



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R06-OAR-2014-0237; FRL-9936-46-Region 6]

Approval and Promulgation of Implementation Plans; New Mexico; Regional Haze Five-Year Progress Report State Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing approval of a revision to a State Implementation Plan (SIP) submitted by the State of New Mexico through the New Mexico Environment Department (NMED) on March 14, 2014. New Mexico's SIP revision addresses requirements of the Clean Air Act (CAA) and the EPA's rules that require states to submit periodic reports describing progress toward reasonable progress goals (RPGs) established for regional haze and a determination of the adequacy of the State's existing regional haze SIP (RH SIP).

DATES: Comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit comments, identified by Docket No. EPA-R06-OAR-2014-0237, by one

of the following methods:

- www.regulations.gov. Follow the online instructions.
- E-mail: Mr. Guy Donaldson at donaldson.guy@epa.gov

Mail or Delivery: Mr. Guy Donaldson, Chief, Air Planning Section (6PD-L),
Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-
2733.

Instructions: Direct comments to Docket No. EPA-R06-OAR-2014-0237. The EPA's policy is that all comments received will be included in the public docket without change and made available online at www.regulations.gov. The EPA includes any personal information provided, unless a comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit any information electronically that is considered CBI or any other information whose disclosure is restricted by statute. The www.regulations.gov website is an "anonymous access" system, which means the EPA will not know one's identity or contact information unless it is provided in the body of a comment. If a comment is e-mailed directly to the EPA without going through www.regulations.gov, then the sender's e-mail address will automatically be captured and included as part of the public docket comment and made available on the Internet. If a comment is submitted electronically, then it is recommended that one's name and other contact information be included in the body of the comment, and with any disk or CD-ROM submitted. If the EPA cannot read a particular comment due to technical difficulties and is unable to contact for clarification, the EPA may not be able to consider the comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The

written comment will be considered the official comment with multimedia submissions and should include all discussion points desired. The EPA will generally not consider comments or their contents submitted outside of the primary submission (*i.e.* on the web, cloud, or other file sharing systems). For additional information on submitting comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

Docket: The index to the docket for this action is available electronically at www.regulations.gov and in hard copy at the EPA Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available at either location (e.g., CBI).

The New Mexico regional haze progress report is available online at the following: www.nmenv.state.nm.us/aqb/reghaz/regional-haze_index.html. It is also available for public inspection during official business hours, by appointment, at the Air Quality Bureau, Environmental Protection Division, New Mexico Environment Department, 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico 87505.

FOR FURTHER INFORMATION CONTACT:

Mr. James E. Grady, (214) 665-6745; grady.james@epa.gov. To inspect the hard copy materials, please contact Mr. Grady or Mr. Bill Deese at (214) 665-7253.

SUPPLEMENTARY INFORMATION: Throughout this document, “we,” “our,” or “us” each mean “the EPA.”

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I. Background on Regional Haze

Regional haze is visibility impairment that occurs over a wide geographic area primarily from the pollution of fine particles (PM_{2.5})¹ in nature. Fine particles causing haze consist of sulfates, nitrates, ammonium, particulate organic matter, black carbon, and soil dust. Airborne PM_{2.5} can scatter and absorb the incident light and therefore lead to atmospheric opacity and

¹ Additionally, coarse particles (PM₁₀) can contribute to light extinction. However, they settle out from the air more rapidly than fine particles and usually will be found relatively close to emission sources. Fine particles can be transported long distances by wind and can be found in the air thousands of miles from where they were formed.

horizontal visibility degradation. Regional haze limits visual distance and reduces color, clarity and contrast of view. Emissions that affect visibility include a wide variety of natural and man-made sources. In New Mexico, the most important sources of haze-forming emissions are coal-fired power plants, oil and gas development, woodland fires, and windblown dust. Reducing PM_{2.5} and their precursor gases in the atmosphere is an effective method of improving visibility. PM_{2.5} precursors consist of sulfur dioxide (SO₂), nitrogen oxides (NO_x), ammonia (NH₃) and volatile organic compounds (VOCs).

II. Background on Regional Haze SIPs

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the prevention of any future, and the remedying of any existing man-made impairment of visibility in 156 national parks and wilderness areas designated as mandatory Class I Federal areas.² On December 2, 1980, the EPA promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources, i.e., "reasonably attributable visibility impairment."³ These regulations represented the first phase in addressing visibility impairment. The EPA deferred

² Areas designated as mandatory Class I Federal areas consist of National Parks exceeding 6000 acres, wilderness areas and national memorial parks exceeding 5000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1979). The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager." 42 U.S.C. 7602(i). When we use the term "Class I area" in this action, we mean a "mandatory Class I Federal area."

³ 45 FR 80084 (December 2, 1980).

action on regional haze that emanates from a variety of sources until monitoring, modeling and scientific knowledge about the relationships between pollutants and visibility impairment were improved.

Congress added section 169B to the CAA in 1990 to address regional haze issues, and the EPA promulgated regulations addressing regional haze in 1999.⁴ The Regional Haze Rule revised the existing visibility regulations to integrate into the regulations provisions addressing regional haze impairment and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 51.309, are included in the EPA's visibility protection regulations at 40 CFR 51.300–309. States must demonstrate reasonable progress toward meeting the national goal of a return to natural visibility conditions for mandatory Class I Federal areas both within and outside states by 2064. The requirement to submit a regional haze SIP applies to all fifty states, the District of Columbia, and the Virgin Islands. States were required to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.⁵

III. Requirements for the Five-Year Regional Haze Progress Report SIP

The Regional Haze Rule requires a comprehensive analysis of each state's regional haze SIP every ten years and a progress report every five years. This five-year review is intended to provide a progress report on, and, if necessary, mid-course corrections to, the regional haze SIP. The progress report provides an opportunity for public input on the State's (and the EPA's)

⁴ 64 FR 35714 (July 1, 1999), codified at 40 CFR part 51, subpart P (Regional Haze Rule).

⁵ See 40 CFR 51.308(b). EPA's regional haze regulations require subsequent updates to the regional haze SIPs. 40 CFR 51.308(g)–(i).

assessment of whether the approved regional haze SIP is being implemented appropriately and whether reasonable visibility progress is being achieved consistent with the projected visibility improvement in the SIP. At a minimum, New Mexico must include in its progress report the following seven elements:⁶

- 1) Provide a description of the status of implementation of all control measures in the approved RH SIP.
- 2) Summarize the emissions reductions achieved through implementation of the control measures.
- 3) Assess the visibility conditions and changes for each Class I area in the State.
- 4) Analyze the changes in emissions from sources and activities within the State.
- 5) Provide an assessment of any significant changes in anthropogenic emissions within or outside the State that have limited or impeded progress in reducing emissions and improving visibility in Class I areas.
- 6) Evaluate the sufficiency of the approved RH SIP to meet all RPGs.
- 7) Provide a review of the State's visibility monitoring strategy.

New Mexico submitted their progress report SIP for the State⁷ under 40 CFR 51.309.⁸

Typically, progress report requirements of most states are covered under 40 CFR 51.308 (g) and

⁶ See 40 CFR 51.309(d)(10)(i)

⁷ The proposed action does not pertain to the Albuquerque/Bernalillo County portion of the SIP in New Mexico. The New Mexico Air Quality Control Act (section 74-2-4) authorizes Albuquerque/Bernalillo County to locally administer and enforce the State Air Quality Control Act by providing for a local air quality control program, and that entity submitted an initial RH SIP for its own jurisdiction that was separately approved by the EPA (77 FR 71119, November 29, 2012). The EPA anticipates a separate RH progress report SIP submittal from this entity.

⁸ Three Western States (New Mexico, Utah and Wyoming) exercised the option provided in the Regional Haze Rule to meet the alternative requirements contained in 40 CFR 51.309 for RH SIPs.

(h). However, 40 CFR 51.309 presents nine western states with an optional approach of fulfilling Regional Haze Rule requirements by adopting emission reduction strategies developed by the Grand Canyon Visibility Transport Commission (GCVTC). These strategies were designed primarily to improve visibility of sixteen Class I areas in the Colorado Plateau⁹ area. Since New Mexico currently has one Class I area, the San Pedro Parks Wilderness Area, inside the Colorado Plateau, the State exercised the option to meet the alternative requirements contained in 40 CFR 51.309 for RH SIPs. The requirements for five-year progress reports are consistent with those for the other states, but the requirements for the reports are codified at 40 CFR 51.309(d)(10) instead of at 40 CFR 51.308 (g) and (h). Also, under 40 CFR 51.309(d)(10)(i), states must submit a regional haze progress report in the years 2013 and 2018. In contrast, under 40 CFR 51.308, states must submit a progress report five years from submittal of the initial implementation plan. Under 40 CFR 51.309(d)(10)(ii), states are required to submit, at the same time as the progress report SIP, a determination of the adequacy of their existing RH SIP and to take one of four possible actions, as described in more detail in this proposal.

IV. Evaluation of New Mexico's Regional Haze Progress Report SIP

On December 31, 2003, the State of New Mexico submitted a RH SIP with later SIP revisions (July 5, 2011 and October 7, 2013) that addressed the requirements of 40 CFR

⁹ The Colorado Plateau is a high, semi-arid tableland in Southeast Utah, Northern Arizona, Northwest New Mexico, and Western Colorado. The sixteen mandatory Class I areas are as follows: Grand Canyon National Park, Mount Baldy Wilderness, Petrified Forest National Park, Sycamore Canyon Wilderness, Black Canyon of the Gunnison National Park Wilderness, Flat Tops Wilderness, Maroon Bells Wilderness, Mesa Verde National Park, Weminuche Wilderness, West Elk Wilderness, San Pedro Parks Wilderness, Arches National Park, Bryce Canyon National Park, Canyonlands National Park, Capital Reef National Park, and Zion National Park.

51.309.¹⁰ On March 14, 2014, the EPA received the periodic report on progress from NMED in the form of a regional haze SIP revision. This latest submission is the subject of this proposed approval. The periodic report was made in the first implementation period toward RPGs for Class I areas in and outside the State that were affected by emissions from New Mexico's sources. The SIP revision includes the State's determination that the existing RH SIP requires no substantive revision to achieve the established regional haze visibility improvement and emissions reduction goals for 2018. The EPA is proposing to approve New Mexico's progress report SIP on the basis that it satisfies the requirements of 40 CFR 51.309(d)(10).

New Mexico has nine Class I areas within its borders: Bandelier Wilderness, Bosque del Apache National Wildlife Refuge, Carlsbad Caverns National Park, Gila Wilderness, Pecos Wilderness, Salt Creek Wilderness, Wheeler Peak Wilderness, White Mountain Wilderness, and San Pedro Parks Wilderness. San Pedro Parks Wilderness is the only Class I area in New Mexico that is located on the Colorado Plateau.¹¹ Visibility impairment at New Mexico's nine Class I areas is tracked in units of deciviews (dv), which is related to the cumulative sum of visibility

¹⁰ The EPA approved all of the 2003 and 2011 submittals on November 27, 2012 (77 FR 70693) except for the submitted NO_x Best Available Retrofit Technology (BART) determination for the San Juan Generating Station (SJGS). The EPA had issued a Federal Implementation Plan (FIP) containing a different NO_x BART determination for the SJGS. 76 Fed. Reg. 52,388 (Aug. 22, 2011). The 2013 RH SIP revision contained a new NO_x BART determination for the SJGS that superseded the State's previous NO_x BART determination included in the 2011 RH SIP revision. The EPA withdrew the FIP and approved the 2013 RH SIP revision on October 9, 2014 (79 FR 60985 and 79 FR 60978)

¹¹ The Section 309 SIP submitted by the State of New Mexico in December of 2003 addresses only San Pedro Parks Wilderness Area. All of the other Class I areas are addressed under the Section 309(g) SIP submitted by the State of New Mexico in June of 2011 and as revised and submitted in October of 2013.

impairment from individual aerosol species as measured by eight monitors in the Interagency Monitoring of Protected Visual Environments (IMPROVE) Network.¹²

Through collaboration with the Western Regional Air Partnership (WRAP),¹³ New Mexico worked with the western states to assess state-by-state contributions to visibility impairment in specific Class I areas in New Mexico and those affected by emissions from New Mexico. The WRAP report provides data on other, less pertinent Class I areas outside New Mexico borders, and this information primarily appears in the technical appendices.¹⁴

The following sections cover:

- The seven regulatory elements required by the progress report SIP;¹⁵
- How New Mexico's progress report SIP addressed each element; and
- The EPA's analysis and proposed determination as to whether New Mexico satisfied each part.

A. Status of Control Strategies

¹² The IMPROVE monitor for the Wheeler Peak Wilderness Area is used to represent visibility conditions at the nearby Pecos Wilderness. The IMPROVE monitor for Carlsbad Caverns is located in Texas at Guadalupe Mountains National Park.

¹³ The WRAP is a collaborative effort of tribal governments, state governments and various federal agencies representing the western states that provides technical and policy tools for the western states and tribes to comply with the EPA's Regional Haze regulations. Detailed information regarding WRAP support of air quality management issues for western states is provided on the WRAP website (www.wrapair2.org). Data summary descriptions and tools specific to Regional Haze Rule support are available on the WRAP Technical Support System website (<http://vista.cira.colostate.edu/tss/>).

¹⁴ The *Western Regional Air Partnership Regional Haze Rule Reasonable Progress Summary Report* technical support document has been prepared on behalf of the fifteen Western State members in the WRAP region to provide the technical basis for use by states to develop the first of their individual reasonable progress reports for the 116 Federal Class I areas located in the Western states.

¹⁵ See 40 CFR 51.309(d)(10)(i)

40 CFR 51.309(d)(10)(i)(A) requires a description of the status of implementation of all control measures included in the RH SIP for achieving RPGs for Class I areas both within and outside the State.

New Mexico stated in the progress report that it is implementing all long-term control strategies, with the exception of the state adopted State Mobile Source Regulation.¹⁶ The State Mobile Source Regulation, when adopted, sought to apply California motor vehicle standards within New Mexico, and this regulation, while mentioned in the State's long-term strategy, was not submitted to EPA as a SIP revision. The report explains that federal programs, as revised, achieve the same emission reductions and have provided the State a basis, in its judgment, for not implementing the regulation. The EPA considers this explanation acceptable.

New Mexico evaluated the status of all measures included in its RH SIP in accordance with the requirements under 40 CFR 51.309(d)(10)(i)(A). The major control measures identified by New Mexico in the progress report RH SIP are as follows:

- Best Available Retrofit Technology (BART)
- SO₂ Milestone and Backstop Trading Program
- Agricultural and Forestry Smoke Management Techniques
- Additional Controls - State Air Regulations: New Source Review (NSR) and Prevention of Significant Deterioration (PSD)

¹⁶ Under 40 CFR 51.309(d)(5)(ii), New Mexico is required to submit interim reports to the EPA and the public on the implementation status of the regional and local strategies to address mobile source emissions.

In its initial RH SIP, New Mexico identified ammonium sulfate, particulate organic matter, and coarse mass as the largest contributors to visibility impairment. Many of the contributing sources to visibility impairment in New Mexico are natural, rather than anthropogenic in nature, and are not controllable. The primary sources of ammonium sulfate are point sources and on- and off-road mobile source emissions. For particulate organic matter, the primary sources of emissions are from natural and anthropogenic fire. The primary sources of coarse mass emissions in New Mexico are windblown and fugitive dust. For the progress report, New Mexico focused on those emission sources that were anthropogenic in nature.

The progress report stated that the emissions reductions from implementing the major control measures would ensure that the New Mexico Class I areas would achieve the RPGs. New Mexico included a summary of the implementation status associated with each control measure and quantified the benefits where possible. When comparing baseline to current visibility conditions, the progress report showed that New Mexico is currently on track, if not exceeding, the visibility impairment emission reductions needed to achieve RPG's for 2018.¹⁷

1. Best Available Retrofit Technology (BART)

New Mexico identified one single stationary source in the progress report SIP, the San Juan Generating Station (SJGS), to be subject to BART. The SJGS includes four coal-fired boilers. In the New Mexico 2013 RH SIP, New Mexico determined that the BART controls for boiler units 1 and 4 will have selective non-catalytic reduction (SNCR) air pollution control devices installed for visibility-impairing pollutant reduction. Consistent with the terms in the

¹⁷ See table 2.1 of New Mexico Regional Haze progress report SIP. A complete copy of the progress report SIP is available in the online docket for this proposal.

State's then-pending SIP revision, the report assumed future installation of controls would occur fifteen months following approval of the revised RH SIP (but not earlier than January 31, 2016).¹⁸ Additionally, the remaining two boiler units, 2 and 3, would be retired by the end of 2017. New Mexico estimated that implementation of the BART controls at SJGS would result in NO_x reduction of approximately 13,000 tons per year (tpy) (from 21,000 tpy to 8,011 tpy); SO₂ reduction of 6,600 tpy (from 10,500 tpy to 3,843 tpy); and particulate matter (PM) reduction of 1,200 tpy (from 2,380 tpy to 1,184 tpy). These reductions represent a 35% reduction in the statewide emissions of NO_x, SO₂, and PM.

The EPA finds that the progress report SIP adequately reviews the status of New Mexico's BART source. It identifies the controls to be applied; outlines the compliance timeframe for those controls; and shows potential reduction in visibility-impairing pollutants with future BART implementation.

2. SO₂ Milestone and Backstop Trading Program

The progress report SIP discusses the SO₂ Milestone and Backstop Trading Program¹⁹ as a control measure. New Mexico has participated in this voluntary program since December 31, 2003. New Mexico must submit an annual report that compares tracked stationary source SO₂ emissions to yearly milestones. A milestone is an established maximum level of annual

¹⁸ Subsequent to the submission of the New Mexico progress report SIP, the EPA withdrew the FIP and approved the 2013 RH SIP revision on October 9, 2014 (79 FR 60985 and 79 FR 60978).

¹⁹ Under Section 309 of the Federal Regional Haze Rule, nine western states and tribes within those states have the option of submitting plans to reduce regional haze emissions that impair visibility at 16 Class I areas on the Colorado Plateau. Five states -- Arizona, New Mexico, Oregon, Utah, and Wyoming -- and Albuquerque-Bernalillo County initially exercised this option by submitting plans to the EPA by December 31, 2003. Oregon elected to cease participation in the program in 2006 and Arizona elected to cease participation in 2010. The tribes were not subject to the deadline and still can opt into the program at any time.

emissions for a given year (from 2003 to 2018). The milestones help establish annual SO₂ emission reduction targets. The annual targets represent RPGs in reducing visibility-impairing emissions. If states fail to meet the milestones, then the backstop-trading program is triggered to implement an emissions cap. The cap allocates emission allowances (or credits) to the affected sources based on the cap, and requires the sources to hold sufficient allowances to cover their emissions each year.

Appendix B of the progress report SIP includes the 2011 Regional SO₂ Emissions and Milestone Report. The 2011 milestone is 200,722 tons SO₂, which represents the average regional emissions milestone for the years 2009, 2010, and 2011. The average of 2009, 2010, and 2011 adjusted emissions was determined to be 130,935 tons SO₂. New Mexico and participating States have met the 200,722 tons SO₂ milestone. Emissions were about 35% below the 2011 three-State regional milestone.

3. Agricultural and Forestry Smoke Management Techniques²⁰

The progress report SIP affirms that New Mexico developed a state Smoke Management Plan (SMP) to be used as a control measure. The EPA previously approved smoke management rules into the SIP in 2012, which protect the health and welfare of New Mexicans from the impacts of smoke from all sources of fire.²¹

²⁰ The EPA approved 20.2.65 NMAC, Smoke Management and 20.2.60 NMAC Open Burning, on November 27, 2012 (77 FR 70693) in the same action approving the 2011 New Mexico RH SIP.

²¹ Several WRAP policies developed by the GCVTC were used to guide the development of the New Mexico SMP program: The WRAP Policy for Characterizing Fire Emissions shows a methodology to categorize fire emissions as either natural or anthropogenic. The WRAP Policy on Enhanced Smoke Management Programs for Visibility identifies and enhanced SMP to address visibility effects from all types of fire that contribute to visibility impairment in mandatory Federal Class I areas. The WRAP Policy on Annual Emissions Goals for Fire outlines a process by which states/tribes may establish annual emission goals, based on the utilization of currently available

4. Additional Controls - State Air Regulations: NSR and PSD

The progress report affirms that New Mexico continues to implement the State's NSR program and asserts that state regulations are up to date with 40 CFR 51.166. NSR applies to all construction permitting for new stationary sources under the CAA, for attainment or non-attainment areas.²²

Likewise, New Mexico implements the State's PSD program, as has been the case since 1982. PSD is the NSR program for new major²³ stationary sources and major modifications in attainment areas. The program minimizes new pollution and utilizes best available control technology (BACT) to reduce visibility-impairing pollutants and prevent deterioration of Class I areas.²⁴

Both PSD and BART protect Class I area visibility in the same way. BART and PSD are complementary programs aimed at regulating the same source categories; either one or the other applies depending upon when the source was constructed. PSD was adopted in 1977 for all new major sources. BART is applied to pre-PSD, to address visibility impacts from existing major sources built 1962 to 1977. BART only addresses visibility, whereas PSD addresses NAAQS, increment consumption, and visibility.

emission reduction techniques, to include in their RH SIPs.

²² The NSR program is established by 20.2.72 NMAC. <http://164.64.110.239/nmac/parts/title20/20.002.0072.htm>

²³ "Major" means emitting or having the potential to emit 100 tpy or more of any criteria pollutant for the specific source categories listed in the PSD regulations. There are 28 listed source categories, which include power plants that use steam to generate electricity, petroleum refineries and glass fiber processing plants. If a plant does not fall into one of the listed source categories, then a threshold of 250 tpy applies. BART addresses certain sources that have the potential to emit 250 tpy or more of a single visibility-impairing pollutant.

²⁴ The most recent approval of New Mexico's PSD program was on 12/11/2013 (see 78 FR 75253). PSD is established by 20.2.74 NMAC. <http://164.64.110.239/nmac/parts/title20/20.002.0074.htm>

5. Summary of Control Strategy Implementation

The EPA proposes to conclude that New Mexico adequately addressed the status of control measures in its progress report RH SIP as required by the provisions under 40 CFR 51.309(d)(10)(i)(A). All major control measures (including BART) were identified and the emission reduction strategy behind each control was explained. New Mexico included a summary of the implementation status associated with each control measure and quantified the benefits where possible. In addition, the progress report SIP adequately outlined the compliance timeframe for all controls.

B. Emissions Reductions from Control Strategies

40 CFR 51.309(d)(10)(i)(B) requires a summary of the emission reductions achieved throughout the State through implementation of control measures mentioned in 40 CFR 51.309(d)(10)(i)(A). The progress report must identify and estimate emissions reductions to date in visibility-impairing pollutants from the SIP control measures identified for implementation.

New Mexico reported in figure 3.6 of the progress report SIP that NO_x, SO₂, and PM point source emissions decreased in New Mexico from 2008 to 2012. Approximated NO₂ emissions reduced from 63,000 tpy to 44,000 tpy, constituting an emission reduction of about 30%. Approximated SO₂ emissions reduced from 26,000 tpy to 15,000 tpy, constituting an emission reduction of about 42%. As compared to NO₂ and SO₂, PM emissions represent a small part of the State's emissions inventories, and PM reductions are not especially pronounced. Figure 3.6 shows that actual point source emissions for NO₂ and SO₂ decreased below the WRAP's projected 2018 point-source emissions that helped establish New Mexico's RPGs for the first planning period. In reviewing the point source data, the EPA compared it to that reported

by the Clean Air Markets Division (CAMD) and found that the reported emissions were consistent with that data.²⁵

New Mexico explained that the most significant decrease in emissions since the RH SIP revision in June 2011 has been from SO₂ in accordance with the State's SO₂ Milestone and Backstop Trading Program. SO₂ emissions were about 35% below the 2011 three-state regional milestone.

Part of the observed emission reductions were also the result of controls installed at SJGS completed in 2009 in response to a 2005 consent decree. Future emission reductions to satisfy BART at SJGS will also occur during this planning period, resulting in a significant reduction in total point source emissions in the State. New Mexico estimated that implementation of the BART controls at SJGS would result in NO_x reduction of approximately 13,000 tons per year (tpy) (from 21,000 tpy to 8,011 tpy); SO₂ reduction of 6,600 tpy (from 10,500 tpy to 3,843 tpy); and particulate matter (PM) reduction of 1,200 tpy (from 2,380 tpy to 1,184 tpy). These reductions represent a 35% reduction in the statewide emissions of NO_x, SO₂, and PM. Statewide emissions are significantly below the 2018 projected levels relied upon in the 2011 RH SIP. Therefore, New Mexico does not expect reasonable progress to be adversely impacted in any of the Class I areas in New Mexico or neighboring states.

Additional control measures included in the SIP were federal and state programs (NSR, PSD, and SMP programs). Qualitatively, the continued implementation of those federal and state measures is expected to continue to reduce emissions. Deciview and aerosol extinction maps

²⁵ See the Technical Support Document (TSD), "Evaluation of State Emission Trends Analysis," a copy of which is posted in the docket for this proposal.

provided by New Mexico illustrate both a decrease in magnitude of visibility impairment and relative pollutant contribution in New Mexico and surrounding states for 2005-2009.²⁶

The EPA proposes to conclude that New Mexico has adequately summarized the emission reductions achieved throughout the State in its progress report RH SIP as required under 40 CFR 51.309(d)(10)(i)(B). In meeting this requirement, the EPA does not expect states to quantify emission reductions for measures which have not yet been implemented or for which the compliance date has not yet been reached. However, for purposes of future progress reports, we recommend that New Mexico include additional quantitative details on the reductions of each major specific visibility-impairing pollutant and utilize available CAMD data, as appropriate.

C. Visibility Progress

40 CFR 51.309(d)(10)(i)(C) requires that 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 days²⁷ expressed in terms of five-year averages of these annual values:

1. Assess the current visibility conditions for the most impaired and least impaired days.
2. Analyze the difference between current visibility conditions for the most impaired and least impaired days and baseline visibility conditions.
3. Evaluate the change in visibility impairment for the most impaired and least impaired days over the past five years.

²⁶ See Figures 3.1 through 3.5 of progress report SIP.

²⁷ The “most impaired days” and “least impaired days” in the regional haze rule refers to the average visibility impairment (measured in deciviews) for the 20% of monitored days in a calendar year with the highest and lowest amount of visibility impairment, respectively, averaged over a five-year period. *See* 40 CFR 51.301.

New Mexico provided visibility data for 2000 through 2011 that addressed the three requirements of 40 CFR 51.309(d)(10)(i)(C) for Class I areas in New Mexico. Much of the analysis and visibility data presented in the New Mexico progress report SIP were taken from the *RHR Reasonable Progress Summary Report* prepared by the WRAP.

This section requires the report to include deciview values for three separate periods: baseline visibility conditions, current visibility conditions, and visibility conditions of the past five years. Baseline visibility conditions refer to conditions identified in initial RH SIPs for the 2000-2004 period. Current visibility conditions refer to the most recent five-year average data available at the time the State submitted its progress report. The past five years would be five years before the year used for current visibility conditions.²⁸

New Mexico calculated the five-year baseline visibility conditions for 2000-2004; successive five-year average visibility conditions for 2005-2009; and the most recent visibility conditions for 2007-2011. The change in baseline and current visibility was compared to the change in baseline and past five-year visibility.²⁹ Both results were tabulated for the 20% worst and best days and compared to 2018 RPGs.³⁰ The most recent data from 2007-2011 in the progress report SIP were not addressed. The EPA provided a comparison of the 2007-2011 data in table 2, below, showing that progress, while trending toward further visibility improvement, was not quite as good as in the 2005-2009 period.

²⁸ *General Principles for the 5-Year Regional Haze Progress Reports for the Initial Regional Haze State Implementation Plans (Intended to Assist States and EPA Regional Offices in Development and Review of the Progress Reports)*, EPA, April 2013.

²⁹ New Mexico also included 2006 to 2010 data, but it was not included in table 2.

³⁰ See Tables 3.3 through 3.20 of the New Mexico progress report SIP

Table 2. Visibility Conditions at New Mexico Class I Areas

Class I Area	Baseline (2000- 2004) (dv)	2005- 2009 (dv)	Visibility Improvement over Baseline (2005-2009) (dv)*	2007- 2011 (dv)	Visibility Improvement over Baseline (2007-2011) (dv)*	2018 RPGs (dv)	Visibility Improvement Needed Over Baseline for 2018 RPGs (dv)*
20% Worst Days							
Bandelier	12.2	11.8	0.4	12.0	0.2	11.9	0.3
Bosque del Apache	13.8	13.4	0.4	13.1	0.7	13.59	0.21
Gila Wilderness	13.1	12.5	0.6	11.3	1.8	12.99	0.11
Carlsbad Caverns	17.2	15.9	1.3	15.3	1.9	16.93	0.27
Salt Creek	18.0	17.5	0.5	17.3	0.7	17.33	0.67
San Pedro Parks	10.2	9.9	0.3	10.1	0.1	9.8	0.4
Wheeler Peak	10.4	9.1	1.3	9.6	0.8	10.23	0.17
White Mountain	13.7	13.2	0.5	13.9	-0.2	13.27	0.43
20% Best Days							
Bandelier	5.0	4.2	0.8	3.9	1.1	4.89	0.11
Bosque del Apache	6.3	5.8	0.5	5.5	0.8	6.1	0.2
Gila Wilderness	3.3	2.7	0.6	2.4	0.9	3.2	0.1
Carlsbad Caverns	5.9	5.4	0.5	4.9	1.0	6.14	---
Salt Creek	7.8	7.3	0.5	6.9	0.9	7.43	0.37
San Pedro Parks	1.5	1.0	0.5	1.0	0.5	1.2	0.3
Wheeler Peak	1.2	0.9	0.3	0.9	0.3	1.13	0.07
White Mountain	3.6	3.3	0.3	3.3	0.3	3.42	0.18

*Negative Visibility Improvement means an increase above the baseline values, indicating that visibility has worsened.

All Class I areas show visibility improvement over the baseline through the first progress period (2005-2009). In addition, all Class I sites were below the 2018 RPGs for the first progress period except for San Pedro Parks and Salt Creek. The five-year average deciview trends for 2007-2011 progress period achieved visibility improvement for all Class I areas except White Mountain, which got slightly worse by 0.2 dv. All but three sites met the 2018 RPGs during the 2007-2011 period.

The EPA proposes to conclude that New Mexico has adequately addressed the requirements under 40 CFR 51.309(d)(10)(i)(C) to include summaries of monitored visibility data as required by the Regional Haze Rule. For purposes of improved clarity on future reports, the EPA recommends that New Mexico include a graph of rolling averages similar to what was

provided in the guidance example,³¹ illustrating the uniform glide path. The glide path graphically shows what would be a uniform rate of progress, toward meeting the national goal of a return to natural visibility conditions by 2064 for each Class I area.

D. Emissions Progress

40 CFR 51.309(d)(10)(i)(D) requires an analysis tracking the change over the past five years in emissions of pollutants contributing to visibility impairment from all sources and activities within the State. Emission 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 five-year period. The EPA evaluated New Mexico's analysis and more detail is provided in the Technical Support Document for this action.

The EPA proposes to conclude that New Mexico has adequately addressed the requirements under 40 CFR 51.309(d)(10)(i)(D) to track changes in emissions of pollutants contributing to visibility impairment from all sources and activities within the State. The analysis in this progress report was based on appropriate available data with sufficient forward projections.

E. Assessment of Changes Impeding Visibility Progress

³¹ See page 10 of *General Principles for the 5-Year Regional Haze Progress Reports for the Initial Regional Haze State Implementation Plans (Intended to Assist States and EPA Regional Offices in Development and Review of the Progress Reports)* April 2013.

40 CFR 51.309(d)(10)(i)(E) requires an assessment of any significant changes in anthropogenic emissions within or outside the State that have occurred over the past five years that have limited or impeded progress in reducing pollutant emissions and improving visibility in Class I areas impacted by the State's sources.

New Mexico stated in the progress report SIP that there does not appear to be any anthropogenic emissions within New Mexico that would have limited or impeded progress in reducing pollutant emissions or improving visibility. New Mexico stated that SO₂ and PM were the major visibility-impairing concerns on the 20% worst days. Stationary point sources were the greatest contributor of SO₂ while fire, including natural and anthropogenic, was the greatest PM contributor. Both of these pollutants were covered by long-term control measures described in the progress report SIP (BART, SMP, and SO₂ Milestone and Backstop Trading Program). Other states relied on WRAP modeling to show reasonable progress at their Class I areas. With the BART determination of a two-unit shut down and two-unit SNCR installation for the SJGS, New Mexico will be exceeding the modeled levels relied on by WRAP for regional haze. Therefore, New Mexico is not impeding other states in meeting their RPGs, and is decreasing visibility-impairing pollutants more than was anticipated in the WRAP modeling for NO_x, SO₂ and PM.

The EPA proposes to find that New Mexico has adequately addressed the requirements under 40 CFR 51.309(d)(10)(i)(E) to show that the major contributors of anthropogenic emissions are being reduced and visibility is improving at a uniform rate without having limited or impeded progress.

F. Assessment of Current Strategy to Meet RPGs

40 CFR 51.309(d)(10)(i)(F) calls for an assessment of whether the current implementation plan elements and strategies in the RH SIP 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 RPGs.

New Mexico stated in the progress report SIP that the elements and strategies outlined in its RH SIP are sufficient to enable New Mexico and other neighboring states to meet all the established RPGs. To support this conclusion, New Mexico referenced visibility data³² that showed five-year average deciview trends for the 20% worst and best days for the baseline period (2000-2004); subsequent five-year visibility conditions (2005-2009); and the most recent five-year visibility conditions (2007-2011). All Class I areas indicated visibility improvement over the baseline through the first progress period. All but two Class I areas were below the RPGs for the first progress period based on 2005-2009 data. The five-year average deciview trend for the most recent period (2007- 2011) achieved visibility improvement for all Class I areas except White Mountain, which got slightly worse by 0.2 dv. All but three sites met the 2018 RPGs based on 2007-2011 data: The data supports an inference that 2007-2011 visibility conditions at White Mountain are higher due to elevated coarse mass levels in 2011 compared to baseline levels. The 2007-2011 visibility conditions at Bandelier and San Pedro parks were high, apparently due to elevated organic mass levels in 2011 from impacts of fires.

Although three Class I sites were not tracking the RPGs at the time of the progress report, New Mexico expects further reduction of SO₂ and NO₂ emissions, not accounted for in the original RH SIP, principally from the implementation of BART controls. These added control

³² In Appendix C of Regional Haze Progress Report SIP.

measures should contribute toward Bandelier, San Pedro, and White Mountain achieving the RPGs for 2018. Further progress will also occur through recently adopted or proposed regulatory programs. The EPA notes that visibility conditions at these sites in some years can be impacted more significantly by natural sources of wind-blown dust and/or fires than other years and considers this relevant when evaluating progress toward the natural visibility goals.

The EPA proposes to conclude that New Mexico has adequately addressed the requirements under 40 CFR 51.309(d)(10)(i)(F). The EPA views the requirement of this section as a qualitative assessment that should evaluate emissions and visibility trends, including expected emissions reductions from measures that have not yet become effective. New Mexico referenced the improving visibility trends with appropriately supported data with a focus on future implementation of BART controls.

G. Review of Visibility Monitoring Strategy

40 CFR 51.309(10)(i)(G) requires a review of the State's visibility monitoring strategy and any modifications to the strategy as necessary.

The monitoring strategy for regional haze in New Mexico relies upon participation in the IMPROVE³³ network, which is the primary monitoring network for regional haze nationwide.

The IMPROVE network provides a long-term record for tracking visibility improvement or

³³ Data from IMPROVE show that visibility impairment caused by air pollution occurs virtually all the time at most national parks and wilderness areas. The average visual range in many Class I areas (i.e., national parks and memorial parks, wilderness areas, and international parks meeting certain size criteria) in the western United States is 100-150 kilometers, or about one-half to two-thirds of the visual range that would exist without anthropogenic air pollution. In most of the eastern Class I areas of the United States, the average visual range is less than 30 kilometers, or about one-fifth of the visual range that would exist under estimated natural conditions. 64 FR 35715 (July 1, 1999).

degradation. New Mexico currently relies on data collected through the IMPROVE network to satisfy the regional haze monitoring requirement as specified in the Regional Haze Rule.

In its progress report SIP, New Mexico summarizes the existing IMPROVE monitoring network: Seven monitoring sites in New Mexico and one in Texas (utilized for Carlsbad Caverns National Park). New Mexico stated that IMPROVE monitoring data served as the baseline for the regional haze program and that future regional haze monitoring strategy must be based on, or directly comparable to the current IMPROVE network. New Mexico concluded that the existing network is adequate and modifications to the visibility monitoring strategy are not necessary at this time.

The EPA proposes to conclude that New Mexico has adequately addressed the sufficiency of its monitoring strategy as required by the provisions under 40 CFR 51.309(d)(10)(i)(G). New Mexico reaffirmed its continued reliance upon the IMPROVE monitoring network. New Mexico also explained the importance of the IMPROVE monitoring network for tracking visibility trends at its Class I areas and identified no expected changes in this network.

H. Determination of Adequacy

Under 40 CFR 51.309(d)(10)(ii), states are required to submit, at the same time as the progress report SIP, a determination of the adequacy of their existing RH SIP and to take one of four possible actions based on information in the progress report. 40 CFR 51.309(d)(10)(ii) requires states to take one of the following actions:

- 1) Submit a negative declaration to the EPA that no further substantive revision to the State's existing RH SIP is needed.

- 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 EPA 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 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) If the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources within the State, then the State shall revise its implementation plan to address the plan's deficiencies within one year.

The State of New Mexico has provided the information required under 40 CFR 51.309(d)(10)(i) in the five-year progress report. Based upon this information, New Mexico states in its progress report SIP that it believes that the current Section 309 and 309(g) RH SIPs are adequate to meet the State's 2018 RPGs and require no further revision at this time. Thus, the EPA has received a negative declaration from New Mexico.

V. The EPA's Proposed Action

The EPA is proposing to approve New Mexico's regional haze five-year progress report SIP revision (submitted on March 11, 2014) as meeting the applicable regional haze

requirements set forth in 40 CFR 51.309(d)(10). The EPA is proposing to approve New Mexico's determination that the current RH SIP is adequate to meet the State's 2018 RPGs.

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action does have tribal implications in non-reservation areas of Indian country within the state. However, it will neither impose substantial direct compliance costs on federally recognized tribal governments, nor preempt tribal law. The EPA is coordinating with tribes regarding this matter.

VII.

List of Subjects in 40 CFR part 52

Environmental protection, Air pollution control, Best Available Retrofit Technology, Incorporation by Reference, Intergovernmental relations, Nitrogen oxides, Particulate matter, Reporting and recordkeeping requirements, Regional Haze, Sulfur dioxide, Visibility, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: October 23, 2015.

Samuel Coleman,

Acting Regional Administrator, Region 6.

[FR Doc. 2015-28007 Filed: 11/2/2015 8:45 am; Publication Date: 11/3/2015]