IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF TEXAS, and TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, *Petitioners,* v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, and REGINA A. MCCARTHY, in her official capacity as Administrator of the United States Environmental Protection Agency, *Respondents.*	}	Case No. _____

PETITION FOR REVIEW

In accordance with Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1), 5 U.S.C. § 702, and Federal Rule of Appellate Procedure 15(a), the State of Texas and the Texas Commission on Environmental Quality hereby petition this Court for review of the United States Environmental Protection Agency's (EPA) final rule titled "Protection of Visibility: Amendments to Requirements for State Plans," 82 Fed. Reg. 3,078. (Jan. 10, 2017), a copy of which is enclosed with this filing (Attachment 1).

This Court has jurisdiction and is a proper venue for this action under 42 U.S.C. § 7607(b)(1). This petition for review is timely filed within sixty days of the date of publication of the final rule in the Federal Register. *Id.* The final rule is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. Clean Air Act § 307(d)(9), 42 U.S.C. § 7607(d)(9).

Dated: January 18, 2017

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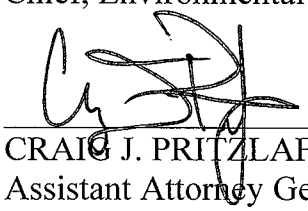

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I certify that I will cause to be served a true copy of the Petition for Review via U.S. mail on January 18, 2017, upon the following:

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 52

[EPA–HQ–OAR–2015–0531; FRL–9957–05–OAR]

RIN 2060–AS55

Protection of Visibility: Amendments to Requirements for State Plans

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing revisions to requirements under the Clean Air Act (CAA) for state plans for protection of visibility in mandatory Class I Federal areas in order to continue steady environmental progress while addressing administrative aspects of the program. In summary, the revisions clarify the relationship between long-term strategies and reasonable progress goals (RPGs) in state implementation plans (SIPs) and the long-term strategy obligation of all states; clarify and modify the requirements for periodic comprehensive revisions of SIPs; modify the set of days used to track progress towards natural visibility conditions to account for events such as wildfires; provide states with additional flexibility to address impacts on visibility from anthropogenic sources outside the United States (U.S.) and from certain types of prescribed fires; modify certain requirements related to the timing and form of progress reports; and update, simplify and extend to all states the provisions for reasonably attributable visibility impairment, while revoking most existing reasonably attributable visibility impairment federal implementation plans (FIPs). The EPA also is making a one-time adjustment to the due date for the next periodic comprehensive SIP revisions by extending the existing deadline of July 31, 2018, to July 31, 2021.

DATES: This final rule is effective on January 10, 2017.

ADDRESSES: The EPA established Docket ID No. EPA–HQ–OAR–2015–0531 for this action. All documents in the docket are listed in the *http://www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available electronically in *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: For general information regarding this rule, contact Mr. Christopher Werner, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, by phone at (919) 541–5133 or by email at *werner.christopher@epa.gov;* or Ms. Rhea Jones, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, by phone at (919) 541–2940 or by email at *jones.rhea@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Preamble Glossary of Terms and Acronyms

The following are abbreviations of terms used in this document.

AQRV Air quality related value
BART Best available retrofit technology
b_{ext} Light extinction
CAA Clean Air Act
CFR Code of Federal Regulations
EGU Electric generating unit
EPA Environmental Protection Agency
FIP Federal implementation plan
FLM or FLMs Federal Land Manager or Managers
ICR Information collection request
IMPROVE Interagency monitoring of protected visual environments
NAAQS National Ambient Air Quality Standards
NSR New Source Review
NO_X Nitrogen oxides
OMB Office of Management and Budget
PM Particulate matter
$PM_{2.5}$ Particulate matter equal to or less than 2.5 microns in diameter (fine particulate matter)
PM_{10} Particulate matter equal to or less than 10 microns in diameter
PRA Paperwork Reduction Act
RHR Regional Haze Rule
RPG Reasonable progress goal
RPO Regional planning organization
SIP State implementation plan
SO_2 Sulfur dioxide
TAR Tribal Authority Rule
URP Uniform rate of progress

B. Entities Affected by This Rule

Entities potentially affected directly by this rule include state, local and tribal [1] governments, as well as FLMs responsible for protection of visibility in mandatory Class I federal areas.[2] Entities potentially affected indirectly by this rule include owners and operators of sources that emit particulate matter equal to or less than 10 microns in diameter (PM_{10}), particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$ or fine PM), sulfur dioxide (SO_2), oxides of nitrogen (NO_X), volatile organic compounds and other pollutants that may cause or contribute to visibility impairment. Others potentially affected indirectly by this rule include members of the general public who live, work or recreate in mandatory Class I areas affected by visibility impairment. Because emission sources that contribute to visibility impairment in Class I areas also may contribute to air pollution in other areas, members of the general public may also be affected by this rulemaking.

C. Obtaining a Copy of This Document and Other Related Information

In addition to being available in the docket, an electronic copy of this **Federal Register** document will be posted at *http://www.epa.gov/visibility.* A "track changes" version of the full regulatory text that incorporates and shows the full context of the changes in this final action is also available in the docket for this rulemaking. In addition to the final and regulatory text documents, other relevant documents are located in the docket, including technical support documents referenced in this preamble.

[1] The EPA's visibility protection regulations may apply, as appropriate under the Tribal Authority Rule (TAR) in 40 CFR part 49, to an Indian tribe that receives a determination of eligibility for treatment as a state for purposes of administering a tribal visibility protection program under section 169A of the CAA. No tribe has applied for such status, and so at present the EPA is responsible for implementation of the visibility protection regulations in areas of tribal authority. This responsibility includes, but is not limited to, implementation of the reasonable progress requirements of 40 CFR 51.308(f), as necessary or appropriate. These rule changes may impact the development and approvability of tribal implementation plans that tribes may wish to submit in the future. We encourage states to provide outreach and engage in discussions with tribes about their regional haze SIPs as they are being developed.

[2] Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. CAA section 162(a). In accordance with section 169A of the CAA, the 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. CAA section 162(a). Although states and tribes may designate as Class I additional areas that 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." CAA section 302(i). When we use the term "Class I area" in this action, we mean any one of the 156 "mandatory Class I Federal areas" where visibility has been identified as an important value, unless the context makes it clear that additional non-mandatory Federal Class I areas are also meant to be included.

Attachment 1

D. Judicial Review

Under CAA section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by March 13, 2017. Under CAA section 307(d)(7)(B), any such judicial review is limited to only those objections that were raised with reasonable specificity in timely comments. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for purposes of judicial review, extend the time in which a petition for judicial review may be filed, or postpone the effectiveness of the rule. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

E. Organization of This ***Federal Register*** *Document*

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F. Background on This Rulemaking

On May 4, 2016, the EPA proposed revisions to the 1999 Regional Haze Rule (RHR),[3] which include clarifications and modifications to the requirements that states (and, if applicable, tribes) have to meet as they implement programs for the protection of visibility in mandatory Class I Federal areas, under sections 169A and 169B of the CAA. The EPA held public hearings on May 19, 2016, in Washington, DC and on June 1, 2016, in Denver, Colorado. States, industry, private citizens and non-governmental organizations submitted over 180,000 comments. Based on EPA's review of the comments, we are finalizing most of the proposed revisions, but are also making some changes to respond to the concerns raised by commenters. These include: Changes to the proposed terminology used to refer to emissions inventories; changes to the proposed definitions and terminology related to how days are selected for tracking progress; changes to the proposed fire-related definitions and terminology; changes to the proposed required content of progress reports; changes to the proposed deadline for a state response to a reasonably attributable visibility impairment certification; the addition of a requirement for FLMs to consult with states prior to making a reasonably attributable visibility impairment certification; and minor changes to the requirements for FLM consultation on SIPs and progress reports. The EPA is issuing this final rule under section 307(d) of the CAA. Section 553(d) of the Administrative Procedure Act (APA), 5 U.S.C. Chapter 5, generally provides that rules may not take effect earlier than 30 days after they are published in the **Federal Register**. CAA section 307(d)(1) clarifies that: "The provisions of section 553 through 557 * * * of Title 5 shall not, except as expressly provided in this section, apply to actions to which this subsection applies." Thus, section 553(d) of the APA does not apply to this rule. The EPA has nevertheless considered the purposes underlying APA section 553(d) in making this rule effective upon publication. The primary purpose of the 30-day waiting period prescribed in section 553(d) is to give affected parties a reasonable time to adjust their behavior and prepare before the final rule takes effect. Notably, there are no specific obligations in the first thirty days of this regulatory action, and all obligations are established as of a date certain, rather than being tied to the effective date.

In addition, section 553(d) allows an effective date less than 30 days after publication for a rule that "grants or recognizes an exemption or relieves a restriction." An important aspect of this rule is the 3-year extension for state planning obligations. This extension is comparable to the grant of an exemption or relief from a restriction because it provides more time for states to meet a regulatory requirement. It is thus reasonable to make this action effective upon publication because states do not require an additional 30 days to adjust their behavior and prepare for the rule going into effect, and in fact will gain additional time to meet their planning obligations.

II. Executive Summary

The CAA's visibility protection program, implemented through the rules at 40 CFR 51.300 through 51.309, helps to protect clear views in national parks, such as Grand Canyon National Park, and wilderness areas, such as the Okefenokee National Wildlife Refuge.

[3] Here and elsewhere in this document, the terms "Regional Haze Rule," "1999 Regional Haze Rule" and "1999 RHR" refer to the 1999 final rule (64 FR 35714), as amended in 2005 (70 FR 39156, July 6, 2005), 2006 (71 FR 60631, October 13, 2006) and 2012 (77 FR 33656, June 7, 2012).

Vistas in these areas are often obscured by visibility-impairing pollutants caused by emissions from numerous sources located over a wide geographic area. States are required to submit periodic plans demonstrating how they have and will continue to make progress towards achieving their visibility improvement goals. The first state plans were due in 2007 and covered the 2008–2018 planning period.

The EPA is making changes to the requirements that states (and, if applicable, tribes) have to meet for the second and subsequent implementation periods as they develop programs for the protection of visibility in mandatory Class I areas, consistent with CAA requirements. Implementation of the EPA's RHR (during the first implementation period) resulted in significant reductions in emissions and associated improvements in visibility in many Class I areas (*see* Section III.B of this document). This final rule supports continued environmental progress by retaining much of the 1999 RHR, clarifying or revising certain provisions of the visibility protection rules in 40 CFR part 51, subpart P, and removing rule provisions that have been superseded by subsequent developments. An overview of the revisions is provided later, with additional details throughout this document.

The EPA is clarifying the relationship between long-term strategies and RPGs in state plans and the long-term strategy obligations of all states. We are re-iterating that the CAA requires states to consider the four statutory factors (costs of compliance, time necessary for compliance, energy and non-air quality environmental impacts and remaining useful life) in each implementation period to determine the rate of progress towards natural visibility conditions that is reasonable for each Class I area. The rate of progress in some Class I areas may be meeting or exceeding the uniform rate of progress (URP) that would lead to natural visibility conditions by 2064, but this does not excuse states from conducting the required analysis and determining whether additional progress would be reasonable based on the four factors. The EPA is revising the RHR to address a number of issues, as discussed in the proposal, including: The way in which a set of days during each year is to be selected for purposes of tracking progress towards natural visibility conditions; aspects of the requirements for the content of progress reports; updating, simplifying and extending to all states the provisions for reasonably attributable visibility impairment and revoking FIPs adopted in the 1980s that require the EPA to assess and address any existing reasonably attributable visibility impairment situations in some states; and revising the requirement for states to consult with FLMs. Other changes address administrative aspects of the program in order to reduce unnecessary burden. These include the following: The EPA is finalizing a one-time adjustment to the due date for the next SIPs (from 2018 to 2021); revising the due dates for progress reports; and changing the requirement that progress reports be submitted as formal SIP revisions to documents that need not comply with the procedural requirements of 40 CFR 51.102, 40 CFR 51.103 and Appendix V to Part 51—Criteria for Determining the Completeness of Plan Submissions. All of these changes apply to periodic comprehensive state implementation plans developed for the second and subsequent implementation periods and to progress reports submitted subsequent to those plans. These changes do not affect the development and review of state plans for the first implementation period or the first progress reports due under the 1999 RHR.

The rationale for these changes is described more fully in the descriptions of each change detailed later in this action as well as in the preamble to the proposed rule.[4] The revisions being finalized are informed by approximately 15 years of implementation of the CAA, numerous outreach sessions and stakeholder feedback regarding the regional haze program, and the many constructive comments we received on the proposal. The clarifications regarding the relationship between RPGs, long-term strategies and the long-term strategy obligation of all states are intended to ensure appropriate and consistent understanding of these requirements as states prepare their plans for the second implementation period. These clarifications reflect EPA's long-standing interpretation of the RHR, and are now being codified. The rule revisions related to how days are selected for visibility progress tracking will provide the public and state officials more meaningful information on how existing and potential new emission reduction measures are contributing or could contribute to reasonable progress in reducing man-made visibility impairment. Changes to FLM consultation requirements will help ensure that the expertise and perspective of these officials are brought into the state plan development process early enough that they can meaningfully contribute to the state's deliberations. Collectively, the changes being finalized now will ensure that the regional haze program is implemented consistent with CAA obligations, and ensure successful implementation during the second planning period and beyond.

With regard to the extension of the deadline of July 31, 2018, to July 31, 2021, for states' comprehensive SIP revisions for the second implementation period, this one-time change will benefit states by allowing them to obtain and take into account information on the effects of a number of other regulatory programs that will be impacting sources over the next several years. The change will also allow states to develop SIP revisions for the second implementation period that are more integrated with state planning for these other programs, an advantage that was widely confirmed in early discussions with states and in comments submitted to the docket for this rulemaking. We anticipate that this change will result in greater environmental progress than if planning for these multiple programs were not as well integrated. The end date for the second implementation period remains 2028, as was required by the 1999 RHR. Other than the one-time change to the next due date for periodic comprehensive SIP revisions, no change is being made for due dates for future periodic comprehensive SIP revisions.

The changes related to progress reports are intended to make the timing of progress reports more useful as mid-course reviews, to clarify the required content of progress reports for aspects on which there has been some confusion, and to allow states to conserve their administrative resources and make submission of progress reports more timely by removing the requirement that they be submitted as formal SIP revisions. We are retaining a requirement that states consult with FLMs on their progress reports, and that states offer the public an opportunity to comment on progress reports before they are finalized, which are two of the steps that applied to progress reports when they were required to be SIP revisions, and which will help ensure ongoing accountability for progress reports. Please note that while the proposed rule included identical FLM consultation periods for progress reports and periodic comprehensive SIP revisions, FLM consultation requirements for SIP revisions and progress reports will differ going forward. This issue is described more fully in Section IV.K of this document.

[4] 81 FR 26942 (May 4, 2016).

Finally, the 1999 RHR's provisions related to reasonably attributable visibility impairment required a recurring process of assessment and planning by the states. Experience since these provisions were promulgated suggests that situations involving reasonably attributable visibility impairment occur infrequently and therefore that an "as needed" approach for initiating a state planning obligation would be a more efficient use of resources. The EPA is finalizing its proposal to replace the recurring process of assessment of reasonably attributable visibility impairment with an as-needed approach. The change to an as-needed approach only applies to reasonably attributable visibility impairment—periodic planning for purposes of regional haze will continue. In addition, in light of our increased understanding of the interstate nature of visibility impairment, we are expanding the applicability of the requirement to address reasonably attributable visibility impairment from only states with Class I areas to all states. If a situation exists or arises in which a source or a small number of sources in a state without any Class I area causes reasonably attributable visibility impairment at a Class I area in another state, this mechanism will ensure adequate visibility protection.

III. Overview of Visibility Protection Statutory Authority, Regulation and Implementation

A. Visibility in Mandatory Class I Federal Areas

Reduction in visibility caused by emissions of PM_{10}, $PM_{2.5}$ (*e.g.*, sulfates, nitrates, organic carbon, elemental carbon and soil dust) and their precursors (*e.g.*, SO_2, NO_X and, in some cases, ammonia and volatile organic compounds) can take the form of either visibly distinct layers or plumes of pollution or more uniform "regional haze." Fine particle precursors react in the atmosphere to form $PM_{2.5}$, which along with directly emitted PM_{10} and $PM_{2.5}$ impairs visibility by scattering and absorbing light. This light scattering reduces the clarity, color and visible distance that one can see. Particulate matter can also cause serious health effects in humans (including premature death, heart attacks, irregular heartbeat, aggravated asthma, decreased lung function and increased respiratory symptoms) and contribute to environmental effects such as acid deposition and eutrophication.

Data from the existing visibility monitoring network, the "Interagency Monitoring of Protected Visual Environments" (IMPROVE) monitoring network, show that at the time the RHR was finalized in 1999, visibility impairment caused by air pollution occurred virtually all the time at most national park and wilderness areas. The formally defined average visual range [5] in many Class I areas in the western U.S. was 62–93 miles. In some Class I areas, these visual ranges may have been impacted by natural wildfire and dust episodes in addition to anthropogenic impacts. In most of the eastern Class I areas of the U.S., the average visual range was less than 19 miles.[6]

Based on visibility data through 2014, the visual range has increased 10 to 20 miles (4 to 7 deciviews) [7] since the year 2000 in eastern Class I areas on the 20 percent haziest days. Some western Class I areas have also experienced visual range increases of 5 to 10 miles (1 to 4 deciviews) on the 20 percent haziest days. However, in some areas, such as Sawtooth Wilderness area in Idaho, improvements from reduced emissions from man-made sources have been overwhelmed by impacts from wildfire and/or dust events. There are also some western areas where visibility has improved only by a slight amount or made no progress.

B. Reasonably Attributable Visibility Impairment

In section 169A of the 1977 Amendments to the CAA, Congress enacted a program for protecting visibility in the nation's national parks, wilderness areas and other Class I areas due to their "great scenic importance." [8] Section 169A(a) of the CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution."

In 1980, the EPA promulgated regulations to address visibility impairment in Class I areas, including but not limited to impairment that is "reasonably attributable" to a single source or small group of sources, *i.e.*, "reasonably attributable visibility impairment." [9] These regulations, codified at 40 CFR 51.300 through 51.307, represented the first phase in addressing visibility impairment from existing sources. They also addressed potential visibility impacts from new and modified major sources already subject to permitting requirements for purposes of protection of the National Ambient Air Quality Standards (NAAQS) and preventing significant deterioration of air quality.

Notably, not all states were subject to the 1980 reasonably attributable visibility impairment requirements. Under the 1980 rules, the 35 states and one territory (Virgin Islands) containing Class I areas were required to submit SIPs addressing reasonably attributable visibility impairment. The 1980 rules required states to (1) develop, adopt, implement and evaluate long-term strategies for making reasonable progress toward remedying existing and preventing future impairment in the mandatory Class I areas through their SIP revisions; (2) adopt certain measures to assess potential visibility impacts due to new or modified major stationary sources, including measures to notify FLMs of proposed new source permit applications, and to consider visibility analyses conducted by FLMs in their new source permitting decisions; (3) conduct visibility monitoring in mandatory Class I areas, and (4) revise their SIPs at 3-year intervals to assure reasonable progress toward the national visibility goal. In addition, the 1980 regulations provided that an FLM may certify to a state at any time that visibility impairment at a Class I area is reasonably attributable to a single source or a small number of sources. Following such a certification by an FLM, a state was required to address the requirements for best available retrofit technology (BART) for BART-eligible sources considered to be contributing to reasonably attributable visibility impairment. Also, the appropriate control of any source certified by an FLM, whether BART-eligible or not, would be specifically addressed in the long-term strategy for making reasonable progress toward the national goal of natural visibility conditions. *See* the

[5] Visual range is the greatest distance, in kilometers or miles, at which a certain dark object can be discerned against the sky by a typical observer under certain defined conditions. Visual range defined in this highly controlled manner is inversely proportional to light extinction (b_{ext}) by particles and gases and is calculated as: Visual Range = $3.91/b_{ext}$ (Bennett, M.G., The physical conditions controlling visibility through the atmosphere; Quarterly Journal of the Royal Meteorological Society, 1930, 56, 1–29). Light extinction has units of inverse distance (*i.e.*, Mm^{-1} or inverse Megameters (mega = 10^6)). Under conditions other than those defined in this reference, people's ability to discern landscape features may vary and be different than implied by the value of the visual range as calculated from light extinction using this formula.

[6] 64 FR 35715 (July 1, 1999).

[7] The deciview haze index (discussed in more detail in Section III.B.3 of this document) is logarithmically related to light extinction and is used by the regional haze program because it describes uniform differences in visibility across a range of visibility conditions.

[8] H.R. Rep. No. 294, 95th Cong. 1st Sess. at 205 (1977).

[9] 45 FR 80084 (December 2, 1980).

1980 rule's version of 40 CFR 51.302(c)(2)(i).

In practice, the 1980 rules resulted in few SIPs being submitted by states and approved by the EPA, requiring the EPA to develop and apply FIPs to those states that failed to submit an approvable reasonably attributable visibility impairment SIP.[10] Most of these FIPs contained planning requirements only. That is, most of the FIPs merely committed the EPA to assessing on a 3-year cycle whether reasonably attributable visibility impairment was occurring, and if so, to adopting an appropriate strategy of required emission controls.

C. Regional Haze

1. Requirements of the 1990 CAA Amendments and the EPA's Regional Haze Rule

In 1990, Congress added section 169B to the CAA to further address regional haze issues. Among other things, this section included provisions for the EPA to conduct visibility research on regional regulatory tools with the National Park Service and other federal agencies, and to provide periodic reports to Congress on visibility improvements due to implementation of other air pollution protection programs. CAA section 169B also generally allowed the Administrator to establish visibility transport commissions and specifically required the Administrator to establish a commission for the Grand Canyon area. The EPA promulgated a rule to address regional haze in 1999.[11] The 1999 RHR established a more comprehensive visibility protection program for Class I areas. The requirements for regional haze are found at 40 CFR 51.308 and 51.309.

The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia and the Virgin Islands.[12] Congress subsequently amended the deadlines for regional haze SIPs, and the EPA adopted regulations requiring states to submit the first implementation plans addressing regional haze visibility impairment no later than December 17, 2007.[13] These initial SIPs were to address emissions from certain large stationary sources and other requirements, which we discuss in greater detail later. Few states submitted a regional haze SIP by the December 17, 2007, deadline, and on January 15, 2009, the EPA found that 37 states, the District of Columbia and the Virgin Islands had failed to submit SIPs addressing the regional haze requirements.[14] These findings triggered a requirement for the EPA to promulgate FIPs within 2 years unless a state submitted a SIP and the EPA approved that SIP within the 2-year period.[15] Most states eventually submitted SIPs.

The 1999 RHR also required states to submit periodic comprehensive revisions of their regional haze SIPs. Under 40 CFR 51.308(f) of the 1999 RHR, states were required to submit the first such revision by no later than July 31, 2018, and every 10 years thereafter. These periodic comprehensive SIP revisions were required to address a number of elements, including current visibility conditions and actual progress made toward natural conditions during the previous implementation period; a reassessment of the effectiveness of the long-term strategy in achieving the RPGs over the prior implementation period; and affirmation of or revision to the RPGs. Further information on these periodic comprehensive SIP revisions can be found in Section III.B.3 of this document. In addition, the 1999 RHR's 40 CFR 51.308(g) required each state to submit progress reports, in the form of SIP revisions, every 5 years after the date of the state's initial SIP submission. In the progress reports, states were required to evaluate the progress made towards the RPGs for mandatory Class I areas located within the state, as well as those mandatory Class I areas located outside the state that may be affected by emissions from within the state. Further information on progress reports can be found in Section III.B.4 of this document.

The 1999 RHR sought to improve efficiency and transparency by requiring states to coordinate planning under the 1980 reasonably attributable visibility impairment provisions with planning under the provisions added by the 1999 RHR. The states were directed to submit reasonably attributable visibility impairment SIPs every 10 years rather than every 3 years, and to do so as part of the newly required regional haze SIPs. Many, but not all, states submitted initial regional haze SIPs that committed to this coordinated planning process. Coordination of reasonably attributable visibility impairment and regional haze planning is described in more detail later.

2. Roles of Agencies in Addressing Regional Haze

Successful implementation of the regional haze program requires long-term regional coordination among states, tribal governments and various federal agencies. As noted earlier, pollution affecting the air quality in Class I areas is emitted from many individual sources and can be transported over long distances, even hundreds of miles. Therefore, to effectively address the problem of visibility impairment in Class I areas, states need to develop strategies in coordination with one another, taking into account the effect of emissions from one jurisdiction on the air quality in another.

Because the pollutants that lead to regional haze can originate from sources located across broad geographic areas, and because these sources may be numerous and emit amounts of pollutants that, even though small, contribute to the collective whole, the EPA encourages states to address visibility impairment from a regional perspective. Five regional planning organizations (RPOs) were formed after the promulgation of the RHR in 1999 to address regional haze and related issues: The Central Regional Air Planning Association, the Mid-Atlantic/Northeast Visibility Union, the Midwest Regional Planning Organization, the Western Regional Air Partnership and the Visibility Improvement State and Tribal Association of the Southeast.[16] The RPOs first evaluated technical information to better understand how their states and tribes impact Class I areas across the country, and then supported the development (by states) of regional strategies to reduce emissions of pollutants that lead to regional haze.

3. Requirements for the Regional Haze SIPs

As mentioned earlier, states were required to submit SIPs addressing regional haze visibility impairment in 2007, which covered what we refer to as the first implementation period (2008–2018). A focus of the 2007 SIP obligation was to give specific attention to certain stationary sources that were in existence on August 7, 1977, but were not in operation before August 7, 1962, by requiring these sources, where appropriate, to install BART controls for the purpose of eliminating or reducing visibility impairment. These SIPs included a number of components and/

[10] 52 FR 45132 (November 24, 1987).

[11] 64 FR 35714 (July 1, 1999).

[12] This requirement does not apply to other U.S. territories defined as "states" under the CAA because they do not have mandatory Class I Federal areas and are too distant from any such areas to affect them.

[13] 70 FR 39104 (July 6, 2005).

[14] 74 FR 2392 (January 15, 2009).

[15] CAA section 110(c).

[16] *See* "Visibility—Regional Planning Organizations," *available at https://www.epa.gov/visibility/visibility-regional-planning-organizations.*

or analyses, which are described later along with information regarding whether or not this final rule impacts that particular SIP element.

BART Requirement. Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires states to revise their SIPs to include such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources [17] procure, install and operate BART. Under the RHR, the EPA directed states to conduct BART determinations for any "BART-eligible" sources [18] that may be anticipated to cause or contribute to any visibility impairment in a Class I area. The EPA published the *Guidelines for BART Determinations Under the Regional Haze Rule* at appendix Y to 40 CFR part 51 (hereinafter referred to as the "BART Guidelines") to assist states in determining which of their sources should be subject to the BART requirements and in determining appropriate emission limits for each applicable source.[19] The 1999 RHR also gave states the flexibility to adopt an emissions trading program or other alternative program in lieu of source-specific BART as long as the alternative provided greater reasonable progress towards improving visibility than BART and met certain other requirements set out in the 1999 RHR's 40 CFR 51.308(e)(2).

States were required to undertake the BART determination process during the first implementation period. The BART requirement was a one-time requirement, but a BART-eligible source may need to be re-assessed for additional controls in future implementation periods under the CAA's reasonable progress provisions. Specifically, we anticipate that a number of BART-eligible sources that installed only moderately effective controls (or no controls at all) will need to be reassessed. Under the 1999 RHR's 40 CFR 51.308(e)(5), BART-eligible sources are subject to the requirements of 40 CFR 51.308(d), which addresses regional haze SIP requirements for the first implementation period, in the same manner as other sources going forward.[20]

Visibility Metric. The RHR established the 24-hour deciview haze index as the principal metric or unit for expressing visibility on any particular day.[21] The deciview haze index is calculated from light extinction values and expresses uniform changes in the degree of haze in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy. Deciview values are calculated by using air quality measurements to estimate light extinction, most recently using the revised IMPROVE algorithm, and then transforming the value of light extinction using a logarithmic function.[22] The deciview is a more useful measure for comparing days and tracking progress in improving visibility than light extinction itself because each deciview change is an equal incremental change in visibility typically perceived by a human observer. Most people can detect a change in visibility of one deciview. The preamble to the 1999 RHR provided additional details about the deciview haze index.

Baseline, Current and Natural Conditions and Tracking Changes in Visibility. To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program (40 CFR 81.401–437), and as part of the process for determining reasonable progress, states were required to calculate visibility conditions at each Class I area for a 5-year period just preceding each periodic comprehensive SIP revision.[23] To do this, the 1999 RHR required states to determine average visibility conditions (in deciviews) for the 20 percent least impaired days and the 20 percent most impaired days over the 5-year period at each of their Class I areas.

States were also required to develop an estimate of natural visibility conditions for the purpose of estimating progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. The EPA has provided guidance to states regarding how to calculate baseline, natural and current visibility conditions at each Class I area.[24] After the EPA issued this guidance, a number of interested parties together developed a set of alternative estimates of natural conditions using a more refined approach (known as "NC–II"), which were used by most states in their first regional haze SIPs with EPA approval.[25]

Baseline visibility conditions reflect the degree of visibility impairment for the 20 percent least impaired days and 20 percent most impaired days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states are required to calculate the average degree of visibility impairment for each Class I area, based on the average of annual values of these two metrics over the 5-year period. The comparison of baseline visibility conditions to natural visibility conditions indicates the amount of improvement that would be necessary to attain natural visibility. Over time, the comparison of current visibility conditions [26] to the baseline visibility conditions will indicate the amount of progress that has been made.

The 1999 RHR defined "visibility impairment" as a humanly perceptible change (*i.e.*, difference) in visibility from that which would have existed under natural conditions. The rule directed the tracking of visibility

[17] The set of "major stationary sources" potentially subject-to-BART is listed in CAA section 169A(g)(7).

[18] BART-eligible sources are those sources that have the potential to emit 250 tons or more of a visibility-impairing air pollutant, were not in operation prior to August 7, 1962, but were in existence on August 7, 1977, and whose operations fall within one or more of 26 specifically listed source categories. 40 CFR 51.301.

[19] 70 FR 39104 (July 6, 2005).

[20] Under the 1999 RHR's 40 CFR 51.308(e)(5), BART-eligible sources were subject to the requirements of 40 CFR 51.308(d), which addresses regional haze SIP requirements for the first implementation period, in the same manner as other sources going forward.

[21] *See* 70 FR 39104, 39118.

[22] Pitchford, M.; Malm, W.; Schichtel, B.; Kumar, N.; Lowenthal, D.; Hand, J. Revised algorithm for estimating light extinction from IMPROVE particle speciation data; J. Air & Waste Manage. Assoc. 2007, 57, 1326–1336; doi: 3155/1047–3289.57.11.1326.

[23] Under the 1999 RHR, states were also required to periodically review progress in reducing impairment every 5 years.

[24] Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule, September 2003, EPA–454/B–03–005, available at *http://www3.epa.gov/ttn/caaa/t1/memoranda/rh_envcurhr_gd.pdf;* and Guidance for Tracking Progress Under the Regional Haze Rule, September 2003, EPA–454/B–03–004, available at *http://www3.epa.gov/ttn/oarpg/t1/memoranda/rh_tpurhr_gd.pdf.*

[25] Regional Haze Rule Natural Level Estimates Using the Revised IMPROVE Aerosol Reconstructed Light Extinction Algorithm, available at *http://vista.cira.colostate.edu/improve/Publications/GrayLit/032_NaturalCondIIpaper/Copeland_etal_NaturalConditionsII_Description.pdf;* Revised IMPROVE Algorithm for Estimating Light Extinction from Particle Speciation Data, available at *http://vista.cira.colostate.edu/improve/Publications/GrayLit/019_RevisedIMPROVEeq/RevisedIMPROVEAlgorithm3.doc;* and Regional Haze Data Analysis Workshop, June 8, 2005, Denver, CO, agenda and documents available at *http://www.wrapair.org/forums/aamrf/meetings/050608den/index.html.*

[26] Given the required timing of the first regional haze SIPs that were due by December 17, 2007, "baseline visibility conditions" were also the "current" visibility conditions. For future SIPs, "current conditions" will be updated to the 5-year period just preceding the SIP revision.

impairment on the 20 percent "most impaired days" and 20 percent "least impaired days" in order to determine progress towards natural visibility conditions. 40 CFR 51.308(d)(2)(i–iv). In light of the 1999 RHR's definition of "impairment," the term "impaired" in the phrases "most impaired days" and "least impaired days" could be taken to mean anthropogenic impairment only and to exclude reductions in visibility attributable to natural emission sources. However, the preamble to the 1999 RHR stated that the least and most impaired days were to be selected as the monitored days with the lowest and highest actual deciview levels caused by all sources, respectively. In 2003, the EPA issued guidance describing in detail the steps necessary for selecting and calculating light extinction on the "worst" and "best" visibility days, and this guidance also indicated that the monitored days with the lowest and highest actual deciview levels were to be selected as the least and most impaired days.[27] This approach worked well in many Class I areas but caused some concerns in other areas.

Specifically, the "worst" visibility days in some Class I areas can be impacted by irregularly occurring natural emissions (*e.g.,* wildland wildfires and dust storms). These natural contributions to haze vary in magnitude and timing. Anticipating this variability, in the 1999 RHR the EPA decided to use 5-year averages of visibility data to minimize the impacts of the interannual variability in natural events. However, additional data available through the IMPROVE monitoring network indicate that in many Class I areas 5-year averages are not sufficient for minimizing these erratic impacts. As a result, visibility improvements resulting from decreases in anthropogenic emissions can be hidden by this natural variability. Further, because of the logarithmic deciview scale, changes in PM concentrations and light extinction due to reductions in anthropogenic emissions have little effect on the deciview value on days with high PM concentrations and light extinction due to natural sources. The use of the days with the highest deciview index values, without consideration of the source of the visibility impacts, thus created difficulties when attempting to track visibility improvements resulting from controls on anthropogenic sources. States identified this difficulty prior to the start of this rulemaking and asked that the EPA explore options for focusing the visibility tracking metric on the effect of controlling anthropogenic emissions. To help states minimize the impacts of emissions from natural sources on visibility tracking via an approach that is also consistent with the CAA's goal to reduce visibility impairment resulting from man-made air pollution, the EPA proposed to more explicitly (and consistently) address this issue for future implementation periods.

Reasonable Progress Goals and Long-Term Strategy. To ensure continuing progress towards achieving the natural visibility goal, the 1999 RHR required that each SIP submission in the series of periodic comprehensive regional haze SIPs establish two distinct RPGs (one for the most impaired and one for the least impaired days) for every Class I area. *See* 40 CFR 51.308(d)(1). The 1999 RHR did not mandate specific milestones or rates of progress, but instead called for states to establish goals that provide for "reasonable progress" toward achieving natural visibility conditions. Specifically, states were required to provide for an improvement in visibility for the most impaired days over the period of the SIP, and ensure no degradation in visibility for the least impaired days over the same period.

To set their RPGs, states were required to consider the four statutory reasonable progress factors: (1) The costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources. States were required to demonstrate in their SIPs how these factors were considered when selecting the RPGs for the least impaired and most impaired days for each applicable Class I area. The RPGs are not enforceable.[28]

Consistent with the requirement in section 169A(b) of the CAA that states include in their regional haze SIPs a 10- to 15-year strategy for making reasonable progress, 40 CFR 51.308(d)(3) of the 1999 RHR required states to include a long-term strategy in their regional haze SIPs. Under the 1999 RHR, a state's long-term strategy is inextricably linked to the RPGs because the long-term strategy "must include enforceable emission limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by states having mandatory Class I Federal areas." 40 CFR 51.308(d)(3).

When setting their RPGs, states were also required to consider the rate of progress for the most impaired days that would be needed to reach natural visibility conditions by 2064 and the emission reduction measures that would be needed to achieve that rate of progress over the approximately 10-year period of the SIP. The purpose of this requirement was to allow for analytical comparisons between the rate of progress that would be achieved by the state's chosen set of control measures and the URP. If a state's RPG for the most impaired days achieved progress that was equal to the URP, the RPG would be "on the URP line" [29] or "on the glidepath." If a state's RPG for the most impaired days was not on the glidepath, 40 CFR 51.308(d)(1)(ii) required the state to demonstrate that it would not be reasonable to require additional control measures and adopt an RPG that would be on the glidepath. The 1999 RHR did not establish an enforceable requirement that natural conditions be reached by 2064. The EPA approved a number of SIPs for the first implementation period that projected that continued progress at the rate expected to be achieved during the first period would not result in natural conditions until after 2064. However, the EPA also disapproved some SIPs during the first implementation period where states argued that no analysis of the four factors was necessary because visibility was projected to be "below the glidepath" at the end of the implementation period even without additional measures.[30]

In setting their RPGs, each state with one or more Class I areas was also required to consult with potentially "contributing states," *i.e.,* other nearby states with emission sources that may be affecting visibility impairment in the state's Class I areas. In such cases, the contributing state was required to demonstrate that it included in its long-term strategy all measures necessary to obtain its share of the emission reductions needed to make reasonable progress at the Class I area.[31] In

[27] Guidance for Tracking Progress Under the Regional Haze Rule, September 2003, *http://www3.epa.gov/ttnamti1/files/ambient/visible/tracking.pdf*

[28] 64 FR 35754.

[29] The URP for the most impaired days can be represented in a graphical manner by drawing the "URP line" on a chart with calendar year on the horizontal axis and deciviews for the 20 percent most impaired day on the vertical axis.

[30] 76 FR 64186 at 64195 (October 17, 2011) (proposed action on Arkansas's RPGs), 77 FR 14604 at 14612 (March 12, 2012) (final action on Arkansas's RPGs).

[31] This consultation obligation is a key element of the regional haze program. Congress, the states, the courts and the EPA have long recognized that regional haze is a regional problem that requires regional solutions. *Vermont* v. *Thomas,* 850 F.2d 99, 101 (2d Cir. 1988). Ultimately, early actions by states such as Vermont were influential in Congressional enactment of section 169B of the

determining whether the upwind and downwind states' long-term strategies and RPGs provided for reasonable progress toward natural visibility conditions, the EPA was required to evaluate the demonstrations developed by the state. 40 CFR 51.308(d)(1).

The 1999 RHR required states to consider all types of anthropogenic sources of visibility impairment when developing their long-term strategies, including major and minor stationary sources, mobile sources and area sources. States had to consider a number of factors when developing their long-term strategies, including: (1) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment; (2) measures to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes; (6) the enforceability of emissions limitations and control measures; and (7) 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. 40 CFR 51.308(d)(3)(v).

Coordinating Regional Haze and Reasonably Attributable Visibility Impairment. The 1999 RHR fulfilled the EPA's responsibility to put in place a national regulatory program that addresses both reasonably attributable visibility impairment and regional haze. As part of the 1999 RHR, the EPA revised the schedule in 40 CFR 51.306(c) for the periodic review of reasonably attributable visibility impairment SIPs. The revised version of this subsection required that the reasonably attributable visibility impairment plan must continue to provide for a periodic review and SIP revision not less frequently than every 3 years until the date of submission of the state's first plan addressing regional haze visibility impairment. On or before this date, the state must have revised its plan to provide for periodic review and revision of a coordinated long-term strategy for addressing reasonably attributable visibility impairment and regional haze, and the state must have submitted the first such coordinated long-term strategy with its first regional haze SIP. Under the 1999 RHR, states were required to submit future coordinated long-term strategies, and periodic progress reports evaluating progress towards RPGs. The state's periodic review of its long-term strategy was required to report on both regional haze visibility impairment and reasonably attributable visibility impairment and was required to be submitted to the EPA in the form of a periodic comprehensive SIP revision. Under our proposed changes to the reasonably attributable visibility impairment provisions, this coordinated approach to a state's long-term strategies for regional haze and reasonably attributable visibility impairment would continue, but will apply in the infrequent case that a state receives a certification of reasonably attributable visibility impairment.

Monitoring Strategy and Other Implementation Plan Requirements. 40 CFR 51.308(d)(4) of the 1999 RHR included the requirement for a monitoring strategy for measuring, characterizing and reporting of regional haze visibility impairment that is representative of all mandatory Class I areas within the state. The strategy was required to be coordinated with the monitoring strategy required in the 1999 RHR version of 40 CFR 51.305 for reasonably attributable visibility impairment. Compliance with this requirement could be met through "participation" in the IMPROVE network.[32] A state's participation in the IMPROVE network includes state support for the use of CAA state and tribal assistance grants funds to partially support the operation of the IMPROVE network as well as the state's review and use of monitoring data from the network. The monitoring strategy was due with the first regional haze SIP, and under the 1999 RHR it must be reviewed every 5 years as part of the progress reports. The monitoring strategy must also provide for additional monitoring sites if the IMPROVE network is not sufficient to determine whether RPGs will be met. To date, neither the EPA nor any state has concluded that the IMPROVE network is not sufficient in this way. The evolution of the IMPROVE network will be guided by a Steering Committee that has FLM, EPA and state participation, within the evolving context of available resources. It is the EPA's objective that individual states will not be required to commit to providing monitoring sites beyond those planned to be operated by the IMPROVE program during the period covered by a SIP revision. Further, if the IMPROVE program must discontinue a monitoring site, this would not be a basis for an approved regional haze SIP to be found inadequate; but rather, the state, the federal agencies and the IMPROVE Steering Committee should work together to address the RHR requirements when the next SIP revision is developed. As described in Section IV.H of this document, we proposed that progress reports from individual states no longer be required to review and modify as necessary the state's monitoring strategy. The IMPROVE Steering Committee structure, the requirement to review the monitoring strategy as part of the periodic comprehensive SIP revision, and the requirement for a state to consider any recommendations from the EPA or a FLM for additional monitoring for purposes of reasonably attributable visibility impairment will be sufficient to achieve the objective of the current progress report requirement to review the monitoring strategy.

Consultation Between States and FLMs. The 1999 RHR required that states consult with FLMs before adopting and submitting their SIPs. 40 CFR 51.308(i). There are two parts to this requirement. First, states must provide FLMs an opportunity for an in-person consultation meeting at least 60 days prior to holding any public hearing on the SIP. This consultation meeting was required to include the opportunity for the FLMs to discuss their assessment of impairment of visibility in any Class I area and to offer recommendations on the development of the RPGs and on the development and implementation of strategies to address visibility impairment. Further, a state was required to include in its SIP a description of how it addressed any comments provided by the FLMs. We proposed to require that states offer the opportunity for this already-required in-person consultation meeting early enough that information and recommendations provided by the FLMs can meaningfully inform the state's decisions on the long-term strategy. The second part of the consultation requirement is that a SIP must provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas.

CAA in 1990. Congress intended this provision of the CAA to "equalize the positions of the States with respect to interstate pollution," (S. Rep. No. 95–127, at 41 (1977)) and our interpretation accomplishes this goal by ensuring that downwind states can seek recourse from us if upwind states are not doing enough to address visibility transport.

[32] While compliance with 40 CFR 51.308(d)(4) for regional haze may be met through participation in the IMPROVE network, additional analysis or techniques beyond participation in IMPROVE may be required for compliance with 40 CFR 51.305 for reasonably attributable visibility impairment.

We did not propose any change to this requirement for procedures for continuing consultation. This continuing consultation should provide opportunities for FLM input on the scope and methods for the state's technical analyses as they are being planned, while the in-person consultation meeting required by the first part of the consultation requirement will occur as a state is making decisions based on the conclusions of its technical analyses. FLMs often participate in multi-state workgroups on regional haze and related issues and attend multi-state meetings on these topics, which further facilitates collaboration with individual states during SIP development.

4. Requirements for the Regional Haze Progress Reports

The 1999 RHR included provisions for progress reports to be submitted at 5-year intervals, counting from the submission of the first required SIP revision by the particular state. The requirements for these reports were included for most states in 40 CFR 51.308(g) and (h). Three western states (New Mexico, Utah and Wyoming) exercised an option provided in the RHR to meet alternative requirements contained in 40 CFR 51.309 for their SIPs. For these three states, the requirements for the content of the 5-year progress reports are identical to those for the other states, but for these states the requirements for the reports were contained in 40 CFR 51.309(d)(10). This section specifies fixed due dates in 2013 and 2018 for these progress reports. The 1999 RHR then provided that these three states will revert to the progress report requirements in 40 CFR 51.308 after the report currently due in 2018. We did not propose this aspect of the RHR.

An explanation of the 5-year progress reports is provided in the preamble to the 1999 RHR.[33] This 5-year review was intended to provide an interim report on the implementation of, and if necessary mid-course corrections to, the regional haze SIP, which is generally prepared in 10-year increments. The progress report provides an opportunity for public input on the state's (and the EPA's) 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.

Required elements of the progress report under the 1999 RHR included: The status of implementation of all measures included in the regional haze SIP; a summary of the emissions reductions achieved throughout the state; an assessment of current visibility conditions and the change in visibility impairment over the past 5 years; 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; 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; an assessment of whether the current SIP elements and strategies are sufficient to enable the state (or other states with mandatory Class I areas affected by emissions from the state) to meet all established RPGs; a review of the state's visibility monitoring strategy and any modifications to the strategy as necessary; and a determination of the adequacy of the existing SIP (including taking one of four possible actions).[34] We proposed to include a number of clarifications and changes to the requirements for the content of progress reports.

Under the 1999 RHR's 40 CFR 51.308(g) and 40 CFR 51.309(d)(10), progress reports must take the form of SIP revisions, so states must follow formal administrative procedures (including public review and opportunity for a public hearing) before formally submitting the 5-year progress report to the EPA. *See* 40 CFR 51.102, 40 CFR 51.103, and Appendix V to Part 51—Criteria for Determining the Completeness of Plan Submissions. We proposed to remove the requirement that progress reports be submitted as SIP revisions.

In addition, because progress reports were SIP revisions under the 1999 RHR, states were required to provide FLMs with an opportunity for in-person consultation at least 60 days prior to any public hearing on progress report. *See* 1999 RHR version of 40 CFR 51.308(i)(2) and (3). Procedures must also be provided for continuing consultation between the state and FLM regarding development and review of progress reports. *See* 40 CFR 51.308(i)(4).

Under the 1999 RHR, the first progress reports were due 5 years from the initial SIP submittal (with the next progress reports for New Mexico, Utah, and Wyoming due in 2018). Most of these deadlines have already passed although some are due in 2016 and in 2017.[35]

5. Tribes and Regional Haze

Tribes have a distinct interest in regional haze due to the effects of visibility impairment on tribal lands as well as on other lands of high value to tribal members, such as landmarks considered sacred. Tribes, therefore, have a strong interest in emission control measures that states and the EPA incorporate into SIPs and FIPs with regard to regional haze, and also have an interest in the state response to any certification of reasonably attributable visibility impairment made by an FLM.[36] The agency has a tribal consultation policy that covers any plan that the EPA would promulgate that may affect tribal interests. This consultation policy applies to situations where a potentially affected source is located on tribal land, as well as situations where a SIP or FIP concerns a source that is located on state land and may affect tribal land or other lands that involve tribal interests. In addition, the EPA has and will continue to consider any tribal comments on any proposed action on a SIP or FIP.

In the first implementation period for regional haze SIPs, the partnerships within the RPOs included strong relationships between the states and the tribes, and the EPA encourages states to continue to invest in those relationships (including consulting with tribes), particularly with respect to tribes located near Class I areas. States should continue working directly with tribes on their SIPs and their response to any certification of reasonably attributable visibility impairment made by an FLM. It is preferable for states to address tribal concerns during their planning process rather than the EPA addressing such concerns in its subsequent rulemaking process. During the development of this rulemaking, the EPA was asked by the

[33] 64 FR 35747 (July 1, 1999).

[34] 40 CFR 51.308(g). *See* also 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, EPA–454/B–03–005, available at *https://www.epa.gov/sites/production/files/2016-03/documents/haze_5year_4-10-13.pdf,* (hereinafter referred to as "our 2013 Progress Report Guidance").

[35] A number of first progress reports have been submitted by states. Several of these progress reports have been approved, action on several others has been proposed, and EPA is still reviewing the other submitted reports. There are also states for which progress reports are overdue, and a few states for which progress reports are not yet due and have not been submitted.

[36] Like the EPA, the Department of the Interior and the U.S. Forest Service in the U.S. Department of Agriculture have strong tribal consultation policies. *See: http://www.epa.gov/tribal/consultation/index.htm; http://www.fs.fed.us/spf/tribalrelations/authorities.shtml,* and *https://www.doi.gov/tribes/Tribal-Consultation-Policy.*

National Tribal Air Association to adopt a requirement that states formally consult with tribes during the development of their regional haze SIPs. The CAA does not explicitly authorize the EPA to impose such a requirement on the states. While we recognize the value of dialogue between state and tribal representatives, we did not propose to require it.

D. Air Permitting

One part of the visibility protection program, 40 CFR 51.307, New Source Review (NSR), was established in 1980 with the rationale that while most new sources that may impair visibility were already subject to review under the Prevention of Significant Deterioration provisions (part C of Title I of the CAA), additional regulations would "ensure that certain sources exempt from the PSD regulations because of geographic criteria will be adequately reviewed for their potential impact on visibility in the mandatory Class I Federal area." [37] The EPA explained at proposal that this was necessary because the PSD regulations did not call for the review of major emitting facilities (or major modifications) located in nonattainment areas,[38] and that it was appropriate to "clarify certain procedural relationships between the FLM and the state in the review of new source impacts on visibility in Federal class I areas." [39] The EPA envisioned that state and FLM consultation would commence with the state notifying the FLM of a potential new source, and that consultation would continue throughout the permitting process. We proposed to revise 40 CFR 51.307 only as needed to maintain consistency with revisions to other sections of 40 CFR part 50 subpart P.

[37] 45 FR 80084 (December 2, 1980).

[38] In 1978, PSD rules were put in place that required permitting agencies to interact with FLMs and for air quality related values (AQRVs) to be taken into consideration in the PSD permitting process. 43 FR 26380 (June 19, 1978). Those PSD rules did not cover sources in nonattainment areas, and while there were EPA rules for nonattainment NSR in existence, they did not require consideration of Class I areas. In 1979, 40 CFR part 51, appendix S established rules for nonattainment permitting, but they did not (and still do not) require consideration of visibility or FLM notification. (The same is also true of a more recent addition, 40 CFR 51.165. Where applicable to nonattainment areas, this rule does not require Class I reviews. While 40 CFR 51.165(b) requires that sources located in attainment areas cannot cause or contribute to a NAAQS violation anywhere, this does not cover AQRVs in Class I areas.) As a result, in 1980, the EPA added requirements to 40 CFR 51.307 for notification of FLMs of pending permits for new sources in nonattainment areas.

[39] 45 FR 34765 (May 22, 1980).

IV. Final Rule Revisions

The EPA is finalizing revisions to the agency's visibility regulations that are intended to build upon the progress achieved by the visibility program over the last decade while streamlining certain administrative requirements that are unnecessarily burdensome. The EPA gained a substantial amount of knowledge during the first regional haze implementation period and learned what aspects of the program work well and what aspects could benefit from modification. The EPA received information and perspectives from air agencies and FLMs during this period that were invaluable in developing the proposal. We also received comments from a wide variety of other stakeholders during the public comment process, including groups of states, FLMs, industry and industry representatives, nongovernmental organizations, and others. We considered all timely comments submitted on the proposal and address many of the most significant comments in this section. We are also providing a separate response-to-comments (RTC) document in the docket for this rulemaking. Between this preamble and the RTC document, we have responded to all significant comments received on this rulemaking.

A. Ongoing Litigation in Texas v. EPA

A number of state and industry stakeholders submitted comments regarding the ongoing litigation in the Fifth Circuit Court of Appeals over the EPA's January 2016 final action that partially approved and partially disapproved the Oklahoma and Texas regional haze SIPs for the first implementation period and promulgated partial FIPs for each state.[40] These commenters asserted that the Fifth Circuit's decision granting a stay [41] of the Texas FIP's reasonable progress emission limits undermined our proposed revisions to the visibility regulations. Some commenters also suggested that we must suspend our rulemaking revising the visibility regulations until after the Fifth Circuit has issued a decision on the merits.

We disagree that the Fifth Circuit's recent stay decision in *Texas* v. *EPA* dictates the lawfulness or timeliness of this rulemaking. First, as the commenters have noted, the Fifth Circuit decision was not a final decision on the merits of our action on the Oklahoma and Texas regional haze SIPs; instead, it was a preliminary decision issued by a panel of Fifth Circuit judges reviewing motions to stay the EPA's FIP, otherwise referred to as a "motions panel." That panel expressly noted that its "determination of Petitioners' likelihood of success on the merits is for the purposes of the stay only and does not bind the merits panel." [42] Second, and more importantly, the Fifth Circuit's evaluation of the EPA's FIP was based on the existing visibility regulations at 40 CFR 51.308(d). In this rulemaking, we are promulgating new regulations at 40 CFR 51.308(f) that will govern the second and future implementation periods. Under CAA section 307(b), the D.C. Circuit Court of Appeals is the exclusive venue for judicial review of these regulations. Consequently, the preliminary views of another circuit on the lawfulness of a FIP issued in the first implementation period under our existing regulations at 40 CFR 51.308(d) are not germane to this rulemaking. Third, portions of the stay decision indicate a fundamental misunderstanding of aspects of the visibility program and the EPA's action on the Oklahoma and Texas regional haze SIPs. For example, the decision on several occasions conflated the BART and reasonable progress requirements of the RHR, even though the FIP solely concerned the latter.[43] Indeed, we explicitly delayed final action in promulgating a FIP to address the BART requirements for EGUs in Texas in light of the D.C. Circuit's decision to remand several of the Cross-State Air Pollution Rule's (CSAPR) emissions budgets.[44]

While the decision in *Texas* v. *EPA* does not dictate the outcome of this rulemaking, the decision has created some confusion regarding certain aspects of the visibility program, including (1) whether states can or must consider the four reasonable progress factors on a source-specific basis; (2) the scope of the consultation requirements; and (3) whether a state's long-term strategy can contain measures that cannot be fully implemented by the end of an implementation period. Consequently, we believe that it is appropriate to address each of these issues at this time to explain how it was treated under the existing regulations during the first implementation period and whether it will be treated any

[40] 81 FR 295 (January 5, 2016).

[41] *Texas* v. *EPA*, 2016 U.S. App. LEXIS 13058 (5th Cir. July 15, 2016).

[42] *Id.* at *42 n.29.

[43] *See, e.g., id.* at *8 (SIPs must "list the best available retrofit technology ('BART') that emission sources in the state will have to adopt to achieve the visibility goals"); *id.* at *9 ("BART is the only portion of the implementation plan that is enforced against emission sources in a state."); *id.* at *42 (asserting that "the BART requirements" are "the portion of the Final Rule imposing injury on Petitioners").

[44] 81 FR 301–02.

differently (and if so how) under the new regulations governing future implementation periods.

1. Source-Specific Analysis

In *Texas* v. *EPA*, the Fifth Circuit explained that neither the RHR nor the CAA requires a state to conduct a source-specific four-factor analysis.[45] Several commenters cited this aspect of the Fifth Circuit's decision to argue that the EPA's proposal could not require states to conduct source-specific four-factor analyses and that, while states could conduct such analyses at their discretion, a state's decision not to do so could not form the basis of the EPA's disapproval of a SIP. Other commenters argued that proposed 40 CFR 51.308(f)(3)(ii) would unlawfully force states to conduct source-specific four-factor analyses if a state's RPGs provide for a slower rate of improvement in visibility than the URP. Several commenters asked us to clarify our position on these issues.

Neither the 1999 RHR nor the revised regulations in this rulemaking require states to conduct four-factor analyses on a source-specific basis. CAA section 169A(b)(2) requires states to include in their SIPs "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress." While these emission limits must apply to individual sources or units, section 169A(g)(1) does not explicitly require states to consider the four factors on a source-specific basis when determining what amount of emission reductions (and corresponding visibility improvement) constitutes "reasonable progress." Unlike section 169A(g)(2), which requires states to consider "any existing control technology in use at *the source*" and "the remaining useful life of *the source*" when determining BART, section 169A(g)(1) refers to the four factors more generally. For example, with respect to remaining useful life, section 169A(g)(1) refers not to "the source," but rather "any existing source subject to such requirements." Thus, the EPA has consistently interpreted the CAA to provide states with the flexibility to conduct four-factor analyses for specific sources, groups of sources or even entire source categories, depending on state policy preferences and the specific circumstances of each state. This is the case under the 1999 RHR and continues to be the case under these final revisions. Contrary to the arguments in some comments, 40 CFR 51.308(f)(3)(ii) explicitly refers to "sources *or groups of sources.*" Similarly, 40 CFR 51.308(f)(2)(i) also refers to "major or minor stationary sources *or group of sources,* mobile sources, and area sources."

We also note that the stay decision in *Texas* v. *EPA* mistakenly indicated that the EPA disapproved the Texas SIP for failing to evaluate the four factors on a source-specific basis. As we explained in the January 2016 final rule, we disapproved Texas's four-factor analysis because the set of sources and controls that Texas analyzed was both over-inclusive and under-inclusive, not because the state failed to conduct a source-specific analysis.[46] Texas's analysis was over-inclusive because it included controls on sources that served only to increase total costs with little corresponding visibility benefit, and under-inclusive because it did not include scrubber upgrades that would achieve highly cost-effective emission reductions that would lead to significant visibility improvements. While these final revisions to the RHR continue to provide states with considerable flexibility in evaluating the four reasonable-progress factors, we expect states to exercise reasoned judgment when choosing which sources, groups of sources or source categories to analyze. Consistent with CAA section 169A(g)(1) and our action on the Texas SIP, a state's reasonable progress analysis must consider a meaningful set of sources and controls that impact visibility. If a state's analysis fails to do so, for example, by arbitrarily including costly controls at sources that do not meaningfully impact visibility or failing to include cost-effective controls at sources with significant visibility impacts, then the EPA has the authority to disapprove the state's unreasoned analysis and promulgate a FIP.

2. Interstate Consultation

In the *Texas* v. *EPA* stay decision, the Fifth Circuit explained that neither the RHR nor the CAA explicitly require upwind states to provide downwind states with source-specific emission control analyses.[47] Consistent with Congress's focus on interstate cooperation under section 169B, the 1999 RHR required states to consult with one another when developing their RPGs and long-term strategies, develop "coordinated emission management strategies" and document any disagreements regarding their goals and strategies.[48] We agree with the Fifth Circuit that the 1999 RHR did not require upwind states to provide downwind states with a specific type of four-factor analysis during the consultation process; the four-factor analysis that the upwind state did could be based on a source-specific or aggregate approach, for example. The consultation provisions were intended to foster and facilitate regional solutions to what is, by definition, a regional problem, not to mandate specific outcomes. The final revisions largely preserve the existing consultation provisions and similarly do not require upwind states to provide downwind states with any specific type of analysis, or vice versa. Nevertheless, to develop coordinated emission management strategies, each state must make decisions with respect to its own long-term strategy with knowledge of what other states are including in their strategies and why. In other words, states must exchange their four-factor analyses and the associated technical information that was developed in the course of devising their long-term strategies. This information includes modeling, monitoring and emissions data and cost and feasibility studies. To the extent that one state does not provide another other state with these analyses and information, or to the extent that the analyses or information are materially deficient, the latter state should document this fact so that the EPA can assess whether the former state has failed to meaningfully comply with the consultation requirements.

3. Timing of Control Requirements

Lastly, in *Texas* v. *EPA*, the Fifth Circuit's stay decision suggested that it was likely that the EPA had exceeded its statutory authority by imposing emission controls that go into effect after the end of the implementation period.[49] This preliminary assessment is incorrect for several reasons.

First, we note that the decision did not cite to a provision of the CAA to support the proposition that the EPA exceeded its statutory authority. Indeed, the CAA includes no such constraint. Two provisions are of particular relevance. Section 169A(b)(2)(B) requires SIPs to include "a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal." The phrase "ten to fifteen years" is ambiguous. It could mean that the long-term strategy must be updated every 10 to 15 years or that the strategy must be fully implemented within 10 to 15 years. Even under the latter interpretation, courts have held that an agency does not lose authority to regulate when a mandatory deadline

[45] *Id.* at *45–51.

[46] 81 FR 313–14.

[47] *Id.* at *51–53.

[48] 40 CFR 51.308(d)(1)(iv); (d)(3)(i).

[49] *Texas*, 2016 U.S. App. LEXIS 13058 at *53–57.

has passed; rather, the appropriate remedy is an order compelling agency action.[50] We therefore do not interpret this provision as restricting the authority of states or the EPA to include control measures in a SIP or FIP that cannot be fully implemented by the end of a regulatory implementation period or as relaxing their obligation to include such controls if they are otherwise necessary to make reasonable progress. To do so would create an inappropriate incentive for states to delay their SIP submittals in an effort to "run out the clock" on the EPA's authority to issue a corrective FIP.

Also, section 169A(g)(1) requires states to consider "the time necessary for compliance" when determining what control measures are necessary to make reasonable progress. This phrase is also ambiguous. One possible interpretation of the phrase is that states need only consider control measures that can be implemented within a certain period of time. This interpretation is unreasonable, however, because it would allow states to forever forgo cost-effective but time-intensive emission reduction measures that could otherwise improve visibility, which would thwart Congress's national goal. A more reasonable interpretation of the phrase is that states must consider the feasibility of the "schedules of compliance" referred to in section 169A(b)(2) when determining when the emission reductions necessary to make reasonable progress must be implemented. The structure of section 169A also lends support to this interpretation. When determining reasonable progress, states must consider three of the same factors that they consider when determining BART. The only unique reasonable progress factor relates to timing: "the time necessary for compliance." Congress had no reason to include a timing factor for BART, however, because section 169A(b)(2)(A) already includes a requirement that BART must be installed and operated "as expeditiously as practicable," which section 169A(g)(4) defines as no later than 5 years from the date of plan approval. With no similar requirement in section 169(b)(2), it is reasonable to interpret that Congress intended "the time necessary for compliance" factor to serve an analogous function to the "expeditiously as practicable" language, albeit with more discretion left to the states.

[50] *Oklahoma* v. *EPA*, 723 F.3d 1201, 1223–24 (10th Cir. 2013) (citing *Brock* v. *Pierce Cty.*, 476 U.S. 253, 260 (1986).

Second, we note that the Fifth Circuit appeared to misunderstand a provision in the 1999 RHR that it used to support its decision. Specifically, the stay decision stated:

> The Regional Haze Rule requires states to "consider . . . the emission reduction measures needed to achieve [the reasonable progress goal] *for the period covered by the implementation plan,*" and to impose "enforceable emissions limitations, compliance schedules, and other measures, as necessary to achieve the reasonable progress goals." 40 CFR 51.308(d)(1)(i)(B), (d)(3) (emphasis added). The Regional Haze Rule provides that each implementation plan will cover a ten-year period; before the close of each ten-year period, the state must submit a comprehensive revision to cover the next ten-year period. 40 CFR 51.308(b), (f) (first implementation plan due December 2007; first "comprehensive periodic revision" due July 31, 2018, and every ten years thereafter). The emissions controls included in a state implementation plan, therefore, must be those designed to achieve the reasonable progress goal for the period covered by the plan. 40 CFR 51.308(d)(1)(i)(B).[51]

However, 40 CFR 51.308(d)(1)(i)(B) does not actually say that states must consider the emission reductions measures needed to achieve "the reasonable progress goal" for the period covered by the implementation plan. Instead, it requires states to "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." [52] In essence, the provision requires a state to make a comparison between its chosen control set and the specific set of control measures that would be needed to achieve the URP by the end of the implementation period. The provision does not dictate the date by which all of the measures in a state's chosen control set must be implemented.

Third, the stay decision did not discuss the EPA's 2007 reasonable progress guidance, which specifically recognized that the time needed for full implementation of a control measure might extend beyond the end of the implementation period. In such situations, the EPA stated that it may be appropriate for states to use the time necessary for compliance factor "to adjust the [RPG] to reflect the degree of improvement in visibility achievable within the period of the first SIP," [53] which would prevent the state from falling short of its goal. The 2007 guidance did not state that the CAA or the 1999 RHR prohibited states from requiring the control measure.

[51] *Texas*, 2016 U.S. APP. LEXIS 13058 at *53–54.

[52] 40 CFR 51.308(d)(1)(i)(B) (emphases added).

[53] Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, revised, at 5–2 (June 1, 2007).

In the proposal for this rulemaking, which was promulgated before the Fifth Circuit's stay decision, we did not address this issue. At that time, we thought that it was clear that neither states nor the EPA lose the authority to require emissions limits or other measures that are necessary to make reasonable progress if those limits or measures cannot be fully implemented by the end of the implementation period and incorporated into the RPGs. For the reasons provided previously, we continue to believe that this is the case.

Therefore, we are modifying 40 CFR 51.308(f)(2)(i) to explicitly provide that, when considering the time necessary for compliance, a state may not reject a control measure because it cannot be installed and become operational until after the end of the implementation period. As discussed previously, the state should instead consider that fact in determining the appropriate compliance deadline for the measure. Of course, any emission reductions that will not occur until after the end of the implementation period should not be reflected in the RPGs.

In addition, to avoid any future confusion with respect to this issue, we are making a small modification to 40 CFR 51.308(f)(3)(i) in these final revisions. This final provision now reads:

> A State in which a mandatory Class I Federal area is located must establish reasonable progress goals (expressed in deciviews) that reflect the visibility conditions that are projected to be achieved by the end of the applicable implementation period as a result of *those* enforceable emissions limitations, compliance schedules, and other measures required under paragraph (f)(2) *that can be fully implemented by the end of the applicable implementation period,* as well as the implementation of other requirements of the CAA.

This modification makes it clear that a state's long-term strategy can include emission limits and measures beyond those reflected in the state's RPGs. The RPGs are unenforceable tracking metrics. They are not meant to dictate or limit the content of a state's long-term strategy for making reasonable progress towards Congress's national goal. This change is also consistent with our actions promulgating FIPs near the end of the first implementation period, which by necessity included reasonable progress emission limits with compliance deadlines after 2018.[54]

[54] 81 FR 296 (January 5, 2016) (Texas); 81 FR 68319 (October 4, 2016) (Arkansas).

B. Cooperative Federalism

Some commenters invoked principles of cooperative federalism to argue that the proposed revisions were too prescriptive and thus undermined the discretion afforded to states by the CAA. As support for this argument, the commenters pointed almost exclusively to the Fifth Circuit's stay decision in *Texas* v. *EPA,* discussed previously, in which a motions panel of the Fifth Circuit described EPA's role in reviewing SIPs as "ministerial." [55] Commenters also suggest the proposed revisions are inconsistent with the principles announced in *American Corn Growers Association* v. *EPA,* 291 F.3d 1 (D.C. Cir. 2002) ("Corn Growers").

As a preliminary matter, the commenters' reliance on *Texas* v. *EPA* is misplaced. The view expressed in the stay decision, that the EPA has only a "ministerial function" in reviewing SIPs, is at odds with the great majority of courts that have considered this issue in the context of the regional haze program. Under the principles of cooperative federalism, the CAA vests state air agencies with substantial discretion as to how to achieve Congress's air-quality goals and standards, but states exercise this authority with federal oversight. As the Tenth Circuit explained in *Oklahoma* v. *EPA,* "the EPA reviews all SIPs to ensure that they comply with the [CAA]," and "[t]he EPA may not approve any plan that 'would interfere with any applicable requirement' of [the Act]." [56] Relying on *Oklahoma,* the Eighth Circuit in *North Dakota* v. *EPA* held that the "EPA is left with more than the ministerial task of routinely approving SIP submissions," [57] and that the "EPA's review of a SIP extends not only to whether the state considered the necessary factors in its determination, but also to whether the determination is one that is reasonably moored to the CAA's provisions." [58] Similarly, in *Arizona* v. *EPA,* the Ninth Circuit held that the "EPA is not limited to the 'ministerial' role of verifying whether a determination was made; it must 'review the substantive content of the . . . determination,'" [59] and that the "EPA has a *substantive* role in deciding whether state SIPs are compliant with the Act and its implementing regulations." [60] In accord with these principles, the Third Circuit recently remanded the EPA's approval of a state's regional haze SIP where the EPA deferred too readily to state conclusions without providing a sufficient explanation for overlooking problems in the SIP.[61] Thus, the view expressed by the Fifth Circuit motions panel in the stay decision is an outlier.

More importantly, however, the situation in *Texas* v. *EPA* is inapposite to the situation here. In *Texas,* we partially disapproved an individual state's implementation plan and promulgated a FIP to fill the gap. In this rulemaking, we are not expressing views on any state's implementation plan, so it is simply premature to suggest that we are affording insufficient deference to state choices. Rather, we are promulgating revisions to the existing visibility regulations that will guide future SIP development. In 1977, Congress expressly required the EPA to promulgate regulations "to assure (A) reasonable progress toward meeting the national goal . . . and (B) compliance with the requirements of [section 169A]." [62] Congress also required the EPA's regulations to "provide guidelines to the States" [63] regarding "methods for identifying, characterizing, determining, quantifying, and measuring visibility impairment;" [64] "modeling techniques for determining the extent to which manmade air pollution may reasonably be anticipated to cause or contribute to such impairment;" [65] and "methods for preventing and remedying such manmade air pollution and resulting visibility impairment." [66] In 1990, Congress reiterated this statutory obligation, tasking the EPA again with carrying out its "regulatory responsibilities under [section 169A], including criteria for measuring 'reasonable progress' toward the national goal." [67]

These final revisions to the 1999 RHR and 1980 reasonably attributable visibility impairment regulations are fully consistent with this extensive grant of rulemaking authority. The revisions will ensure that the steady environmental progress achieved during the first implementation period continues, while streamlining several administrative aspects of the program to reduce burdens on states. The revisions require states to consider certain factors and provide certain information as they develop their regional haze SIPs, but they do not mandate specific outcomes. Where applicable, the revisions also provide states with significant flexibility to take state-specific facts and circumstances into account when developing their long-term strategies.[68] Thus, contrary to the commenters' assertions, the final revisions are fully consistent with the CAA's cooperative-federalism framework and the decision in *Corn Growers,* which addressed EPA's authority to require states to consider the visibility benefits of BART controls in a specific fashion, a set of facts not present in this rulemaking, is not on point.

C. Clarifications To Reflect the EPA's Long-Standing Interpretation of the Relationship Between Long-Term Strategies and Reasonable Progress Goals

1. Summary of Proposal

Under the 1999 RHR, states were required to revise their regional haze SIPs every 10 years by evaluating and reassessing all of the elements required under 40 CFR 51.308(d).[69] Over the course of the first implementation period, however, we realized that some of the requirements in 40 CFR 51.308(d) were creating confusion regarding the relationship between RPGs and the long-term strategy and the respective obligations of upwind and downwind states. We discussed this issue at length in our December 14, 2014, proposed action on the Texas and Oklahoma regional haze SIPs,[70] and incorporated that discussion by reference in the proposal for this rulemaking.[71]

For example, under 40 CFR 51.308(d), states were required to (1) develop RPGs, (2) calculate baseline and natural visibility conditions, (3) establish long-term strategies and (4) adopt monitoring strategies and other measures to track future progress and ensure compliance. The sequencing of these requirements in the rule text was problematic because it did not accord with the way the planning process works in practice. For example, states must calculate baseline and natural visibility conditions before they can compare their RPGs to the URP. Similarly, states must evaluate the control measures that are necessary to

[55] *Texas,* 206 U.S. App. LEXIS 13058 at *5.

[56] *Oklahoma* v. *EPA,* 723 F.3d 1201, 1204 (10th Cir. 2013).

[57] *North Dakota* v. *EPA,* 730 F.3d 750, 761 (8th Cir. 2013).

[58] *Id.* at 766.

[59] *Ariz. el rel. Darwin* v. *EPA,* 815 F.3d 519, 531 (9th Cir. 2016).

[60] *Id.* at 532 (emphasis in original).

[61] *Nat'l Parks Conservation Ass'n* v. *EPA,* 803 F.3d 151, 167 (3d Cir. 2015).

[62] CAA section 169A(b).

[63] CAA section 169A(b)(1).

[64] CAA section 169A(a)(3)(A).

[65] CAA section 169A(a)(3)(B).

[66] CAA section 169A(a)(3)(C).

[67] CAA section 169B(e)(1).

[68] *See, e.g.,* 81 FR at 26954/1 (explaining that states have the flexibility to justify and use values for natural visibility conditions that include anthropogenic international emissions).

[69] 40 CFR 51.308(f).

[70] 79 FR 74823–30 (December 14, 2014).

[71] 81 FR 26949, 26952.

make reasonable progress using the four factors and develop their long-term strategies before they can predict future emission reductions and conduct the regional-scale modeling used to establish RPGs.

Similarly, problematic was the confusing way in which 40 CFR 51.308(d) addressed the obligations of upwind and downwind states. Under 40 CFR 51.308(d)(1)(i)(A), downwind states were explicitly required to consider the four factors when developing their RPGs. Upwind states, on the other hand, were implicitly required to consider the four factors only when developing their long-term strategies. Section 40 CFR 51.308(d)(3)(iii) required states to "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.*" As we explained in our December 14, 2014, proposed action on the Texas and Oklahoma regional haze SIPs, the CAA requires states to determine reasonable progress by considering the four factors, so the determination of the proper apportionment of emission reductions necessarily required a state to evaluate the four factors in reaching its decision. This structure made little sense because both upwind and downwind states need to conduct their four-factor analyses, determine the proper apportionment of emission reduction obligations, and develop their long-term strategies before the downwind state will have sufficient information to establish RPGs.

Recognizing that the sequence and structure of the existing regulations was confusing, we proposed to amend 40 CFR 51.308(f), which governs periodic SIP revisions for future implementation periods, to codify our long-standing interpretation of the way in which the existing regulations were intended to operate. Specifically, we proposed to eliminate the cross-reference in 40 CFR 51.308(f) to 40 CFR 51.308(d) and to adopt new regulatory language that tracked the actual planning sequence, while clarifying the obligations of upwind and downwind states.[72] Under the proposal, states would (1) calculate baseline, current and natural visibility conditions, progress to date and the URP; (2) develop a long-term strategy for addressing regional haze by evaluating the four factors to determine what emission limits and other measures are necessary to make reasonable progress; (3) conduct regional-scale modeling of projected future emissions under the long-term strategies to establish RPGs and then compare those goals to the URP line;[73] and (4) adopt a monitoring strategy and other measures to track future progress and ensure compliance.

2. Comments and Responses

In response to our proposed structural revisions to 40 CFR 51.308(f), we received a number of significant comments. Some commenters contended that the proposed revisions were contrary to the structure and plain language of the CAA. They explained the position that states must first make a "determination" as to what constitutes "reasonable progress" by analyzing the four statutory factors on a source-category basis. Then, only after "reasonable progress" is quantified as a benchmark or goal do states have to consider what emission limits, schedules of compliance and other measures at individual sources are actually necessary to make reasonable progress. The commenters further explained that this reading of the statute was supported by the current regulations, the preamble to the 1999 RHR and the EPA's prior guidance. Based on their reading, these commenters concluded that proposed 40 CFR 51.308(f)(2), which would govern long-term strategies, and proposed 40 CFR 51.308(f)(3), which would govern RPGs, were contrary to the CAA because states must first determine reasonable progress independently from the development of the long-term strategy, not the other way around.

We disagree. Our proposed structural revisions to 40 CFR 51.308(f) are consistent with the CAA. Section 169A(b)(2) requires states to submit SIP revisions that contain "emission limits, schedules of compliance and other measures as necessary to make reasonable progress toward meeting the national goal" and "a long-term (ten to fifteen years) strategy for making reasonable progress." Section 169A(g)(1) states that, in determining reasonable progress, states must consider four factors: "the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements." Under 40 CFR 51.308(f)(2), both as proposed and as we are finalizing it, states must similarly submit a "long-term strategy" that includes "enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress," and determine those limits, schedules, and measures by considering the four statutory factors.

We disagree that the CAA requires EPA's regulations to allow states to calculate the visibility improvement that represents "reasonable progress" prior to or independently from the analysis of control measures. The commenters do not explain how states could consider costs, time schedules, energy and environmental impacts or the remaining useful lives of sources other than by assessing the potential impacts of control measures on those sources. Indeed, use of the terms "compliance" and "subject to such requirements" in section 169A(g)(1) strongly indicates that Congress intended the relevant determination to be the requirements with which sources would have to comply in order to satisfy the CAA's reasonable progress mandate. Moreover, the reasonable progress factors share obvious similarities with the BART factors, which are indisputably used to determine appropriate control measures for sources.[74]

Finally, we note that RPGs are not a concept that is included in the CAA itself. Rather, they are a regulatory construct that we developed to satisfy a separate statutory mandate in section 169B(e)(1), which required our regulations to include "criteria for measuring 'reasonable progress' toward the national goal."[75] Under 40 CFR 51.308(f)(3)(ii), RPGs continue to serve this important analytical function. They measure the progress that is projected to be achieved by the control measures states have determined are necessary to make reasonable progress based on a four-factor analysis. Consistent with the 1999 RHR, the RPGs are unenforceable,[76] but they create a benchmark that allows for analytical

[72] 81 FR 26952.

[73] This step applies only to downwind states that have mandatory Class I Federal areas.

[74] *Compare* CAA section 169A(g)(1) *with* CAA section 169A(g)(2).

[75] *See* 64 FR 35731 ("The final rule calls for States to establish 'reasonable progress goals,' expressed in deciviews, for each Class I area for the purpose of improving visibility on the haziest days and not allowing degradation on the clearest days over the period of each implementation plan or revision. The EPA believes that requiring States to establish such goals is consistent with section 169A of the CAA, which gives EPA broad authority to establish regulations to 'ensure reasonable progress,' and with section 169B of the CAA, which calls for EPA to establish 'criteria for measuring reasonable progress' toward the national goal.").

[76] *Compare* 40 CFR 51.308(f)(3)(iii) *with* 40 CFR 51.308(d)(v).

comparisons to the URP [77] and mid-implementation-period course corrections if necessary.[78]

Other commenters stated that the proposed revisions to 40 CFR 51.308(f) were significant and unexplained departures from the EPA's prevailing interpretation of the reasonable progress factors and long-term strategy during the first implementation period. Several commenters contended that the revisions constituted an arbitrary and capricious change of position under the Supreme Court's recent decision in *Encino Motorcars, LLC* v. *Navarro,* 136 S. Ct. 2117 (2016). For example, one commenter contended that it was paradoxical for the long-term strategy to include the measures necessary to achieve the RPGs, while the RPGs were the predicted visibility outcome of implementing the emission controls in the long-term strategy. The commenter explained that this was inconsistent with the 1999 RHR, which made no mention of RPGs being set based on the predicted visibility improvement resulting from emission controls.

Another commenter contended that the EPA's proposed approach puts the cart before the horse because it does not allow states and RPOs to set visibility targets and then select the appropriate emission reduction measures to reach those targets. This would result in inefficiencies, according to the commenter, because states may have to secure additional emission reductions if their chosen strategies result in RPGs that fall short of the URP. The commenter explained that states would need more guidance regarding what types of sources and source categories to consider when seeking emission reductions. The commenter requested that the EPA develop a more logical process whereby states and RPOs would first develop visibility goals, allocate those goals among the states and then give states latitude to identify and assure emission reductions to achieve those visibility goals by using the four factors.

We disagree with these comments. They reflect a misunderstanding of the regional haze planning process generally followed by states. During the first implementation period, the RPOs conducted the regional-scale modeling used to establish their member states' RPGs. To conduct this modeling, the RPOs relied on 2018 emissions projections that reflected future application of reasonable controls for sources, including existing federal and state measures (the Clean Air Interstate Rule (CAIR), mobile source measures, etc.), anticipated BART controls and anticipated reasonable progress measures. The proposed and final revisions to 40 CFR 51.308(f) are fully consistent with this process. Under 40 CFR 51.308(f)(ii), states must develop their long-term strategies by identifying reasonable progress measures using the four factors and engaging in interstate consultation. Once their strategies have been developed, states with Class I areas must establish RPGs that reflect existing federal and state measures (the CSAPR, the Mercury and Air Toxics Standards, BART, mobile source measures, etc.) and the reasonable progress measures in the long-term strategy.

In contrast, the commenters have proposed a process in which states would either model their RPGs without fully developed emissions information or select their goals arbitrarily without any modeling at all. We rejected a similar approach in the 1999 RHR. In the 1997 proposal for the RHR, we proposed to establish presumptive reasonable progress targets of 1.0 deciview of improvement for the most impaired days and no degradation for the least impaired days and to require states to develop emission reduction strategies to achieve the reasonable progress targets.[79] In the 1999 RHR, we revised the proposal to eliminate the presumptive targets and instead required states "to determine the rate of progress for remedying existing impairment that is reasonable, taking into consideration the statutory factors." [80] Importantly, we explained that, "[i]n considering whether reasonable progress will continue to be maintained, States will need to consider during each new SIP revision cycle whether additional control measures for improving visibility may be needed to make reasonable progress based on the statutory factors." [81] Thus, the 1999 RHR was clear that states must determine what control measures are necessary to make reasonable progress by considering the four factors and then use this information to determine the rate of progress that is reasonable for each mandatory Class I Federal area.

In 2007, we provided guidance to the states on setting RPGs. There, we explained that the guidance's discussion of the four factors was "largely aimed at helping States apply these factors *in considering measures for point sources,*" [82] but that the factors could potentially be applied to sources other than point sources as well. We also described the intricate relationship between RPGs, BART, and the long-term strategy:

> The RPGs, the long-term strategy, and BART (or alternative measures in lieu of BART) are the three main elements of the regional haze SIPs that States are required to submit by December 17, 2007. The long-term strategy and BART emissions limitations or other alternative measures, including cap-and-trade programs or other economic incentive approaches, are inherently related to the RPG. The long-term strategy is the compilation of "enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the [RPGs]," and is the means through which the State ensures that its RPG will be met. BART emissions limits (or alternative measures in lieu of BART, such as the Clean Air Interstate Rule (CAIR)) are one set of measures that must be included in the SIP to ensure that an area makes reasonable progress toward the national goal, and the visibility improvement resulting from BART (or a BART alternative) is included in the development of the RPG.[83]

We note that the discussion previously refers to the long-term strategy as including the measures "necessary to achieve the RPG," and that several provisions in the 1999 RHR were worded similarly.[84] We believe this type of language may have caused confusion among some of the commenters. This language does not mean that we intended states to develop their RPGs first and later adopt measures in the long-term strategy to achieve those RPGs. Rather, it merely acknowledges the fact that, because we intended states to develop their RPGs by modeling, among other things, the measures in the long-term strategy, the measures in the strategy are necessary to achieve the RPGs. For example, BART is one of the measures in the long-term strategy, and the discussion previously clearly states that "the visibility improvement resulting from BART (or a BART alternative) *is included in the development of the RPG.*" We proposed the structural revisions to 40 CFR 51.308(f) in part to eliminate this cart-before-the-horse ambiguity.

Later, the 2007 guidance clearly describes the goal-setting process as starting with the evaluation of control measures. First, we recommended that states "[i]dentify the key pollutants and sources and/or source categories that are contributing to visibility impairment at

[77] *Compare* 40 CFR 51.308(f)(3)(ii) *with* 40 CFR 51.308(d)(1)(ii).

[78] 40 CFR 51.308(g)(7), (h).

[79] 62 FR 41146–47 (July 31, 1997).

[80] 64 FR 35731 (July 1, 1999).

[81] *Id.* at 35733.

[82] Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, at 1–3 (2007) (emphasis added).

[83] *Id.* at 1–4.

[84] *See, e.g.,* 40 CFR 51.308(d)(3), (d)(3)(ii), (d)(3)(v)(C).

each Class I area." [85] Second, we recommended that states "[i]dentify the control measures and associated emission reductions that are expected to result from compliance with existing rules *and* other available measures for the sources and source categories that contribute significantly to visibility impairment." [86] Third, and most importantly, we recommended that states "[d]etermine what additional control measures would be reasonable based on the statutory factors and other relevant factors for the sources and/or source categories you have identified." [87] Finally, we recommended that states "[e]stimate through the use of air quality models the improvement in visibility that would result from implementation of the control measures you have found to be reasonable and compare this to the uniform rate of progress." [88] In sum, "[t]he improvement in visibility resulting from implementation of the measures you have found to be reasonable . . . is the amount of progress that represents your RPG." [89] This is the process that states used during the first implementation period, *see* the RTC at 2.2.1.2.6 for examples, and it is the same process that the states must follow under the final revisions to 40 CFR 51.308(f).

While the guidance went on to note that states could attempt to "back out" the measures necessary to achieve the URP by modeling first and then considering the four factors to select appropriate measures,[90] few if any states chose this approach, likely because it was a more complicated way to achieve the same result as the recommended approach. Under either approach, states still had to use the four factors to justify whether the control measures necessary to achieve the URP were reasonable, whether achieving the URP was unreasonable and some of lesser set of measures was reasonable, or whether additional measures were reasonable. Moreover, the "back out" approach specified a concrete visibility target as its basis: The visibility that would be achieved by the URP at the end of the implementation period. The approach would be arbitrary and unworkable as a step in making the justifications just mentioned if the visibility target were chosen at random, as some commenters have requested. In sum, the EPA's proposed structural revisions are completely consistent with the 1999 RHR, our 2007 guidance and the planning process actually used by states during the first implementation period. For this reason, the Supreme Court's decision in *Encino Motorcars* is inapplicable.

Another commenter contended that the EPA's proposed revisions failed to include a necessary step where states evaluate the control measures identified as necessary to make reasonable progress in light of the RPGs themselves. This commenter requested a mechanism whereby a state could determine that some of the initially evaluated control measures were unnecessary in light of the RPGs themselves. In particular, this commenter suggested that a state should be able to reject "costly" control measures if (1) the RPG for the most impaired days is on or below the URP line or (2) the RPGs are not "meaningfully" different than current visibility conditions.

We disagree that the states should be able to reevaluate whether a control measure is necessary to make reasonable progress based on the RPGs. The CAA requires states to determine what emission limitations, compliance schedules and other measures are necessary to make reasonable progress by considering the four factors. The CAA does not provide that states may then reject some control measures already determined to be reasonable if, in the aggregate, the controls are projected to result in too much or too little progress. Rather, the rate of progress that will be achieved by the emission reductions resulting from all reasonable control measures is, by definition, a reasonable rate of progress.

In regards to the commenter's first suggestion, if a state has reasonably selected a set of sources for analysis and has reasonably considered the four factors in determining what additional control measures are necessary to make reasonable progress, then the state's analytical obligations are complete if the resulting RPG for the most impaired days is below the URP line. The URP is not a safe harbor, however, and states may not subsequently reject control measures that they have already determined are reasonable. If a state's RPG for the most impaired days is above the URP line, then the state has an additional analytical obligation to ensure that no reasonable controls were left off the table.

The commenter's second suggestion, that states should be able to reject "costly" control measures if the RPG for the most impaired days is not "meaningfully" different than current visibility conditions, is counterintuitive and at odds with the purpose of the visibility program. In this situation, the state should take a second look to see whether more effective controls or additional measures are available and reasonable. Whether the state takes this second look or not, it may not abandon the controls it has already determined are reasonable based on the four factors. Regional haze is visibility impairment that is caused by the emission of air pollutants from numerous sources located over a wide geographic area. At any given Class I area, hundreds or even thousands of individual sources may contribute to regional haze. Thus, it would not be appropriate for a state to reject a control measure (or measures) because its effect on the RPG is subjectively assessed as not "meaningful." Also, for Class I areas where visibility conditions are considerably worse than natural conditions because of continuing anthropogenic impairment from numerous sources, the logarithmic nature of the deciview index makes the effect of a control measure on the value of the RPG less than its effect would be if visibility conditions at the Class I area were better. Thus, if a state could reject a control measure based on its individual effect on the RPG, the state would be more likely to reject those measures that are necessary to make reasonable progress at the dirtiest Class I areas, which would thwart Congress' national goal.

One commenter contended that the proposed revisions would lead to disagreements among states because states might set different RPGs instead of working jointly toward the downwind state's goals. We disagree. Only downwind states set RPGs for their mandatory Class I Federal areas, so there is no situation in which there would be different goals for the same area.

Another commenter contended that the proposed revisions would force states to require controls even where visibility at a Class I area is already equivalent to or better than the visibility that represents the URP at the end of the implementation period. We agree that some states may end up establishing RPGs that exceed the URP, but as we explained previously in this document, the URP was never intended to be a safe harbor. In the 1999 RHR, we explained that "[i]f the State determines that the amount of progress identified through the analysis is reasonable based upon the statutory factors, the State should identify this amount of progress as its reasonable progress goal for the first long-term strategy, unless it determines that additional progress beyond this

[85] *Id.* at 203.
[86] *Id.* (emphasis in the original).
[87] *Id.*
[88] *Id.*
[89] *Id.* at 2–4 (emphasis added).
[90] *Id.* at 2–3 to 2–4.

amount is also reasonable. If the State determines that additional progress is reasonable based on the statutory factors, the State should adopt that amount of progress as its goal for the first long-term strategy." [91] This approach is consistent with and advances the ultimate goal of section 169A: Remedying existing and preventing future visibility impairment. Congress required the EPA to promulgate regulations requiring reasonable progress toward that goal, and it would be antithetical to allow states to avoid implementing reasonable measures until and unless that goal is achieved.

Other commenters were supportive of the proposed structural revisions intended to clarify the relationship between RPGs and long-term strategies. They explained that by reorienting these provisions to reflect the EPA's long-standing interpretation, the EPA was providing a clearer blueprint for states to follow in future implementation periods. These commenters also provided specific suggestions for how the EPA could further revise the proposed regulatory text for 40 CFR 51.308(f). Among other things, these commenters requested that the EPA include language in the regulations that would make it clear that a state's long-term strategy can include emission limits and other measures that cannot be installed by the end of an implementation period. As discussed earlier in Section IV.A of this document, we are modifying the language in 40 CFR 51.308(f)(2(i) and 51.308(f)(3)(i) to make this point clear. We have reviewed the other suggestions made by these commenters and do not believe that they are necessary, as discussed more fully in the RTC document available in the docket for this rulemaking.

We also received several comments regarding the obligations of upwind and downwind states. Some commenters supported the revisions that were intended to clarify that all states must conduct a four-factor analysis to determine what control measures are necessary to make reasonable progress at each mandatory Class I Federal area affected by emissions from the state. They explained that any other interpretation of the CAA's requirements would allow an upwind state to continue impairing downwind visibility without consequence, regardless of whether there were reasonable, cost-effective measures that would improve downwind visibility. Other commenters argued that upwind states should not have the same obligations as downwind states. One commenter asserted that, under the proposal, all states would be subject to the RHR for the very first time, regardless of whether they have a mandatory Class I Federal area or not. Another commenter contended that requiring upwind states to conduct four-factor analyses for downwind Class I areas was a new requirement that was not part of the 1999 RHR. This commenter acknowledged that upwind states must address downwind Class I areas where their emissions "may reasonably be anticipated to cause or contribute to any impairment of visibility" at the downwind area, but suggested that the proposed revisions use the language "may affect" instead. This commenter stated that the EPA's proposal did not define or quantify what the term "may affect" means.

> Section 169A(b)(2) states that the EPA's regulations must: Require each applicable implementation plan for a State in which any [mandatory Class I Federal] area . . . is located (or a for a State the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area) to contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal.

Section 169A(g)(1) thus requires states to determine the measures necessary to make reasonable progress by considering the four factors, while section 169A(a)(1) defines Congress's national goal as preventing future and remedying existing anthropogenic visibility impairment in all Class I areas. Thus, Congress was clear that both downwind states (*i.e.*, "a State in which any [mandatory Class I Federal] area . . . is located) and upwind states (*i.e.*, "a State the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area") must revise their SIPs to include measures that will make reasonable progress at all affected Class I areas. Congress was also clear that states must determine the necessary measures and rate of progress that are reasonable by considering the four factors. Our proposed revisions to 40 CFR 51.308(f)(2) are in accord with this congressional mandate.

The commenter who suggested that our proposed revisions are expanding the scope of the RHR to all states for the first time is incorrect. The 1999 RHR applies to all states,[92] and all states submitted regional haze SIPs (or asked the EPA to promulgate a regional haze FIP on its behalf) during the first implementation period. As discussed later in this preamble, we are expanding the scope of the 1980 reasonably attributable visibility impairment regulations to all states for the first time, but the new reasonably attributable visibility impairment provisions only require state action upon receipt of a certification by a FLM. Historically, there have been very few FLM certifications requesting states to assess controls for a particular source or small group of sources.

Finally, we note that the language "may affect" in 40 CFR 51.308(f)(2) was adapted from the 1999 RHR, which used the same term.[93] On July 8, 2016, we released draft guidance that discusses how states can determine which Class I areas they "may affect" and therefore must consider when selecting sources for inclusion in a four-factor analysis.[94] The draft guidance discusses various approaches that states used during the first implementation period, provides states with the flexibility to choose from among these approaches in the second implementation period, and recommends that states adopt "a conservative . . . approach to determining whether their sources may affect visibility at out-of-state Class I areas." [95] We plan to finalize the draft guidance in the near future.

We also received comments on the proposed interstate consultation provisions in 40 CFR 51.308(f). A few commenters inquired whether proposed 40 CFR 51.308(f)(2)(iii) [96] would affect a substantive change from the existing consultation provisions in 40 CFR 51.308(d). One commenter stated that proposed 40 CFR 51.308(f)(2)(ii) would apparently require states to consider how other states calculated the URP, adopted emission reduction measures for sources and adopted any additional measures that may be needed to address state contributions. This commenter also argued that proposed 40 CFR 51.308(f)(2)(iii) would incentivize states not to agree with other states on coordinated emission management strategies because an agreement would create an enforceable obligation against the state. Another commenter stated that the EPA would need to coordinate and

[91] 64 FR 35732.

[92] 40 CFR 51.300(b)(1)(i).

[93] *See* 40 CFR 51.308(d)(3).

[94] 81 FR 44608 (July 8, 2016).

[95] Draft Guidance on Progress Tracking Metrics, Long-term Strategies, Reasonable Progress Goals and Other Requirements for Regional Haze State Implementation Plans for the Second Implementation Period, at 57–58 (2016).

[96] As explained later in this document, the final rule includes a consolidation and resulting renumbering of some of the proposed provisions of 40 CFR 51.308(f)(2). This discussion refers specifically to either proposed or final section numbers to avoid confusion.

mediate interstate consultations in order for them to prove successful.

With one exception, we did not intend the proposed interstate consultation provisions to affect a substantive change from the existing provisions in the 1999 RHR. Under the proposed provisions, as under the 1999 RHR, states must consult to develop coordinated emission management strategies, demonstrate that their SIPs contain all agreed-upon emission reduction measures, and document disagreements so that the EPA can properly evaluate whether each state's implementation plan provides for reasonable progress toward the national goal. We also proposed a new requirement, in 40 CFR 51.308(f)(2)(ii), that states must consider the control strategies being adopted by other states when conducting their own four-factor analyses. The purpose of this provision was to ensure that if one state had identified a control measure as being reasonable for a source or group of sources to improve visibility at a Class I area, then other states that affect that Class I area would be required to consider that control measure for their own sources, to the extent that the sources share similar characteristics. However, in reviewing proposed 40 CFR 51.308(f)(2)(ii), we realized that it contains extraneous language that has led to confusion among some of the commenters. We discuss this issue in more depth, and other changes being made to the consultation provisions, in the following section.

In regard to the commenter's concern that the consultation provisions will incentivize states to avoid entering into agreements with each other to avoid enforceable obligations, we disagree. States largely worked cooperatively to develop coordinated emission management strategies during the first implementation period, and we expect that they will do so again. If a state believes that additional controls from sources in another state or states are necessary to make reasonable progress at a Class I area, then the state should document the disagreement to assist the EPA in determining whether the other state's SIP is inadequate. Moreover, even if states were to avoid entering into agreements for the purpose of avoiding enforceable obligations under 40 CFR 51.308(f)(iii), this would not absolve the states of their independent obligation to include in their SIPs enforceable emission limits and other measures that are necessary to make reasonable progress at all affected Class I areas, as determined by considering the four factors. Finally, we do not believe that the EPA needs to coordinate or mediate interstate consultations. During the first implementation period, states consulted one-on-one and through the RPO process without EPA oversight, and we expect this process to work going forward as well.

3. Final Rule

We are finalizing the revisions to 40 CFR 51.308(f) that were intended to clarify the relationship between RPGs and long-term strategies and the obligations of upwind and downwind states largely as proposed. However, we are making several changes to the provisions in 40 CFR 51.308(f)(2) governing long-term strategies to simplify these provisions, enhance clarity and eliminate superfluous regulatory text.

In 40 CFR 51.308(f)(2), we are revising the requirement that states must include in their long-term strategies "the enforceable emissions limitations, compliance schedules, and other measures that are necessary to achieve reasonable progress" to read "make reasonable progress" instead. This change is to maintain consistency with the language in CAA section 169A(b)(2).

In 40 CFR 51.308(f)(2)(i), we are making two minor changes. First, we are revising the beginning of the first sentence to read, "[t]he State must evaluate and determine the emission reduction measures that are necessary to make reasonable progress by considering" the four factors. We believe that this formulation is clearer than the language in the proposal and more consistent with the language of the CAA. Second, we are revising the second sentence, and splitting it into two separate sentences, to make it clear that states must consider anthropogenic sources of visibility impairment when conducting their four-factor analyses, not natural sources, and that anthropogenic sources can include mobile and area sources in addition to major and minor stationary sources. As mentioned earlier, we are also adding a sentence to 40 CFR 51.308(f)(2)(i) regarding the consideration of emission controls that cannot reasonably be installed prior to the end of the implementation period.

We are removing proposed 40 CFR 51.308(f)(2)(ii) in these final revisions, which required states to consider the URP, the emission reduction measures identified under 40 CFR 51.308(f)(2)(i), and measures being adopted by contributing states under 40 CFR 51.308(f)(2)(iii) when developing their long-term strategies. States are already required to consider the URP under 40 CFR 51.308(f)(3)(ii) when establishing their RPGs. Moreover, it is duplicative to require states to consider the emission reduction measures identified under 40 CFR 51.308(f)(2)(i) a second time. As discussed in the following paragraph, we are moving the third requirement in proposed 40 CFR 51.308(f)(2)(ii) to the interstate consultation provisions.

We are changing proposed 40 CFR 51.308(f)(2)(iii), regarding interstate consultations, to be 40 CFR 51.308(f)(2)(ii) and making several changes. First, we are removing the distinction between contributing states and states affected by contributing states because the substance of the two provisions was essentially the same. The final revisions include a single provision requiring each state to consult with the other states that are reasonably anticipated to contribute to visibility impairment in a mandatory Class I Federal area to develop coordinated emission management strategies. Identification of the other states should occur as part of a regional planning process. Second, we are revising the language that required states to obtain either their "share of the emission reductions needed to provide for reasonable progress" or "all measures needed to achieve its apportionment of emission reduction obligations" depending on whether the state was a contributing state or a state affected by contributing states. Most states are both contributing states and states affected by contributing states, so these variations in wording could be viewed as creating two distinct obligations. Now, each state must demonstrate that it has included in its long-term strategy "all measures agreed to during state-to-state consultations or a regional planning process, or measures that will provide equivalent visibility improvement." Third, as discussed previously, we have moved the requirement that states consider the emission reduction measures other states have identified as being necessary to make reasonable progress from proposed 40 CFR 51.308(f)(2)(ii), which accordingly has been eliminated, to the interstate consultation provisions (now numbered as 40 CFR 51.308(f)(2)(ii)) because it is a more logical place for it. We have also revised the wording of this provision to eliminate the ambiguity in the proposed language noted by commenters regarding "additional measures being adopted" by other states. Under this provision, states must consider whether the emission reduction measures other states have identified by other States for their sources as being necessary to make reasonable progress in the mandatory Class I Federal area. This consideration

is appropriate especially when the sources are of a similar type and have similar emissions profiles and visibility impacts.

We are changing proposed 40 CFR 51.308(f)(2)(iv), regarding documentation requirements, to be 40 CFR 51.308(f)(2)(iii) and making a few minor changes. First, we are revising the first sentence to require the states to "document the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the State is relying to determine the emission reduction measures that are necessary to make reasonable progress in each mandatory Class I area it affects." The proposed language referred to "information on the factors listed in (f)(2)(i) and modeling, monitoring, and emissions information," but we believe this language was confusing because it suggested that information on the four factors was something distinct from modeling, monitoring and emissions information. The purpose of this provision is to require states to document all of the information on which they rely to develop their long-term strategies, which will primarily be information used to conduct the four-factor analysis. Therefore, in addition to modeling, monitoring and emissions information, we are making it explicit that states must also submit the cost and engineering information on which they are relying to evaluate the costs of compliance, the time necessary for compliance, the energy and non-air quality impacts of compliance and the remaining useful lives of sources.

We are removing proposed 40 CFR 51.308(f)(2)(v), which required states to identify the anthropogenic sources of visibility impairment analyzed using the four factors and the criteria used to select sources for analysis, because 40 CFR 51.308(f)(2)(i) as finalized already includes these requirements.

Finally, we are changing proposed 40 CFR 51.308(f)(2)(vi) to be 40 CFR 51.308(f)(2)(iv) and making a few changes. We are revising the first sentence of this provision to clarify that the enumerated factors are additional to the factors states must consider in 40 CFR 51.308(f)(2)(i). We are also removing proposed 40 CFR 51.308(f)(2)(vi)(C) and (F) because they are duplicative requirements. These provisions required states to consider the emission limitations and schedules for compliance to achieve the RPG and the enforceability of emission limitations and control measures. Section 40 CFR 51.308(f)(2) already requires states to include enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress in their long-term strategies. Section IV.G of this document discusses revisions we are making to the additional factor regarding basic smoke management practices and smoke management programs.

D. Other Clarifications and Changes to Requirements for Periodic Comprehensive Revisions of Implementation Plans

The following clarifications and changes were also proposed to be included in the revised 40 CFR 51.308(f). A summary of each proposed clarifying change, a synopsis of the final rule, and a discussion of comments received and EPA's responses are given later.

The URP line starts at 2000–2004, for every implementation period.

1. Summary of Proposal

The 1999 RHR's text of 40 CFR 51.308(d)(1)(i)(B) contains a discussion of how states must analyze and determine "the rate of progress needed to attain natural visibility conditions by the year 2064." This rate has commonly been called the "uniform rate of progress" or URP as well as "the glidepath." The 1999 RHR's text of 40 CFR 51.308(f), which indicates that states must evaluate and reassess all elements required by 40 CFR 51.308(d), requires states to evaluate and reassess the URP in the second and subsequent implementation periods. We explained in the proposal that 40 CFR 51.308(d) is not perfectly clear as to whether the URP line for the second or later implementation periods must always start in the baseline period of 2000–2004, or whether the state must (or may) recalculate the starting point of the URP line based on data from the most recent 5-year period during each successive regional haze SIP revision.[97] We also explained that although the regulations make clear that the endpoint of the URP line should be set based on attainment of the natural visibility condition for the 20 percent most impaired days in 2064, the 1999 RHR does not specify an exact date in 2064 for this element.

To ensure consistent understanding of how the URP analysis must be done, the EPA proposed rule revisions in 40 CFR 51.308(f)(1)(i) and (vi) that would make it explicit that in every implementation period, the URP line for each Class I area is to be drawn starting on December 31, 2004, at the value of the 2000–2004 baseline visibility conditions for the 20 percent most impaired days, and ending at the value of natural visibility conditions on December 31, 2064. Specifying that the 5-year average baseline visibility conditions are associated with the date of December 31, 2004, and that natural visibility conditions are associated with the date of December 31, 2064, also clarifies that the period of time between the baseline period and natural visibility conditions, which is needed for determining the URP (deciviews/year) is 60 years.

Along with the clarification that the baseline period remains 2000–2004 for subsequent implementation periods, the EPA also proposed clarifications in 40 CFR 51.308(f)(1)(i) regarding how states treat Class I areas without available monitoring data or Class I areas with incomplete monitoring data, as follows: If Class I areas do not have monitoring data for the baseline period, data from representative sites should be used; if baseline monitoring data are incomplete, states should use the 5 complete years closest to the baseline period. We proposed to add this provision to remove any uncertainty about how an issue of data incompleteness should be addressed in a SIP.

Finally, we proposed language in 40 CFR 51.308(f)(3)(i) and an accompanying definition of "end of the applicable implementation period" in 40 CFR 51.301 to make clear that RPGs are to address the period extending to the end of the year of the due date of the next periodic comprehensive SIP revision.

2. Comments and Responses

Some commenters were supportive of EPA's proposal to have the URP line start at 2000–2004 for every implementation period, although some asked for the option of recalculating the URP for the start of each implementation period based on how much further progress is needed to reach natural conditions given the progress already achieved. Other commenters did not agree with EPA's proposal and instead supported a revision to the regulations that would require states to reset the URP at current visibility conditions during each periodic review, provided those visibility conditions are better than during the baseline. Taking into account past improvements in visibility that were in excess of the URP in this way would result in a lower-lying URP line for successive planning periods. This could change the comparison of the RPG to the URP line, and trigger the

[97] The preamble to the 1999 RHR provides an example explaining how a state would determine the 2028 point on the URP line. 64 FR at 35746, n. 113. In this example, the URP line for the second implementation period starts at 2000–2004.

requirement of 40 CFR 51.308(f)(3)(ii) to show that there are no additional measures that would be reasonable to include in the long-term strategy, when it would not be triggered if the start of the URP line had been kept at the 2000–2004 period.

As explained in the 1999 RHR, the consideration of the improvement in visibility represented by the URP and the measures necessary to attain that level of improvement is an analytical requirement. In the 1999 RHR, EPA adopted this required analysis in lieu of establishing presumptive reasonable progress targets, in part to provide equity between the goals set for the Class I areas in the more impaired eastern portion of the country as compared to the areas in the western portion. The URP analysis also helps to provide transparency to the overall regional haze SIP planning process, in part by requiring states to compare their RPGs to the rate of progress represented by the URP at each Class I areas. Neither of these goals would be served by allowing states to adopt differing approaches to the calculation of the URP.

We have considered the comments suggesting that the URP be redrawn during each successive planning period. Although such an approach is apparently intended by commenters to maintain pressure on the states to adopt more comprehensive and effective reasonable progress strategies, it is not clear that this approach would in fact achieve that outcome because it may create disincentives for states to take aggressive action during the first few planning periods. This is because resetting the URP would make it more likely that a state that has taken early and aggressive action to improve visibility would become subject to the enhanced analytical requirement of 40 CFR 51.308(f)(3)(ii), thus generating a possible disincentive for continued progress.

Because we have concluded that our proposed approach of starting the URP for every implementation period at 2000–2004 will result in the most equitable and transparent process and provide the strongest incentive for continued progress toward achieving natural visibility conditions, we are finalizing that approach with no changes to 40 CFR 51.308(f)(1)(i) or (vi).

3. Final Rule

The EPA is finalizing all of the previously described rule text without any changes from the proposal.

The long-term strategy and the RPGs must provide for an improvement in visibility for the most impaired days and ensure no degradation for the clearest days.

1. Summary of Proposal

Section 169A of the CAA requires a SIP to not only reduce existing visibility impairment but also to prevent future impairment. As part of meeting the goal of preventing future visibility impairment, 40 CFR 51.308(d)(1) of the 1999 RHR requires a state to establish RPGs that ensure no degradation in visibility for the least impaired days over the period of the implementation plan. This text is ambiguous, however, as to whether "the period of the implementation plan" refers to the entire period since the baseline period of 2000–2004 or to the specific implementation period addressed by the periodic SIP revision. The proposal noted that a table in the preamble to the 1999 RHR summarizing certain requirements indicated that the 2000–2004 period would be used for "tracking visibility improvement." [98] To provide further clarity on this issue, we proposed new rule text in revised 40 CFR 51.308(f)(3)(i) that would make clear that the requirement is for a state to establish an RPG for the 20 percent clearest days in each periodic review that ensures that there is no deterioration in visibility on the 20 percent clearest days as compared to the baseline period of 2000–2004. We note that while 40 CFR 308(d)(1) of the 1999 RHR expresses the requirement of no degradation in visibility in terms of the RPG for the 20 percent clearest days, this requirement comes into play as a factor in what emission sources are subject to additional control measures in the long-term strategy, because this RPG is the projected result of implementing the long-term strategy. In other words, a state must adopt a long-term strategy that includes the necessary measures to ensure that the expected visibility on the 20 percent clearest days at the end of the planning period, as represented by the RPG for these days, will not deteriorate as compared to the visibility condition for these days in 2000–2004.The rule text we proposed for 40 CFR 308(f)(3)(i) made this connection explicit by saying that the long-term strategy and the RPG must provide for no degradation.

2. Comments and Responses

The EPA received comments both in support of, and raising concerns with, the proposed changes. The commenters opposed to our proposal preferred that when a state documents that the RPG for the 20 percent clearest days (*i.e.*, the projected visibility condition on the clearest days as of the end of the given implementation period) shows no degradation, the benchmark for that comparison should be the lowest measured impairment of either the baseline period or current conditions reported in any progress report or comprehensive periodic revision for the clearest days. The approach recommended by the commenter would mean that the benchmark for the no degradation comparison would ratchet down over time.

One commenter pointed out that as proposed, 40 CFR 308(f)(3)(i) addressed not just the requirement for no degradation for the clearest days but also the requirement that there be an improvement for the most impaired days. This commenter noted that the relevant sentence of 40 CFR 308(f)(3)(i) could be interpreted to mean that the baseline period of 2000–2004 is the benchmark for determining if the long-term strategy and RPG for the most impaired days provides for an improvement.[99] The commenter said that the final rule should provide that the benchmark for the improvement requirement should be the lowest measured impairment of either the baseline period or current conditions reported in any progress report or comprehensive periodic revision for the most impaired days. The approach recommended by the commenter would mean that the benchmark for the improvement comparison would ratchet down over time.

We are finalizing our proposal to clarify that the benchmark for the requirement for no degradation on the 20 percent clearest days is the 2000–2004 baseline visibility condition. Further, we are clarifying that the baseline visibility condition for the 20 percent most impaired days is also the benchmark for the requirement that the long-term strategy and RPGs provide for an improvement for the most impaired days. We are taking this approach in the final rule for several reasons.

Visibility on the clearest days has been improving since the 2000–2004 period in most Class I areas, generally tracking the improvements seen on the 20 percent haziest and 20 percent most

[98] 64 FR 35730.

[99] The relevant sentence in the rule reads, "The long-term strategy and reasonable progress goals must provide for an improvement in visibility for the most impaired days and ensure no degradation in visibility for the clearest days since the baseline period." The concluding phrase "since the baseline period" can be taken to apply to only the clearest days, or to both the most impaired days and the clearest days.

impaired days.[100] We expect that it will continue to be the case that emission reduction measures that provide for reasonable progress on the 20 percent most impaired days will also have benefits on the clearest days. Thus, we expect that there will be a continuing improvement on the clearest days regardless of the benchmark selected, even if the rule did not contain any requirement for no degradation on the clearest days. Even so, we believe that the no degradation requirement with the 2000–2004 visibility condition as the benchmark is an appropriate backstop in the rule that will continue to require states to consider additional measures in the event that measures adopted to improve visibility on the most impaired days are insufficient to protect visibility on the clearest days.

We are not adopting the approach of ratcheting down the benchmark for the no degradation requirement. If we were to do this, it might lead to unreasonable outcomes in some cases. Available air quality modeling approaches for forecasting visibility conditions are at present more uncertain when predicting low concentrations of visibility-impairing pollution than when predicting higher concentrations, making comparisons of two "clean" scenarios more uncertain. Such comparisons could become required for many areas and have critical implications for SIP approvals. Errors in such comparisons due to modeling system errors might lead to inappropriate SIP disapprovals if the benchmark for the no degradation requirement continually ratcheted down as progress is made. Another consideration is that even with a 5-year averaging approach, transient natural phenomena might cause a temporary improvement in visibility on the clearest days entirely unrelated to the content and implementation of states' long term strategies, which would permanently reduce the benchmark if the ratcheting approach were followed. It might then be very difficult or unreasonable for a state in subsequent periods to show no degradation relative to this lower benchmark given that on the clearest days influences from anthropogenic sources will be relatively small. Finally, we believe that consistency between the benchmark for the no degradation test and the starting point for the URP, across Class I areas in a given implementation period and across implementation periods, will aid public understanding and participation in SIP development. For these reasons, we are finalizing our proposal on this aspect of the RHR.

In addition, we are finalizing wording in 40 CFR 308(f)(3)(i) that makes it clear that the baseline condition in 2000–2004 is also the benchmark for determining whether the long-term strategy and RPGs provide for an improvement in visibility for the most impaired days, but repeating the reference to this baseline so that it links unambiguously to that requirement as well as to the no degradation requirement. We recognize that since 2000–2004 there have been widespread improvements in visibility on the most impaired days and that this already accomplished improvement has created a "cushion" for a comparison to check that the RPG for the end of a future implementation period shows improvement. However, we disagree with the commenter's suggestion that the benchmark for the improvement requirement should ratchet down over time, for similar but not entirely identical reasons that we disagree regarding the no degradation requirement. The advantage of consistency to public understanding applies to the improvement requirement as well as to the no degradation requirement. While the problem of modeling uncertainty applies less to the most impaired days at this stage of the regional haze program, in later periods the most impaired days will be clearer than they are now and the difficulty of distinguishing differences may apply more strongly. Also, we are mindful of the potential for reducing incentives for states to take action during the first few planning periods. With the 2000–2004 period as the benchmark for the no degradation requirement, a state has an incentive to take early action to improve the clearest days because this will create a safety margin in case later developments outside the state's control cause an increase in impairment on these days. Ratcheting down the baseline for the no degradation requirement would remove this incentive for continued progress because it would never be possible for a state to create a safety margin.

However, the use of the baseline period as the benchmark for the no degradation and improvement requirements does not mean that states are free to simply allow visibility levels to return to what they were in the baseline period, or to allow for degradation in visibility as compared to current conditions. If a state were to set an RPG that reflects a forecast of degradation during a particular period, the adequacy of the SIP would need to be carefully assessed. In this situation, additional measures may be necessary to ensure reasonable progress, depending on the underlying explanation for the forecasted degradation. It may be that a state would be able to show that any forecasted degradation is attributable to causes other than deficiencies in its long-term strategy, but such a demonstration would need to be carefully assessed. We note that for at least the next planning period or two, the requirement to consider the four statutory factors for a reasonably selected set of sources should result in the adoption of additional control measures that provide an improvement, especially for a state with sources that contribute to impairment at a Class I area with an RPG above the URP line.

3. Final Rule

Upon careful consideration of public comments received on this issue, the EPA is finalizing the proposed rule with a clarifying edit to the proposed language to make it clear that the baseline visibility condition is also the benchmark for determining whether the long-term strategy and RPGs provide for an improvement in visibility on the most impaired days.

The sentences of the final version of 40 CFR 51.308(f)(1)(i), regarding the calculation of the baseline visibility conditions, have been slightly reordered and reworded from the proposed version for clarity. In addition, the final sentence of this paragraph, regarding Class I areas that did not have IMPROVE monitoring stations installed in time to provide complete monitoring data for 2000–2004, has been re-worded to clarify that "closest" means closest in time to 2000–2004 and does not refer to another Class I area that is nearest in distance. In the final version of 40 CFR 51.308(f)(1)(ii), an occurrence of "or" has been corrected to "and" to indicate that natural visibility conditions for both the most impaired days and the clearest days must be based on available monitoring information. Minor edits for clarity have also been included in the final versions of 40 CFR 51.308(f)(1)(iii) and (iv).

Analytical Obligation When the Reasonable Progress Goal for the 20 Percent Most Impaired Days Is Not On or Below the URP Line.

1. Summary of Proposal

The EPA proposed 40 CFR 51.308(f)(3)(ii) in order to clarify the

[100] The RTC contains graphics illustrating these improvement trends. The only situations in which there has been degradation since 2000–2004 are at a few Class I areas in the Virgin Islands and Alaska where sea salt particles significantly contribute to light extinction on the clearest days and concentrations of such particles on those days have increased over this period.

relationship between the RPG for the 20 percent most impaired days and the URP line. This relationship determines the content of the demonstration a state must submit to show that its long-term strategy provides for reasonable progress. This clarification was based upon the 1999 RHR's text of 40 CFR 51.308(d)(1)(ii). That provision addresses required actions of a state containing a Class I area that has adopted an RPG for the area that provides for a slower rate of visibility improvement than that needed to attain natural conditions by 2064 (*i.e.*, an RPG for the 20 percent most impaired days that is above the URP line). The proposed text of 40 CFR 51.308(f)(3)(ii)(A) stated that if the RPG for a Class I area is above the URP line, the state containing the Class I area must demonstrate, based on the four reasonable progress factors, that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the state that may be reasonably anticipated to contribute to visibility impairment that would be reasonable to include in the long-term strategy, and that such a demonstration is required to be "robust." Specifically, this demonstration must include documentation of the criteria used to determine which sources or groups of sources were evaluated and of how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.

In addition, in comparison with the 1999 RHR's 40 CFR 51.308(d)(2)(iv) and 40 CFR 51.308(d)(3)(i) and (ii), the proposed 40 CFR 51.308(f)(2)(iii) more clearly spelled out the respective consultation responsibilities of states containing Class I areas as well as states with sources that may reasonably be anticipated to cause or contribute to visibility impairment in those areas. To further clarify the obligations of what we are referring to as contributing states, we proposed 40 CFR 51.308(f)(3)(ii)(B) to specify that in a situation where the RPG for the most impaired days is set above the glidepath, a contributing state must make the same demonstration with respect to its own long-term strategy that is required of the state containing the Class I area, namely that there are no other measures needed to provide for reasonable progress. The intent of this proposal was to ensure that states perform rigorous analyses, and adopt measures necessary for reasonable progress, with respect to Class I areas that their sources contribute to, regardless of whether such areas are located within their borders. This proposed change clarifies that the RPG for the most impaired days in the SIP of the state containing the Class I area does not "set the bar" for the contributing state's long-term strategy.

2. Comments and Responses

The EPA received comments both in support of, and opposed to, the proposed changes. Comments opposing these provisions stated that this additional requirement goes beyond the CAA's requirement to consider the four statutory factors. The EPA disagrees with this assertion. Congress declared a national goal of preventing any future and remedying any existing visibility impairment in Class I areas resulting from manmade air pollution and delegated to EPA the authority to promulgate regulations assuring reasonable progress toward meeting that goal. CAA section 169A(a)(1), (a)(4). The analytical obligations contained in 40 CFR 51.308(f)(3)(ii) are a mechanism to ensure that states are, in fact, making reasonable progress by requiring states in certain circumstances to demonstrate the reasonableness of their four-factor analyses. In addition, some commenters suggested that the term "robust demonstration" is overly vague and expressed concern that, essentially, the EPA could take advantage of this vagueness in order to form its own criteria for disapproval of a SIP. Most commenters did not supply any specific suggestions, simply stating either that the term should be clarified or that this provision should not be finalized, although one commenter suggested states be allowed to refer to information already submitted or contained in an applicable docket for purposes of such a demonstration. We disagree that the requirement of a "robust demonstration" is vague. The provision requires the demonstration to be based on the analysis in 40 CFR 51.308(f)(2)(i), and further clarifies that the demonstration must document the criteria used to determine which sources or groups of sources were evaluated and how the four reasonable progress factors were considered. The purpose of this demonstration is to show that a state conducted its analysis in a reasonable manner and that there are no additional measures that would be reasonable to implement in a particular planning period. A state may refer to its own experience, past EPA actions, the preamble to this rule as proposed and this final rule preamble, and existing guidance documents for direction on what constitutes a reasoned determination. Additionally, the EPA recently issued a draft guidance document that addresses, among other things, the reasonable progress analysis, which we expect to finalize in the near future. This guidance can provide further direction regarding the types of information and analyses a state may provide in its demonstration under 40 CFR 51.308(f)(3)(ii). The EPA is therefore finalizing this provision as proposed. In addition, one commenter stated that the "robust demonstration" language of the proposed 40 CFR 51.308(f)(3)(ii)(A) was missing from the proposed 40 CFR 51.308(f)(3)(ii)(B). The EPA agrees the necessary text was missing from proposal, as states with Class I areas should be subject to the same type of demonstration as those contributing states without Class I areas. Therefore, the final rule includes in the requirements for a contributing state in 40 CFR 51.308(f)(3)(ii)(B) the same requirement for a robust demonstration that appeared only in 40 CFR 51.308(f)(3)(ii)(A) at proposal.

Some commenters stated a desire for corresponding rule text dealing with situations where RPGs are equal to ("on") or better than ("below") the URP or glidepath. Several commenters stated that the URP or glidepath should be a "safe harbor," opining that states should be permitted to analyze whether projected visibility conditions for the end of the implementation period will be on or below the glidepath based on on-the-books or on-the-way control measures, and that in such cases a four-factor analysis should not be required. Other commenters suggested a somewhat narrower entrance to a "safe harbor," by suggesting that if current visibility conditions are already below the end-of-planning-period point on the URP line, a four-factor analysis should not be required. We do not agree with either of these recommendations. The CAA requires that each SIP revision contain long-term strategies for making reasonable progress, and that in determining reasonable progress states must consider the four statutory factors.[101] Treating the URP as a safe harbor would be inconsistent with the statutory requirement that states assess the potential to make further reasonable progress towards natural visibility goal in every implementation period. Even if a state is currently on or below the URP, there may be sources contributing to visibility impairment for which it would be reasonable to apply additional control measures in light of the four factors. Although it may conversely be the case that no such sources or control measures exist in a particular state with respect to a particular Class I area and implementation period, this should be determined based on a four-factor

[101] CAA section 169A(b)(2)(B), (g)(1).

analysis for a reasonable set of in-state sources that are contributing the most to the visibility impairment that is still occurring at the Class I area.[102] It would bypass the four statutory factors and undermine the fundamental structure and purpose of the reasonable progress analysis to treat the URP as a safe harbor, or as a rigid requirement.

3. Final Rule

The EPA is finalizing all of the previously described rule text without any changes from the proposal, with the exception of including in 40 CFR 51.308(f)(3)(ii)(B) the same requirement for a robust demonstration that appeared only in 40 CFR 51.308(f)(3)(ii)(A) at proposal.

Emission inventories.

1. Summary of Proposal

The EPA proposed language in 40 CFR 51.308(f)(2)(iv) regarding the "baseline emissions inventory" to be used by a state in developing the technical basis for the state's long-term strategy. This was done in order to reconcile this section with changes that have occurred to 40 CFR part 51, subpart A, Air Emissions Reporting Requirements, since the RHR was originally promulgated in 1999. The proposed changes were also intended to provide flexibility in the base inventory year the state chooses to use, as the EPA has always intended if there is good reason to use another inventory year.

2. Comments and Responses

Commenters were split on whether to support the flexibility afforded by the proposed rule text for selecting a year other than the most recent NEI year as the year of the inventory to be used as the basis for developing the long-term strategy. Some commenters supported the proposal, while others preferred that EPA require or definitively endorse that the 2011 NEI can be used as the base year for modeling for the next periodic comprehensive SIP revisions. The latter view generally resulted from concerns that while additional NEI versions, such as the 2014 and 2017 NEI versions, should be available by the time periodic comprehensive SIP revisions are due in 2021, there would not be adequate time after release of these inventories to complete all the modeling and analysis work required.

Consideration of these comments uncovered significant ambiguity in the text of 40 CFR 51.308(d)(3)(iii) of the 1999 RHR and ambiguity in the proposed new 40 CFR 51.308(f)(2)(iv) that would reflect 40 CFR 51.308(d)(3)(iii). Specifically, the term "the baseline inventory on which [the state's] strategies are based" in the 1999 RHR can be taken to refer to the inventory that is used to assess the contribution that sources make to visibility impairment (and the visibility benefits of additional control measures, when such benefits are considered) for individual sources or groups of sources. That information is critical to the development of the long-term strategy and, in that sense, is the information on which a state's strategies are to be based. However, we believe that some commenters have taken the term to refer to the inventory that is used as the expected starting point for the photochemical modeling that they (and we) expect will be used to project the RPG that quantifies the projected effect of all the measures in the long-term strategy and other influences on visibility at the end of the implementation period. The two bodies of information are not necessarily the same, and they do not necessarily even need to be for the same year in order to develop a SIP that provides for reasonable progress. In fact, the modeled RPGs that are eventually included in a SIP revision do not directly affect the development of the long-term strategy, but rather they reflect that strategy. We are revising the proposed regulatory text to make this clear. The final regulations use the "emissions information on which the State's strategies are based" to refer to the inventory that is used to assess the contribution that sources make to visibility impairment and not to the base year inventory used to model the RPGs.

The requirement in the final version of 40 CFR 51.308(f)(2)(iv) is that the emissions information on which the state is relying to determine the emission reduction measures that are necessary to make reasonable progress must include, but need not be limited to, information on emissions in a year at least as recent as the most recent year for which the State has submitted emission inventory information to the Administrator under the Air Emissions Reporting Requirements. To allow time for this information to be used in SIP development, the rule provides for a 12-month "grace period" such that a submission to the NEI in the period 12 months prior to the due date of the SIP does not trigger this requirement. We agree with the comments to the effect that there is no reason why a state should not make at least some information for the year of its most recent submission to the NEI part of the basis for its determination of the emission reduction measures that are necessary to make reasonable progress. The state is not required to use the same information as was submitted to the NEI, and it should not if it has developed or received better information for that year since its NEI submission. A state may also consider information for a more recent year if it is available and is of sufficient quality. Therefore, we do not believe it is necessary or appropriate for the RHR to provide for an exception to the requirement as it is stated in this section of the rule text and interpreted here. A state that plans to use information other than what is in the most recent NEI version released by the EPA to develop its long-term strategy should consult with its EPA regional office to obtain the EPA's preliminary perspective on whether there is a reasonable basis for its planned approach. This should also be a topic of the ongoing consultation with affected FLMs.

The final version of 40 CFR 51.308(f)(2)(iv) does not address the question of the year to be used as the base year for emissions modeling of the RPGs. The EPA generally recommends that this be the year of the most recent NEI version that has been developed and validated enough to be appropriate for air quality modeling to support policy development. The final rule provides the EPA flexibility to approve a SIP based on another year if there are good reasons. States that believe that another year is more suitable should consult with the EPA Regional office about their reasons.

3. Final Rule

For the reasons described previously, and also here, the final language for 40 CFR 51.308(f)(2)(iv) differs somewhat from the wording we proposed with respect to the terminology used to refer to emissions inventories. The final version of this subsection of the rule refers to the "emissions information on which the state's strategies are based," rather than to a "baseline" emissions inventory. The final version also does not include a provision for EPA approval for selecting a year other than the year of the most recent submission under the Air Emissions Reporting Requirements as the year of the

[102] The point that having a RPG that is on or below the URP line is not a safe harbor has been articulated in past actions such as the disapproval of the reasonable progress element of Arkansas' SIP (*see* fn *32*). Our approval of the reasonable progress element of South Dakota's SIP is an example in which we approved the state's RPGs even though the RPG for the most impaired days for two Class I areas were above the respective URP lines, based on the state having adequately considered the four statutory factors for important contributing sources. 76 FR 76646 (December 8, 2011) (proposed action) and 77 FR 24845 (April 26, 2012) (final action).

inventory to be used as the basis for developing the long-term strategy. However, the final rule provides a 12-month grace period for the use of the year of the most recent submission under the Air Emissions Reporting Requirements. The rule does not address the selection of a year as the base year for emissions modeling of the RPGs for the end of the implementation period.

EPA action on RPGs.

1. Summary of Proposal

The proposed language of 40 CFR 51.308(f)(3)(iv) was intended to make clear that in approving a state's RPGs, the EPA will consider the controls and technical demonstration provided by a contributing state with respect to its long-term strategy, in addition to those developed by the state containing the Class I area with respect to its long-term strategy. This clarification was proposed in light of the 1999 RHR's 40 CFR 51.308(d)(1)(iii), which only explicitly mentions the demonstration provided by the state containing the Class I area.

2. Comments and Responses

No comments were received that specifically addressed this proposed rule text.

3. Final Rule

The EPA is finalizing this rule text as proposed.

Progress report elements of periodic comprehensive SIP revisions.

1. Summary of Proposal

The proposed language in 40 CFR 51.308(f)(5) complemented proposed changes regarding progress reports and the proposal to eliminate separate progress reports being due simultaneously with periodic comprehensive SIP revisions by requiring periodic comprehensive SIP revisions to include certain information that would have been addressed in the progress reports. While the proposed language would expand the scope of periodic comprehensive SIP revisions, the same information would still be covered and states would no longer need to prepare and submit two separate documents (potentially containing overlapping content) at the same time.

2. Comments and Responses

Few comments were received that specifically addressed this proposed rule text. Those that did address these provisions supported the proposed changes, with one comment additionally suggesting use of the terminology "the most recent progress report" instead of "the past progress report," which EPA is incorporating into the final text (this is discussed later). In addition, one commenter noted that states should also be required to address the requirements of proposed 40 CFR 51.308(g)(8) in periodic comprehensive SIP revisions. Proposed 40 CFR 51.308(g)(6), renumbered in the final rule as 40 CFR 51.308(g)(8), requires progress reports to include a summary of the most recent assessment of smoke management programs operating within the state if such assessments are an element of the program. (As background, this is not a requirement of the 1999 RHR for either progress reports or periodic SIP revisions.) We agree that the provisions of 40 CFR 51.308(f)(5) do not contain a requirement similar to the requirement in proposed 40 CFR 51.308(g)(6) or final 40 CFR 51.308(g)(8). However, for any state where smoke from prescribed fires is a significant contributor to visibility impairment, the analysis that it will perform under 40 CFR 51.308(f)(3)(iv)(D) as finalized (the requirement for a state to consider basic smoke management practices and smoke management programs) will serve the same purpose as would requiring periodic SIP revisions to summarize the conclusions of the most recent assessment of an existing smoke management program.

3. Final Rule

The EPA is finalizing this rule text as proposed with only minor wording changes for clarity including a small change in wording in response to a public comment indicating confusion with the terminology "past progress report." The EPA agrees that this should instead refer to the "most recent progress report" and is finalizing revised text accordingly.

E. Changes to Definitions and Terminology Related to How Days Are Selected for Tracking Progress

1. Summary of Proposal

The 1999 RHR's 40 CFR 51.308(d) required states to determine the visibility conditions (in deciviews) for the average of the 20 percent least impaired and 20 percent most impaired visibility days over a specified time period at each of their Class I areas. As discussed in detail in the preamble of the proposed rule, the definition of visibility impairment included in 40 CFR 51.301 of the 1999 RHR suggests that only visibility impacts from anthropogenic sources should be included when considering the degree of visibility impairment. However, the approach followed for the first implementation period involved selecting the least and most impaired days as the monitored days with the lowest and highest actual deciview levels regardless of the source of the particulate matter causing the visibility impairment. While the EPA approved SIPs using this approach for the first implementation period, experience now indicates that for the most impaired days an approach focusing on anthropogenic impairment is more appropriate because it will more effectively track whether states are making progress in controlling anthropogenic sources. Our proposed approach is also more consistent with the definition of visibility impairment in 40 CFR 51.301. Because the 1999 RHR rule text already refers to the 20 percent most impaired days, we did not propose to change that wording. In the preamble to the proposal, we made clear that going forward, we would interpret "most impaired days" to mean those with the greatest anthropogenic visibility impairment, as opposed to the 20 percent haziest days. We did not propose to change the approach of using the 20 percent of days with the best visibility to represent good visibility conditions for RPG and tracking purposes, but we did propose a rule text change to refer to them as the 20 percent clearest days rather than the 20 percent least impaired days.

The proposal included changes to a number of the definitions in 40 CFR 51.301 as well as added definitions for some previously undefined terms, including *clearest days, the deciview index, natural visibility conditions* and *visibility.*

The EPA solicited comment on requiring all states to use the new meaning of "most impaired days" as referring to the days with the most anthropogenic impairment, as well as on a second proposed approach. In the second proposed rule alternative, states would be allowed to choose between selecting the 20 percent of days with the highest overall haze (*i.e.,* the approach used in the first implementation period) and selecting the 20 percent of days with the most impairment from anthropogenic sources (the proposed new meaning). The EPA also solicited comment on any additional approaches.

2. Comments and Responses

We received some comments favoring the first proposed rule alternative that expressed support for a single, consistent approach to selecting the 20 percent most impaired days for all states. However, the majority of comments from states favored the second proposed rule alternative due to

the flexibility it offered. Some comments on the second proposed rule alternative expressed concerns about, and requested guidance for, consultation between states in situations where two states use different approaches. Some comments favoring the second proposed rule alternative said that they anticipated that using the 20 percent most anthropogenically impaired days would mean an additional workload that would consume state resources during the planning process, and cited this as the reason they did not support the first proposed rule alternative. One commenter suggested that the final rule could allow states submitting their SIPs for the second implementation period by the 1999 RHR's deadline of July 31, 2018, to choose between using the 20 percent most anthropogenically impaired days or the 20 percent haziest days, with states submitting later required to use the latter approach.

After considering these comments and other considerations as described here, we are finalizing the first proposed alternative for the final rule (*i.e.*, that "most impaired days" means those with the most anthropogenic impairment). The EPA often provides states flexibility when it may help achieve the objectives of SIP development and does not negatively implicate a program's objectives. In this particular situation, however, the flexibility of the second proposed rule approach would not significantly assist in developing efficient and effective SIPs and would likely result in confusion among stakeholders. For example, if two states with Class I areas in close proximity choose different approaches to the selection of days, the public might misunderstand how past and projected progress in improving visibility compares between the two areas. Also, allowing the state with a Class I area to unilaterally choose the selection approach for that area would raise the prospect that a contributing state might disagree with that choice, because the choice could make a difference in whether both states are subject to the enhanced analysis requirement of 40 CFR 51.308(f)(3)(ii), therefore complicating consultation among states. It would be possible for a state to choose a given approach simply because it would result in the best comparison of RPGs to the glidepath or URP for the implementation period being addressed by a SIP revision, and a state could conceivably switch back and forth between the two approaches from one period to another to get the best comparison for each period, causing additional confusion. In addition, we believe the approach of using anthropogenic impairment to select the 20 percent worst days is more consistent with the intent of the original RHR, namely to reduce the aggregate effect that anthropogenic sources have on the visual experience of visitors to Class I areas.

The EPA disagrees that concerns regarding additional workload and lack of resources preclude adopting the first proposed alternative. The EPA and IMPROVE program will work together to provide datasets that identify the most anthropogenically impaired days in each year of IMPROVE data and that contain the statistical summaries of these days need as part of a SIP revision or progress report. These datasets will be based on a specific method the EPA intends to recommend in a future guidance document. We expect that these datasets will avoid any increase in the workload and resources required of states relative to continued use of the haziest days. We will also work with any state or states interested in a different specific method for identifying the most impaired days than the one we will recommend, to avoid an increase in workload that would interfere with other aspects of SIP development.

The final rule revisions requiring states to use the 20 percent of days with the greatest anthropogenic impairment do not have any direct implications for how states develop their long-term strategies. While these revisions may affect whether a state has to demonstrate that there are no additional measures that would be reasonable to include in the long-term strategy under the requirement of 40 CFR 51.308(f)(3)(ii), these revisions do not prescribe how a state may make this demonstration. Thus, we believe that this requirement will not impair states' flexibility to appropriately analyze and address the sources of visibility impairment at Class I areas in and near their states.

We are not making any changes in response to the comment suggesting that the final rule provide flexibility in the approach to the selection of the worst days only for areas that submit their SIP revisions by July 31, 2018. It is our understanding that only some eastern states may be submitting SIP revisions this early and that the states involved have not been experiencing erratic impacts from wildfires and dust storms. Therefore, we do not believe the special flexibility the commenter suggests is needed. As mentioned, any state may choose to include in its SIP a second summary of visibility data using the 20 percent haziest days approach, for public information purposes.

Regarding the proposed changes to definitions, commenters recommended adding language to the definitions of *most impaired days, regional haze,* and *visibility impairment* to further clarify that these terms refer to impairment due to anthropogenic sources. The EPA agrees that some of the suggestions provided by commenters further clarify that visibility impairment is due to anthropogenic sources and does not include emissions from natural sources. Therefore, in response to these comments, we have finalized additional changes to the definitions of *most impaired days, regional haze,* and *visibility impairment* to also include the concept that impairment is anthropogenic.

We also received comments on the proposed change to the definition of *natural conditions* and the proposed definition of *natural visibility conditions.* The commenters asked the EPA to further revise these definitions to reflect the reality that natural conditions have changed over time and will continue to change in the future; to make clear the timeframe of natural visibility conditions we intend to be captured by the definition; that natural visibility conditions may reflect poor visibility conditions; and to more explicitly include the factors contributing to natural visibility conditions (*e.g.,* fire and dust events, volcanic activity, etc.). As a result of these comments, we are finalizing additional changes to these two definitions and adding definitions for two additional terms used in the rule. We are also providing further explanation of the role of natural visibility conditions in the SIP development process as follows.

The EPA is finalizing the definition of *natural conditions* to include a list of example phenomena considered to be a part of natural conditions. The list provided is not intended to be exhaustive, but provides examples of some of the types of natural impacts that may affect Class I areas. We are also finalizing the definition of *natural conditions* to reflect the EPA's understanding that natural conditions not only will vary with time, but that they also may have long-term trends due to changes in the Earth's climate system. We have also clarified in this definition that natural phenomena both near to and far from a Class I area may impact visibility in the Class I area.

To reduce confusion between the natural visibility that would exist on a single day and the average of a set of natural visibility values for a set of days, we are finalizing separate definitions of *natural visibility* and *natural visibility*

condition. Natural visibility will refer to visibility on a single day. The *natural visibility* definition includes language that recognizes natural visibility does vary daily and may contain long-term trends. *Natural visibility condition* will refer to the average of a set of values on an indicated set of days.

In practice, the natural visibility condition for the 20 percent most impaired days is used by a state when developing the most appropriate 2064 endpoint for the URP line. Then the RPG for the 20 percent most impaired days is to be compared with the point on the URP line corresponding to the end date of the implementation period, which will in effect be adjusted by a portion of the adjustment made to the 2064 endpoint. The EPA invited comment on draft guidance [103] to the states on how to determine the value of the 2064 natural visibility condition for the 20 percent most impaired days for each Class I area for purposes of calculating the URP, and we intend to provide final guidance on this topic separately from this action on revisions to the RHR.

The need for clarity about the distinction between visibility on one day and the average of the visibility values for a set of days also applies to baseline visibility conditions and to current visibility conditions. To achieve this clarity, the final rule text includes new definitions of the terms *baseline visibility condition* and *current visibility condition*. These definitions are consistent with the way these terms are used in 40 CFR 51.308, but having these explicit definitions will improve understanding by participants in the regional haze program.

3. Final Rule

The EPA is finalizing the requirement that all states select the 20 percent most impaired days, *i.e.*, the days with the most impairment from anthropogenic sources, as the "worst" days for purposes of calculating baseline visibility conditions, current visibility conditions, natural visibility conditions and the URP in SIPs and, as applicable, in progress reports. Under the final rule revisions, states retain the option to also present visibility data using the days with the highest overall deciview index values (*i.e.*, the 20 percent haziest days), for public information purposes. Including this information in the SIP may help communicate to the public the magnitude of impacts from natural sources including wildland wildfires and dust storms. The RPGs and URP line that are calculated using anthropogenic impairment to select the most impaired days constitute the glidepath representing the state's determination of reasonable progress and, if appropriate, may trigger the requirement for a state to show that there are no additional emission reductions measures that would be reasonable to include in the long-term strategy (*see* Section IV.D of this document). Since the 20 percent most anthropogenically impaired days will, going forward, be used to estimate natural visibility conditions, current visibility conditions and the URP, they must also be used in setting RPGs and in progress reports. Conforming edits that were proposed to the provisions related to each of these calculations are likewise being finalized. As described at proposal, the revised approach will apply starting with the second and subsequent periodic comprehensive SIP revisions and will apply to progress reports starting with those submitted after the second SIP revision. EPA will continue to use the previous approach of considering the 20 percent haziest days with respect to SIP revisions submitted to satisfy the requirements of the first implementation period or initial progress reports.

The EPA did not propose to require any particular method for determining the natural versus anthropogenic contributions to daily haze and thus the degree of visibility impairment for each monitored day. The EPA issued draft guidance [104] describing a recommended approach along with a process for routinely providing relevant datasets for use by states when they develop their SIPs and progress reports. No particular method is being prescribed by the final rule nor will the final version of the guidance contain any binding requirements; states can therefore develop, justify and use another method of discerning natural and anthropogenic contributions to visibility impairment in their SIPs. The EPA intends to include more information on this subject in the final guidance.

As described in the summary of comments on this topic, the EPA is finalizing the proposed changes to the definitions of *clearest days, deciview, deciview index, least impaired days,* and *visibility* along with additional changes we have determined are needed to further clarify the definitions of *most impaired days, visibility impairment, regional haze, natural conditions,* and *natural visibility condition*. The additional changes to these proposed definitions are intended to more clearly explain that impairment is from anthropogenic sources and that natural sources and their contributions to visibility vary over time. Additionally, the EPA is finalizing definitions for *natural visibility, baseline visibility condition,* and *current visibility condition* that we determined are needed to fully clarify the meanings of these terms.

We are not finalizing the proposed change to the definition of a Federal Class I area that would have stated that non-mandatory Federal Class I areas are identified in 40 CFR part 52. There currently are no non-mandatory Federal Class I areas and the reference to 40 CFR part 52 could have created confusion. The final definition of a mandatory Class I Federal area correctly indicates that the mandatory areas are identified in 40 CFR part 81 subpart D.

F. Impacts on Visibility From Anthropogenic Sources Outside the U.S.

1. Summary of Proposal

In the proposal, the EPA acknowledged that emissions (natural and anthropogenic) from other countries and marine vessel activity in waters outside the U.S. may impact Class I areas, especially those areas near borders and coastlines. Prior to our proposal, several states with such Class I areas requested that they be allowed to adjust their URP line, visibility tracking metrics and RPGs to account for international anthropogenic impacts when preparing SIPs and progress reports.[105] We therefore solicited comment on a proposed provision that would allow states with Class I areas significantly impacted by international anthropogenic emissions to adjust their URPs with approval from the Administrator.[106] The proposed

[103] Draft Guidance on Progress Tracking Metrics, Long-Term Strategies, Reasonable Progress Goals and Other Requirements for Regional Haze State Implementation Plans for the Second Implementation Period. 81 FR 44608 (July 8, 2016).

[104] 81 FR 44608 (July 8, 2016).

[105] The impacts from natural sources located outside the U.S. can be large in certain Class I areas, but because the RHR treats impacts from all natural sources equally, those impacts are inherently properly included in the 2000–2004 baseline condition used as the starting point for the URP line and the natural visibility condition used as the 2064 endpoint of the URP line. Thus, the logical interest of these states was in a special adjustment for the impacts of anthropogenic sources outside the U.S. We note for clarity that under the final rule, prescribed fires outside of the U.S. are considered anthropogenic sources and thus the discussion in this section is relevant to such prescribed fires. Prescribed fires in wildland are also addressed in Section IV.G of this document.

[106] The 1999 RHR provided that if a state found that international emissions sources were affecting visibility conditions in a Class I area or interfering with plan implementation, that state could submit a technical demonstration in support of its finding. If EPA agreed with the finding, it would "take appropriate action to address the international

Continued

adjustment would consist of adding to the value of the natural visibility condition for the 20 percent most impaired days in 2064 an estimate of the average impact from international anthropogenic sources on such days,[107] for the sole purpose of calculating the URP.[108] We also solicited comment on another possible approach to accounting for international anthropogenic impacts, in which the influence of emissions from anthropogenic sources outside the U.S. would be removed from estimates of 2000–2004 baseline visibility conditions, current visibility conditions and the RPG for the end of an implementation period.

The proposal reflected the EPA's position that it may be appropriate to allow a state to adjust the RPG framework, including in its progress reports, to avoid any perception that a state should be aiming to compensate for impacts from international anthropogenic sources and to avoid requiring a state to undertake the additional analytical requirement under 40 CFR 51.308(f)(3)(ii) based solely on visibility impairment due to international anthropogenic sources. However, we proposed that an adjustment to compensate for such impacts would be available only when and if these impacts can be estimated with sufficient accuracy. In the proposal we stated that we do not expect that explicit consideration of impacts from anthropogenic sources outside the U.S. should or would actually affect the conclusions that states make about what emission controls for their own sources are necessary for reasonable progress. However, we explained that explicit quantification of international anthropogenic impacts, if accurate, could improve public understanding and effective participation in the development of regional haze SIPs. We also indicated that while we had not yet, at the time of the proposal, seen an approach that would allow states to adjust their visibility tracking metrics with sufficient accuracy, we expected that by the time some future periodic comprehensive SIP revisions are to be prepared, methods and data for estimating international anthropogenic impacts will be substantially more robust. Our proposal did not include any statement about whether EPA would provide estimates on international impacts or guidance on how states can estimate such impacts.

2. Comments and Responses

Some commenters opposed allowing any adjustment to the URP, while others supported some sort of adjustment based on the impacts of international anthropogenic sources. Several commenters stated that the EPA or other federal entities should provide an approach to estimating international anthropogenic impacts, or actual estimates of such impacts, that are presumptively approvable, or that the EPA should give deference to any estimate a state develops. Some commenters inferred that the EPA's statements in the proposal regarding the current state of the art for estimating international anthropogenic impacts meant that no state would be able to obtain EPA approval for an adjustment in the SIP due in 2021. Several commenters objected to their understanding that the proposed rule would require a state to obtain EPA approval for a particular adjustment approach before including such an approach in its SIP submission. Finally, at least one commenter requested that EPA also provide rule language allowing for adjustment of the 20 percent clearest days framework to reflect the impacts of international anthropogenic sources.

The EPA does not have a near-term plan to develop guidance on estimating international anthropogenic impacts or to provide such estimates specifically for the purpose of regional haze SIPs. However, the EPA is an active participant in research in this area and will continue to share its work with interested states and with others.[109] To clarify, the statements in the preamble regarding the state of the art method refer to our assessment of the estimates and models for estimating international impacts available in the scientific literature at the time of this rulemaking. We did not intend to preclude or prejudge consideration of estimates that states may include in SIPs for the second implementation period or subsequent periods based on newer and more refined methodologies and/or information. Although we do not believe such estimates and models are currently able to adequately represent the impacts of international anthropogenic sources on visibility, we acknowledge that this is an area of active research and development that may lead to adequate estimates in time for the development of SIPs for the second implementation period. Additionally, the final rule text includes a small change to clarify that the Administrator's approval for an adjustment will be part of the Administrator's review of the full SIP submission for an implementation period, and not a separate action in advance of SIP submission. In this way, the Administrator's decision to approve or not approve the adjustment will be made in the context of the complete SIP submission, with public notice and an opportunity to comment. As with any SIP element, states are encouraged to consult with EPA Regional offices during the development of any proposed adjustment approach.

Because the EPA is not providing estimates of international anthropogenic impacts or guidance for calculating those impacts at this time, we are not specifying that any such estimates or methodologies are presumptively approvable. We further disagree with comments that states have inherent discretion to adjust their URP and RPG frameworks to account for impacts of international anthropogenic sources and that the EPA lacks the authority to review such adjustments. As explained in Section IV.B of this notice, the CAA mandates that the EPA promulgate regulations requiring that states' SIP submittals contain, among other things, "measures as may be necessary to make reasonable progress toward meeting the national goal." [110] Furthermore, the EPA is required to ensure that states' submittals meet the basic legal requirements and objectives of the CAA, including any regulations the agency promulgates for the purpose of ensuring that states make reasonable progress towards achieving natural visibility. A proposed adjustment to a state's RPG framework to address the impacts of international anthropogenic sources has the potential to affect that state's assessment of what constitutes reasonable progress. Thus, the EPA not only has the authority to review a state's

emissions through available mechanisms." 64 FR 35714, 35747 (July 1, 1999).

[107] The URP line is expressed in deciview units, so the value added to the natural visibility condition would also be in deciviews. However, that added deciview value would be based on the light extinction increments caused by the indicated sources.

[108] This proposed extra step in determining the URP was not intended to have the effect of defining international anthropogenic sources as natural, or to change any other aspect of SIP development.

[109] For example, the EPA held a 2-day workshop in February 2016 to advance the collective understanding of technical and policy issues associated with background ozone, which includes impacts from anthropogenic sources outside the U.S., as part of the agency's ongoing efforts to engage with states and stakeholders on implementation of the 2015 ozone NAAQS. While this workshop focused on ozone, the modeling issues and approaches for ozone are similar to those for visibility-impairing pollutants. More information on the EPA's activities and current understanding of this area can be found in the white paper available at *https://www.epa.gov/ozone-pollution/background-ozone-workshop-and-information* and other documents available in EPA number EPA–HQ–OAR–2016–0097 at *https://www.regulations.gov*.

[110] CAA section 169A(b)(2).

proposed adjustment, it has an obligation to do so.

Finally, we disagree with the comment that we should provide rule language for states to adjust their frameworks for assessing visibility on the 20 percent clearest days to account for any impacts of international anthropogenic sources. First, particular days on which international anthropogenic sources have particularly strong impacts due to unusual source events or transport conditions are unlikely to be among the 20 percent clearest days in their respective years. The commenter presented no basis for anticipating that increasing impacts from anthropogenic sources on the clearest days might cause a state to be unable to satisfy the no degradation requirement without employing unreasonable measures for domestic sources. Second, our analysis indicates that such an adjustment would not have been necessary in the first implementation period, in that nearly all Class I areas in fact have had no degradation during this period so far, and the few that have experienced degradation have not done so because of impacts attributable to international anthropogenic sources. Improvements in visibility on the 20 percent clearest days have been significant enough so that we expect that states impacted by increased emissions from international anthropogenic sources in the second implementation period will still be able to comply with the requirement that visibility on those days show no degradation compared to 2000–2004 baseline conditions. The RTC contains more information on this improvement trend. The EPA will continue to assess this relationship throughout the second and subsequent implementation periods. Third, on clear days when there is relatively little visibility-impairing air pollution, it is difficult with our current tools to discern the portion of that air pollution originating from international anthropogenic sources, as opposed to domestic anthropogenic or natural sources and as compared to the assessment of the impact of international anthropogenic sources on the most impaired days. It would thus be unlikely that a state could estimate international anthropogenic impacts on the 20 percent clearest days with the requisite degree of accuracy at this time or when developing a SIP for the second implementation period.

3. Final Rule

The EPA is finalizing the provision to allow an adjustment of the URP by adding an estimate for international anthropogenic impacts to 2064 natural visibility conditions. We are not finalizing the alternative approach to accounting for international anthropogenic impacts that would have involved removing the influence of emissions from anthropogenic sources outside the U.S. when developing the estimates of 2000–2004 baseline visibility conditions, current visibility conditions and the RPGs. We are finalizing only one approach to provide consistency and transparency, as the alternative approach would have been more complicated and involved presenting numerous counterfactual values of visibility levels that could be mistaken as actual measured values.

Because this adjustment is permitted only if the Administrator determines that a state has estimated the international impacts from anthropogenic sources outside the U.S. using scientifically valid data and methods, we are finalizing the rule text of 40 CFR 51.308(f)(1)(vi)(B) as proposed, with a small change to clarify singular versus plural,[111] as well as the aforementioned change to clarify that the Administrator's approval for an adjustment will be part of the Administrator's review of the full SIP submission for an implementation period, and not a separate action in advance of SIP submission.

In addition, we are finalizing the proposed rule text changes in 40 CFR 51.308(f)(1)(i) and 40 CFR 51.308(f)(1)(vi) to remove "needed to attain natural visibility conditions" from the reference to "uniform rate of progress," because when adjusted to reflect international impacts the "uniform rate of progress" would not be the rate of progress that would reach true natural visibility conditions.

Because the manner in which a state with a Class I area calculates the URP may affect other states with sources that contribute to visibility impairment at the Class I area,[112] we recommend that a state seeking approval for such an adjustment first consult with contributing states. Such an adjustment should also be a topic for the required consultation with the FLM for the Class I area at issue.

G. Impacts on Visibility From Wildland Fires

1. Summary of Proposal

Fires on wildlands within and outside the U.S. can significantly impact visibility in some Class I areas on some days but have little to no impact in other Class I areas. And even in those Class I areas significantly impacted by fires on wildlands on some days, there are a greater number of days where fires do not have such impacts. The EPA presented an extensive discussion of wildland fire concepts, including actions that the manager of a prescribed fire can take to reduce the amount of smoke generated by a prescribed fire and/or to reduce public exposure to the smoke that is generated (*i.e.*, basic smoke management practices), in the proposed and recently finalized revisions to the Exceptional Events Rule.[113] That discussion is not repeated here.

The preamble for our proposed action discussed at length how the RHR relates to the management of wildland wildfires and wildland prescribed fires. The information presented there is applicable to states as guidance under these final RHR revisions, except as revised or supplemented as follows. There were many public comments on the subject of wildland fires, some of which are addressed in this section. We address the remaining comments in the RTC document for this action.

We proposed new definitions for wildland, wildfire and prescribed fire. These proposed definitions were consistent with the definitions we had recently proposed be added to the Exceptional Events Rule. We said in the proposal for the Exceptional Events Rule that wildland can include

[111] Our proposed rule text used the phrase "the State must add the estimated impacts [of international anthropogenic sources (or certain prescribed fires)] to *natural visibility conditions* and compare the resulting value to *baseline visibility conditions*." For consistency with our final definitions, this part of the final rule text instead refers to the *natural visibility condition* and *the baseline visibility condition*. The use of the plural form for "natural visibility conditions" and "baseline visibility conditions" could give the impression that multiple values of impacts are to be added to multiple values of natural visibility conditions, when actually a single value reflecting impacts from international anthropogenic sources (or certain prescribed fires) is to be added to the single value of the "natural visibility condition" for the 20 percent most impaired days. The final rule text does not specify that the average of estimates of daily international impacts be used in this addition step, so that states can propose and the Administrator can approve another statistic to represent the distribution of daily values, for example the median value, if more appropriate.

[112] Contributing states may be affected because under the final version of 40 CFR 51.308(f)(3)(iv)(B), a contributing state will have an additional analytical requirement if the RPG does not provide for the URP at an affected Class I area in another state.

[113] 80 FR 72840 (November 20, 2015); 81 FR 68216 (October 3, 2016). Both the preamble and final rule of the Exceptional Events Rule listed six basic smoke management practices with an important footnote which recognizes that those listed are not intended to be all-inclusive for the purpose of the Exceptional Events Rule. Section IV.G.2 of this document discusses the term "basic smoke management practices" in the context of the Regional Haze Rule.

forestland, shrubland, grassland and wetlands, and that the proposed definition of wildland includes lands that are predominantly wildland, such as land in the wildland-urban interface. The proposed definition for wildfire included a provision that a wildfire that occurs predominantly on wildland is a natural event.

We also proposed language for new 40 CFR 51.308(f)(2)(vi)(E) based on the provisions of the 1999 RHR's 40 CFR 51.308(d)(3)(v)(E), with updates to reflect terminology used within the air quality and land management communities. Specifically, we proposed to use the term "basic smoke management *practices*" to better align with current usage of "smoke management practices" in the fire management community to refer to steps that a burn manager can take to reduce emissions during a prescribed fire. We also proposed to use the term "wildland vegetation management purposes" in lieu of "forestry management purposes." This latter change was proposed in recognition of the fact that not all wildland for which fire and smoke are issues is forested. We also proposed to replace the phrase "including plans as currently exist within the State for these purposes" with "and smoke management programs for prescribed fire as currently exist within the State." The term "smoke management program" is used within the fire management community to refer to a multi-participant program that seeks to influence or regulate both whether and when prescribed fires are conducted and, typically, the smoke management practices employed during a prescribed fire. We stated in the preamble of the proposal that this required consideration of smoke management programs only applies if the existing smoke management program has six key features: (i) Authorization to burn, (ii) minimizing air pollutant emissions, (iii) smoke management components of burn plans, (iv) public education and awareness, (v) surveillance and enforcement and (vi) program evaluation.

We proposed that for a state with a long-term strategy that includes a smoke management program for prescribed fires on wildland, each required progress report must include a summary of the most recent periodic assessment of the smoke management program including conclusions the managers of the smoke management program or other reviewing body reached in the assessment as to whether the program is meeting its goals regarding improving ecosystem health and reducing the damaging effects of catastrophic wildfires. (Comments on this proposal are summarized in Section IV.H of this document.)

We proposed that the Administrator may approve a state's proposal to adjust the URP to avoid subjecting a state to the additional analytical requirement of 40 CFR 51.308(f)(3)(ii) due to the impacts of wildland fire conducted with the objective to establish, restore and/or maintain sustainable and resilient wildland ecosystems, to reduce the risk of catastrophic wildfires, and/or to preserve endangered or threatened species for purposes of ecosystem health (objectives that we refer to here as "wildland ecosystem health") and public safety during which appropriate basic smoke management practices were applied. This aspect of the proposal did not address and did not apply to fires of any type on lands other than wildland or to burning on wildland that is for purposes of commercial logging slash disposal rather than wildland ecosystem health and public safety. This aspect of the proposal was not restricted to prescribed fires within the U.S.

We proposed to revise the definition of "fire" to remove the phrase "prescribed natural fire." However, we stated that the definition of "fire" that would be revised appears in 40 CFR 51.301, when it actually appears in 40 CFR 51.309(b)(4) and applies only to 40 CFR 51.309. We inadvertently did not make any change to 40 CFR 51.309(b)(4) in our proposed rule text. We proposed this revision to remove "prescribed natural fire" from the "fire" definition because the concept of a "prescribed natural fire" is inconsistent with our proposal that all prescribed fires be considered anthropogenic sources. We recognize that some prescribed fires are intended to emulate and/or mitigate natural wildfires that would otherwise occur at some point in time. We also recognize that some wildfires are appropriately allowed to proceed for some time over an area without suppression in order to help achieve land management objectives. However, to use the term "natural" and "prescribed" in one definition would cause confusion.

While the direction of these proposals was towards providing states considerable flexibility regarding measures to limit emissions from wildland prescribed fire after having given reasonable consideration to their options, it was not and is not our intention to in any way discourage federal, state, local or tribal agencies or private land owners from taking situation-appropriate steps to minimize emissions from prescribed fires on wildland or prescribed fires on other types of land.

2. Comments and Responses

With regard to the definitions of prescribed fire and wildfire and the related question of whether each type of wildland fire should be considered as an anthropogenic versus non-anthropogenic event or source, some commenters said that all wildland prescribed fires, or at least all prescribed fires conducted under a smoke management program, should be treated as non-anthropogenic. Other commenters said that all or some wildfires should be treated as anthropogenic, noting that the occurrence of wildfires is not purely natural in that past human actions have affected fire risks and that current actions by humans initiate some wildfires. We disagree with these and similar comments. We recognize that prescribed fires in many cases are conducted because natural wildfires have been previously suppressed, or as a substitute for waiting for a wildfire to take place because conditions are such that a wildfire would pose high risks. We also recognize that human actions, in particular the suppression of wildfires in the past, have affected the propensity of some wildlands to experience wildfires from natural ignition sources such as lightning and that human actions such as arson or careless smoking, fireworks, target practice or backyard burning are the sources of the ignition of many wildland wildfires. Thus, there is some basis for the perspective that prescribed fires merit being treated somewhat like natural sources, as well as for the opposite view that wildfires merit being treated somewhat as anthropogenic sources. However, by declaring in section 169A(a) of the CAA a national goal of remedying visibility impairment in Class I areas "which impairment results from man-made air pollution," Congress established a bifurcation between anthropogenic and non-anthropogenic sources of air pollution. Given that prescribed fires involve conscious planning by humans, it would be unreasonable for the rule to categorically consider them to be natural events and natural sources of air pollution.[114] We consider wildfires

[114] As explained in footnote 95, the rationale for allowing an adjustment of the URP framework to address the impacts of wildland prescribed fires does not stem from the fact that we are treating these fires as natural sources of air pollution, as this is not the case. Rather, we are providing for an adjustment because we acknowledge that anthropogenic prescribed fire conducted for purposes of ecosystem health and public safety

having natural causes of ignition to be natural sources of air pollution. The provision that a wildfire that occurs predominantly on wildland is a natural event also encompasses wildfires initiated by human action because it is not always possible to determine the cause of ignition for some wildfires, and because once ignited the progress of these wildfires is largely determined by factors beyond human control at the time. Therefore, it is appropriate to treat both wildland wildfires with natural sources of ignition and the other types of wildfires encompassed by the definition in 40 CFR 51.301 as natural events and natural sources of air pollution.

These categorizations do not mean that prescribed fires necessarily should or can be regulated in a manner similar to sources that are more purely anthropogenic, such as industrial sources, or that no consideration should be given to how human actions affect wildfire occurrence. For the regional haze program, an implication of these categorizations is that states are not required to consider additional measures to reduce visibility impacts from wildfires when they develop their regional haze SIP submissions. However, we believe that it is in the public interest for states, and all managers of wildland, to consider such measures to limit wildfire impacts on visibility on an ongoing basis. We encourage them to do so, to help improve visitor experiences in Class I areas, to protect public safety and health and to protect ecosystems from the impacts of catastrophic wildfires. We also believe that it is in the public interest for states, and all land managers using prescribed fire, to consider measures that can reduce the impact of prescribed fires on visibility in Class I areas and other air quality objectives. As they consider measures to reduce the impacts of prescribed fires on visibility, states may consider the benefits of wildland prescribed fire use (including benefits to ecosystem health and reduction in the risk of catastrophic wildfires) and the opportunity provided by the final rule for a state to make an adjustment to the URP to account for the impact of certain prescribed fires.

Regarding the proposal that would allow the Administrator to approve an adjustment to the URP for impacts from at least some wildland prescribed fires, some comments were in favor of this provision while others suggested minor changes to the proposed approach. Many comments did not support all the specifics of our proposal for adjustment of the URP. Many commenters also said that the EPA or the FLMs should provide guidance on how to estimate prescribed fire impacts for the purposes of this adjustment and/or provide the adjustment values themselves.

Of those commenters who did not support all the specifics of our proposal, one commenter said that states should be required to apply the four statutory factors to prescribed fire in order to be eligible to make any adjustment to the URP for prescribed fire impacts. Other commenters said that adjustment should be allowed only for prescribed fires conducted in accordance with any applicable smoke management program. However, other commenters said that an adjustment should be allowed to reflect the impacts of all types of prescribed fire and not merely those that met the conditions proposed by the EPA based on ecosystem or public health protection and use of basic smoke management practices.

We disagree with commenters that the adjustment of the URP should be based on the impact of all prescribed fires, or all wildland prescribed fires, rather than only wildland prescribed fire conducted for purposes of ecosystem health and public safety during which appropriate basic smoke management practices have been applied. The fires that meet these conditions are fires conducted for purposes and in accordance with practices that are consistent with the goal of making reasonable progress towards natural visibility. We note, however, that the availability of an adjustment to the URP for the impacts of these particular prescribed fires does not in any way restrict a state from considering additional measures or management programs to address their impacts on visibility. We recommend that as a state considers such measures, it should consult with managers of federal, state and private lands that would be subject to such measures; this may include federal agencies in addition to the federal land manager of the Class I areas affected by sources in the state, with whom consultation on the development of the SIP is a requirement of the final rule. Furthermore, it is appropriate that for prescribed fires conducted on lands other than wildlands, wildland fires conducted for other purposes and wildland fires conducted without application of basic smoke management practices, the URP should assume their impacts will diminish to zero by 2064, just as the URP effectively assumes with respect to other types of anthropogenic sources within the U.S.[115] This will focus public and state attention on whether there are any reasonable measures for reducing impacts from these other types of prescribed fires. We also disagree with other commenters who recommended that the adjustment be more restrictive and apply only to prescribed fires conducted in compliance with a smoke management program, because this would make the adjustment unavailable to some states where it would be consistent with the goal of making reasonable progress and where an adjustment would be an appropriate efficiency and public communication approach.

We also disagree with commenters that states should be required to conduct a four-factor analysis for prescribed fire before being eligible to adjust their URPs for the impacts of such fires. As we explained earlier, we are limiting the availability of an adjustment to only those wildland prescribed fires conducted for the purposes of ecosystem health and public safety and in accordance with basic smoke management practices. These particular types of fires are generally consistent with the goal of making reasonable progress because they are most often conducted to improve ecosystem health and to reduce the risk of catastrophic wildfires, both of which can result in net beneficial impacts on visibility.[116] Therefore, as

during which appropriate basic smoke management practices have been applied can be consistent with the goal of making reasonable progress towards natural visibility.

[115] If there is no adjustment of the 2064 endpoint of the URP line for impacts from international anthropogenic sources, the URP effectively assumes that emissions from these sources will be zero in 2064. If there is an adjustment, the URP effectively assumes that these sources continue to have emissions in 2064.

[116] There is similarity and a difference in the rationales for an adjustment of the URP related to impacts from anthropogenic sources outside the U.S. and an adjustment related to impacts from wildland prescribed fire conducted for reasons of ecosystem health and public safety with appropriate basic smoke management practices applied. Because states cannot control and should not be expected to compensate for impacts from international anthropogenic sources, such international impacts should not be the sole reason that the RPG is above the URP line. In contrast, states generally have authority to regulate wildland prescribed fires within their borders. However, because it is generally reasonable for wildland prescribed fires of the type described to be conducted as determined to be needed through appropriate planning processes, with appropriate basic smoke management practices to reduce smoke impacts on the public, states should have the flexibility to determine that limiting the number of such wildland prescribed fires is not necessary for reasonable progress. SIP development can be more efficient and the public will better understand the progress being made to control other types of sources if the URP is adjusted to remove the influence of any projected increase in application of this type of wildland prescribed fire. Also, as with international anthropogenic impacts, this will avoid such fire impacts from being a critical factor in whether the RPG is above the URP line.

long as these fires are conducted in accordance with basic smoke management practices, an additional four-factor analysis in this specific case might serve no purpose. States may consider additional measures to address the impacts of these and other types of prescribed fires, on the basis of a formal four-factor analysis if they choose or after another form of consideration.[117]

One commenter suggested that an adjustment for the impacts of prescribed fires also be allowed as part of the demonstration that the long-term strategy and RPGs ensure no degradation on the clearest days. We disagree with this suggestion. First, the impacts from prescribed fires will necessarily be small on the clearest days. The commenter presented no basis for anticipating that increasing impacts from prescribed fire on the clearest days might cause a state to be unable to satisfy the no degradation requirement without employing unreasonable measures for other source types. Second, our analysis indicates that such an adjustment would not have been necessary in the first implementation period, in that nearly all Class I areas in fact have had no degradation during this period so far, and the few that have experienced degradation have not done so because of impacts attributable to prescribed fire. Improvements in visibility on the 20 percent clearest days have been significant enough so that we expect that states impacted by increased emissions from prescribed fire in the second implementation period will still be able to comply with the requirement that visibility on those days show no degradation compared to 2000–2004 baseline conditions. The RTC contains more information on this improvement trend. The EPA will continue to assess this relationship throughout the second and subsequent implementation periods. Finally, on clear days when there is relatively little visibility-impairing air pollution, it is difficult with our current tools to discern the portion of that air pollution originating from prescribed fire, as opposed to the assessment of the impact of prescribed fire on the most impaired days. It would thus be unlikely that a state could estimate prescribed fire impacts on the 20 percent clearest days with the requisite degree of accuracy at this time or when developing a SIP for the second implementation period.

Regarding our proposal to use updated terminology in proposed 40 CFR 51.308(f)(2)(vi)(E), some commenters said that "basic smoke management practices" was not the appropriate update of the term "smoke management techniques" because the latter term is not explicitly restricted to "basic" techniques. We disagree with the commenter that the phrase "basic smoke management practices" could be interpreted as requiring a state to consider a narrower set of practices than the phrase "smoke management techniques." The EPA listed six basic smoke management practices in both the preamble and final rule of the Exceptional Events Rule with an important footnote which recognizes that those listed are not intended to be all-inclusive for the purposes of the Exceptional Events Rule. We similarly consider the term "basic smoke management practices" in the context of the Regional Haze Rule as allowing for additional basic smoke management practices to be developed to address Class 1 visibility impacts. In addition, this paragraph of the Regional Haze Rule specifies what a state at a minimum must consider, and a state may consider other measures as well. Accordingly, the final rule text in 308(f)(2)(iv)(D) contains the phrase "basic smoke management practices."

No commenters opposed the use of "and smoke management programs" in proposed 40 CFR 51.308(f)(2)(vi)(E) in place of "including plans" in 40 CFR 51.308(d)(3)(v)(E). However, there were other comments on proposed 40 CFR 51.308(f)(2)(vi)(E) that concern the proposed retention and meaning of the phrase "as currently exist within the State for these purposes." One commenter supported the concept that only states with existing smoke management programs should be subject to this specific requirement to consider smoke management programs. Another commenter said that even with this restricted applicability, the requirement to consider smoke management programs was too prescriptive and states should be allowed to apply the same consideration to prescribed fires as generally apply for all sources. One group of commenters opposed the restriction to only states with existing smoke management programs, and further suggested that listing only smoke management practices and smoke management programs was insufficient and that the rule should also require all states to consider other measures to mitigate the impact of fire.

After consideration of these comments and a review of how the EPA and the states have applied 40 CFR 51.308(d)(3)(v)(E) during the first implementation period, we decided that finalization of the phase "as currently exist with the State for these purposes" cannot be said to clearly be only a preservation of the existing requirement of the 1999 RHR, particularly when combined with the replacement of "including plans" with "and smoke management programs." In the first implementation period the EPA never relied on a narrow interpretation of the applicability of this part of 40 CFR 51.308(d)(3)(v)(E) in reviewing a SIP. The final rule does not include the phrase "as currently exist with the State for these purposes" because we have decided that there is no rational basis for the restriction.[118]

The final version of 40 CFR 51.308(f)(2)(iv)(D) (renumbered) requires that states *consider* basic smoke management practices and smoke management programs when developing their long-term strategies. As discussed in the preamble to our proposed action,[119] these requirements do not require a state to adopt basic smoke management practices or programs into its regional haze SIP.[120] As states consider whether to adopt new measures that might affect the ability of land managers to use prescribed fire, they may newly consider both the effectiveness of their smoke management programs in protecting visibility and the benefits of wildland prescribed fire for ecosystem health and public safety. There are many ways that a state can give new consideration to such practices and programs. For example, a state can consider the need for including such measures in its SIP without shoehorning them into a formal four-factor analysis. A state can also consider them by determining based on analysis of IMPROVE data that fires in general, and thus prescribed fires in

[117] Another way of considering whether measures in addition to BSMP are appropriate for prescribed fires conducted to improve ecosystem health and to reduce the risk of catastrophic wildfires, and/or considering what measures are appropriate for other types of prescribed fires, could be to assess and conclude that a particular subcategory of prescribed fires does not meaningfully impact visibility at any Class I area. Such a conclusion could support a decision not to require additional measures for that subcategory in the LTS even though a formal four-factor analysis has not been completed. A state might also include in its LTS measures aimed at reducing impacts from a subcategory of prescribed fire because those measures are already in effect in the state due to another CAA requirement or due to state-only considerations. If so, a new formal four-factor analysis of those measures would not be useful.

[118] Given the removal of the phrase "as currently exist within the state," the interpretation we articulated in the proposal that this phrase refers only to smoke management programs with the six listed features listed in the proposal is no longer relevant.

[119] *See* 81 FR 26958–59.

[120] Also, the EPA is not recommending that all states adopt any particular measures for wildland fire because situations vary too much from state to state and within states for any general recommendation to be appropriate.

particular, are not a significant contributor to reduced visibility at the Class I areas in the state (or impacted by the state). Therefore, this requirement of the final rule will not impose a difficult analytical burden on states or require them to adopt unreasonable measures. However, a state cannot unreasonably determine that a requirement for burn managers to use certain basic smoke management practices *is not* necessary to make reasonable progress. If a state determines that a requirement for burn managers to use certain smoke management practices *is* necessary to make reasonable progress, the long-term strategy must include such measure(s) in enforceable form. The same applies to consideration of a smoke management program. One possible outcome may be that a state reasonably does not make such a formal determination, but nevertheless decides to revise its current program regarding prescribed fires without incorporating the program (or the program enhancements) into the SIP. Such an action could indicate that the state has satisfied the requirement to consider basic smoke management practices and smoke management programs.

States also have the flexibility to allow reasonable use of prescribed fire. As previously noted, one approach to reducing the occurrence of wildland wildfires, and the risk of wildfires having catastrophic impacts, is appropriate use of prescribed fire. The EPA and the federal land management agencies will continue to work with the states as they consider how use of prescribed fire may reduce the frequency, geographic scale and intensity of natural wildfires, such that vistas in Class I areas will be clearer on more days of the year, to the enjoyment of visitors. States may also consider how the use of prescribed fire on wildland can benefit ecosystem health, protect public health from the air quality impacts of catastrophic wildfires and protect against other risks from catastrophic wildfires. These final rule revisions give states that have considered these factors, and other relevant factors, the flexibility to provide and plan for the use of prescribed fire, with basic smoke management practices applied, to an extent and in a manner that states and the EPA believe appropriate. The EPA is committed to working with states, tribes, federal land managers, other stakeholders and other federal agencies on matters concerning the use of prescribed fire, as appropriate, to reduce the impact of wildland fire emissions on visibility.

3. Final Rule

We are finalizing the fire-related definitions as proposed, including the revision of the definition of "fire" in 40 CFR 51.309(b)(4), with one change from proposal. We are finalizing a different definition of "wildfire" than we proposed. The final revised definition of a wildfire includes "a prescribed fire that has developed into a wildfire" instead of the proposed language "a prescribed fire that has been declared to be a wildfire." Two comments in this rulemaking objected to or asked for clarification of the meaning of the "declared to be a wildfire" portion of the definition. The definition of wildfire being finalized for the RHR in this final action is the same definition as recently finalized for the revised Exceptional Events Rule, as commenters in both rulemakings raised similar concerns about the proposed definition. Consistent with the approach taken in the final revised Exceptional Events Rule, we concluded that whether a prescribed fire should be treated as a wildfire for regional haze program purposes depends on the facts of the situation. Specifically, the final definition includes the phrase "a prescribed fire that has developed into a wildfire," which means a prescribed fire that has "developed in an unplanned way such that its management challenges are essentially the same as if it had been initiated by an unplanned ignition." *See* 81 FR 68250. While we proposed, and are finalizing, a definition of "wildfire" that includes a statement that a wildfire that predominantly occurs on wildland is a natural event, we do not intend to restrict a wildfire on other types of land from also being treated as a natural event or source, based on specific facts about the wildfire.

We are also finalizing 40 CFR 51.308(f)(3)(ii) as proposed to provide an adjustment to the URP framework for the 20 percent most impaired days due to the impacts of wildland fire conducted with the objective to establish, restore and/or maintain sustainable and resilient wildland ecosystems, to reduce the risk of catastrophic wildfires, and/or to preserve endangered or threatened species for purposes of ecosystem health and public safety during which appropriate basic smoke management practices were applied. Such an adjustment is not available for fires of any type on lands other than wildland or to burning on wildland that is for purposes of commercial logging slash disposal rather than wildland ecosystem health and public safety.

We are also finalizing the term "basic smoke management practices" as an update of the term "smoke management techniques" in 40 CFR 51.308(f)(2)(iv)(D) (renumbered). We are also finalizing the use of "smoke management programs" where the 1999 RHR used the term "plans." The final rule differs from the proposal in that it does not include the phrase "as currently exist within the State for these purposes."

This action also deletes the obsolete and duplicative definition of "base year" in 40 CFR 51.309(b)(8) and reserves that section number. The definition of "base year" in 40 CFR 51.309(b)(7) is the operative definition for this section of the RHR. The definition being deleted refers to 40 CFR 51.309(f) which is reserved in the current rule.

H. Clarification of and Changes to the Required Content of Progress Reports

1. Summary of Proposal

The proposed rule detailed additional revisions to 40 CFR 51.308(g) in order to clarify the substance of the regional haze progress reports, given ambiguities in the 1999 RHR with respect to, among other things, the period to be used for calculating current visibility conditions, and whether forward-looking, quantitative modeling is required in the progress reports to assess whether RPGs will be met. These proposed revisions were numerous and often independent of one another, and are summarized briefly as follows.

A proposed revision to the opening portion of 40 CFR 51.308(g) would have required that a state provide the public with a 60-day comment period on a draft progress report that is not a SIP revision, before submitting it to the EPA. The 1999 RHR did not explicitly say that a public comment period was required for progress reports, because other EPA rules require public notice for all SIP revisions and under the 1999 RHR progress reports have been SIP revisions.

Proposed revisions to 40 CFR 51.308(g)(3)(ii) added a number of explanatory sentences to better indicate what "current visibility conditions" are and how to calculate them, given that it is not clear what "current visibility conditions" are in the 1999 RHR. Practicality requires that "current conditions" should mean "conditions for the most recent period of available data." [121] The proposed text also made

[121] In our guidance on the preparation of progress reports, the EPA indicated that for "current visibility conditions," the reports should include

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clear that the period for calculating current visibility conditions is the most recent rolling 5-year period for which IMPROVE data are available as of a date 6 months preceding the required date of the progress report, given our belief that (since we also proposed that progress reports no longer be submitted as SIP revisions) this period would be sufficient for states to incorporate the most recent available data into their progress reports.[122] We also invited comment on other specific appropriate timeframes, including 3 months, 9 months and 12 months.

Proposed revisions to 40 CFR 51.308(g)(3)(iii) were designed to remedy a gap in the 1999 RHR, which failed to make clear what the "past 5 years" are for assessing the change in visibility impairment. We proposed to delete the "past 5 years" text and replace it with text indicating the change in visibility impairment is to be assessed over the span of time since the period addressed in the most recent periodic comprehensive SIP revision. The EPA believed this would remedy the issue that, because of data reporting delays, the period covered by available monitoring data will not line up with the periods defined by the submission dates for progress reports, and would ensure that each year of visibility information is included either in a periodic comprehensive SIP revision or the progress report that follows it. We proposed to make the same change to the 1999 RHR's "past 5 years" text in the first sentence of 40 CFR 51.308(g)(4) for the purposes of reporting changes in emissions of pollutants contributing to visibility impairment, for similar reasons.

We proposed several other revisions, particularly to 40 CFR 51.308(g)(4), to revise and clarify the states' obligations regarding emissions inventories. One issue was that the 1999 RHR's text seemingly required a state to project emissions inventories to the end of the "applicable 5-year period" whenever that endpoint is not the year of a triennial inventory (2011, 2014, etc.) required by 40 CFR part 51 subpart A (Air Emissions Reporting Requirements). For a variety of reasons more fully explained in the preamble to our proposal, we proposed text changes that explain clearly that states must include in their progress reports the emissions, by sector, from all sources and activities up to the triennial year for which information has already been submitted to the NEI. With regard to emissions data for EGUs, states would need to include data up to the most recent year for which the EPA has provided a state-level summary of such EGU-reported data. Finally, the last sentence of the proposed text for 40 CFR 51.308(g)(4) made clear that if emission estimation methods have changed from one reporting year to the next, states need not backcast (*i.e.*, use the newest methods to repeat the estimation of emissions in earlier years) in order to create a consistent trend line over the whole period, since although some states expressed concern that other parties may interpret the 1999 RHR as requiring it, the EPA has never expected states to backcast in this context.

We also proposed changes to 40 CFR 51.308(g)(5), which requires assessments of any significant changes in anthropogenic emissions that have occurred, consistent with our proposed changes to other sections. Specifically, we proposed to delete the reference to the "past 5 years" and instead direct states that the period to be assessed involves that since the last periodic comprehensive SIP revision. We also proposed text that would require states to report whether these changes were anticipated in the most recent SIP, given that this would assist the FLMs, the public and the EPA in understanding the significance of any change in emissions for the adequacy of the SIP to achieve established visibility improvement goals.

The EPA further proposed to renumber the 40 CFR 51.308(g)(6) of the 1999 RHR as 40 CFR 51.308(g)(7), and proposed to change that provision to clarify that the RPGs to be assessed are those established for the period covered by the most recent periodic comprehensive SIP revision. The proposed change did not alter the intended meaning of this section, and simply clarified that in a progress report, a state is not required to look forward to visibility conditions beyond the end of the current implementation period.

The proposed, new 40 CFR 51.308(g)(6) included a provision requiring a state with a long-term strategy that includes a smoke management program for prescribed fires on wildland to include in each required progress report a summary of the most recent periodic assessment of the smoke management program, including conclusions that were reached in the assessment as to whether the program is meeting its goals regarding improving ecosystem health and reducing the damaging effects of catastrophic wildfires.

A final proposed change to 40 CFR 51.308(g) removed the provisions of 40 CFR 51.308(g)(7) of the 1999 RHR entirely, relieving the state of the need to review its visibility monitoring strategy within the context of the progress report, a change that had been requested by many states during our pre-proposal consultations. Such a change was appropriate since all states currently rely on their participation in the IMPROVE monitoring program (and expect to continue to do so), so continuing the requirement for every state to submit a distinct monitoring strategy element in each progress report would consume state and EPA resources with little or no practical value for visibility protection.

Finally, we proposed minor changes to 40 CFR 51.308(h) and 40 CFR 51.308(i). Proposed changes to 40 CFR 51.308(h) regarding actions the state is required to take based on the progress report merely removed the implication that all progress reports are to be submitted at 5-year intervals, and aimed to improve public understanding of the declaration that a state must make when it determines that no SIP revisions are required. The proposed changes to 40 CFR 51.308(i) created a stand-alone requirement that states must consult with FLMs regarding progress reports because the 1999 RHR only applies FLM consultation requirements to SIP revisions (and the proposal would remove the formal SIP revision requirement from progress reports).

2. Comments and Responses

Several commenters pointed out that while there is no explicit provision in the 1999 RHR for the public to comment prior to the submission of progress reports for the first implementation period, which are required to be SIP revisions, other provisions in EPA rules require states to provide at least a 30-day notice to the public on any type of SIP revision, in contrast to the 60-day period we proposed to require for progress reports that are not SIP revisions. The commenters generally opposed the longer period and noted that it, in combination with the requirement to consult with FLMs well ahead of the start of public comment, would make it more difficult to meet the requirement that progress reports contain emissions and air quality

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the 5-year average that includes the most recent quality assured public data available at the time the state submits its 5-year progress report for public review. *See* section II.C of General Principles for the 5-Year Regional Haze Progress Reports for the Initial Regional Haze State Implementation Plans, April 2013.

[122] Note that we are not proposing this specification of 6 months for the progress report aspects of a periodic comprehensive SIP revision (*see* Section IV.E of this document), in light of the longer time needed for administrative steps between completion of technical work and submission to the EPA.

information no older than 6 months. We agree that retaining the current requirement for a 30-day public comment period is appropriate and are finalizing that period. States may provide a longer comment period, either initially or upon request, and we recommend that states do so when it would not prevent timely submission to the EPA.

Some commenters opposed the proposed provision in 40 CFR 51.308(g)(3)(ii) making clear that the period for calculating current visibility conditions is the most recent rolling 5-year period for which IMPROVE data are available as of a date 6 months preceding the required date of the progress report. As discussed previously, we also invited comment on other specific timeframes, and most of these commenters felt 12 months to be a more appropriate timeframe. However, in general these comments pointed specifically to the proposed provision requiring consultation with FLMs 60 to 120 days prior to a public hearing or other public comment opportunity on progress reports, and/or pointed to the proposed requirement for a 60-day public comment opportunity, as the reason for a 12-month period for IMPROVE data availability. However, as noted elsewhere in this document these two review/comment periods are not being finalized as proposed. In addition, the argument of several commenters that 6 months is an insufficient period to incorporate IMPROVE data even without the extended FLM consultation period was not well supported. Therefore, the EPA does not find these comments persuasive given the other content of the final rule.

One commenter on the proposed 40 CFR 51.308(g)(3)(ii) noted that given the fact that progress reports for the first implementation period have often not been submitted on time, the EPA should adjust the language of the rule text such that the period for calculating current visibility conditions should be based on the later of the required date or submittal date of the progress report. The EPA disagrees with this assessment because this could create a situation requiring a state to re-analyze data (and substantially re-draft portions of a progress report) in situations where submittal of a progress report is delayed for valid or unforeseeable reasons. We note that there will be other avenues for the public and the EPA to obtain the most recent IMPROVE data if a late progress report does not have the most current information.

Comments on the proposed revisions to 40 CFR 51.308(g)(4) regarding emissions tracking were numerous and varied, with many commenters expressing reservations about the proposed text. In general, these commenters asked that the EPA either not require states to use NEI data unless such data are available in final form a minimum of 12 months prior to the due date of the progress report, or that states should use the most recent final NEI data available at the time the progress report is prepared. In response, we want to reiterate that our proposal addressed only the requirement for the time period for the emissions information to be included in a progress report. We did not propose to require that the emissions data actually submitted to or contained in any version of the NEI be used in a progress report. Our intention is that a state have the flexibility to update and revise such data prior to presenting it in a progress report, but not the flexibility to limit its presentation to only emissions information for earlier years.[123] Second, we acknowledge that, as proposed, this subsection could be interpreted to trigger a requirement to present emissions data for a certain year should data for that year be made available for the first time the day before the planned submission of a progress report. We are therefore finalizing additional text in 40 CFR 51.308(g)(4) (similar to text proposed and being finalized in 40 CFR 51.308(g)(3)) making clear that only NEI emissions data submitted by the state to the Administrator (or, in the case of data submitted directly by sources to a centralized emissions data system, made available in a state-level summary by the Administrator) at least 6 months prior to the due date for the progress report triggers the requirement that the progress report include emissions information for that year.

Proposed changes to 40 CFR 51.308(g)(5) involving assessments of any significant changes in anthropogenic emissions that have occurred since the period addressed in the last SIP revision were generally well received, however, one commenter asked that the EPA require additional specificity in this assessment. The EPA did not make any changes in response to this comment because the rule we are finalizing already includes the required information.

Comments on the proposed, new 40 CFR 51.308(g)(6) regarding a progress report including a summary of the most recent periodic assessment of any existing smoke management program that is part of the long-term strategy were numerous, with some commenters generally favoring and all but one state opposing this additional rule provision. The comments in opposition to the new provision appear to interpret it as creating a requirement that states periodically assess their smoke management programs and whether these programs are meeting their goals. However, the proposed provision was not intended to create any such requirement. It merely intended that if there is a smoke management program in the long-term strategy that already has a periodic program assessment element, the findings and recommendation of the most recent assessment must be summarized in the regional haze progress report. We are finalizing small changes from the proposed provision to make this intention clear. We reiterate that we interpret this provision to only apply to smoke management programs that have been made part of the long-term strategy in the regional haze SIP, and only to programs that have a program evaluation element. A state that has such a smoke management program and has included its program in its regional haze SIP has acknowledged that management of smoke is a significant concern with respect to visibility. Providing the public with easy access to a summary of the most recent program assessment via the regional haze progress report will facilitate public participation in the state's development of its next SIP revision. The benefit of including a summary of the program assessment for a smoke management program that is not part of the SIP in the progress report, if there has been a program assessment, may be less, and we believe a state should have flexibility to include or not include such a summary in its progress report.

Regarding the proposed 40 CFR 51.308(g)(7) (which as proposed was simply a modified version of the 1999 RHR's 40 CFR 51.308(g)(6) that clarified that a progress report's required assessment of whether a SIP is sufficient to meet established RPGs should address the RPGs defined for the end of the particular implementation period), the few comments received from states indicated a general opposition to the requirement to evaluate SIP adequacy to meet RPGs. The EPA did not propose to remove this function of the progress reports, so comments in favor of removing it are outside the scope of this rulemaking.

[123] This point about updating and revising data for a particular year also applies to emissions information made available by the Administrator in a state-level summary. It is possible that a state may have more recent, more complete or more accurate data for its sources than the Administrator has been able to include in his or her state-level summary for a particular year.

The proposed removal of the provisions of the 1999 RHR's 40 CFR 51.308(g)(7), designed to relieve the state of the need to review its visibility monitoring strategy within the context of the progress report, received few comments, but was generally opposed by conservation organization commenters and favored by state commenters. With respect to the progress reports that will be due in the second and subsequent implementation period, the reasoning for eliminating these provisions as explained in the proposal remains valid even in light of the comments received. However, upon further consideration it is appropriate to leave in place the requirement for a monitoring strategy element for the remaining progress reports due in the first implementation period, as many progress reports have already been submitted and many others are well under development. Being consistent with respect to this requirement for all progress reports during the first implementation period will not be a significant burden on the states. We have not disapproved the monitoring strategy element of any progress report to date.

The RTC responds to these comments in more detail.

Public comments on 40 CFR 51.308(i) regarding the requirement for consultation with FLMs on progress reports are discussed elsewhere in this document.

3. Final Rule

The EPA is finalizing all of the rule text detailed in the preceding discussion as proposed with changes. Instead of removing the 1999 RHR's 40 CFR 51.308(g)(7) regarding monitoring strategies entirely, we are retaining it but making it applicable only to progress reports for the first implementation period. With the retention of 40 CFR 51.308(g)(7), the numbering of other sections in the final rule is different than proposed and is consistent with the numbering in the 1999 RHR. We are revising the opening text of 40 CFR 51.308(g) to make the required public comment period be 30 days rather than 60 days. We are revising 40 CFR 51.308(g)(4) to provide a 6-month grace period for the trigger of the requirement to include emissions information for a recent year. The final version of new 40 CFR 51.308(g)(8) (numbered as (g)(6) in the proposal) has been revised from the proposal to clarify its applicability.

We are finalizing rule text in 40 CFR 51.308(g)(7) that makes it clear that all remaining progress reports for the first implementation period submitted after these rule revisions are finalized must address the monitoring strategy, as has been the requirement of the 1999 RHR for progress reports already submitted. A progress report for the second or a subsequent implementation period will not have to address the monitoring strategy.

I. Changes to Reasonably Attributable Visibility Impairment Provisions

1. Summary of Proposal

The EPA proposed extensive changes to 40 CFR 51.300 through 51.308 with regard to reasonably attributable visibility impairment. The motivation for these changes was discussed in detail in the proposal. In summary, in the time since the reasonably attributable visibility impairment provisions were originally promulgated in 1980, advances in ambient monitoring, emissions quantification, emission control technology and meteorological and air quality modeling have been built into the regional haze program, such that state compliance with the RHR's requirements will largely ensure that progress is made towards the goal of natural visibility conditions. Therefore, some aspects of the reasonably attributable visibility impairment provisions of the visibility regulations have less potential benefit than they did when they originally took effect. These provisions have received few revisions over the years resulting in a substantial amount of confusing and outdated language within the current visibility regulations including seemingly overlapping and redundant requirements. While there have historically been very few certifications of existing reasonably attributable visibility impairment by an FLM, in several situations a certification by an FLM has ultimately resulted in new controls or changes in source operation.

The EPA therefore proposed to (1) eliminate recurring requirements on states that we believe have no significant benefit for visibility protection; (2) clarify and strengthen the 1999 RHR's provisions under which states must address reasonably attributable visibility impairment when an FLM certifies that such impairment is occurring in a particular Class I area due to a single source or a small number of sources; (3) remove FIP provisions that require the EPA to periodically assess whether reasonably attributable visibility impairment is occurring and to respond to FLM certifications; and (4) edit various portions of 40 CFR 51.300 through 40 CFR 51.308 to make them clearer and more compatible with each other. The EPA solicited comment on each of the proposed changes as well as suggestions for alternative approaches.

Specific proposed provisions included:

- Revisions to 40 CFR 51.300, Purpose and applicability, to expand the reasonably attributable visibility impairment requirements to all states in light of the evolved understanding that pollutants emitted from one or a small number of sources can affect Class I areas many miles away.
- Revisions to 40 CFR 51.301, Definitions, to change the definition of *reasonably attributable* in order to make clear that a state does not have complete discretion to determine what techniques are appropriate for attributing visibility impairment to specific sources.
- Deletion of the entire text of 40 CFR 51.302 and replacement with new language clearly describing a state's responsibilities upon receiving a FLM certification of reasonably attributable visibility impairment. The following aspects of the proposed 40 CFR 51.302 are of particular relevance in summarizing comments and explaining our final action.
  - The proposed 40 CFR 51.302(b) described the required state action in response to any FLM certification of reasonably attributable visibility impairment, namely that a state shall revise its regional haze implementation plan to include a determination, based on the four reasonable progress factors set forth in 40 CFR 51.308(d)(1)(i)(A), of any controls necessary on the certified source(s) to make reasonable progress toward natural visibility conditions in the affected Class I area. This would preserve the existing state obligation, including the fact that a certification by an FLM would not create a definite state obligation to adopt a new control requirement, but rather only to submit a SIP revision that provides for any controls necessary for reasonable progress. It would be the EPA, not the certifying FLM, that would determine whether the responding SIP is adequate and the response reasonable.
  - The proposed 40 CFR 51.302(c) addressed those situations where an FLM certifies as a reasonably attributable visibility impairment source a BART-eligible source where there is at that time no SIP or FIP in place setting BART emission limits for that source or addressing BART requirements via a better-than-BART alternative program.[124] In such an instance, the

[124] Although most of the BART requirements have been addressed in most states, there remain a handful of states with BART obligations. In addition, there is litigation over the BART element in some approved SIPs and promulgated FIPs. We expect that this situation may exist in one or more

proposed rule would require the state to revise its regional haze SIP to meet the requirements of 40 CFR 51.308(e), BART requirements for regional haze visibility impairment, and notes that this requirement exists in addition to the requirements of 40 CFR 51.302(b) regarding imposition of controls for reasonable progress. The proposed version of 40 CFR 51.302(c) also clarified two aspects of the 1999 RHR to match the EPA's past and current interpretations. First, while a certification of reasonably attributable visibility impairment for a BART-eligible source prior to the EPA's approval of a state's BART SIP for that source does not impose any substantive obligation on a state that is over and above the BART obligation imposed by 40 CFR 51.308, the state's response to the certification of reasonably attributable visibility impairment for a BART-eligible source must take into account current information. Second, a certification of reasonably attributable visibility impairment for a BART-eligible source after the state's BART SIP for that source has been approved by the EPA does not trigger a requirement for a new BART determination based on the five statutory factors for BART, but rather, the state's obligation with respect to that source is the same as for a non-BART eligible source.

Three alternatives were proposed for 40 CFR 51.302(d) regarding the time schedule for state response to an FLM certification of reasonably attributable visibility impairment.

- Revisions to 40 CFR 51.303, Exemptions from control, to correctly refer to the new 40 CFR 51.302(c) as well as to the BART provisions in 40 CFR 51.308(e). Note that these revisions were described in the preamble of the proposal, but were inadvertently not included in the proposed rule text.
- Revisions to 40 CFR 51.304, Identification of integral vistas, to remove antiquated language in light of the fact that FLMs were required to identify any such integral vistas on or before December 31, 1985, and to list those few integral vistas that were properly identified.
- Revisions to 40 CFR 51.305, Monitoring for reasonably attributable visibility impairment, to state that the requirement to include in a periodic comprehensive SIP revision a monitoring strategy specifically for reasonably attributable visibility impairment in Class I area(s) only applies in situations where the Administrator, Regional Administrator or FLM has advised the state of a need for it.
- Complete removal of 40 CFR 51.306.
- Revisions to 40 CFR 51.308 (in addition to those discussed elsewhere in this document and in the proposal) related to reasonably attributable visibility impairment.
- Revisions to 40 CFR 51.308(e), BART, relating to a state's option to enact an emissions trading program or other alternative measure in lieu of source-specific BART.

Finally, consistent with our proposal to remove the requirement for states to periodically assess reasonably attributable visibility impairment, the EPA proposed to revise many sections of 40 CFR part 52 to remove provisions that establish FIPs that require the EPA to periodically assess whether reasonably attributable visibility impairment exists at Class I areas in certain states and to address it if it does, and to respond to any certification of reasonably attributable visibility impairment that may be directed to a state that does not have an approved reasonably attributable visibility impairment SIP.

2. Comments and Responses

Comments on the proposed revisions to 40 CFR 51.300 regarding the expansion of reasonably attributable visibility impairment to states that do not have Class I areas were mixed across stakeholder groups. While few commenters expressed disagreement with the EPA's statements surrounding the improved scientific understanding of long-range pollutant transport showing that reasonably attributable visibility impairment can be an interstate issue, commenters opposing the reasonably attributable visibility impairment expansion generally pointed to the alleged redundant nature of the reasonably attributable visibility impairment and regional haze requirements, as well as asserting that any and all FLM concerns can be raised during the SIP development process. Using similar arguments, a number of commenters urged the EPA to remove the reasonably attributable visibility impairment requirements entirely, although this was not an option outlined in the proposal.

A number of comments on the proposed revisions to 40 CFR 51.301 regarding definitions opined that changing the definition of "reasonably attributable" (to remove implied state discretion in determining whether the technique used was appropriate) would significantly alter the federal-state relationship in the visibility program and give FLMs authority beyond that afforded in sections 169A and 169B of the CAA. In response, the EPA is clarifying that the text edit to remove the phrase "the state deems" from the definition of "reasonably attributable" was not intended to give the FLMs sole power to determine what technique is appropriate for attributing visibility impairment to a source or small number of sources. If and when an FLM makes a certification, it can base the certification on a technique that it thinks appropriate. Whether that technique is appropriate is an issue that the affected state may opine on during the consultation opportunity the FLM is required to offer (details of this consultation opportunity are discussed later) and as part of its responsive SIP revision. If the state believes that the technique is not appropriate and that no appropriate technique would verify the attribution alleged by the FLM, the state may submit a narrative-only SIP revision that disagrees with the certification and explains the reason for the disagreement, and accordingly contains no additional measures for the identified source or sources. However, it will be the EPA that ultimately determines whether the technique was appropriate, when we approve or disapprove the responsive SIP revision after considering the information that supports the certification, the information in the SIP revision, and public comments. This change in the rule text does not alter the federal-state relationship, because even under the wording of the 1999 RHR, the EPA would review the reasonableness of a state's determination as to what technique is appropriate for attributing visibility impairment.

Several of these comments also ask that, if the EPA finalizes this change in definition, that the scope of attribution techniques which would qualify as "appropriate" be better stated. On this point, the EPA does not believe imposing such limits on the scope of techniques that qualify as "appropriate" is justified, particularly given that continually improving scientific understanding of pollutant transport and the continually evolving scope of modeling will no doubt result in even better attribution techniques in the future.

Other comments on 40 CFR 51.301 asked for a more descriptive and thorough definition of "reasonably attributable visibility impairment" and its related terms. Comments on 40 CFR 51.302 regarding FLM certification of reasonably attributable visibility impairment contained similar requests,

states at some time after the effective date of the final rule.

with most states and industry expressing concern that the proposed rule did not define sufficiently limiting principles for FLMs, failed to identify information about the scientific basis for any certification of reasonably attributable visibility impairment, and did not provide any basis by which a state or source could review or object to any certification of reasonably attributable visibility impairment before it triggered a mandatory obligation to respond. Several commenters asked for guidance or criteria in the final rule for the certification process and techniques for attribution, with some providing a suggested list of elements to include in a certification of reasonably attributable visibility impairment.

The comments in favor of a more specific provision in the final rule for what type of source impact, assessed by what method, constitutes reasonable attributable visibility impairment did not offer any particular more specific definition of reasonably attributable visibility impairment, and we had not proposed any more specific definition. While the EPA acknowledges the comments, we do not think it is necessary to finalize a more specific definition in the rule text. The EPA agrees with the portion of one comment letter suggesting that a thorough certification of reasonably attributable visibility impairment should describe the location(s) within the Class I area where the impairment occurs, when (*e.g.*, year-round or only during certain times of the year) the impairment occurs, what attribution methods were used to determine impairment (such as photographs or videos, monitoring, and/or modeling), a description of how the impairment adversely impacts visibility, an identification of the source or sources believed by the FLM to be causing the impairment and the methods used to make this determination. Past reasonably attributable visibility impairment certifications have generally included these elements or the certifying FLM otherwise shared such information with the state.

Additional comments on 40 CFR 51.302 asked for some degree of state participation in certification development, such as a pre-certification consultation requirement whereby FLMs must consult with states (and possibly EPA) before certifying, as well as an option for the state to appeal a certification once received. In response to these comments, we are including a consultation obligation on the FLMs in the final rule text. We would like to reiterate the importance of state-FLM consultation for all aspects of the RHR, including reasonably attributable visibility impairment. While the final rule requires the FLM to offer a state an in-person consultation meeting at least 60 days prior to making a certification of reasonably attributable visibility impairment, we encourage FLMs and state to have conversations and exchange technical information even earlier. The FLMs have conveyed to the EPA their expectation that a reasonably attributable visibility impairment certification will be an unusual "backstop" for a situation that is not otherwise addressed under the regional haze program despite good communication between the FLM and the state. In addition, in each instance since the original regulations were promulgated since 1980, FLMs have consulted with states and EPA and only made the decision to certify reasonably attributable visibility impairment when these conversations did not lead to a resolution of the issue.

One commenter said that there is no provision in the 1980 rule on reasonably attributable visibility impairment that allows an FLM to make a certification for a source that is not BART-eligible. This commenter objected to the explicit provisions in our proposed rule revisions that provide for such a certification. We disagree with the commenter's description of the 1980 rule. We recognize that the term "existing stationary facility" was defined in the 1980 rule as including only BART-eligible sources, and that many of the provisions of the 1980 rule were specific to these sources. However, the 1980 rule's definition of reasonably attributable visibility impairment refers to "air pollutants from one, or a small number of sources," not more narrowly to "existing stationary facilities." Also, 40 CFR 51.302(c)(2)(i) as promulgated in 1980 says that a state plan to address reasonably attributable visibility impairment must include a strategy "as may be necessary to make reasonable progress towards the national goal" and 40 CFR 51.302(c)(2)(ii) requires an assessment of how each element of the plan relates to preventing visibility impairment. Neither of these sections is limited to only "existing stationary facilities." In addition, 40 CFR 51.302(c)(3) as promulgated in 1980 required plans to require "each source" to maintain control equipment and to establish procedures to ensure the equipment is properly operated and maintained. While the remaining parts of 40 CFR 51.302(c) contain more specific requirements that apply when a certification of reasonably attributable visibility impairment has identified an "existing stationary facility", the existence of these requirements does not mean that an FLM may not make a certification for another type of source or that a state has no obligation to submit a SIP revision to respond to the certification. Furthermore, as explained in more detail in the RTC, we believe that the CAA provides broad enough authority for the EPA to promulgate the provisions in the final rule regarding the certification of reasonably attributable visibility impairment by sources that are not BART-eligible, regardless of how these sources were addressed in the 1980 rule. If a certification is made for a source (or a small number of sources) that is not BART-eligible (or for a BART-eligible source for which the EPA has already approved or promulgated a plan addressing the BART requirement), the responsive SIP revision must provide for whatever measures for that source are necessary to make reasonable progress considering the four statutory factors, unless the SIP revision establishes that there is no reasonably attributable visibility impairment due to the identified source.

There were a number of comments on 40 CFR 51.302(d) regarding the proposed three options for a schedule for state response to a certification of reasonably attributable visibility impairment. Some commenters recommended the first proposed approach of keeping the 1999 RHR's schedule under which a state response is due within 3 years of a certification of reasonably attributable visibility impairment. Most commenters found the third proposed approach to be unnecessarily complicated, while some objected to how much time could elapse between a certification and the state's responsive SIP revision; we are not finalizing the third approach and will not discuss it further. Some commenters favored a modified version of the second proposed option (in which the deadline would be the earlier of the due date for the next progress report or periodic comprehensive SIP revision, so long as that submission is due at least 2 years after the certification), but with more time to respond. These commenters generally stated that the minimum workable time was either 3 or 4 years. It is noteworthy, however, that other commenters opposed this second option, largely due to the fact that in some situations a state response would not be due for some time after an FLM certification (up to 7 years).

We noted that if the second approach were finalized but with the minimum time to respond to a certification increased to 3 or 4 years (as recommended by some states),

responses to FLM certifications may not be due until 8 or 9 years after certification, which is an excessive amount of time. The EPA believes that retaining the fixed 3-year deadline of the existing rule is workable for all parties and is most appropriate and hence is finalizing the first option in this rulemaking, with an added provision that no response will be due before the July 31, 2021, due date of the next SIP revision.[125] While not specifically proposed, this provision is being finalized in response to the general concern of some commenters with a state having to respond to a reasonably attributable visibility impairment certification before it has had an opportunity to systematically consider what additional emission reductions measures are necessary for reasonable progress for the second implementation period taking into account all the requirements of this final rule.

While we did not publish specific proposed rule changes for removing all mention of integral vistas from the visibility protection rules, we invited comment on such a step. We did so because it appeared that if we finalized our other proposals, there would be no requirement in our rules that actually depends on whether an integral vista associated with a Class I area had been identified. Thus, removing mention of integral vistas would simplify the rule text without changing any party's obligations under our visibility protection rules. A number of commenters agreed with our assessment and supported the removal of all mention of integral vistas, and no commenter opposed this change. However, we now realize that because the definition in 40 CFR 51.301 that "*visibility in any mandatory Class I Federal area* includes any integral vista associated with that area" and because there are several provisions that after our final action continue to use the term "visibility in any mandatory Class I Federal area," there are some provisions where the existence of a single identified integral vista could conceivably make a difference to the obligation of some party or to an EPA action. For this reason, we are finalizing only what we proposed, which is removal of antiquated language in section 40 CFR 51.304, but not removal of all references to integral vistas in subpart P.

[125] The added provision that refers to July 31, 2021, will have the effect of providing additional time for the state's response only for a reasonably attributable visibility impairment certification made prior to July 31, 2018.

For a discussion of the comments on other areas proposed and being finalized related to reasonably attributable visibility impairment, please *see* the RTC document available in the docket for this rulemaking.

3. Final Rule

We are finalizing the proposed revisions to the reasonably attributable visibility impairment and related provisions, with four changes.

First, as mentioned in the Section IV.I.2 of this document, we are finalizing a modified version of one of the proposed alternatives regarding the deadline for state response to a certification of reasonably attributable visibility impairment certification, namely that the response would always be due within 3 years (as required by the existing rule). The final rule retains this option's 3-year, fixed deadline rather than one of the alternative schemes proposed that would have always aligned the deadline with the next SIP revision or progress report, but adds an additional one-time provision such that a state response to a certification of reasonably attributable visibility impairment will in no case be due earlier than July 31, 2021. The final rule retains the language indicating that the state is not required at the time of response to also revise its RPGs to reflect the additional emission reductions required from the source or sources.

Second, we are adding to 40 CFR 51.308(e)(2)(v) and 40 CFR 51.308(e)(4) references to the reasonably attributable visibility impairment provisions in 40 CFR 51.302(b) and 40 CFR 51.302(c). We proposed to add to each of these parts of the rule only a reference to 40 CFR 51.302(b) but have realized that a reference in each to 40 CFR 51.302(c) is also needed. With these revisions, it is clear that for a BART-eligible source participating in a trading program that has been determined to be better-than-BART, if an FLM certifies that there is reasonably attributable visibility impairment due to that source a state may include a geographic enhancement of the trading program to satisfy both the reasonable progress obligation under 40 CFR 51.302(b) and any outstanding BART obligation under 40 CFR 51.302(c). While most BART-eligible sources cannot become subject to 40 CFR 51.302(c) because an approved BART SIP (or a SIP under 40 CFR 51.309) or a FIP is in place as a result of planning efforts in the first implementation period, there are a small number of BART-eligible sources that might become subject to 40 CFR 51.302(c) and it is important to be clear that a geographic enhancement is an option for them, as it has been under the 1999 RHR.

Third, also mentioned in the preceding section, we are finalizing a requirement in 40 CFR 51.302(a) that the FLM making a certification of reasonably attributable visibility impairment must offer an opportunity to the state(s) containing the identified sources to consult regarding the basis for the certification, in person and at least 60 days before the FLM makes the certification. This change was added in response to comments received that specifically asked for such consultation.

Fourth, we are not finalizing the proposed changes to 40 CFR 51.308(c), for the following reasons. Because we are finalizing a 3-year, fixed deadline for state response to a certification of reasonably attributable visibility impairment, the first part of the proposed provision (regarding the need to respond as part of an upcoming, otherwise due SIP revision) no longer applies. As to the second part of the proposed provision (regarding monitoring to assess reasonably attributable visibility impairment), we now realize this aspect is adequately covered by 40 CFR 51.308(f)(4) and that duplication of requirements in different subsections would only cause confusion. Therefore, 40 CFR 51.308(c) will remain unchanged from the 1999 RHR.

J. Consistency Revisions Related To Permitting of New and Modified Major Sources

1. Summary of Proposal

Proposed changes to 40 CFR 51.307, New source review, were limited to a few proposed changes to maintain consistency with other sections of the RHR and with the CAA. These changes were minor and therefore will not be repeated here.

2. Comments and Responses

There were no significant comments received on the proposed changes to this subsection.

3. Final Rule

Changes to 40 CFR 51.307 are being finalized as proposed. The EPA does wish to emphasize the requirement for FLM consultation during the new source review permitting process. As discussed in the preamble for the proposal, 40 CFR 51.307(a) requires FLM consultation for any new major source or major modification that would be constructed in an area designated attainment or unclassifiable that may affect visibility in any Federal Class I

area. FLM consultation is also required under 40 CFR 51.307(b)(2) for any major source or major modification that proposes to locate in a nonattainment area that may affect visibility in any mandatory Federal Class I area. Two EPA guidance documents interpret this consultation requirement, particularly with regard to evaluating whether a proposed new major source or major modification may affect visibility in a Federal Class I area.[126] The EPA regional offices can provide additional assistance to states in ensuring that their permitting programs meet the regulations and that the appropriate consultation is being conducted for affected permits.

K. Changes to FLM Consultation Requirements

1. Summary of Proposal

As discussed in the proposed rule, state consultation with FLMs is a critical part of the development of quality SIPs. We proposed not only to apply the FLM consultation requirements of 40 CFR 51.308(i)(2) to progress reports that are not SIP revisions, but to make further edits to this subsection to support such consultations. The proposed changes were motivated by a concern that the 1999 RHR's requirement for consultation at least 60 days prior to a public hearing may not result in a state offering an in-person consultation meeting sufficiently early in the state's planning process to meaningfully inform the state's development of the long-term strategy. We proposed to add a requirement that such consultation on SIPs and progress reports occur early enough to allow the state time for full consideration of FLM input, but no fewer than 60 days prior to a public hearing or other public comment opportunity. A consultation opportunity that takes place no less than 120 days prior to a public hearing or other public comment opportunity would then be deemed to have been "early enough."

2. Comments and Responses

Overall, the comments were split with many favoring any enhanced FLM participation in regional haze planning, while most states generally disfavored enhanced participation.

Regarding comments specific to the proposed changes to 40 CFR 51.308(i)(2), states were split in supporting or opposing the inclusion of a reference using the phrase "early enough." Some commenters said the criteria were not clear and asked for clarity on what would be needed to satisfy the requirement. In addition, many states and industry said the current 60-day period is long enough for SIPs, and that a longer period could delay their submission.

For progress reports, several state and industry commenters indicated that the 60-day period described in the 1999 RHR is sufficient, or that FLMs should not be consulted on progress reports at all if they are no longer required to be SIP revisions. A main concern was that anything more than a 60-day period would conflict with the proposed requirement in 40 CFR 51.308(g)(3) to assess current conditions based on the IMPROVE data available 6 months before the progress report due date. As discussed earlier in this document, this requirement under 40 CFR 51.308(g)(3) is being finalized as proposed. The EPA agrees that a requirement to consult with FLMs on progress reports more than 60 days prior to opening a public comment period may interfere with the revised provisions in 40 CFR 51.308(g)(3) and is therefore finalizing the 60-day requirement without referring to consultation being "early enough" and without referring to the 120-day point in the process.

Finally, some multi-state organization commenters asked for confirmation that state and FLM participation in the RPO process would continue to meet the consultation requirement. The EPA does not agree that such participation would suffice for consultation because being informed of the technical work performed by the multi-state organizations is not the same as the FLMs being substantively involved in regulatory decisions a state makes on what controls to require based on that work (*i.e.*, the decisions on the long-term strategy on which public comment will be sought prior to submission to the EPA in the form of a SIP revision). Furthermore, the objective of these provisions is not to achieve FLM consultation with states on setting RPGs, since that process is largely mechanical in nature because RPGs are to be based on the long-term strategy and do not involve any additional policy decisions. We note that a standing invitation for FLM participation in the work performed by multi-state organizations may be part of the procedures that a SIP provides for continuing consultation between the state and the FLM, as required by 40 CFR 51.308(i)(4).

For a more thorough discussion of the comments on FLM consultation requirements, please *see* the RTC document available in the docket for this rulemaking.

3. Final Rule

After consideration of public comments, we are finalizing the revisions to 40 CFR 51.308(i)(2) with changes from proposal. The proposed requirement for consultation no fewer than 60 days prior to a public hearing or other public comment opportunity (with a consultation opportunity that takes place no less than 120 days prior to a public hearing or other public comment opportunity being deemed "early enough") is being finalized for SIP revisions. For progress reports (which, as discussed elsewhere in this document, will no longer be subject to the formalities of a SIP revision), the EPA is finalizing a requirement for consultation no fewer than 60 days prior to a public hearing or other public comment opportunity, with no reference to the consultation opportunity being "early enough." We are also finalizing somewhat different wording regarding the purpose of the consultation on SIP revisions, to convey the idea that consultation that takes place via an in-person meeting 60 to 120 days prior to a public hearing or comment opportunity will be about decisions that are about to be made by the state on its long-term strategy rather than about the plan for the technical analysis that informs these decisions, because by that time the technical analysis will have already been largely completed.[127] The final wording on the purpose of the consultation also emphasizes the content of the long-term strategy rather than the setting of the RPGs, consistent with the concept that the RPGs are a reflection of the requirements of the long-term strategy.

L. Extension of Next Regional Haze SIP Deadline From 2018 to 2021

1. Summary of Proposal

The EPA proposed to revise 40 CFR 51.308(f) to move the deadline for the submission of the next periodic comprehensive SIP revisions from July 31, 2018, to July 31, 2021, with states retaining the option of submitting their SIP revisions before July 31, 2021. We proposed to leave the end date for the second implementation period at 2028,

[126] Notification to Federal Land Manager Under Section 165(d) of the Clean Air Act, memo from David G. Hawkins, EPA Assistant Administrator for Air, Noise, and Radiation to EPA's Regional Administrators, March 19, 1979; 1990 New Source Review Workshop Manual, Chapter E, Section III A. Source Applicability.

[127] We expect that the FLM would have already provided input into the planning of the technical analysis including steps to gather information to be analyzed, as part of the ongoing consultation required under 40 CFR 51.308(h)(4) and as part of FLM participation in multi-state planning groups.

regardless of when SIP revisions are submitted. The proposed change was to be a one-time schedule adjustment such that the due dates for periodic comprehensive SIP revisions for the third and subsequent planning periods would still be due on July 31, 2028, and every 10 years thereafter. The EPA proposed this extension to allow states to coordinate regional haze planning with other regulatory programs, including but not limited to the Mercury and Air Toxics Standards,[128] the 2010 1-hour SO_2 NAAQS,[129] the 2012 annual $PM_{2.5}$ NAAQS [130] and the Clean Power Plan,[131] with the further expectation that this cross-program coordination would lead to better overall policies and enhanced environmental protection.

2. Comments and Reponses

Many commenters, especially state air agencies, expressed support for this extension, while other commenters opposed it. A primary concern from the latter group of commenters was that, given the fact that many initial regional haze SIPs were submitted late (in some cases, well into the first implementation period), this pattern was likely to continue and many periodic comprehensive SIP revisions would not be submitted by July 31, 2021, which would leave even less time during the second implementation period for any emission reductions necessary for reasonable progress to occur. One commenter stated that the 2021 date would be workable provided EPA acts promptly on each state's periodic comprehensive SIP revision, and that EPA should indicate now that it will make prompt findings of nonsubmittal or substantial inadequacy when the time comes.

As a general matter, making findings of nonsubmittal or substantial inadequacy are well within the EPA's authority. While we recognize the commenter's concern regarding the timing of SIP submissions, we expect that the length of the second implementation period will be sufficient to secure the emission reductions necessary for reasonable progress. The EPA anticipates that the experience states and the EPA have gained from the first round of regional haze planning will result in a more efficient process of SIP submission and review moving forward. Furthermore, the EPA has clarified in the final rule that whether or not a control measure can be installed and become operational before the end of the planning period is not a factor in determining whether that measure is necessary to achieve reasonable progress. Thus, the length of the implementation period should not be a barrier to achieving the emission reductions identified by the reasonable progress analysis. Finally, this rule change grants states additional time up front (before 2021) for regional haze planning and analysis and thus makes it more likely they will submit their SIP revisions for the second implementation period either on or ahead of schedule.

Some commenters contended that the EPA's rationales do not justify the proposed extension, and that giving states an additional 3 years to coordinate their planning would frustrate Congress's policy goals and impair human health. One commenter said that the EPA should evaluate the public health impacts of its proposal to delay the SIP deadline to 2021. We disagree with these comments. As we explained at proposal, the RHR requires states to include the impacts of other regulatory programs when developing their regional haze SIPs. Many industries, including the utility sector, are currently in the midst of developing mid- to long-term plans that will govern how they navigate the numerous recent additions to the regulatory landscape that include, but are not limited to, the programs discussed in the proposal and mentioned previously (*i.e.*, the Mercury and Air Toxics Standards,[132] the 2010 1-hour SO_2 NAAQS,[133] the 2012 annual $PM_{2.5}$ NAAQS [134] and the Clean Power Plan).

Decisions that states and regulated entities make in response to one program may affect the options available for addressing their regional haze obligations, and vice versa. Providing time for regulated entities to coordinate their planning will allow them to design pollution control strategies that make efficient and effective use of their resources over the long term. Congress's goal of attaining natural visibility conditions will not be achieved in the next implementation period—it is necessarily a longer-term effort that will require states and regulated entities to make careful, considered decisions about how to balance the requirement to achieve sustained and sustainable visibility improvement moving forward with their business, regulatory and other priorities. Additionally, with the extension of the due date for the second implementation period SIPs, we are maintaining 2028 as the end date of the implementation period. We thus disagree that providing states 3 additional years to coordinate planning is inconsistent with continuing to make reasonable progress towards the ultimate goal of natural visibility conditions. We also disagree that providing 3 additional years will seriously undermine the goal of coordinated, regional planning among states. While we are aware that some states in the eastern U.S. are considering submitting SIPs before July 31, 2021, these states are coordinating among themselves on their technical analyses and they have not indicated that the extension will obstruct their coordination with other states.

Although Congress did not establish an explicit role for health considerations in the regional haze program, reductions of visibility-impairing pollutants also have important health related co-benefits. However, because the purpose of the regional haze program is improving visibility in Class I areas, we disagree that the EPA should evaluate the human health impacts of moving the deadline for regional haze SIP submissions from 2018 to 2021. Importantly, the emission reductions achieved in the first implementation period will continue to be in effect, and emissions will continue to be addressed during this period under the existing structure of federal, state and local clean air programs. Insofar as states and sources were already planning to undertake emission control projects in response to other regulatory requirements, the timing of these projects will be unaffected by the change in the SIP due date in the regional haze program. Furthermore, states are not required to wait until 2021 to submit their regional haze SIP revisions for the second implementation period, although they may choose to do so.

One commenter asserted that EPA's proposal to extend the deadline for submission of regional haze SIPs for the second implementation period violates the plain language of the section 169B(e)(2) of the CAA. The commenter argues that this statutory provision requires EPA to mandate that states submit regional haze SIP revisions within 12 months of promulgating RHR revisions under section 169A. We disagree. Section 169B(e)(2) states that "[a]ny regulations promulgated under section [169A] of this title pursuant to *this subsection* shall require affected

[128] 77 FR 9304, February 16, 2012.

[129] 75 FR 35520, June 22, 2010.

[130] 78 FR 3086, January 15, 2013.

[131] 80 FR 64662, October 23, 2015. The Clean Power Plan was stayed by the Supreme Court for the duration of litigation. Order in Pending Case, *West Virginia* v. *EPA*, No. 15A773 (February 9, 2016). As a result, states have no compliance obligations with respect to the Clean Power Plan at this time.

[132] 77 FR 9304, February 16, 2012.

[133] 75 FR 35520, June 22, 2010.

[134] 78 FR 3086, January 15, 2013.

States to revise within 12 months their implementation plans under section [110]." (emphasis added). The subsection at issue, 169B(e)(1), requires EPA to promulgate regional haze regulations within 18 months of receiving the report required of Visibility Transport Commissions under 169B(d)(2). This report was a one-time requirement intended to inform EPA's yet-to-be-promulgated regulations. Thus, section 169B(e)(1) clearly expresses Congress's intent to establish a timetable for the EPA's initial regional haze rulemaking in order to ensure that the regulations would be promulgated in a timely fashion and would be informed by the studies and report required under 169B(a)(1) and (d)(2), respectively. Section 169B(e)(2) states that regulations promulgated pursuant to (e)(1)—which addresses only EPA's obligation to undertake that initial regional haze rulemaking—must require states to submit SIP revisions within 12 months. We disagree with the commenter's assertion that Congress intended this 12-month deadline to apply in the case of subsequent rule revisions, as subsection (e) describes a one-time process of research, reports and rulemaking to get the regional haze program off the ground. Neither 169(e)(1) nor (e)(2) contains any indication that Congress intended this specific timeline to apply for additional, future rulemakings.

Another commenter said that in lieu of formally extending the deadline, the Agency should consider granting an administrative waiver to a state that affirmatively shows that a delay in submitting its periodic comprehensive SIP revisions is warranted. The EPA does not believe the additional effort required on the part of a state and the EPA would be worthwhile for such an undertaking because many states have good reason to coordinate their planning for their periodic comprehensive SIP revisions with that for other regulatory requirements and programs. A waiver process would thus add considerable administrative burden with minimal benefit, as the EPA would be likely to grant most or all of the waiver requests based on this need to coordinate planning.

3. Final Rule

The EPA is finalizing this one-time deadline extension with no changes from proposal.

M. Changes to Scheduling of Regional Haze Progress Reports

1. Summary of Proposal

The EPA proposed to revise the requirements in 40 CFR 51.308(g) and (h) regarding the timing of submission of reports evaluating progress towards the natural visibility goal. The 1999 RHR required states to submit regional haze progress reports every 5 years, with the first progress report due 5 years after submission of the first periodic comprehensive SIP revisions. Because states submitted these first SIP revisions on dates spread across several years, many of the due dates for progress reports currently do not fall mid-way between the due dates for periodic comprehensive SIP revisions, as the EPA initially envisioned. Looking forward, continued operation of the 1999 RHR would in many cases require a progress report shortly before or shortly after a periodic comprehensive SIP revision, at which time it could not be expected to have much utility as a mid-course review of environmental progress or much incremental informational value for the public compared to the data contained in that SIP revision.

Complementing the revisions to 40 CFR 51.308(f) regarding the deadlines for submittal of periodic comprehensive revisions, we proposed to revise 40 CFR 51.308(g) and (h) such that the second and subsequent progress reports would be due by January 31, 2025, July 31, 2033, and every 10 years thereafter, placing one progress report mid-way between the due dates for periodic comprehensive SIP revisions. As we explained, this timing provides a balance between allowing the implementation of the most recent SIP revision to proceed long enough for a review to be possible and worthwhile, and having enough time remaining before the next comprehensive SIP revision for state action to make changes in its rules or implementation efforts, if necessary, separately from the actions in that next SIP.

As explained in the proposal, the EPA no longer believes a progress report is useful at or near the time of submission of a periodic comprehensive SIP revision, since in practical terms a progress report provides little additional information beyond that required in a periodic comprehensive SIP revision (with the exception of the 1999 RHR's requirement that a progress report include information on the trend in visibility over the whole period since the baseline period of 2000–2004). In order to substantially reduce administrative burdens and make progress reports more useful to the public with no attendant reduction in environmental protection, we proposed to limit the requirement for separate progress reports to the one due mid-way between periodic comprehensive SIP revisions and to add to the requirement for periodic comprehensive SIP revisions a requirement to include the visibility trend information that the 1999 RHR previously required exclusively in progress reports.

2. Comments and Responses

Commenters generally supported the change to progress report scheduling such that due dates would fall mid-way between those of periodic comprehensive SIP revisions, though some comments recommended that a periodic SIP revision be explicitly required to include all the required progress report elements listed in 40 CFR 51.308(g) of the 1999 RHR and in particular element (g)(6), which requires an assessment of whether the current SIP is sufficient to meet all established RPGs. There are seven listed progress report elements in the 1999 RHR and eight listed elements in the revised final rule. The subjects of the first five of the elements are the same in the two versions of the rule, and we proposed and are finalizing a requirement that each periodic SIP revision address these five elements. We are not requiring periodic SIP revisions to assess whether the SIP is sufficient to meet all established RPGs (element (g)(6) in the 1999 RHR and the revised final rule). Given that the SIP is being revised, there would be no utility in assessing whether the previous terms of the SIP for the previous implementation period were sufficient to meet the progress goals for the previous period. Also, since the new SIP revision will contain new progress goals for the end of the currently applicable implementation period and these goals will be calculated to reflect the new measures in that SIP revision and previously adopted measures, it necessarily will be that this revised SIP is sufficient to meet the new goals. The seventh element of a progress report as listed in the 1999 RHR (which EPA is eliminating in the revised rule for progress reports for the second and subsequent implementation periods for reasons described elsewhere in this document) is a review of the monitoring strategy. However, periodic SIP revisions are required to address the monitoring strategy under 40 CFR 308(f)(6) of the final rule text, so no further mention of monitoring strategies is needed. The newly added element of a progress report in the revised final rule (now numbered as element (g)(8)) is

the summary of the most recent assessment of a smoke management program if any. Our reasons for not requiring periodic SIP revisions to include such a summary are given elsewhere in this document.

Some commenters requested that the progress report due January 1, 2025, be removed from the rule, given the fact that it would be due only 3.5 years after the July 31, 2021, due date of the next periodic comprehensive SIP revision. These commenters felt this time period prohibitively short and that this information could be better be included in the next periodic comprehensive SIP revision due July 31, 2028. A few commenters asked that EPA entirely remove the requirement for progress reports from the regional haze program. As noted previously, progress reports are an important tool for states to review and potentially make changes in their rules or implementation efforts, if necessary. Although the progress report for the second implementation period will be due only 3.5 years after the due date of the preceding periodic comprehensive SIP revisions, we still believe in the usefulness of such a mid-course review. In addition, some states have indicated that they intend to submit periodic comprehensive SIP revisions closer to the 1999 RHR's July 31, 2018 deadline, so for those states substantially more than 3.5 years will have elapsed before the progress report becomes due.

3. Final Rule

The EPA is finalizing these provisions regarding scheduling of progress reports, and the aforementioned additional requirement that periodic comprehensive SIP revisions include gap-filling visibility trend information, with no change from proposal.

N. Changes to the Requirement That Regional Haze Progress Reports Be SIP Revisions

1. Summary of Proposal

We proposed to revise 40 CFR 51.308(g) regarding the requirements for the form of progress reports, which under the 1999 RHR were required to take the form of SIP revisions that comply with certain procedural requirements.[135] As explained in the proposed rule and elsewhere in this document, the EPA originally included the requirement for progress reports in the 1999 RHR primarily to ensure that the states remain on track between periodic comprehensive SIP revisions. In the 1999 RHR, we required progress reports to be in the form of SIP revisions that meet the procedural requirements of 40 CFR 51.102 and 51.103 (which in turn refer to the requirements of Appendix V of 40 CFR part 51). Given the requirements for what a state should include in its progress report, we anticipated that these submittals would typically contain narrative descriptions of such things as current visibility conditions and emissions inventories. We did not anticipate that progress reports would typically include new or revised emission limits.[136] Although the EPA specifically intended for progress reports to involve significantly less effort than a periodic comprehensive SIP revision, a state must provide public notice and an opportunity for a public hearing for SIP revisions. In addition, they must conform to certain administrative procedural requirements, provide various administrative material, and must be submitted by an official who is authorized by state law to submit a SIP revision.

We proposed to revise our regulations so that progress reports need not be in the form of SIP revisions, but to require states to consult with FLMs and obtain public comment on their progress reports before submission to the EPA. We also proposed that the SIP revision due in 2021 must include a commitment to prepare and submit these progress reports to the EPA according to the revised schedule being finalized in this rule (*see* previous section). While these progress reports would be acknowledged and assessed by the EPA, our review of these reports would not result in a formal approval or disapproval of them. In addition, relieving states of the obligation to follow the procedural requirements of 40 CFR 51.102 and 51.103 would free up state resources for other important environmental planning, given the fact that they are resource-intensive. Other advantages to the proposed approach were discussed in detail at proposal.

2. Comments and Responses

Many commenters expressed support, with some suggesting that EPA do away with progress reports entirely (similar sentiments were expressed in comments on progress report timing; see previously in this document). Other commenters opposed eliminating the requirement that progress reports take the form of SIP revisions, and expressed that review by EPA should at least involve a finding of adequacy or inadequacy.

In response to comments opposing eliminating the requirement that progress reports be SIP revisions, the EPA would like to reiterate that as part of our review of a progress report, we will follow up with the state on any appropriate next steps, and we note again that there are additional remedies (such as undertaking a less formal assessment of the results of the implementation of the previously submitted SIP) available to the EPA in the event a state fails to properly submit a progress report.

Some comments expressed concern that the EPA would use progress reports as a basis for a "SIP call" and opined that progress reports should only provide information for subsequent SIP submittals. It should be noted, however, that 40 CFR 51.308(h), which we are not revising in any material way, already requires that if a state has determined in its progress report that its implementation plan is or may be inadequate to ensure reasonable progress due to emissions within that state, it must revise its current SIP to address its deficiencies. Thus, there is already a mechanism under which states must use the information in their progress reports to assess the adequacy of their existing SIPs. Additionally, under CAA section 110(k)(5), the EPA has the authority to review a SIP and assess the adequacy of that SIP. While this authority is discretionary, when and if the EPA does make a determination about the adequacy of a regional haze SIP it must do so reasonably, and this may require consideration of the information in a progress report. Therefore, we are not including in the final rule any provision saying that the content of a progress report may not be used as part of the basis for a SIP call action.

We will further consider a suggestion from one commenter that we provide a centralized Web site that would inform the public of which progress reports are currently available for public comment at the state level and the planned end of each comment period.

3. Final Rule

The EPA is finalizing the proposal to eliminate the requirement that progress reports take the form of SIP revisions. The EPA would like to emphasize (as explained at proposal) that although progress reports will no longer be

[135] These procedural requirements are detailed in 40 CFR 51.102, 40 CFR 51.103 and Appendix V to Part 51—Criteria for Determining the Completeness of Plan Submissions.

[136] Under our regulations, if a state were to determine at the time of submitting its progress report that its SIP is or may be inadequate to ensure reasonable progress due to emissions from sources within the state, the state has 1 year in which to submit a SIP revision addressing the inadequacy of its plan. 40 CFR 51.308(h)(4). This SIP revision would contain any required new or revised emission limits.

required to take the form of SIP revisions, states will still be required to include the required progress report elements listed in 40 CFR 51.308(g)(1) through 40 CFR 51.308(g)(8), in particular the assessment of whether the existing SIP elements are sufficient to enable a state to meet all established RPGs for the period covered by the most recent periodic SIP revision. We are also retaining the requirement that states consult with FLMs and obtain public comment on their progress reports before submission to the EPA.[137] Also, 40 CFR 51.308(h) will continue to require that at the same time the state is required to submit a progress report, it must also take one of four listed actions concerning whether the SIP is adequate to achieve established goals for visibility improvement, and the state will continue to have an obligation to revise its SIP to address any plan deficiencies within 1 year of submission of a determination that the SIP is or may be inadequate.

O. Changes to Requirements Related to the Grand Canyon Visibility Transport Commission

1. Summary of Proposal

As noted in the proposal, 40 CFR 51.309 has limited applicability going forward because its provisions apply only to 16 Class I areas covered by the Grand Canyon Visibility Transport Commission Report, only to three states that chose to rely on the special provisions in this section and only to SIPs for the first regional haze implementation period (*i.e.*, through 2018). However, we proposed certain conforming revisions to avoid confusion going forward, including the following:

- Revising 40 CFR 51.309(d)(4)(v) to correctly refer to the new 40 CFR 51.302(b) (in lieu of (e), which no longer exists in the proposed 40 CFR 51.302) and to delete the reference to BART since it does not appear in 40 CFR 51.302(b).
- Changing the title of 40 CFR 51.309(c)(10), Periodic implementation plan revisions, to include "and progress reports" at the end, to complement the revisions that will no longer require progress reports be considered SIP revisions.
- Revising 40 CFR 51.309(c)(10) to preserve the 1999 RHR's requirement that the progress reports due in 2013 take the form of SIP revisions, but direct the reader to the provisions of 40 CFR 51.308(g) for subsequent progress reports.
- Revising 40 CFR 51.309(c)(10)(iv) to indicate that subsequent progress reports are subject to the requirements of 40 CFR 51.308(h) regarding determinations of adequacy of existing SIPs.
- Revising 40 CFR 51.309(g)(2)(iii) to correct a typographical error.

2. Comments and Responses

Few comments were received on the proposed revisions to 40 CFR 51.309. Of those, most concerned fire issues, and this subject matter is treated elsewhere in this document. One commenter requested clarification on what happens to states participating in the GCVTC after 2018, and in response the EPA would like to clarify that all measures and obligations contained in a SIP approved pursuant to 40 CFR 51.309 must continue to be implemented unless the SIP itself provides for that measure or obligation to sunset, that the revised provisions of 40 CFR 51.309 will apply to any SIP revision that would revise a SIP provision that was part of the basis of EPA initially approving the SIP as meeting the requirements of the 1999 RHR's 40 CFR 51.309 and that future periodic comprehensive SIP revisions and progress reports from these states will be subject to the requirements of 40 CFR 51.308(f) and (g), respectively.

3. Final Rule

All revisions to 40 CFR 51.309 are being finalized without change from proposal.

V. Environmental Justice Considerations

The EPA believes this action will not have disproportionately high and adverse human health, well-being or environmental effects on minority, low-income or indigenous populations because it will not negatively affect the level of protection provided to human health, well-being or the environment under the CAA's visibility protection program. These revisions to the RHR alter procedural and timing aspects of the SIP requirements for visibility protection but do not substantively change the requirement that SIPs provide for reasonable progress towards the goal of natural visibility conditions. These SIP requirements are designed to protect all segments of the general population.

The EPA acknowledges that the delay in submitting SIP revisions from 2018 to 2021 might, but will not necessarily, affect the schedule on which sources must comply with any new requirements. One commenter said that any such delay in reducing emissions is likely to disproportionately impact children, communities of color and the economically disadvantaged. However, because neither the CAA nor the 1999 RHR set specific deadlines for when sources must comply with any new requirements in a state's next periodic comprehensive SIP revision, states have substantial discretion in establishing reasonable compliance deadlines for measures in their SIPs. Given this, we expect to see a range of compliance deadlines in the next round of regional haze SIPs from early in the second implementation period to 2028, depending on the types of measures adopted, and this would have occurred regardless of whether these changes had been finalized. Thus, the EPA believes the delay in the periodic comprehensive SIP revision submission deadline from 2018 to 2021 will not meaningfully reduce the overall progress towards better visibility made by the end of 2028 and will not meaningfully adversely affect environmental protection for any segments of the population. Furthermore, by reducing uncertainty about the requirements of the RHR and in some regards making those requirements more protective, we believe this action is likely to improve public health protection.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket.

B. Paperwork Reduction Act (PRA)

The information collection activities in this final rule have been submitted for approval to the OMB under the PRA. The ICR document that the EPA prepared has been assigned the EPA ICR number 2540.02. A copy of the ICR supporting statement is available in the docket for this rule, and it is briefly summarized here.

The EPA is finalizing revisions to requirements for state regional haze planning to change the requirements that must be met by states in developing regional haze SIPs, periodic comprehensive SIP revisions, and progress reports for regional haze. The main intended effects of this rulemaking are to provide states with additional time to submit regional haze plans for the second implementation period and

[137] We discuss the timing for consultation elsewhere in this preamble.

to provide states with an improved schedule and process for progress report submission. Further reductions in burden on states for the second planning period include removal of the requirement for progress reports to be SIP revisions, clarifying that states are not required to project emissions inventories as part of preparing a progress report, and relieving the state of the need to review its visibility monitoring strategy within the context of the progress report. With all of these changes considered, the overall burden on states would represent a reduction compared to what would otherwise occur if the provisions of the 1999 RHR were to stay in place. However, we agree with public comments received on the ICR for the proposed rule indicating that the EPA's previous estimates of burden for the 1999 RHR, as well as estimates of burden for the proposed rule, did not accurately reflect the level of effort required to draft SIPs and progress reports. Although at proposal, the total estimated burden for the applicable period of this ICR (*i.e.,* 2016–2019) was estimated to be reduced from 10,307 hours (per year) to 5,974 hours (per year), and total estimated cost was expected to be reduced from $510,498 (per year) to $295,876 (per year), taking into account the information submitted by the commenters, the EPA now estimates burden under the final rule for the applicable period of 2016–2019 to be 13,310 hours (per year) and total estimated cost to be $659,245 (per year). Please note that the EPA believes the final rule will allow for a reduction in effort compared to the 1999 RHR. Thus, if the SIP development and other were undertaken under the 1999 RHR, the costs would be higher than with this final rule. The apparent increase in estimated hours and cost is related to updates of prior estimates in light of more accurate information. Despite this, the EPA projects that the total estimated burden and cost associated with the final rule are less than would be required if the rule revisions were not made. The revisions, for example, extend planning deadlines, reduce the number of SIP submissions to the EPA, relieve states of the need to supply progress reports in the form of formal SIP revisions, and relieve the state of the need to review its visibility monitoring strategy within the context of the progress report. In addition, in accordance with OMB guidance, these numbers reflect the average burden on states per year over the next 3 years only. This burden will vary from year to year, and due to the nature of an average, some states may be above the average while other states may be below the average. The "per-year" numbers provided here are the 3-year averages, and these 3-year averages will also vary. For example, the prior 3-year period (associated with the prior ICR) was not an active SIP development period, and therefore burden on states was relatively low in comparison to the 3-year period associated with this ICR. During this 3-year period states will be taking steps to prepare their next SIPs. SIP development and adoption will continue into the following 3-year period (approximately 2019–2022), and then subside until the next SIP is due in 2028, resulting in a reduced burden compared to the estimates reflected here. For more information and a summary and response to comments received on the proposed rule ICR, please see the Information Collection Request Supporting Statement for EPA ICR Number 2540.02. ICR for Final Revisions to the Regional Haze Regulations, in the docket for this rule. All states are required to submit regional haze SIPs and progress reports under this rule.

Respondents/affected entities: All state air agencies.

Respondent's obligation to respond: Mandatory, in accordance with the provisions of the 1999 RHR.

Estimated number of respondents: 52: 50 states, District of Columbia and U.S. Virgin Islands.

Frequency of response: Approximately every 10 years (SIP) and approximately every 10 years (progress report).

Total estimated burden: 13,310 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $659,245 (per year); includes $0 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. Entities potentially affected directly by these rule revisions include state governments, and for the purposes of the RFA, state governments are not considered small governments. Tribes may choose to follow the provisions of the RHR but are not required to do so. Other types of small entities are not directly subject to the requirements of this rule.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. It does not have a substantial direct effect on one or more Indian tribes. Furthermore, these regulation revisions do not affect the relationship or distribution of power and responsibilities between the federal government and Indian tribes. The CAA and the TAR establish the relationship of the federal government and tribes in characterizing air quality and developing plans to protect visibility in Class I areas, and these revisions to the regulations do nothing to modify that relationship. Thus, Executive Order 13175 does not apply to this action.

Although Executive Order 13175 does not apply to this action, the EPA held public hearings attended by members of tribes and separate meetings with tribal representatives to discuss the revisions proposed in this action. The EPA also provided an opportunity for all interested parties to provide oral or written comments on potential concepts for the EPA to address during the rule revision process. Summaries of these meetings are included in the docket for this rule. The EPA also offered to consult with any tribal government to discuss this proposal. A copy of this offer for consultation can be found in the docket for this rulemaking. No tribes requested consultation. One tribal organization submitted comments, which generally endorsed the proposed revisions. However, this commenter said that this action does have implications to tribes and that the EPA must develop an accountability process to ensure meaningful and timely input to states as they implement the revised

requirements of the RHR. We acknowledge this comment but we do not find it to contain a basis for changing our finding that Executive Order 13175 does not apply to this action. *See* also Section III.B.5 of this document for further discussion regarding the role of tribes in visibility protection.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution or use of energy.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action may not have disproportionately high and adverse effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898.[138] The results of our evaluation are contained in Section V of this document.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the U.S. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

VII. Statutory Authority

The statutory authority for this action is provided by 42 U.S.C. 7403, 7407, 7410 and 7601.

[138] 59 FR 7629 (February 16, 1994).

List of Subjects

40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Nitrogen dioxide, Particulate matter, Sulfur oxides, Transportation, Volatile organic compounds.

40 CFR Part 52

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Nitrogen dioxide, Particulate matter, Sulfur oxides, Transportation, Volatile organic compounds.

Dated: December 14, 2016.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, part 51 and part 52 of chapter I of title 40 of the Code of Federal Regulations are amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 51 continues to read as follows:

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

Subpart P—Protection of Visibility

■ 2. Section 51.300 is amended by revising paragraph (b) to read as follows:

§ 51.300 Purpose and applicability.

* * * * *

(b) *Applicability* The provisions of this subpart are applicable to all States as defined in section 302(d) of the Clean Air Act (CAA) except Guam, Puerto Rico, American Samoa, and the Northern Mariana Islands.

■ 3. Section 51.301 is amended by:
■ a. Adding the definitions in alphabetical order for "Baseline visibility condition", "Clearest days", and "Current visibility condition";
■ b. Revising the definition of "Deciview";
■ c. Adding the definitions in alphabetical order for "Deciview index" and "End of the applicable implementation period";
■ d. Revising the definition of "Least impaired days", "Mandatory Class I Federal Area", "Most impaired days", and "Natural conditions";
■ e. Adding the definitions in alphabetical order for "Natural visibility", "Natural visibility condition", and "Prescribed fire";
■ f. Revising the definitions of "Reasonably attributable" and "Regional haze";
■ g. Adding the definition in alphabetical order for "Visibility";
■ h. Removing the definition of "Visibility impairment";
■ i. Adding the definition of "Visibility impairment or anthropogenic visibility impairment"; and,
■ j. Adding the definitions in alphabetical order for "Wildfire" and "Wildland".

The revisions and additions read as follows:

§ 51.301 Definitions.

* * * * *

Baseline visibility condition means the average of the five annual averages of the individual values of daily visibility for the period 2000–2004 unique to each Class I area for either the most impaired days or the clearest days.

* * * * *

Clearest days means the twenty percent of monitored days in a calendar year with the lowest values of the deciview index.

Current visibility condition means the average of the five annual averages of individual values of daily visibility for the most recent period for which data are available unique to each Class I area for either the most impaired days or the clearest days.

Deciview is the unit of measurement on the deciview index scale for quantifying in a standard manner human perceptions of visibility.

Deciview index means a value for a day that is derived from calculated or measured light extinction, such that uniform increments of the index correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to very obscured. The deciview index is calculated based on the following equation (for the purposes of calculating deciview using IMPROVE data, the atmospheric light extinction coefficient must be calculated from aerosol measurements and an estimate of Rayleigh scattering):

Deciview index = 10 ln (b_{ext}/10 Mm^{-1}).

b_{ext} = the atmospheric light extinction coefficient, expressed in inverse megameters ($Mm-1$).

End of the applicable implementation period means December 31 of the year in which the next periodic comprehensive implementation plan revision is due under § 51.308(f).

* * * * *

Least impaired days means the twenty percent of monitored days in a calendar

year with the lowest amounts of visibility impairment.

* * * * *

Mandatory Class I Federal Area or *Mandatory Federal Class I Area* means any area identified in part 81, subpart D of this title.

Most impaired days means the twenty percent of monitored days in a calendar year with the highest amounts of anthropogenic visibility impairment.

Natural conditions reflect naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration, and may refer to the conditions on a single day or a set of days. These phenomena include, but are not limited to, humidity, fire events, dust storms, volcanic activity, and biogenic emissions from soils and trees. These phenomena may be near or far from a Class I area and may be outside the United States.

Natural visibility means visibility (contrast, coloration, and texture) on a day or days that would have existed under natural conditions. Natural visibility varies with time and location, is estimated or inferred rather than directly measured, and may have long-term trends due to long-term trends in natural conditions.

Natural visibility condition means the average of individual values of daily natural visibility unique to each Class I area for either the most impaired days or the clearest days.

* * * * *

Prescribed fire means any fire intentionally ignited by management actions in accordance with applicable laws, policies, and regulations to meet specific land or resource management objectives.

Reasonably attributable means attributable by visual observation or any other appropriate technique.

* * * * *

Regional haze means visibility impairment that is caused by the emission of air pollutants from numerous anthropogenic 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.

* * * * *

Visibility means the degree of perceived clarity when viewing objects at a distance. Visibility includes perceived changes in contrast, coloration, and texture elements in a scene.

Visibility impairment or *anthropogenic visibility impairment* means any humanly perceptible difference due to air pollution from anthropogenic sources between actual visibility and natural visibility on one or more days. Because natural visibility can only be estimated or inferred, visibility impairment also is estimated or inferred rather than directly measured.

* * * * *

Wildfire means any fire started by an unplanned ignition caused by lightning; volcanoes; other acts of nature; unauthorized activity; or accidental, human-caused actions, or a prescribed fire that has developed into a wildfire. A wildfire that predominantly occurs on wildland is a natural event.

Wildland means an area in which human activity and development is essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered.

■ 4. Revise § 51.302 to read as follows:

§ 51.302 Reasonably attributable visibility impairment.

(a) The affected Federal Land Manager may certify, at any time, that there exists reasonably attributable visibility impairment in any mandatory Class I Federal area and identify which single source or small number of sources is responsible for such impairment. The affected Federal Land Manager will provide the certification to the State in which the impairment occurs and the State(s) in which the source(s) is located. The affected Federal Land Manager shall provide the State(s) in which the source(s) is located an opportunity to consult on the basis of the planned certification, in person and at least 60 days prior to providing the certification to the State(s).

(b) The State(s) in which the source(s) is located shall revise its regional haze implementation plan, in accordance with the schedule set forth in paragraph (d) of this section, to include for each source or small number of sources that the Federal Land Manager has identified in whole or in part for reasonably attributable visibility impairment as part of a certification under paragraph (a) of this section:

(1) A determination, based on the factors set forth in § 51.308(f)(2), of the control measures, if any, that are necessary with respect to the source or sources in order for the plan to make reasonable progress toward natural visibility conditions in the affected Class I Federal area;

(2) Emission limitations that reflect the degree of emission reduction achievable by such control measures and schedules for compliance as expeditiously as practicable; and

(3) Monitoring, recordkeeping, and reporting requirements sufficient to ensure the enforceability of the emission limitations.

(c) If a source that the Federal Land Manager has identified as responsible in whole or in part for reasonably attributable visibility impairment as part of a certification under paragraph (a) of this section is a BART-eligible source, and if there is not in effect as of the date of the certification a fully or conditionally approved implementation plan addressing the BART requirement for that source (which existing plan may incorporate either source-specific emission limitations reflecting the emission control performance of BART, an alternative program to address the BART requirement under § 51.308(e)(2) through (4), or for sources of SO_2, a program approved under paragraph § 51.309(d)(4)), then the State shall revise its regional haze implementation plan to meet the requirements of § 51.308(e) with respect to that source, taking into account current conditions related to the factors listed in § 51.308(e)(1)(ii)(A). This requirement is in addition to the requirement of paragraph (b) of this section.

(d) For any existing reasonably attributable visibility impairment the Federal Land Manager certifies to the State(s) under paragraph (a) of this section, the State(s) shall submit a revision to its regional haze implementation plan that includes the elements described in paragraphs (b) and (c) of this section no later than 3 years after the date of the certification. The State(s) is not required at that time to also revise its reasonable progress goals to reflect any additional emission reductions required from the source or sources. In no case shall such a revision in response to a reasonably attributable visibility impairment certification be due before July 31, 2021.

■ 5. Section 51.303 is amended by revising paragraph (a)(1) to read as follows:

§ 51.303 Exemptions from control.

(a)(1) Any existing stationary facility subject to the requirement under § 51.302(c) or § 51.308(e) to install, operate, and maintain BART may apply to the Administrator for an exemption from that requirement.

* * * * *

■ 6. Revise § 51.304 to read as follows:

§ 51.304 Identification of integral vistas.

(a) Federal Land Managers were required to identify any integral vistas on or before December 31, 1985, according to criteria the Federal Land

Managers developed. These criteria must have included, but were not limited to, whether the integral vista was important to the visitor's visual experience of the mandatory Class I Federal area.

(b) The following integral vistas were identified by Federal Land Managers: At Roosevelt Campobello International Park, from the observation point of Roosevelt cottage and beach area, the viewing angle from 244 to 256 degrees; and at Roosevelt Campobello International Park, from the observation point of Friar's Head, the viewing angle from 154 to 194 degrees.

(c) The State must list in its implementation plan any integral vista listed in paragraph (b) of this section.

■ 7. Revise § 51.305 to read as follows:

§ 51.305 Monitoring for reasonably attributable visibility impairment.

For the purposes of addressing reasonably attributable visibility impairment, if the Administrator, Regional Administrator, or the affected Federal Land Manager has advised a State containing a mandatory Class I Federal area of a need for monitoring to assess reasonably attributable visibility impairment at the mandatory Class I Federal area in addition to the monitoring currently being conducted to meet the requirements of § 51.308(d)(4), the State must include in the next implementation plan revision to meet the requirement of § 51.308(f) an appropriate strategy for evaluating reasonably attributable visibility impairment in the 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.

§ 51.306 [Removed and Reserved]

■ 8. Section 51.306 is removed and reserved.

■ 9. Section 51.307 is amended by revising paragraphs (a) introductory text and (b)(1) and (2) to read as follows:

§ 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) of the CAA, the State plan must, in any review under § 51.166 with respect to visibility protection and analyses, provide for:

* * * * *

(b) * * *

(1) That may have an impact on any integral vista of a mandatory Class I Federal area listed in § 51.304(b), or

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

* * * * *

■ 10. Section 51.308 is amended by:

■ a. Revising paragraph (b);

■ b. Revising paragraphs (d)(2)(iv), (d)(3) introductory text, (e)(2)(v), (e)(4) and (5), (f), (g) introductory text, and (g)(3) through (7);

■ c. Adding paragraph (g)(8); and

■ d. Revising paragraphs (h) introductory text, (h)(1), (i)(2) introductory text, (i)(2)(ii), and (i)(3) and (4).

The revisions and additions read as follows:

§ 51.308 Regional haze program requirements.

* * * * *

(b) *When are the first implementation plans due under the regional haze program?* Except as provided in § 51.309(c), each State identified in § 51.300(b) must submit, for the entire State, an implementation plan for regional haze meeting the requirements of paragraphs (d) and (e) of this section no later than December 17, 2007.

* * * * *

(d) * * *

(2) * * *

(iv) For the first implementation plan addressing the requirements of paragraphs (d) and (e) of this section, the number of deciviews by which baseline conditions 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) 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 that 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:

* * * * *

(e) * * *

(2) * * *

(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(b) or (c) related to reasonably attributable impairment from the pollutants covered under the emissions trading program or other alternative measure.

* * * * *

(4) A State whose sources are subject to a trading program established under part 97 of this chapter in accordance with a federal implementation plan set forth in § 52.38 or § 52.39 of this chapter or a trading program established under a SIP revision approved by the Administrator as meeting the requirements of § 52.38 or § 52.39 of this chapter need not require BART-eligible fossil fuel-fired steam electric plants in the State to install, operate, and maintain BART for the pollutant covered by such trading program in the State. A State may adopt provisions, consistent with the requirements applicable to the State's sources for such trading program, for a geographic enhancement to the trading program to address any requirement under § 51.302(b) or (c) related to reasonably attributable impairment from the pollutant covered by such trading program in that State.

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

* * * * *

(f) *Requirements for periodic comprehensive revisions of implementation plans for regional haze.* Each State identified in § 51.300(b) must revise and submit its regional haze implementation plan revision to EPA by July 31, 2021, July 31, 2028, and every 10 years thereafter. The plan revision due on or before July 31, 2021, must include a commitment by the State to meet the requirements of paragraph (g) of this section. In each plan revision, 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 that 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) *Calculations of baseline, current, and natural visibility conditions; progress to date; and the uniform rate of progress.* For each mandatory Class I Federal area located within the State, the State must determine the following:

(i) *Baseline visibility conditions for the most impaired and clearest days.* The period for establishing baseline visibility conditions is 2000 to 2004. The State must calculate the baseline visibility conditions for the most impaired days and the clearest days using available monitoring data. To determine the baseline visibility condition, the State must calculate the average of the annual deciview index values for the most impaired days and for the clearest days for the calendar years from 2000 to 2004. The baseline visibility condition for the most impaired days or the clearest days is the average of the respective annual values. For purposes of calculating the uniform rate of progress, the baseline visibility condition for the most impaired days must be associated with the last day of 2004. 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. For mandatory Class I Federal areas with incomplete monitoring data for 2000–2004, the State must establish baseline values using the 5 complete years of monitoring data closest in time to 2000–2004.

(ii) *Natural visibility conditions for the most impaired and clearest days.* A State must calculate natural visibility condition by estimating the average deciview index existing under natural conditions for the most impaired days or the clearest days based on available monitoring information and appropriate data analysis techniques; and

(iii) *Current visibility conditions for the most impaired and clearest days.* The period for calculating current visibility conditions is the most recent 5-year period for which data are available. The State must calculate the current visibility conditions for the most impaired days and the clearest days using available monitoring data. To calculate each current visibility condition, the State must calculate the average of the annual deciview index values for the years in the most recent 5-year period. The current visibility condition for the most impaired or the clearest days is the average of the respective annual values.

(iv) *Progress to date for the most impaired and clearest days.* Actual progress made towards the natural visibility condition since the baseline period, and actual progress made during the previous implementation period up to and including the period for calculating current visibility conditions, for the most impaired and for the clearest days.

(v) *Differences between current visibility condition and natural visibility condition.* The number of deciviews by which the current visibility condition exceeds the natural visibility condition, for the most impaired and for the clearest days.

(vi) *Uniform rate of progress.* (A) The uniform rate of progress for each mandatory Class I Federal area in the State. To calculate the uniform rate of progress, the State must compare the baseline visibility condition for the most impaired days to the natural visibility condition for the most impaired days in the mandatory Class I Federal area and determine the uniform rate of visibility improvement (measured in deciviews of improvement per year) that would need to be maintained during each implementation period in order to attain natural visibility conditions by the end of 2064.

(B) As part of its implementation plan submission, the State may propose (1) an adjustment to the uniform rate of progress for a mandatory Class I Federal area to account for impacts from anthropogenic sources outside the United States and/or (2) an adjustment to the uniform rate of progress for the mandatory Class I Federal area to account for impacts from wildland prescribed fires that were conducted with the objective to establish, restore, and/or maintain sustainable and resilient wildland ecosystems, to reduce the risk of catastrophic wildfires, and/or to preserve endangered or threatened species during which appropriate basic smoke management practices were applied. To calculate the proposed adjustment(s), the State must add the estimated impact(s) to the natural visibility condition and compare the baseline visibility condition for the most impaired days to the resulting sum. If the Administrator determines that the State has estimated the impact(s) from anthropogenic sources outside the United States and/or wildland prescribed fires using scientifically valid data and methods, the Administrator may approve the proposed adjustment(s) to the uniform rate of progress.

(2) *Long-term strategy for regional haze.* Each State 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 that may be affected by emissions from the State. The long-term strategy must include the enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress, as determined pursuant to (f)(2)(i) through (iv). In establishing its long-term strategy for regional haze, the State must meet the following requirements:

(i) The State must evaluate and determine the emission reduction measures that are necessary to make reasonable progress by considering 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 anthropogenic source of visibility impairment. The State should consider evaluating major and minor stationary sources or groups of sources, mobile sources, and area sources. The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy. In considering the time necessary for compliance, if the State concludes that a control measure cannot reasonably be installed and become operational until after the end of the implementation period, the State may not consider this fact in determining whether the measure is necessary to make reasonable progress.

(ii) The State must consult with those States that have emissions that are reasonably anticipated to contribute to visibility impairment in the mandatory Class I Federal area to develop coordinated emission management strategies containing the emission reductions necessary to make reasonable progress.

(A) The State must demonstrate that it has included in its implementation plan all measures agreed to during state-to-state consultations or a regional planning process, or measures that will provide equivalent visibility improvement.

(B) The State must consider the emission reduction measures identified by other States for their sources as being necessary to make reasonable progress in the mandatory Class I Federal area.

(C) In any situation in which a State cannot agree with another State on the emission reduction measures necessary to make reasonable progress in a mandatory Class I Federal area, the State must describe the actions taken to resolve the disagreement. In reviewing the State's implementation plan, the

Administrator will take this information into account in determining whether the plan provides for reasonable progress at each mandatory Class I Federal area that is located in the State or that may be affected by emissions from the State. All substantive interstate consultations must be documented.

(iii) The State must document the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the State is relying to determine the emission reduction measures that are necessary to make reasonable progress in each mandatory Class I Federal area it affects. The State may meet this requirement by relying on technical analyses developed by a regional planning process and approved by all State participants. The emissions information must include, but need not be limited to, information on emissions in a year at least as recent as the most recent year for which the State has submitted emission inventory information to the Administrator in compliance with the triennial reporting requirements of subpart A of this part. However, if a State has made a submission for a new inventory year to meet the requirements of subpart A in the period 12 months prior to submission of the SIP, the State may use the inventory year of its prior submission.

(iv) The State must consider the following additional 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) Source retirement and replacement schedules;

(D) Basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs; and

(E) 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.

(3) *Reasonable progress goals.* (i) A state in which a mandatory Class I Federal area is located must establish reasonable progress goals (expressed in deciviews) that reflect the visibility conditions that are projected to be achieved by the end of the applicable implementation period as a result of those enforceable emissions limitations, compliance schedules, and other measures required under paragraph (f)(2) of this section that can be fully implemented by the end of the applicable implementation period, as well as the implementation of other requirements of the CAA. The long-term strategy and the reasonable progress goals must provide for an improvement in visibility for the most impaired days since the baseline period and ensure no degradation in visibility for the clearest days since the baseline period.

(ii)(A) If a State in which a mandatory Class I Federal area is located establishes a reasonable progress goal for the most impaired days that provides for a slower rate of improvement in visibility than the uniform rate of progress calculated under paragraph (f)(1)(vi) of this section, the State must demonstrate, based on the analysis required by paragraph (f)(2)(i) of this section, that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the State that may reasonably be anticipated to contribute to visibility impairment in the Class I area that would be reasonable to include in the long-term strategy. The State must provide a robust demonstration, including documenting the criteria used to determine which sources or groups or sources were evaluated and how the four factors required by paragraph (f)(2)(i) were taken into consideration in selecting the measures for inclusion in its long-term strategy. 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 visibility conditions if visibility improvement were to continue at the rate of progress selected by the State as reasonable for the implementation period.

(B) If a State contains sources which are reasonably anticipated to contribute to visibility impairment in a mandatory Class I Federal area in another State for which a demonstration by the other State is required under (f)(3)(ii)(A), the State must demonstrate that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the State that may reasonably be anticipated to contribute to visibility impairment in the Class I area that would be reasonable to include in its own long-term strategy. The State must provide a robust demonstration, including documenting the criteria used to determine which sources or groups or sources were evaluated and how the four factors required by paragraph (f)(2)(i) were taken into consideration in selecting the measures for inclusion in its long-term strategy.

(iii) 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 in providing for reasonable progress towards achieving natural visibility conditions at that area.

(iv) In determining whether the State's goal for visibility improvement provides for reasonable progress towards natural visibility conditions, the Administrator will also evaluate the demonstrations developed by the State pursuant to paragraphs (f)(2) and (f)(3)(ii)(A) of this section and the demonstrations provided by other States pursuant to paragraphs (f)(2) and (f)(3)(ii)(B) of this section.

(4) If the Administrator, Regional Administrator, or the affected Federal Land Manager has advised a State of a need for additional monitoring to assess reasonably attributable visibility impairment at the mandatory Class I Federal area in addition to the monitoring currently being conducted, the State must include in the plan revision an appropriate strategy for evaluating reasonably attributable visibility impairment in the mandatory Class I Federal area by visual observation or other appropriate monitoring techniques.

(5) So that the plan revision will serve also as a progress report, the State must address in the plan revision the requirements of paragraphs (g)(1) through (5) of this section. However, the period to be addressed for these elements shall be the period since the most recent progress report.

(6) *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. 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 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.

(g) *Requirements for periodic reports describing progress towards the reasonable progress goals.* Each State identified in § 51.300(b) must periodically submit a report to the Administrator 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 that 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 paragraphs (d) and (e) of this section. The first progress reports must be in the form of implementation plan revisions that comply with the procedural requirements of § 51.102 and § 51.103. Subsequent progress reports are due by January 31, 2025, July 31, 2033, and every 10 years thereafter. Subsequent progress reports must be made available for public inspection and comment for at least 30 days prior to submission to EPA and all comments received from the public must be submitted to EPA along with the subsequent progress report, along with an explanation of any changes to the progress report made in response to these comments. Periodic progress reports must contain at a minimum the following elements:

* * * * *

(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, least impaired and/or clearest days as applicable expressed in terms of 5-year averages of these annual values. The period for calculating current visibility conditions is the most recent 5-year period preceding the required date of the progress report for which data are available as of a date 6 months preceding the required date of the progress report.

(i)(A) Progress reports due before January 31, 2025. The current visibility conditions for the most impaired and least impaired days.

(B) Progress reports due on and after January 31, 2025. The current visibility conditions for the most impaired and clearest days;

(ii)(A) Progress reports due before January 31, 2025. The difference between current visibility conditions for the most impaired and least impaired days and baseline visibility conditions.

(B) Progress reports due on and after January 31, 2025. The difference between current visibility conditions for the most impaired and clearest days and baseline visibility conditions.

(iii)(A) Progress reports due before January 31, 2025. The change in visibility impairment for the most impaired and least impaired days over the period since the period addressed in the most recent plan required under paragraph (f) of this section.

(B) Progress reports due on and after January 31, 2025. The change in visibility impairment for the most impaired and clearest days over the period since the period addressed in the most recent plan required under paragraph (f) of this section.

(4) An analysis tracking the change over the period since the period addressed in the most recent plan required under paragraph (f) of this section 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. With respect to all sources and activities, the analysis must extend at least through the most recent year for which the state has submitted emission inventory information to the Administrator in compliance with the triennial reporting requirements of subpart A of this part as of a date 6 months preceding the required date of the progress report. With respect to sources that report directly to a centralized emissions data system operated by the Administrator, the analysis must extend through the most recent year for which the Administrator has provided a State-level summary of such reported data or an internet-based tool by which the State may obtain such a summary as of a date 6 months preceding the required date of the progress report. The State is not required to backcast previously reported emissions to be consistent with more recent emissions estimation procedures, and may draw attention to actual or possible inconsistencies created by changes in estimation procedures.

(5) An assessment of any significant changes in anthropogenic emissions within or outside the State that have occurred since the period addressed in the most recent plan required under paragraph (f) of this section including whether or not these changes in anthropogenic emissions were anticipated in that most recent plan and whether they 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 Class I Federal areas affected by emissions from the State, to meet all established reasonable progress goals for the period covered by the most recent plan required under paragraph (f) of this section.

(7) For progress reports for the first implementation period only, a review of the State's visibility monitoring strategy and any modifications to the strategy as necessary.

(8) For a state with a long-term strategy that includes a smoke management program for prescribed fires on wildland that conducts a periodic program assessment, a summary of the most recent periodic assessment of the smoke management program including conclusions if any that were reached in the assessment as to whether the program is meeting its goals regarding improving ecosystem health and reducing the damaging effects of catastrophic wildfires.

(h) *Determination of the adequacy of existing implementation plan.* At the same time the State is required to submit any progress report to EPA in accordance with paragraph (g) of this section, 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 declaration that revision of the existing

implementation plan is not needed at this time.

* * * * *

(i) * * *

(2) The State must provide the Federal Land Manager with an opportunity for consultation, in person at a point early enough in the State's policy analyses of its long-term strategy emission reduction obligation so that information and recommendations provided by the Federal Land Manager can meaningfully inform the State's decisions on the long-term strategy. The opportunity for consultation will be deemed to have been early enough if the consultation has taken place at least 120 days prior to holding any public hearing or other public comment opportunity on an implementation plan (or plan revision) for regional haze required by this subpart. The opportunity for consultation on an implementation plan (or plan revision) or on a progress report must be provided no less than 60 days prior to said public hearing or public comment opportunity. This consultation must include the opportunity for the affected Federal Land Managers to discuss their:

* * * * *

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

(3) In developing any implementation plan (or plan revision) or progress report, 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 progress reports, and on the implementation of other programs having the potential to contribute to impairment of visibility in mandatory Class I Federal areas.

■ 11. Section 51.309 is amended by:

■ a. Revising paragraph (b)(4);

■ b. Removing and reserving paragraph (b)(8);

■ c. Revising paragraphs (d)(4)(v), (d)(10) introductory text, (d)(10)(i) introductory text, and (d)(10)(ii) introductory text;

■ d. Adding paragraphs (d)(10)(iii) and (iv); and

■ e. Revising paragraph (g)(2)(iii).

The revisions and additions read as follows:

§ 51.309 Requirements related to the Grand Canyon Visibility Transport Commission.

* * * * *

(b) * * *

(4) *Fire* means wildfire, wildland fire, prescribed fire, and agricultural burning conducted and occurring on Federal, State, and private wildlands and farmlands.

* * * * *

(d) * * *

(4) * * *

(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.

* * * * *

(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:

* * * * *

(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:

* * * * *

(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.

* * * * *

(g) * * *

(2) * * *

(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.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 12. The authority citation for part 52 continues to read as follows:

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

§ 52.26 [Removed and Reserved]

■ 13. Section 52.26 is removed and reserved.

§ 52.29 [Removed and Reserved]

■ 14. Section 52.29 is removed and reserved.

§ 52.61 [Amended]

■ 15. Section 52.61 is amended by removing and reserving paragraph (b).

■ 16. Section 52.145 is amended by revising paragraph (b) and removing and reserving paragraph (c).

The revision reads as follows:

§ 52.145 Visibility protection.

* * * * *

(b) Regulations for visibility monitoring and new source review. The provisions of §§ 52.27 and 52.28 are hereby incorporated and made part of

the applicable plan for the State of Arizona.

* * * * *

§ 52.281 [Amended]

■ 17. Section 52.281 is amended by removing and reserving paragraphs (b) and (e).

■ 18. Section 52.344 is amended by revising paragraph (b) to read as follows:

§ 52.344 Visibility protection.

* * * * *

(b) The Visibility NSR regulations are approved for industrial source categories regulated by the NSR and PSD regulations which have previously been approved by EPA. However, Colorado's NSR and PSD regulations have been disapproved for certain sources as listed in 40 CFR 52.343(a)(1). The provisions of 40 CFR 52.28 are hereby incorporated and made a part of the applicable plan for the State of Colorado for these sources.

■ 19. Section 52.633 is amended by revising paragraph (b) and removing and reserving paragraph (c).

The revision reads as follows.

§ 52.633 Visibility protection.

* * * * *

(b) Regulations for visibility monitoring and new source review. The provisions of §§ 52.27 and 52.28 are hereby incorporated and made part of the applicable plan for the State of Hawaii.

* * * * *

§ 52.690 [Amended]

■ 20. Section 52.690 is amended by removing and reserving paragraphs (b) and (c).

§ 52.1033 [Amended]

■ 21. Section 52.1033 is amended by removing and reserving paragraphs (a) and (c).

■ 22. Section 52.1183 is amended by revising paragraph (b) and removing and reserving paragraphs (a) and (c).

The revision reads as follows.

§ 52.1183 Visibility protection.

* * * * *

(b) Regulation for visibility monitoring and new source review. The provisions of § 52.28 are hereby incorporated and made a part of the applicable plan for the State of Michigan.

* * * * *

■ 23. Section 52.1236 is amended by revising paragraph (b) and removing and reserving paragraph (c).

The revision reads as follows:

§ 52.1236 Visibility protection.

* * * * *

(b) Regulation for visibility monitoring and new source review. The provisions of § 52.28 are hereby incorporated and made a part of the applicable plan for the State of Minnesota.

* * * * *

§ 52.1339 [Amended]

■ 24. Section 52.1339 is amended by removing and reserving paragraph (b).

§ 52.1387 [Amended]

■ 25. Section 52.1387 is amended by removing and reserving paragraph (b).

■ 26. Section 52.1488 is amended by revising paragraph (b) and removing and reserving paragraph (c).

The revision reads as follows.

§ 52.1488 Visibility protection.

* * * * *

(b) Regulation for visibility monitoring and new source review. The provisions of § 52.28 are hereby incorporated and made a part of the applicable plan for the State of Nevada except for that portion applicable to the Clark County Department of Air Quality and Environmental Management.

* * * * *

■ 27. Section 52.1531 is amended by revising paragraph (b) and removing and reserving paragraph (c).

The revision reads as follows.

§ 52.1531 Visibility protection.

* * * * *

(b) Regulation for visibility monitoring and new source review. The provisions of § 52.28 are hereby incorporated and made a part of the applicable plan for the State of New Hampshire.

* * * * *

§ 52.2132 [Amended]

■ 28. Section 52.2132 is amended by removing and reserving paragraphs (b) and (c).

■ 29. Section 52.2179 is amended by revising paragraph (b) and removing and reserving paragraph (c).

The revision reads as follows:

§ 52.2179 Visibility protection.

* * * * *

(b) Regulation for visibility monitoring and new source review. The provisions of § 52.28 are hereby incorporated and made a part of the applicable plan for the State of South Dakota.

* * * * *

§ 52.2304 [Amended]

■ 30. Section 52.2304 is amended by removing and reserving paragraph (b).

■ 31. Section 52.2383 is amended by revising paragraph (b) to read as follows:

§ 52.2383 Visibility protection.

* * * * *

(b) Regulations for visibility monitoring and new source review. The provisions of § 52.27 are hereby incorporated and made part of the applicable plan for the State of Vermont.

■ 32. Section 52.2452 is amended by revising paragraph (a) and removing and reserving paragraphs (b) and (c).

The revision reads as follows:

§ 52.2452 Visibility protection.

(a) Reasonably Attributable Visibility Impairment. The requirements of section 169A of the Clean Air Act are not met because the plan does not include approvable measures for meeting the requirements of 40 CFR 51.305 for protection of visibility in mandatory Class I Federal areas.

* * * * *

■ 33. Section 52.2533 is amended by revising paragraphs (a) and (b) and removing and reserving paragraph (c).

The revision reads as follows:

§ 52.2533 Visibility protection.

(a) *Reasonably Attributable Visibility Impairment.* The requirements of section 169A of the Clean Air Act are not met because the plan does not include approvable measures for meeting the requirements of 40 CFR 51.305 and 51.307 for protection of visibility in mandatory Class I Federal areas.

(b) Regulation for visibility monitoring and new source review. The provisions of § 52.28 are hereby incorporated and made a part of the applicable plan for the State of West Virginia.

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§ 52.2781 [Amended]

■ 34. Section 52.2781 is amended by removing and reserving paragraphs (b) and (c).

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