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Title 40 – Protection of Environment

Chapter I – Environmental Protection Agency

Subchapter C — Air Programs

Part 51 — Requirements for Preparation, Adoption, and Submittal of Implementation Plans

Subpart P – Protection of Visibility

 Authority:
 Secs. 110, 114, 121, 160-169, 169A, and 301 of the Clean Air Act, (42 U.S.C. 7410, 7414, 7421, 7470-7479, and 7601).

 Source:
 45 FR 80089, Dec. 2, 1980, unless otherwise noted.

 Authority:
 23 U.S.C. 101; 42 U.S.C. 7401-7671q.

 Source:
 36 FR 22398, Nov. 25, 1971, unless otherwise noted.

§ 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 period through 2018, certain States (defined in paragraph (b) of this section 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. 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 with respect to the 16 Class I areas for the period from approval of the plan through 2018. Any Transport Region State electing not to submit an implementation plan under this section is subject to the requirements of § 51.308 in the same manner and to the same extent as any State not included within the Transport Region. Except as provided in paragraph (g) of this section, each Transport Region State is also subject to the requirements of § 51.308 with respect to any other Federal mandatory Class I areas within the State or affected by emissions from the State.
- (b) **Definitions.** For the purposes of this section:
 - (1) 16 Class I areas means the following mandatory Class I Federal areas on the Colorado Plateau: Grand Canyon National Park, Sycamore Canyon Wilderness, Petrified Forest National Park, Mount Baldy Wilderness, San Pedro Parks Wilderness, Mesa Verde National Park, Weminuche Wilderness, Black Canyon of the Gunnison Wilderness, West Elk Wilderness, Maroon Bells Wilderness, Flat Tops Wilderness, Arches National Park, Canyonlands National Park, Capital Reef National Park, Bryce Canyon National Park, and Zion National Park.
 - (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).
 - (3) **Commission Report** means the report of the Grand Canyon Visibility Transport Commission entitled "Recommendations for Improving Western Vistas," dated June 10, 1996.
 - (4) *Fire* means wildfire, wildland fire, prescribed fire, and agricultural burning conducted and occurring on Federal, State, and private wildlands and farmlands.
 - (5) Milestone means the maximum level of annual regional SO_2 emissions, in tons per year, for a given year, assessed annually, through the year 2018, consistent with paragraph (d)(4) of this section.

- (6) **Continuous decline in total mobile source emissions** means that the projected level of emissions from mobile sources of each listed pollutant in 2008, 2013, and 2018, are less than the projected level of emissions from mobile sources of each listed pollutant for the previous period (*i.e.*, 2008 less than 2003; 2013 less than 2008; and 2018 less than 2013).
- (7) Base year means the year for which data for a source included within the program were used by the WRAP to calculate emissions as a starting point for development of the milestone required by paragraph (d)(4)(i) of this section.

(8)-(12) [Reserved]

- (13) *Eligible renewable energy resource,* for purposes of 40 CFR 51.309, means electricity generated by non-nuclear and non-fossil low or no air emission technologies.
- (c) Implementation Plan Schedule. Each Transport Region State electing to submit an implementation plan under this section must submit such a plan no later than December 17, 2007. Indian Tribes may submit implementation plans after this deadline.
- (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 paragraph (e) of this section, each Transport Region State must submit an implementation plan that meets the following requirements:
 - (1) Time period covered. The implementation plan must be effective through December 31, 2018 and continue in effect until an implementation plan revision is approved by EPA in accordance with § 51.308(f).
 - (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 this section. 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 paragraphs (d)(3)(ii) and (iii) of this section, 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) Provisions for stationary source emissions of SO₂. The plan submission must include a SO₂ program that contains quantitative emissions milestones for stationary source SO₂ emissions for each year through 2018. After the first two years of the program, compliance with the annual milestones may be measured by comparing a three-year rolling average of actual emissions with a rolling average of the emissions milestones for the same three years. During the first two years of the program, compliance with the milestones may be measured by a methodology of the States' choosing, so long as all States in the program use the same methodology. Compliance with the 2018 milestone. The milestones must provide for steady and continuing emissions reductions through 2018 consistent with the Commission's definition of reasonable progress, its goal of 50 to 70 percent reduction in SO₂ emissions from 1990 actual emission levels by 2040, applicable requirements under the CAA, and the timing of implementation plan assessments of progress and identification of any deficiencies which will be due in the years 2013 and 2018. The milestones must be shown to provide for greater reasonable progress than would be achieved by application of BART pursuant to § 51.308(e)(2).
 - (ii) Documentation of emissions calculation methods for SO₂. The plan submission must include documentation of the specific methodology used to calculate SO₂ emissions during the base year for each emitting unit included in the program. The implementation plan must also provide for documentation of any change to the specific methodology used to calculate emissions at any emitting unit for any year after the base year.
 - (iii) Monitoring, recordkeeping, and reporting of SO₂ emissions. The plan submission must include provisions requiring the monitoring, recordkeeping, and annual reporting of actual stationary source SO₂ emissions within the State. The monitoring, recordkeeping, and reporting data must be sufficient to determine annually whether the milestone for each year through 2018 is achieved. The plan submission must provide for reporting of these data by the State to the Administrator and to the regional planning organization. The plan must provide for retention of records for at least 10 years from the establishment of the record.
 - (iv) Criteria and Procedures for a Market Trading Program. The plan must include the criteria and procedures for conducting an annual evaluation of whether the milestone is achieved and, in accordance with paragraph (d)(4)(v) of this section, for activating a market trading program in the event the milestone is not achieved. A draft of the annual report evaluating whether the milestone for each year is achieved shall be completed no later than 12 months from the end of each milestone year. The plan must also provide for assessments of the program in the years 2013 and 2018.

- (v) Market trading program. The implementation plan must include requirements for a market trading program to be implemented in the event that a milestone is not achieved. The plan shall require that the market trading program be activated beginning no later than 15 months after the end of the first year in which the milestone is not achieved. The plan shall also require that sources comply, as soon as practicable, with the requirement to hold allowances covering their emissions. Such market trading program must be sufficient to achieve the milestones in paragraph (d)(4)(i) of this section, and must be consistent with the elements for such programs outlined in § 51.308(e)(2)(vi). Such a program may include a geographic enhancement to the program to address the requirement under § 51.302(b) related to reasonably attributable impairment from the pollutants covered under the program.
- (vi) Provision for the 2018 milestone.
 - (A) Unless and until a revised implementation plan is submitted in accordance with § 51.308(f) and approved by EPA, the implementation plan shall prohibit emissions from covered stationary sources in any year beginning in 2018 that exceed the year 2018 milestone. In no event shall a market-based program approved under § 51.308(f) allow an emissions cap for SO₂ that is less stringent than the 2018 milestone, unless the milestones are replaced by a different program approved by EPA as meeting the BART and reasonable progress requirements established in § 51.308.
 - (B) The implementation plan must provide a framework, including financial penalties for excess emissions based on the 2018 milestone, sufficient to ensure that the 2018 milestone will be met even if the implementation of the market trading program in paragraph (d)(4)(v) of this section has not yet been triggered, or the source allowance compliance provision of the trading program is not yet in effect.
- (vii) Provisions for stationary source emissions of NO_X and PM. The implementation plan must contain any necessary long term strategies and BART requirements for stationary source PM and NO_X emissions. Any such BART provisions may be submitted pursuant to either § 51.308(e)(1) or '51.308(e)(2).
- (5) *Mobile sources*. The plan submission must provide for:
 - (i) Statewide inventories of onroad and nonroad mobile source emissions of VOC, NO_X, SO₂, PM_{2.5}, elemental carbon, and organic carbon for the years 2003, 2008, 2013, and 2018.
 - (A) The inventories must demonstrate a continuous decline in total mobile source emissions (onroad plus nonroad; tailpipe and evaporative) of VOC, NO_X, PM_{2.5}, elemental carbon, and organic carbon, evaluated separately. If the inventories show a continuous decline in total mobile source emissions of each of these pollutants over the period 2003-2018, no further action is required as part of this plan to address mobile source emissions of these pollutants. If the inventories do not show a continuous decline in mobile source emissions of one or more of these pollutants over the period 2003-2018, the plan submission must provide for an implementation plan revision by no later than December 31, 2008 containing any necessary long-term strategies to achieve a continuous decline in total mobile source emissions of the pollutant(s), to the extent practicable, considering economic and technological reasonableness and federal preemption of vehicle standards and fuel standards under title II of the CAA.

- (B) The plan submission must also provide for an implementation plan revision by no later than December 31, 2008 containing any long-term strategies necessary to reduce emissions of SO₂ from nonroad mobile sources, consistent with the goal of reasonable progress. In assessing the need for such long-term strategies, the State may consider emissions reductions achieved or anticipated from any new Federal standards for sulfur in nonroad diesel fuel.
- (ii) 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, NO_X, 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 in 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 paragraph (d)(8)(vi) of this section.

- (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 and progress reports*. Each Transport Region State must submit to the Administrator periodic reports in the years 2013 and as specified for subsequent progress reports in § 51.308(g). The progress report due in 2013 must be in the form of an implementation plan revision that complies with the procedural requirements of §§ 51.102 and 51.103.
 - (i) The report due in 2013 will assess the area for reasonable progress as provided in this section for mandatory Class I Federal area(s) located within the State and for mandatory Class I Federal area(s) located outside the State that 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 report due in 2013 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 paragraph (d)(10)(i)(A) of this section.

- (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 5 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 the 5-year progress report due in 2013 to EPA in accordance with paragraph (d)(10)(i) of this section, 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.

- (iii) The requirements of § 51.308(g) regarding requirements for periodic reports describing progress towards the reasonable progress goals apply to States submitting plans under this section, with respect to subsequent progress reports due after 2013.
- (iv) The requirements of § 51.308(h) regarding determinations of the adequacy of existing implementation plans apply to States submitting plans under this section, with respect to subsequent progress reports due after 2013.
- (11) State planning and interstate coordination. In complying with the requirements of this section, 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 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 § 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 this section.
- (f) [Reserved]
- (g) Additional Class I areas. Each Transport Region State implementing the provisions of this section as the basis for demonstrating reasonable progress for mandatory Class I Federal areas other than the 16 Class I areas must include the following provisions in its implementation plan. 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) 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.
 - (2) Provisions establishing reasonable progress goals and implementing any additional measures necessary to demonstrate reasonable progress for the additional mandatory Federal Class I areas. These provisions must comply with the provisions of § 51.308(d)(1) through (4).

- (i) In developing long-term strategies pursuant to § 51.308(d)(3), the State may build upon the strategies implemented under paragraph (d) of this section, and take full credit for the visibility improvement achieved through these strategies.
- (ii) The requirement under § 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 paragraph (d)(4) of this section, it is shown that greater reasonable progress will be achieved for these additional Class I areas than would be achieved through the application of source-specific BART emission limitations under § 51.308(e)(1).
- (iii) The Transport Region State may consider whether any strategies necessary to achieve the reasonable progress goals required by paragraph (g)(2) of this section are incompatible with the strategies implemented under paragraph (d) of this section 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 nonair quality environmental impacts of compliance, or the remaining useful life of any existing source subject to such requirements.

[64 FR 35769, July 1, 1999, as amended at 68 FR 33784, June 5, 2003; 68 FR 39846, July 3, 2003; 68 FR 61369, Oct. 28, 2003; 68 FR 71014, Dec. 22, 2003; 71 FR 60632, Oct. 13, 2006; 82 FR 3128, Jan. 10, 2017]