of the total that is renewable energy, and the State's anticipated contribution toward the renewable energy goals for 2005 and 2015, as provided in section 51.309(d)(8)(vi).

(ii) Programs to provide incentives that reward efforts that go beyond compliance and/or achieve early compliance with air-pollution related requirements.

(iii) Programs to preserve and expand energy conservation efforts.

(iv) The identification of specific areas where renewable energy has the potential to supply power where it is now lacking and where renewable energy is most cost-effective.

(v) Projections of the short- and long-term emissions reductions, visibility improvements, cost savings, and secondary benefits associated with the renewable energy goals, energy efficiency and pollution prevention activities.

(vi) A description of the programs relied on to achieve the State's contribution toward the Commission's goal that renewable energy will comprise 10 percent of the regional power needs by 2005 and 20 percent by 2015, and a demonstration of the progress toward achievement of the renewable energy goals in the years 2003, 2008, 2013, and 2018. This description must include documentation of the potential for renewable energy resources, the percentage of renewable energy associated with new power generation projects implemented or planned, and the renewable energy generation capacity and production in use and planned in the State. To the extent that it is not feasible for a State to meet its contribution to the regional renewable energy goals, the State must identify in the progress reports the measures implemented to achieve its contribution and explain why meeting the State's contribution was not feasible.

(9) Implementation of Additional Recommendations. The plan must provide for implementation of all other recommendations in the Commission report that can be practicably included as enforceable emission limits, schedules of compliance, or other enforceable measures (including economic incentives) to make reasonable progress toward remedying existing and preventing future regional haze in the 16 Class I areas. The State must provide a report to EPA and the public in 2003, 2008, 2013, and 2018 on the progress toward developing and implementing policy or strategy options recommended in the Commission Report.
(10) Periodic Implementation Plan Revisions. Each Transport Region State must submit to the Administrator periodic reports in the years 2008, 2013, and 2018. The progress reports must be in the form of implementation plan revisions that comply with the procedural requirements of §51.102 and §51.103.

(i) The report will assess the area for reasonable progress as provided in §51.309 for mandatory Class I Federal area(s) located within the State and for mandatory Class I Federal area(s) located outside the State which may be affected by emissions from within the State. This demonstration may be based on assessments conducted by the States and/or a regional planning body. The progress reports must contain at a minimum the following elements:

(A) A description of the status of implementation of all measures included in the implementation plan for achieving reasonable progress goals for mandatory Class I Federal areas both within and outside the State.

(B) A summary of the emissions reductions achieved throughout the State through implementation of the measures described in §51.309(d)(10)(i)(A).

(C) For each mandatory Class I Federal area within the State, an assessment of the following: the current visibility conditions for the most impaired and least impaired days; the difference between current visibility conditions for the most impaired and least impaired days and baseline visibility conditions; the change in visibility impairment for the most impaired and least impaired days over the past five years.

(D) An analysis tracking the change over the past 5 years in emissions of pollutants contributing to visibility impairment from all sources and activities within the State. Emissions changes should be identified by type of source or activity. The analysis must be based on the most recent updated emissions inventory, with estimates projected forward as necessary and appropriate, to account for emissions changes during the applicable 5-year period.

(E) An assessment of any significant changes in anthropogenic emissions within or outside the State that have occurred over the past 5 years that have limited or impeded progress in reducing pollutant emissions and improving visibility.

(F) An assessment of whether the current implementation plan elements and strategies are sufficient to enable the State, or
other States with mandatory Federal Class I areas affected by emissions from the State, to meet all established reasonable progress goals.

(G) A review of the State’s visibility monitoring strategy and any modifications to the strategy as necessary.

(ii) At the same time the State is required to submit any 5-year progress report to EPA in accordance with section 51.309(d)(10)(i), the State must also take one of the following actions based upon the information presented in the progress report:

(A) If the State determines that the existing implementation plan requires no further substantive revision at this time in order to achieve established goals for visibility improvement and emissions reductions, the State must provide to the Administrator a negative declaration that further revision of the existing implementation plan is not needed at this time.

(B) If the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources in another State(s) which participated in a regional planning process, the State must provide notification to the Administrator and to the other State(s) which participated in the regional planning process with the States. The State must also collaborate with the other State(s) through the regional planning process for the purpose of developing additional strategies to address the plan’s deficiencies.

(C) Where the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources in another country, the State shall provide notification, along with available information, to the Administrator.

(D) Where the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from within the State, the State shall develop additional strategies to address the plan deficiencies and revise the implementation plan no later than one year from the date that the progress report was due.

(11) State Planning and Interstate Coordination. In complying with the requirements of section 309, States may include emission reductions strategies that are based on coordinated implementation with other States. Examples of these strategies include economic incentive programs and transboundary

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emissions trading programs. The implementation plan must include
documentation of the technical and policy basis for the
individual State apportionment (or the procedures for
apportionment throughout the trans-boundary region), the
contribution addressed by the State's plan, how it coordinates
with other State plans, and compliance with any other appropriate
implementation plan approvability criteria. States may rely on
the relevant technical, policy and other analyses developed by a
regional entity (such as the Western Regional Air Partnership) in
providing such documentation. Conversely, States may elect to
develop their own programs without relying on work products from
a regional entity.

(12) Tribal Implementation. Consistent with 40 CFR Part 49,
Tribes within the Transport Region may implement the required
visibility programs for the 16 Class I areas, in the same manner
as States, regardless of whether such tribes have participated as
members of a visibility transport commission.

(e) States Electing Not to Implement the Commission
Recommendations. Any Transport Region State may elect not to
implement the Commission recommendations set forth in paragraph
(d) of this section. Such States are required to comply with the
timelines and requirements of section 51.308. Any Transport
Region state electing not to implement the Commission
recommendations must advise the other states in the Transport
Region of the nature of the program and the effect of the program
on visibility-impairing emissions, so that other States can take
this information into account in developing programs under
section 51.309.

(f) Annex to the Commission Report.

(1) A Transport Region State may choose to comply with the
provisions of this section and by doing so shall satisfy the
requirements of section 51.308(b)-(e) only if the Grand Canyon
Visibility Transport Commission (or a regional planning body
formed to implement the Commission recommendations) submits a
satisfactory annex to the Commission Report no later than October
1, 2000. To be satisfactory, the Annex must contain the
following elements:

(i) The annex must contain quantitative emission reduction
milestones for stationary source sulfur dioxide emissions for the
reporting years 2003, 2008, 2013 and 2018. The milestones must
provide for steady and continuing emission reductions for the
2003-2018 time period consistent with the Commission’s definition
of reasonable progress, its goal of 50 to 70 percent reduction in
sulfur dioxide emissions from 1990 actual emission levels by 2040, applicable requirements under the Clean Air Act, and the timing of implementation plan assessments of progress and identification of deficiencies which will be due in the years 2008, 2013, and 2018. The emission reduction milestones must be shown to provide for greater reasonable progress than would be achieved by application of best available retrofit technology (BART) pursuant to section 51.308(e)(2) and would be approvable in lieu of BART.

(ii) The annex must contain documentation of the market trading program or other programs to be implemented pursuant to 51.309(d)(4) if current programs and voluntary measures are not sufficient to meet the required emission reduction milestones. This documentation must include model rules, memoranda of understanding, and other documentation describing in detail how emission reduction progress will be monitored, what conditions will require the market trading program to be activated, how allocations will be performed, and how the program will operate.

(2) The Commission may elect, at the same time it submits the annex, to make recommendations intended to demonstrate reasonable progress for other mandatory Class I areas (beyond the original 16) within the Transport Region States, including the technical and policy justification for these additional mandatory Class I Federal areas in accordance with the provisions of section 51.309(g).

(3) The EPA will publish the annex upon receipt. If EPA finds that the annex meets the requirements of §51.309(f)(1) and assures reasonable progress, then EPA, after public notice and comment, will amend the requirements of §51.309(d)(4) to incorporate the provisions of the annex within one year after EPA receives the annex. If EPA finds that the annex does not meet the requirements of §51.309(f)(1), or does not assure reasonable progress, or if EPA finds that the annex is not received, then each Transport Region State must submit an implementation plan for regional haze meeting all of the requirements of section 51.308.

(4) In accordance with the provisions under §51.309(f)(1), the annex may include a geographic enhancement to the program provided for in §51.309(d)(4) to address the requirement under §51.302(c) related to Best Available Retrofit Technology for reasonably attributable impairment from the pollutants covered by the milestones or the backstop market trading program. The geographic enhancement program may include an appropriate level of reasonably attributable impairment which may require
additional emission reductions over and above those achieved under the milestones defines in §51.309(f)(1)(i).

(g) **Additional Class I Areas.** The following submittals must be made by Transport Region States implementing the provisions of this section as the basis for demonstrating reasonable progress for additional Class I areas in the Transport Region States. If a Transport Region State submits an implementation plan which is approved by EPA as meeting the requirements of this section, it will be deemed to comply with the requirements for reasonable progress for the period from approval of the plan to 2018.

1. In the plan submitted for the 16 Class I areas no later than December 31, 2003, a declaration indicating whether other Class I areas will be addressed under §51.308 or 51.309(g)(2) and (3).

2. In a plan submitted no later than December 31, 2008, provide a demonstration of expected visibility conditions for the most impaired and least impaired days at the additional mandatory Class I Federal area(s) based on emissions projections from the long-term strategies in the implementation plan. This demonstration may be based on assessments conducted by the States and/or a regional planning body.

3. In a plan submitted no later than December 31, 2008, provide revisions to the plan submitted under section 51.309(c), including provisions to establish reasonable progress goals and implement any additional measures necessary to demonstrate reasonable progress for the additional mandatory Federal Class I areas. These revisions must comply with the provisions of section 51.308(d)(1)-(4).

4. The following provisions apply for Transport Region States establishing reasonable progress goals and adopting any additional measures for Class I areas other than the 16 Class I areas under section 51.309(g)(2) and (3).

   i. In developing long-term strategies pursuant to section 308(d)(3), the State may build upon the strategies implemented under section 51.309(d) and take full credit for the visibility improvement achieved through these strategies.

   ii. The requirement under section 51.308(e) related to Best Available Retrofit Technology for regional haze is deemed to be satisfied for pollutants addressed by the milestones and backstop trading program if, in establishing the emission reductions milestones under section 51.309(f), it is shown that greater
reasonable progress will be achieved for these Class I areas than
would be achieved through the application of source-specific BART
emission limitations under section 51.308(e)(1).

(iii) The Transport Region State may consider whether any
strategies necessary to achieve the reasonable progress goals
required by 51.309(g)(3) are incompatible with the strategies
implemented under section 51.309(d) to the extent the State
adequately demonstrates that the incompatibility is related to
the costs of the compliance, the time necessary for compliance,
the energy and no air quality environmental impacts of
compliance, or the remaining useful life of any existing source
subject to such requirements.