



## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Parts 51 and 52**

**[EPA-HQ-OAR-2015-0531; FRL-9935-27-OAR]**

**RIN 2060-AS55**

### **Protection of Visibility: Amendments to Requirements for State Plans**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing amendments to requirements under the Clean Air Act (CAA) for state plans for protection of visibility in mandatory Class I federal areas (Class I areas) in order to continue steady environmental progress while addressing administrative aspects of the program. The EPA amendments would clarify the relationship between long-term strategies and reasonable progress goals in state plans, and the long-term strategy obligation of all states. The amendments would also change the way in which some days during each year are to be selected for purposes of tracking progress towards natural visibility conditions to account for events such as wildfires; change aspects of the requirements for the content of progress reports; update, simplify and extend to all states the provisions for reasonably attributable visibility impairment and revoke existing federal implementation plans (FIPs) that require the EPA to assess and address any existing reasonably attributable visibility impairment situations in some states; and add a requirement for states to consult with Federal Land Managers (FLMs) earlier in the development of state plans. The EPA also proposes to address administrative aspects of the program by making a one-time adjustment

to the due date for the next state implementation plans (SIPs), revising the due dates for progress reports and removing the requirement for progress reports to be SIP revisions.

**DATES:** *Comments.* Written comments on this proposal must be received on or before

**[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL**

**REGISTER].** *Public hearing.* The EPA is holding a public hearing concerning the proposed rule

on May 19, 2016, in Washington, D.C. The last day to pre-register to speak at the hearing is

May 17, 2016. Please refer to **SUPPLEMENTARY INFORMATION** for additional

information on submitting comments and the public hearing. *Information collection request.*

Under the Paperwork Reduction Act (PRA), comments on the information collection provisions

are best assured of having full effect if the Office of Management and Budget (OMB) receives a

copy of your comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF**

**PUBLICATION IN THE FEDERAL REGISTER].**

**ADDRESSES:** *Comments:* Submit your comments, identified by Docket ID No. EPA-HQ-

OAR-2015-0531, at <http://www.regulations.gov>. Follow the online instructions for submitting

comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The

EPA may publish any comment received to its public docket. Do not submit electronically any

information you consider to be Confidential Business Information (CBI) or other information

whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be

accompanied by a written comment. The written comment is considered the official comment

and should include discussion of all points you wish to make. The EPA will generally not

consider comments or comment contents located outside of the primary submission (i.e., on the

Web, Cloud, or other file sharing system). For additional submission methods, the full EPA

public comment policy, information about CBI or multimedia submissions and general guidance

on making effective comments, please visit <http://www2.epa.gov/dockets/comments.html>. *Public hearing:* A public hearing will be held at William Jefferson Clinton East building (WJC East), room 1117A, in Washington, D.C. Identification is required. If your driver's license is issued by American Samoa, Illinois or Missouri, you must present an additional form of identification to enter. Enhanced driver's licenses from Minnesota and Washington are acceptable. Please refer to **SUPPLEMENTARY INFORMATION** for additional information on the public hearing and location requirements.

**FOR FURTHER INFORMATION CONTACT:** For general information on this proposed rule and Information Collection Request (ICR), 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](mailto: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](mailto:jones.rhea@epa.gov). For information on the public hearing or to register to speak at the hearing, contact Ms. Pamela Long, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, by phone at (919) 541-0641 or by email at [long.pam@epa.gov](mailto:long.pam@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
NO <sub>x</sub>	Nitrogen oxides
OMB	Office of Management and Budget
PM	Particulate matter
PM <sub>2.5</sub>	Particulate matter equal to or less than 2.5 microns in diameter (fine particulate matter)
PM <sub>10</sub>	Particulate matter equal to or less than 10 microns in diameter
PRA	Paperwork Reduction Act
PSD	Prevention of significant deterioration
RPO	Regional planning organization
SIP	State implementation plan
SO <sub>2</sub>	Sulfur dioxide
TAR	Tribal Authority Rule
URP	Uniform rate of progress

*B. Does this action apply to me?*

Entities potentially affected directly by this proposed rule include state, local and tribal<sup>1</sup> governments, as well as FLMs responsible for protection of visibility in mandatory Class I areas.

Entities potentially affected indirectly by this proposed rule include owners and operators of sources that emit particulate matter equal to or less than 10 microns in diameter (PM<sub>10</sub>), particulate matter equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub> or fine PM), sulfur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds and other pollutants that may cause

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<sup>1</sup> The Regional Haze Rule 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 Regional Haze Rule 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) in instances where potentially affected sources are located on tribal land, as necessary or appropriate. The proposed rule changes may impact the development and approvability of tribal implementation plans that tribes may wish to develop 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.

or contribute to visibility impairment. Others potentially affected indirectly by this proposed 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 proposed rulemaking.

*C. What should I consider as I prepare my comments for the EPA?*

When submitting comments, remember to:

- Identify the rulemaking docket by docket number and other identifying information (subject heading, *Federal Register* date and page number).
- Follow directions. The proposed rule may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree, suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used to support your comment.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns wherever possible, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

Please note that this is a narrow proposed rulemaking. Please focus your comments on only those sections of the CFR affected by our proposed changes.

*D. What information should I know about the public hearing?*

The May 19, 2016, public hearing will be held to accept oral comments on this proposed rulemaking. The hearing will be held at the U.S. Environmental Protection Agency, William Jefferson Clinton East Building (WJC East), Room 1117A, 1201 Constitution Avenue, NW, Washington, D.C. It will convene at 9:00 a.m. and continue until the earlier of 5:00 p.m. or 1 hour after the last registered speaker has spoken. We have scheduled a lunch break from 12:00 to 1:00 p.m. People interested in presenting oral testimony should contact Ms. Pamela Long, Air Quality Planning Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541-0641, fax number (919) 541-5509, email address *long.pam@epa.gov*, at least 2 days in advance of the public hearing (*see DATES*). Additionally, requests to speak will be taken the day of the hearing at the hearing registration desk, although preferences on speaking times may not be able to be fulfilled. Depending on the flow of the day, times may fluctuate. People interested in attending the public hearing should also call Ms. Long to verify the time, date and location of the hearing. While the EPA expects the hearing to go forward as set forth, we ask that you monitor our Web site at <http://www.epa.gov/visibility> or contact Ms. Pamela Long to determine if there are any updates to the information on the hearing.

Oral testimony will be limited to 5 minutes for each commenter. The EPA encourages commenters to provide the EPA with a copy of their oral testimony electronically (via email) before the hearing and in hard copy form at the hearing.

The EPA may ask clarifying questions during the oral presentations, but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public hearing. Verbatim transcripts of the hearing and written statements will be included in the docket for the rulemaking.

Because this hearing is being held at United States (U.S.) government facilities, individuals planning to attend the hearing should be prepared to show valid picture identification to the security staff in order to gain access to the meeting room. Please note that the REAL ID Act, passed by Congress in 2005, established new requirements for entering federal facilities. If your driver's license is issued by American Samoa, Illinois or Missouri, you must present an additional form of identification to enter the federal building. Enhanced driver's licenses from Minnesota and Washington are acceptable. Acceptable alternative forms of identification include: federal employee badges, passports, enhanced driver's licenses, and military identification cards. For additional information for the status of your state regarding REAL ID, go to <http://www.dhs.gov/real-id-enforcement-brief>. In addition, you will need to obtain a property pass for any personal belongings you bring with you. Upon leaving the building, you will be required to return this property pass to the security desk. No large signs will be allowed in the building, cameras may only be used outside of the building, and demonstrations will not be allowed on federal property for security reasons.

Attendees may be asked to go through metal detectors. To help facilitate this process, please be advised that you will be asked to remove all items from all pockets and place them in provided bins for screening; remove laptops, phones, or other electronic devices from their carrying case and place in provided bins for screening; avoid shoes with metal shanks, toe

guards, or supports as a part of their construction; remove any metal belts, metal belt buckles, large jewelry, watches, and follow the instructions of the guard if identified for secondary screening. Additionally, no weapons or drugs or drug paraphernalia will be allowed in the building. We recommend that you arrive 20 minutes in advance of your speaking time to allow time to go through security and to check in with the registration desk.

*E. Where can I obtain 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>.

*F. How is this Federal Register document organized?*

The information presented in this document is organized as follows:

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- B. Does this action apply to me?
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- C. Changes to Definitions and Terminology Related to How Days Are Selected for Tracking Progress
- D. Impacts on Visibility from Anthropogenic Sources Outside the U.S.



- E. Impacts on Visibility from Wildland Fires Within the U.S.
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  - H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use
  - I. National Technology Transfer and Advancement Act
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- VII. Statutory Authority

## **II. What action is the EPA proposing to take?**

The EPA is proposing changes to the requirements that states (and, if applicable, tribes) would have to meet as they implement programs for the protection of visibility in mandatory

Class I areas.<sup>2</sup> This proposal would support continued environmental progress by clarifying certain or revising existing regulatory provisions and removing older rule provisions that have been superseded by subsequent developments. The EPA is proposing to clarify the relationship between long-term strategies and reasonable progress goals in state plans and the long-term strategy obligation of all states. The EPA is also proposing to revise the way in which some days during each year are to be selected for purposes of tracking progress towards natural visibility conditions in order to focus attention on days when anthropogenic emissions impair visibility; revise aspects of the requirements for the content of progress reports; update, simplify and extend to all states the provisions for reasonably attributable visibility impairment and revoke existing FIPs that require the EPA to assess and address any existing reasonably attributable visibility impairment situations in some states; and add a requirement for states to consult with FLMs earlier in the development of state plans. Other changes address administrative aspects of the program in order to reduce unnecessary burden. Specifically, the EPA proposes to make a one-time adjustment to the due date for the next SIPs (from 2018 to 2021, which would help states to coordinate regional haze planning with that for other programs), to revise the due dates for progress reports and to remove the requirement for progress reports to be SIP revisions. All

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<sup>2</sup> Areas designated as mandatory Class I 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. 42 U.S.C. 7472(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. 42 U.S.C. 7472(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.” 42 U.S.C. 7602(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.

of these changes would apply to periodic comprehensive state implementation plans developed for the second and subsequent implementation periods and for progress reports submitted subsequent to those plans. We do not intend the proposed changes to affect the development of state plans for the first implementation period or the first progress reports due under the existing Regional Haze Rule.

The EPA is proposing these changes for several reasons, as described more fully in the descriptions of each change detailed later in this proposed action. The proposed clarifications regarding the relationship between reasonable progress goals, long-term strategies and the long-term strategy obligation of all states reflect long-standing EPA interpretation of the Regional Haze Rule and are intended to ensure consistent (and appropriate) understanding of these requirements as states prepare their plans for the second implementation period. Changes to FLM consultation requirements would help ensure that the expertise and perspective of these officials are brought into the state plan development process earlier, so that they contribute meaningfully during the state's technical analysis and deliberations. The proposals related to how days are selected for visibility progress tracking would 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, by greatly reducing the trend-distorting effect of wildfires and natural dust storms. Collectively, these changes would serve to strengthen the regional haze program based upon lessons learned during the decade and a half since the program's inception.

With regard to the proposed extension of the current deadline of July 31, 2018, to July 31, 2021, for states' comprehensive SIP revisions for the second implementation period, the EPA believes this one-time change would 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 affecting sources over the next several years. The change would 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 discussions with states and that is anticipated to 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, meaning state plans will still focus on emission reduction measures designed to achieve reasonable progress by 2028,<sup>3</sup> as required by the current rule. Other than the proposed one-time change to the next due date for periodic comprehensive SIP revisions (i.e., for those currently due in 2018), no change is being proposed for due dates for future periodic comprehensive SIP revisions.

The proposed 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 ambiguity, and to allow states to conserve their administrative resources and make progress reports more timely by removing the requirement that they be submitted as formal SIP revisions. We are proposing to retain 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 apply now to progress reports that are SIP revisions and which will help ensure ongoing accountability for progress reports.

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<sup>3</sup> When considering the “time necessary for compliance,” *see* 42 USC 7491(g)(1), a state should account for this factor by setting an appropriate compliance schedule. The EPA expects that any control measure included in a SIP submitted by the proposed July 31, 2021, submission deadline will be feasible to implement by 2028.

Finally, the current provisions related to reasonably attributable visibility impairment require a recurring process of assessment and planning by the states. Experience since the current 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 more efficient in the use of resources. The EPA is proposing to replace the recurring process of assessment of reasonably attributable visibility impairment with an as-needed approach, and given our increased understanding of the interstate nature of visibility impairment, to expand the applicability for reasonably attributable visibility impairment from only states with Class I areas to all states. The proposed change to an as-needed approach only applies to reasonably attributable visibility impairment; periodic planning for purposes of regional haze will continue. This would improve visibility protection, if a situation exists or arises in which a source in a state without any Class I area causes reasonably attributable visibility impairment at a Class I area in another state.

The EPA also intends to provide states with updated guidance on the development of regional haze SIPs, in consultation with the states and FLMs, separately from this rulemaking. The guidance will assist states as they refocus on reasonable progress analyses for the next regional haze implementation period ending in 2028. We expect to invite public comment on a draft of this new guidance, and we expect to receive and be able to consider those comments before we finalize the Regional Haze Rule revisions.

### **III. What is the background for the EPA’s proposed action?**

#### *A. Reasonably Attributable Visibility Impairment*

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation’s national parks, wilderness areas and other Class I areas due to

their “great scenic importance.”<sup>4</sup> This section 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.” 45 FR 80084 (December 2, 1980). 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 and other air quality-related 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. The EPA explicitly deferred action on regional haze (visibility-impairing pollution that is caused by the emission of air pollutants from numerous sources located over a wide geographic area) until some future date when improvement in monitoring techniques provided more data on source-specific levels of visibility impairment, regional scale models became refined, and our scientific knowledge about the relationships between emitted air pollutants and visibility impairment improved.

It is important to note that 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

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<sup>4</sup> H.R. Rep. No. 294, 95th Cong. 1st Sess. at 205 (1977).

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 provide 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 small group of sources. Following such a certification by an FLM, a state is 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* existing §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. 52 FR 45132 (November 24, 1987). Most of these FIPs contain planning requirements only, i.e., most of the FIPs merely commit the EPA to assessing on a 3-year cycle whether reasonably attributable visibility impairment is occurring and to adopting an appropriate strategy of required emission controls if it is.

We are proposing extensive changes to the existing provisions regarding reasonably attributable visibility impairment to improve coordination with the regional haze program

requirements and enhance the potential for environmental protection, as described in the “Proposed Rule Changes” section of this document (Section IV.G).

### *B. Regional Haze*

Regional haze is visibility impairment that is produced by a multitude of sources and activities that are located across a broad geographic area and emit PM<sub>10</sub>, PM<sub>2.5</sub> (e.g., sulfates, nitrates, organic carbon, elemental carbon and soil dust) and their precursors (e.g., SO<sub>2</sub>, NO<sub>x</sub> and, in some cases, ammonia and volatile organic compounds). Fine particle precursors react in the atmosphere to form PM<sub>2.5</sub>, which 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 Regional Haze Rule was finalized in 1999, visibility impairment caused by air pollution occurred virtually all the time at most national park and wilderness areas. The average visual range<sup>5</sup> in many Class I areas in the western U.S. was 62–93 miles, but in some Class I areas, these visual ranges may have been impacted by natural wildfire and dust episodes in addition to

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<sup>5</sup> Visual range is the greatest distance, in kilometers or miles, at which a dark object can be discerned against the sky by a typical observer. Visual range is inversely proportional to light extinction ( $b_{\text{ext}}$ ) by particles and gases and is calculated as:  $\text{Visual Range} = 3.91/b_{\text{ext}}$  (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.,  $\text{Mm}^{-1}$  or inverse Megameters [ $\text{mega} = 10^6$ ]).



anthropogenic impacts. In most of the eastern Class I areas of the U.S., the average visual range was less than 19 miles. 64 FR 35715 (July 1, 1999).

Based on visibility data through 2014, considerable visibility improvements (4 to 7 deciviews)<sup>6</sup> have been made in eastern Class I areas on the 20 percent haziest days. Some western Class I areas have also experienced visibility improvements on the 20 percent haziest days (1 to 4 deciviews). 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 changed only by a slight amount.

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

Congress added section 169B to the CAA in 1990 to 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. 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. 64 FR 35714 (July 1, 1999). The 1999 Regional Haze Rule 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.

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<sup>6</sup> 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.

The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia and the Virgin Islands.<sup>7</sup> 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. 70 FR 39104. 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. 74 FR 2392. 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. CAA section 110(c). Most states eventually submitted SIPs.<sup>8</sup>

Further, 40 CFR 51.308(f) currently requires states to submit periodic comprehensive revisions of implementation plans (referred to in this document as periodic comprehensive SIP revisions) addressing regional haze visibility impairment by no later than July 31, 2018, and every 10 years thereafter. These periodic comprehensive SIP revisions must 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 reasonable progress goals over the prior implementation period; and affirmation of or revision to the reasonable progress goals. Further information on these periodic comprehensive SIP revisions can be found in section III.B.3 of this document. In

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<sup>7</sup> This requirement does not apply to other U.S. territories because they do not have mandatory Class I Federal areas and are too distant from any such areas to affect them.

<sup>8</sup> All states and territories, with the exception of Hawaii, Montana and the Virgin Islands, submitted initial regional haze SIPs.

addition, 40 CFR 51.308(g) requires 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. The progress reports are required to evaluate the progress made towards the reasonable progress goals 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 Regional Haze Rule 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 Regional Haze Rule. 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 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 has encouraged states to address visibility impairment from a regional perspective. Five regional planning organizations (RPOs) were formed after the promulgation of the Regional Haze Rule in 1999 to address regional haze and related issues. 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 Regional Haze SIPs*

The Regional Haze Rule required the implementation plans due in 2007, which covered what we refer to as the first implementation period, 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.

*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<sup>9</sup> procure, install and operate BART. Under the Regional Haze Rule, the EPA directed states to conduct BART determinations for any “BART-eligible”

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<sup>9</sup> The set of “major stationary sources” potentially subject-to-BART is listed in CAA section 169A(g)(7).

sources<sup>10</sup> 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. 70 FR 39104 (July 6, 2005). The Regional Haze Rule also gives states the flexibility to adopt an emissions trading program or other alternative program in lieu of source-specific BART as long as the alternative provides greater reasonable progress towards improving visibility than BART and meets certain other requirements set out in 40 CFR 51.308(e)(2).

States undertook the BART determination process during the first implementation period. The BART requirement was a one-time requirement, but BART-eligible sources may need to be re-assessed for additional controls in future implementation periods under the CAA’s reasonable progress provisions. Specifically, we anticipate that BART-eligible sources that installed minor controls (or no controls at all) will need to be reassessed. States should treat BART-eligible sources the same as other reasonable progress sources going forward. Consequently, we are not proposing any changes to the BART provisions in this rulemaking.

*Visibility Metric.* The Regional Haze Rule established a standard, conventional approach to quantifying visibility conditions and tracking how they change over time. The Regional Haze Rule established the 24-hour deciview haze index as the principal metric or unit for expressing visibility on any particular day. *See* 70 FR 39104, 39118. The deciview haze index is calculated

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<sup>10</sup> 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.

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.<sup>11</sup> 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 Regional Haze Rule provides additional details about the deciview haze index. We are proposing minor editorial changes to definitions related to the deciview index to ensure more consistent terminology across sections of the Regional Haze Rule.

*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 must calculate visibility conditions at each Class I area for a 5-year period just preceding each periodic comprehensive SIP revision.<sup>12</sup> To do this, the Regional Haze Rule requires 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 must also develop an estimate of natural visibility conditions for the purpose of estimating progress toward the national goal. Natural visibility is determined by estimating the

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<sup>11</sup> 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.

<sup>12</sup> Under the current version of the Regional Haze Rule, states must also periodically review progress in reducing impairment every 5 years.

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.<sup>13</sup> After the EPA issued this guidance, a number of interested parties developed 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.<sup>14</sup>

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 over the 5-year period. The comparison of initial baseline visibility conditions to natural visibility conditions indicates the amount of improvement that would be necessary to attain natural

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<sup>13</sup> 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](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](http://www3.epa.gov/ttn/oarpg/t1/memoranda/rh_tpurhr_gd.pdf).

<sup>14</sup> 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\\_NaturalCondIpaper/Copeland\\_et\\_al\\_NaturalConditionsII\\_Description.pdf](http://vista.cira.colostate.edu/improve/Publications/GrayLit/032_NaturalCondIpaper/Copeland_et_al_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](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>.

visibility. Over time, the comparison of current conditions<sup>15</sup> to the baseline conditions will indicate the amount of progress that has been made.

The rule text adopted in 1999 defined “visibility impairment” as a humanly perceptible change (i.e., difference) in visibility from that which would have existed under natural conditions. The rule text directed the tracking of visibility impairment on the 20 percent “most impaired days” and 20 percent “least impaired days” in order to determine progress towards natural visibility conditions. Section 51.308(d)(2)(i-iv). In light of the 1999 rule’s definition of “impairment,” the term “impaired” in the phrases “most impaired days” and “least impaired days” could be taken to connote anthropogenic impairment. However, the preamble to the 1999 final rule stated that the least and most impaired days were to be selected as the monitored days with the lowest and highest actual deciview levels, 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.<sup>16</sup> This approach has worked well in many Class I areas but has not in other areas. Specifically, the “worst” visibility days in some Class I areas can be impacted by 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 Regional Haze Rule the EPA had decided to use 5-year averages of visibility data to minimize the impacts of the interannual variability in natural events. However, as the IMPROVE monitoring network has collected more

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<sup>15</sup> 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.

<sup>16</sup> Guidance for Tracking Progress Under the Regional Haze Rule, September 2003, <http://www3.epa.gov/ttnamti1/files/ambient/visible/tracking.pdf>.



years of data, it has become obvious that in many Class I areas 5-year averages are not sufficient for minimizing these impacts. As a result, visibility improvements resulting from decreases in anthropogenic emissions can be hidden in this uncontrollable natural variability. In addition, 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 has created difficulties when attempting to track visibility improvements resulting from controls on anthropogenic sources. States have identified this difficulty and asked that the EPA explore options for focusing the visibility tracking metric on controllable anthropogenic emissions. To help states minimize the impacts of uncontrollable emissions on visibility tracking, the EPA is proposing to more explicitly (and consistently) address this issue for future implementation periods in the “Proposed Rule Changes” section of this document (Sections IV.C. and IV.D).

*Reasonable Progress Goals and Long-Term Strategy.* To ensure continuing progress towards achieving the natural visibility goal, each SIP in the series of periodic comprehensive regional haze SIPs must establish two distinct reasonable progress goals (one for the most impaired and one for the least impaired days) for every Class I area for the following implementation period. *See* 40 CFR 51.308(d) and (f). The Regional Haze Rule does not mandate specific milestones or rates of progress, but instead calls for states to establish goals that provide for “reasonable progress” toward achieving natural visibility conditions. In setting reasonable progress goals, states must 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. *Id.* 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, §51.308(d)(3) of the Regional Haze Rule requires that states include their long-term strategy in their regional haze SIPs. The reasonable progress goals themselves, however, are not enforceable. 64 FR 35754.

In establishing reasonable progress goals, states are required to consider the following factors set out in the definition of “reasonable progress” in section 169A of the CAA and incorporated into the Regional Haze Rule at 40 CFR 51.308(d)(1)(i)(A): (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 must demonstrate in their SIPs how these factors have been considered when selecting the reasonable progress goals for the least impaired and most impaired days for each applicable Class I area. It is important to understand that a state’s long-term strategy is inextricably linked to the reasonable progress goals 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). As intended by the EPA and as understood by all states in the first implementation period, the four reasonable progress factors are considered by a state in setting the reasonable progress goal by virtue of the state having first considered them, and certain other factors listed in §51.308(d)(3) of the Regional Haze Rule, when deciding what controls are to be included in the long-term strategy. Then, the numerical levels of the reasonable progress goals are the predicted visibility outcome of implementing the long-term strategy in addition to ongoing pollution control programs stemming from other CAA requirements. To ensure consistent understanding about the relationship between reasonable progress goals and the long-

term strategy, we are proposing rule text changes to clarify this relationship in the “Proposed Rule Changes” section of this document (Section IV.A). The proposed rule text is consistent with our long-held interpretation of the existing rule text as stated earlier.<sup>17</sup>

In deciding on the long-term strategy and in setting the reasonable progress goals, states must also 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. Uniform progress towards achievement of natural conditions by the year 2064 represents a rate of progress that states are to use for analytical comparison to the amount of progress they expect to achieve on average. The CAA has the goal of reaching natural conditions,<sup>18</sup> but does not have any date for achievement of that goal, requiring only that plans demonstrate reasonable progress towards it. The Regional Haze Rule reiterates the CAA goal, and provides for the use of an analytical framework that compares the rate of progress that will be achieved by a SIP (as represented by the reasonable progress goals for the end of the implementation period) to the rate of progress that if continued would result in natural conditions in 2064 (i.e., the URP). When a SIP contains a reasonable progress goal for the most impaired days that reflects progress that is equal to the URP, the reasonable progress goal is said to be “on the URP line” or “on the

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<sup>17</sup> The EPA’s interpretation of the proper relationship between a state’s reasonable progress goals and its long-term strategy is explained in detail in our proposed action on SIPs from Texas and Oklahoma. *See* section IV.C at 79 FR 74828. This interpretation was reaffirmed in our final action on these SIPs. *See* section II.C of 81 FR 296 (January 5, 2016).

<sup>18</sup> The text of the Regional Haze Rule states the goal of achieving “natural visibility conditions.” Section 169A(a)(1) of the CAA calls for “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.” The D.C. Circuit has affirmed that the Regional Haze Rule properly interprets the visibility goal stated in the CAA as achievement of “natural visibility conditions.” *American Corn Growers Ass’n v. EPA*, 291 F.3d 1, 25-27 (D.C. Cir. 2002).

glidepath.” If a state’s reasonable progress goal for the most impaired days is not on the glidepath, §51.308(d)(1)(ii) requires the state to demonstrate that it would not be reasonable to adopt a reasonable progress goal (and by implication a long-term strategy) that would be on the glidepath. The Regional Haze Rule does not establish an enforceable requirement that natural conditions be reached in 2064. The EPA has approved a number of SIPs for the first implementation period that have projected that continued progress at the rate expected to be achieved during that first period would not result in natural conditions until a date after 2064.

In setting reasonable progress goals, each state with one or more Class I areas must also 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 must demonstrate that it has included in its SIP all measures necessary to obtain its share of the emission reductions needed to meet the reasonable progress goals for the Class I area. Furthermore, section 169A(g)(1) of the CAA and §51.308(d)(1)(i)(A) of the Regional Haze Rule require that states determine “reasonable progress” by considering the four statutory factors. Also, §51.308(d)(3) requires each state to consider its own Class I areas (if it has any) and downwind Class I areas (which may be affected by emissions from the state) when it develops its long-term strategy. In determining whether a state’s long-term strategy and reasonable progress goals provide for reasonable progress toward natural visibility conditions, the EPA is required to evaluate the demonstrations developed by the state. 40 CFR 51.308(d)(1). To ensure consistent understanding about the long-term strategy obligations of all states, we are proposing rule text changes to clarify these obligations in the “Proposed Rule Changes” section of this document (Section IV.B). The proposed rule text is consistent with our long-held interpretation of the existing rule text as stated earlier.

In accordance with the Regional Haze Rule, states should consider all types of anthropogenic sources of visibility impairment in developing their long-term strategy, including major and minor stationary sources, mobile sources and area sources. At a minimum, states must describe how each of the following seven factors are taken into account in developing their long-term strategy: (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 to achieve the reasonable progress goal; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) 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). We are proposing to update the terminology in the fifth of these factors. We are not proposing any changes to the current requirements regarding the other six factors.

As discussed earlier, the current version of the Regional Haze Rule requires control strategies to cover an initial implementation period extending to the year 2018, with a comprehensive reassessment and revision of those strategies, as appropriate, every 10 years thereafter. The reasonable progress goals are specific to the end date of a given implementation period. New reasonable progress goals for the end of the next period are established in the next periodic comprehensive SIP revision. We are proposing to extend, to July 31, 2021, the due date for the SIP revision that under the existing Regional Haze Rule is due July 31, 2018. This

proposed change is discussed in the “Proposed Rule Changes” section of this document (Section IV.J).

*Coordinating Regional Haze and Reasonably Attributable Visibility Impairment.* The 1999 Regional Haze Rule fulfilled the EPA’s responsibility to put in place a national regulatory program that addresses both reasonably attributable and regional haze visibility impairment. As part of the Regional Haze Rule, the EPA revised 40 CFR 51.306(c) regarding reasonably attributable visibility impairment assessment and planning to require 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, which was due December 17, 2007. 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 current version of the regulations, future coordinated long-term strategies, and periodic progress reports evaluating progress towards reasonable progress goals, must be submitted consistent with the schedule for SIP submission and periodic progress reports set forth in 40 CFR 51.308(f) and 51.308(g), respectively. The periodic review of a state’s long-term strategy must report on both regional haze visibility impairment and reasonably attributable visibility impairment and must 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, described in detail in Section IV.G of this document, this coordinated approach to a state’s long-term strategies for regional haze and reasonably

attributable visibility impairment would continue, but would apply only when the state is under an obligation to respond to a reasonably attributable visibility impairment certification.

*Monitoring Strategy and Other Implementation Plan Requirements.* Section 51.308(d)(4) of the Regional Haze Rule includes 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 must be coordinated with the monitoring strategy required in the current version of §51.305 for reasonably attributable visibility impairment. Compliance with this requirement may be met through “participation” in the IMPROVE network.<sup>19</sup> 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 its review and use of monitoring data from the network. The monitoring strategy was due with the first regional haze SIP, and under the current Regional Haze Rule 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 reasonable progress goals 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. The EPA also believes that if the IMPROVE program must discontinue a

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<sup>19</sup> While compliance with §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 §51.305 for reasonably attributable visibility impairment.

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 Regional Haze Rule requirements when the next SIP revision is developed. As described in Section IV.F of this document, we are proposing that progress reports from individual states no longer be required to review and modify as necessary the state's monitoring strategy. We believe 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 existing Regional Haze Rule requires that states consult with FLMs before adopting and submitting their SIPs. 40 CFR 51.308(i). States must provide FLMs an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the SIP. This consultation must 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 reasonable progress goals and on the development and implementation of strategies to address visibility impairment. Further, a state must include in its SIP a description of how it addressed any comments provided by the FLMs. Finally, 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. We are proposing to require that states also consult with FLMs earlier in the development of their SIPs, as described in Section IV.I of this document.

#### *4. Requirements for the Regional Haze Progress Reports*

The current version of the Regional Haze Rule includes 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 are 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 Regional Haze Rule 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 are codified in 40 CFR 51.309(d)(10). This section specifies fixed due dates in 2013 and 2018 for these progress reports. Regardless, the current Regional Haze Rule provides that these three states will revert to the progress report requirements in 40 CFR 51.308 after the report currently due in 2018.

An explanation of the 5-year progress reports is provided in the preamble to the 1999 Regional Haze Rule. 64 FR 35747 (July 1, 1999). This 5-year review is intended to provide an interim report on the implementation of, and, if necessary, mid-course corrections to, the regional haze SIP, which, as noted earlier, is 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 include: 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 reasonable progress goals; 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).<sup>20</sup> We are proposing a number of clarifications and changes to the requirements for the content of progress reports, as described in Section IV.F of this document.

In accordance with 40 CFR 51.308(g) and 51.309(d)(10), progress reports must currently 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 are proposing to remove the requirement that progress reports be submitted as SIP revisions, as described in Section IV.L of this document.

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<sup>20</sup> 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](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”).

In addition, as with SIPs, states are required to provide FLMs with an opportunity for in-person consultation at least 60 days prior to any public hearing on an implementation plan or plan revision, which must include an opportunity for FLMs to discuss their assessment of impairment of visibility in any mandatory Class I area, and discuss their recommendations on the development of reasonable progress goals and the development of implementation strategies to address visibility impairment. *See* 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). We are proposing to preserve the existing requirement for consultation with FLMs on progress reports.

The first progress reports are currently 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. We are proposing a set of common due dates for future progress reports from all states, as described in Section IV.K of this document.

##### *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 reasonably attributable visibility impairment certification made by an FLM.

The EPA takes seriously our government-to-government relationship with tribes.<sup>21</sup> 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 reasonably attributable visibility impairment certification made by an FLM. The EPA believes that 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 National Tribal Air Association to adopt a requirement that states formally consult with tribes during the development of their regional haze SIPs. While we recognize the value of dialog between state and tribal representatives, we are not proposing to require it. We note that the CAA does not explicitly authorize the EPA to impose such a requirement on the states.

### *C. Air Permitting*

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<sup>21</sup> 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>.

One part of the visibility protection program, 40 CFR 51.307, New Source Review , was created 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 (PSD) 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.” 45 FR 80084 (December 2, 1980). 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,<sup>22</sup> 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.” 45 FR 34765 (May 22, 1980). 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 are proposing to revise §51.307 only as needed to maintain consistency with revisions to other sections of 40 CFR part 50 subpart P.

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<sup>22</sup> 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 new source review 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.

#### **IV. Proposed Rule Changes**

The changes being proposed by the EPA will continue steady environmental progress in the regional haze program while streamlining its administrative aspects that do not add to environmental protection. The EPA has gained a substantial amount of knowledge through the process of approving SIPs for the first regional haze implementation period and has learned what aspects of the program work well and what aspects should be modified going forward. Feedback received from co-regulators during this process has been invaluable in developing this proposal, which seeks to reduce administrative burdens of the regional haze program without sacrificing environmental protection. Indeed, the EPA believes that reducing administrative burdens will result in a more effective program in terms of achieving the goal of improved visibility.

##### *A. Clarifications to Reflect the EPA's Long-Standing Interpretation of the Relationship Between Long-Term Strategies and Reasonable Progress Goals.*

The EPA is proposing to amend §51.308(f) of the Regional Haze Rule, which contains the requirements for comprehensive periodic revisions to regional haze SIPs, by adding new provisions that will govern the development of long-term strategies and reasonable progress goals in future implementation periods. We are proposing these changes to make clear the connections between the existing long-strategy and reasonable progress goal requirements. Although the regional haze SIPs submitted by the states during the first planning period generally demonstrated a clear understanding of the connections between these two program elements, recent comments by some owners of industrial sources and states have indicated confusion as to the meaning of these provisions. The EPA's proposed revisions to §51.308(f) are

consistent with the EPA's long-standing interpretation<sup>23</sup> of the existing regulations at §51.308(d), but are organized in a more logical fashion. While the new provisions track the language of the existing regulations at §51.308(d) in many respects, the EPA also has proposed changes in certain places to eliminate ambiguities created by the existing language and to conform with substantive changes being proposed elsewhere in this rulemaking. In this section, we discuss only those changes that are intended to provide clarity regarding the relationship between long-term strategies and reasonable progress goals. Unlike some of the provisions discussed in subsequent sections of this preamble, the changes discussed in this section do not create new requirements for states.

Section 51.308(d) of the existing Regional Haze Rule is organized into four subsections: (d)(1), concerning the calculation of reasonable progress goals; (d)(2), concerning the calculation of baseline and natural visibility conditions; (d)(3), concerning the development of long-term strategies; and (d)(4), concerning the development of monitoring strategies. This organizational structure does not reflect the actual sequence of steps in the regional haze planning process. For example, §51.308(d) lists the requirements for reasonable progress goals before the requirements for long-term strategies. In practice, states must evaluate the four statutory factors to select emission control measures for their long-term strategies before they can calculate their reasonable progress goals by modeling the visibility improvement that will result from the implementation of those controls.

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<sup>23</sup> The EPA's interpretation of the proper relationship between a state's reasonable progress goals and its long-term strategy is explained in detail in our proposed action on SIPs from Texas and Oklahoma. *See* section IV.C at 79 FR 74828. This interpretation was reaffirmed in our final action on these SIPs. *See* section II.C at 81 FR 308 (January 5, 2016).

To address this issue and provide clarity to states and other stakeholders, the EPA is proposing to organize the requirements in §51.308(f) in a more logical fashion. First, proposed subsection (f)(1) provides the requirements governing the calculation of baseline and natural visibility conditions, which are necessary to calculate the URP. A state should calculate current visibility conditions, the URP and the URP line first. In doing so, the contributions of PM species to current anthropogenic light extinction (referred to as the anthropogenic light extinction budget) will become evident, which will inform the state's thinking as to which sources or source categories should be evaluated for potential reasonable progress control measures. Second, proposed subsection (f)(2) provides the requirements governing the development of long-term strategies. In this step, states must, among other things, evaluate sources that impact visibility at one or more Class I areas for potential control measures by considering the four statutory factors. Third, proposed subsection (f)(3) provides the requirements governing the calculation of reasonable progress goals. Once a state has established emission limitations and other control measures as part of its long-term strategy, the state will have the information necessary to model the visibility improvement that will result at each Class I area on the 20 percent most impaired days and 20 percent clearest days after the long-term strategy has been implemented. The projected visibility conditions at the end of the applicable implementation period constitute the reasonable progress goals. States must then compare the goals for the Class I area to the URP. If the goal for the 20 percent most impaired days is above the URP line, the state must demonstrate that there are no additional control measures for sources reasonably anticipated to contribute to visibility impairment in the Class I area that are reasonable to include in the long-term strategy. Finally, proposed subsection (f)(6) provides the requirements governing monitoring strategies,



which must be sufficient to allow states to assess the adequacy of their long-term strategies going forward.

In addition to these organizational changes, the EPA is proposing new language in §51.308(f)(2) that differs from the existing language in §51.308(d)(3), but is intended to achieve the same result. First, the EPA is proposing language in §51.308(f)(2)(i) and (iv) to clarify that all states, not just those with Class I areas, must consider the four statutory factors and properly document all cost, visibility and other technical analyses when developing their long-term strategies. Second, the EPA is proposing language in §51.308(f)(2)(ii) that requires states to consider the URP and the measures that contributing states are including in their long-term strategies when determining whether the state's own long-term strategy is sufficient to ensure reasonable progress.<sup>24</sup> Finally, the EPA is proposing language in §51.308(f)(2)(iii) to clarify the respective obligations of "contributing states" and "states affected by contributing states," during interstate consultation. As is the case under the existing rule text, the EPA will evaluate the sufficiency of the record developed by each state, the state's conclusions, and any disagreements among states to determine whether the state has used reasoned decision making in choosing a set of a control measures that will achieve reasonable progress at the Class I areas impacted by the state's sources. States must document all substantive interstate consultations.

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<sup>24</sup> The EPA views this as a clarification of the requirement that states with sources affecting a given Class I area consult on the content of their long-term strategies. Such consultation would be pointless if each state were not meant to consider the other states' planned emission control measures.

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

The following clarifications and changes are also proposed to be included in the revised §51.308(f).

*The uniform rate of progress line starts at 2000-2004, for every implementation period.*

The current text of §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.” While not actually used within the current rule text, the term that has been commonly used to describe this rate is the “uniform rate of progress” or URP. The current text of §51.308(f) indicates that states must evaluate and reassess all elements required by §51.308(d), and hence the URP, in the second and subsequent implementation periods. Section 51.308(d) is not perfectly clear about whether “the rate of progress needed to attain natural visibility conditions by the year 2064” is meant to refer to needed progress measured from visibility conditions in the baseline period of 2000-2004, or further needed progress measured from “current” visibility conditions (i.e., the visibility conditions during a 5-year period ending shortly before SIP submission). In other words, the section is not perfectly clear as to whether the glidepath or URP line that applies to the SIP for the second or a later implementation period always starts in the baseline period of 2000-2004, or in the most recent 5-year period. It is clear that the glidepath or URP line then reaches natural visibility conditions in “2064,” but no exact date in 2064 is specified.

To ensure consistent understanding, the EPA is proposing rule revisions to state explicitly that in every implementation period, the glidepath or URP line for each Class I area is 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. In this way, it is clear that for a Class I area that has achieved more than the URP in the first implementation period, the state can take that into account in its URP analysis for the second implementation period. 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.

Note that because of updates to the IMPROVE program, some data values from 2000-2004 may be revised over time.<sup>25</sup> Therefore, the value of the starting point for the URP (i.e., baseline visibility conditions) should be re-calculated for purposes of accuracy of analysis in any given periodic comprehensive SIP revision. In addition, the value of the baseline visibility conditions must be recalculated to be consistent with the approach used for the selection of the most impaired days in the SIP revision under preparation (*see* Section IV.C of this document).

Along with the clarification that the baseline period remains 2000-2004 for subsequent implementation periods, the EPA also proposes to include clarifications on how states treat Class I areas without available monitoring data or Class I areas with incomplete monitoring data. 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 (e.g., if a monitor began operating in mid-2000, then 2001-

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<sup>25</sup> IMPROVE data from the 2000-2004 period may be revised after initially reported because of more recently revised methods for calculating ambient concentrations from measurements made on filters and because of revised methods for filling in missing or invalidated data. Such revisions are made in order to maintain consistency in reported results across the years.

2005 would be used as the baseline period for the Class I area). The proposed rule text on this issue, appearing in §51.308(f)(1)(i), does not appear in the current §51.308(d) because at the time §51.308(d) was proposed and finalized, it was not anticipated that this data incompleteness situation would exist. We are proposing to add this provision to remove any uncertainty about how an issue of data incompleteness should be addressed in a SIP.

As part of this clarification and to maintain consistency in the reasonable progress goal framework, the proposed language in §51.308(f)(3)(i) (and an accompanying definition of “end of the applicable implementation period” added to §51.301) would make clear that reasonable progress goals are to address the period extending to the end of the year of the due date of the next periodic comprehensive SIP revision. Also, proposed §51.308(f)(1)(iv) specifies the end day of 2064 as the ending point of the glidepath or URP line.

*Visibility conditions on the clearest 20 percent of days must show no deterioration from conditions in 2000-2004.* The current text of §51.308(d)(1) states that the reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period. This text is ambiguous 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. However, a summary table in the preamble to the 1999 Regional Haze Rule indicated that the 2000-2004 period would be used for “tracking visibility improvement.”<sup>26</sup> To provide further clarity, we are proposing new rule text in revised §51.308(f)(3)(i) to make it clear that the baseline for determining whether there is deterioration on the 20 percent clearest days is the baseline period of 2000-2004.

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<sup>26</sup> 64 FR 35730 (July 1, 1999).

*Analytical Obligation When the Reasonable Progress Goal for the 20 Percent Most Impaired Days Is Not On or Below the URP Line.* The EPA is proposing to clarify how the comparison of the reasonable progress goal for the 20 percent most impaired days to the rate of visibility improvement needed to attain natural conditions by 2064 (i.e., the glidepath or URP line) determines the content of the demonstration the state must submit to show that its long-term strategy provides for reasonable progress. This clarification appears in the proposed §51.308(f)(3)(ii).

The current text of §51.308(d)(1)(ii) discusses required actions of the state containing the Class I area should it set a reasonable progress goal that provides for a slower rate of visibility improvement than that needed to attain natural conditions by 2064 (i.e., a reasonable progress goal for the 20 percent most impaired days that is above the URP line). This section provides that in this situation, the state must demonstrate, based on the four reasonable progress factors, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable, and that the progress goal adopted by the state is reasonable. To clarify how a state must show that being on the URP line is not reasonable in its SIP for the second and subsequent regional haze implementation periods, the EPA is proposing in §51.308(f)(3)(ii)(A) that if the reasonable progress goal is above the URP line, the state 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. States must provide a robust demonstration, including documenting the criteria used to determine which sources or groups of sources were evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.

In existing sections 51.308(d)(2)(iv) and 51.308(d)(3)(i) and (ii), sentences addressing obligations of the state with the Class I area and obligations of the contributing state(s) are juxtaposed in such a way that it can be confusing for a reader to understand which of the two states is being referred each time the word “state” appears. The proposed §51.308(f)(2)(iii) more clearly spells 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 clarify and solidify the obligations of what we are referring to as contributing states, §51.308(f)(3)(ii)(B) is proposed to specify that in situations where reasonable progress goals are 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. This provision will 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 physically located within their borders.

*Emission inventories.* The proposed language of §51.308(f)(2)(iv) regarding the baseline emissions inventory to use in developing the technical basis for the state’s long-term strategy would reconcile this section with changes that have occurred to 40 CFR part 51, subpart A, Air Emissions Reporting Requirements, since the Regional Haze Rule was originally promulgated in 1999. The proposed changes also would 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.

*EPA action on reasonable progress goals.* Proposed language in §51.308(f)(3)(iv) would make clear that in approving a state’s reasonable progress goals, 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 section is a clarification of §51.308(d)(1)(iii), which only explicitly mentions the demonstration provided by the state containing the Class I area.

*Progress reports.* Finally, proposed language in §51.308(f)(5) complements proposed changes regarding progress reports and the proposal to eliminate separate progress reports being due simultaneously with periodic comprehensive SIP revisions. This language would require the periodic comprehensive SIP revision to include certain items of information that would have been addressed in the progress report, thereby expanding its scope somewhat. While the state would no longer need to prepare and submit two separate documents at the same time (the periodic comprehensive SIP revision and a progress report), the same information would still be covered. Combining requirements in this way will avoid the overlap in content that would occur with two separate documents.

*Smoke management programs and basic smoke management practices.* The proposed §51.308(f)(2)(vi)(E) mirrors the existing §51.308(d)(3)(v)(E) with updates to reflect terminology used within the air quality and land management communities to clarify and promote a common understanding of this provision. We propose to replace the term “smoke management techniques” in §51.308(d)(3)(v)(E) with “basic smoke management practices.” We propose to replace the term “forestry management purposes” with “wildland vegetation management purposes” in recognition that not all wildland for which fire and smoke are issues is forested. We also propose to replace the phrase “plans” with “smoke management programs for prescribed

fire.” Like §51.308(d)(3)(v)(E), the proposed §51.308(f)(2)(vi)(E) would require states to consider only currently existing smoke management programs (formerly referred to as “plans”). Section IV.E of this document discusses wildland fire-related issues in more detail and includes explanations of the terms “basic smoke management practices” and “smoke management program.”

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

Section 51.308(d) of the existing Regional Haze Rule requires 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. Section 51.301 of the Regional Haze Rule defines visibility impairment as the humanly perceptible change in visibility from that which would have existed under natural conditions. This definition of visibility impairment suggests that only visibility impacts from anthropogenic sources should be included when considering the degree of visibility impairment. However, the preamble to the 1999 final rule stated that the least and most impaired days were to be selected as the monitored days with the lowest and highest actual deciview levels, respectively. 64 FR 35728 (July 1, 1999). The interpretation in the preamble was subsequently reflected in the EPA guidance on setting reasonable progress goals and tracking progress. In practice, in their SIPs for the first implementation period states followed the approach described in the 1999 preamble and the subsequent guidance, and the EPA approved the SIPs with respect to that aspect. However, as described later, experience now indicates that for the most impaired days an approach focusing on anthropogenic impairment in particular is more appropriate going forward. We are not proposing to change the approach of using the 20 percent of days with the best visibility to



represent good visibility conditions for reasonable progress goal and tracking purposes, but we are proposing text changes to accurately describe how those days are to be selected. These days would be referred to as the 20 percent clearest days.

Natural contributions to the total actual deciview levels vary from year to year. In order to minimize interannual variability, the Regional Haze Rule uses 5-year averages for determining the baseline and current visibility conditions. Also, under the EPA's modeling guidance for regional haze SIPs, reasonable progress goals are projected starting from the average of visibility conditions in a 5-year period that is centered around (or at least includes) the year of the base emission inventory used in the air quality modeling process. Now that many visibility monitoring sites have at least 15 years of data, it is clear that in some locations 5-year averages are not long enough to dampen the visibility impacts of occasional extreme fire years. In their SIPs and SIP revisions for the first implementation period, some states explained that the 20 percent most impaired days in certain Class I areas can be dominated by uncontrollable visibility impacts. Many states, particularly western states, have urged the EPA to make rule changes that would allow them to track visibility progress in Class I areas using a method that is more closely linked with visibility impacts from controllable emissions.

To help states minimize the impacts of uncontrollable emissions on visibility tracking, the EPA proposes to more explicitly (and consistently) address this issue for future implementation periods. In general, the proposed changes related to the selection of days for visibility tracking are intended to accomplish the following for future implementation periods: (1) clarify that "visibility impairment" means the deviation from natural visibility and therefore is due to anthropogenic impacts, (2) revise definitions in §51.301 to make clear that the 20 percent most impaired days should be selected based on anthropogenic visibility impairment

rather than based on the days with highest deciview values due to impacts from all types of sources, and (3) continue to use the 20 percent of days with the lowest total deciviews (i.e., “clearest days”) rather than the 20 percent least impaired days for purposes of tracking any adverse trend in visibility on clear days.

The definitions in §51.301 for several terms and phrases related to the selection of days for visibility tracking have been clarified in the proposed revisions of the rule text. Definitions that are proposed to be changed slightly to provide more clear explanations of their meanings include the following: *deciview*, *most impaired days*, and *visibility impairment*.

Additionally, we propose definitions for the following previously undefined terms be included in §51.301: *clearest days*, *the deciview index* (the term was *deciview haze index* in the 1999 Regional Haze Rule), *natural visibility conditions* and *visibility*. We propose the addition of the term *clearest days* to unambiguously describe the days with the lowest actual deciview values, for which there is to be no degradation in visibility.<sup>27</sup> We propose changing the deciview haze index to *the deciview index* to remove the word haze, since the deciview index can be used for visibility impairment as well as for the total effect of all sources.<sup>28</sup> *Visibility* was previously undefined although used in the definitions of several other important terms, and so we have added a proposed definition to describe that visibility is the change in optical clarity when viewing objects at a distance. We also propose adding a definition for *natural visibility conditions* to clarify that natural visibility conditions cannot be measured and must be inferred or

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<sup>27</sup> We are not proposing to remove the definition of least impaired days because it will still apply to the first implementation period (including the SIPs and progress reports covering the first implementation period).

<sup>28</sup> We note that the very definition of “regional haze” refers to “impairment,” making it confusing to use “haze” to refer to the actual level or degree of visibility considering the effects of both natural and anthropogenic sources. Our proposed edits are aimed at avoiding any inconsistent use of the term “haze.”

estimated, and to distinguish the visibility conditions that occur due to natural conditions from natural conditions themselves such as humidity, emissions from natural sources, etc.

Given the current Regional Haze Rule's definitions of *most impaired days* and *visibility impairment*, the regulations could be read to direct states and the EPA to use the days with the most perceptible anthropogenic impairment as the 20 percent most impaired days. The proposed changes to these definitions in §51.301 do not change this direction. The EPA solicits comments on a first proposal, fully reflected in the proposed rule text, which would require that states select the 20 percent most impaired days based on anthropogenic impairment, rather than based on the highest deciview values due to all sources affecting visibility. If this approach is finalized, states would still have the option to also present the visibility data using the current approach based on the days with the highest overall deciview index values (i.e., the 20 percent haziest days).

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, and thus the utility of the change in approach. Under this first proposal, the reasonable progress goals and URP line that are calculated using anthropogenic impairment to select the most impaired days will be the glidepath that is used to trigger the requirement for a state to show that it is not reasonable for the SIP to provide for the rate of progress that would be needed to reach natural visibility conditions in 2064 (*see* Section IV.B of this document).

The EPA seeks comment also on a second, alternative proposal under which the final rule would allow each state with a Class I area to choose between using the revised approach described earlier (using the 20 percent most anthropogenically impaired days) and using the 20 percent haziest days (whether dominated by natural or anthropogenic impacts) to track visibility as all states with Class I areas did in the first regional haze SIPs. (This alternative approach is not

laid out in proposed rule text revisions, but only minor edits would be required to implement it in the final rule.) If the final rule takes this approach, states would still have the option to also present the visibility data using the other approach.

In summary, the EPA seeks comment on two approaches for selecting the 20 percent “worst” days from the IMPROVE monitoring data. In the first approach, states would be required to select the 20 percent most impaired days, i.e., the days with the most impairment from anthropogenic sources. This first approach would be a change from the approach states used in the first implementation period. This first approach would also mean that all states would use a framework that is consistent on this aspect. In the second approach, states would be allowed to choose whether to select the 20 percent of days with the highest overall haze (i.e., the approach used in the first implementation period) or to select the 20 percent of days with the most impairment from anthropogenic sources. EPA also solicits comments on additional approaches. The EPA will consider comments received on these two options or additional options offered by commenters.

If the 20 percent most anthropogenically impaired days are used to estimate natural visibility conditions, current visibility conditions and the URP, they must also be used in setting reasonable progress goals and in progress reports. Conforming edits are being proposed to the provisions related to each of these, for that purpose. If the final rule requires the revised approach described earlier in the first proposal, it would apply starting with the second and subsequent periodic comprehensive SIP revisions and then to progress reports submitted after the second SIP revision. There would be no change with respect to the EPA action on SIP revisions for the first implementation period.

In order to select the 20 percent most impaired days based on the days with the most anthropogenic impairment, natural contributions to daily deciview values must be estimated by some method. This in turn requires measured concentration values for PM components to be allocated to natural versus anthropogenic sources. The EPA is not proposing that any particular method for determining natural contributions to daily haze and thus the degree of visibility impairment for each monitored day be codified in the rule text. The EPA plans to issue guidance 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. Because no particular method would be prescribed by rule, states could develop, justify and use another method in their SIPs, if the final rule requires (or allows) the 20 percent most impaired days based on anthropogenic impairment to be used.

*D. Impacts on Visibility from Anthropogenic Sources Outside the U.S.*

The EPA acknowledges that emissions (natural and anthropogenic) from other countries (and from marine vessel activity in non-U.S. waters) may impact Class I areas, especially those areas near borders and coastlines. We have had requests from states with such Class I areas that given these emissions are beyond states' control, the states should be allowed to account for international impacts when preparing SIPs and progress reports. For example, states have requested that they be allowed to consider impacts from international emissions when comparing their reasonable progress goals to the URP line. This comparison matters because (as described in Section IV.C of this document) it may trigger an additional analytical requirement by the state. Impacts from international emissions can also affect whether a progress report will conclude that actual visibility conditions are approaching the reasonable progress goals for the end of the implementation period. It has been suggested to the EPA that estimated impacts from

international emissions might be added to the 2064 end point of the URP line. It has also been suggested that estimated impacts from international emissions be subtracted from baseline and current visibility conditions.

On this issue, we first wish to clarify that it has never been the intention of the EPA that states be obligated to in any way compensate for haze impacts from anthropogenic international emissions by adopting more stringent emission controls on their own sources. We also wish to note that impacts from natural sources in other countries should be considered part of natural visibility conditions. States have the flexibility under the Regional Haze Rule to justify and use values for natural visibility conditions that include such effects. We believe the proposed changes regarding which days in a year are used for tracking progress (*see* Section IV.C of this document), when supplemented by our planned guidance on this topic, will adequately address international impacts related to significant wildland wildfires in Canada and Mexico and dust storms in Mexico (and perhaps also dust storms in northern Africa).

The EPA has further considered possible approaches regarding the impacts from anthropogenic sources in other countries, including border countries as well as more distant countries such as China. It is the role of the federal government, much more than of the states, to work with other countries to make such reasonable progress. The EPA is, in fact, actively engaged with other countries to help them reduce their anthropogenic emissions, particularly emissions in Mexico from sources near the U.S.-Mexico border. *See* <http://www2.epa.gov/border2020>.

We believe that it may be appropriate to allow states to adjust the reasonable progress goal framework, including their progress reports, to explicitly take into account international impacts from anthropogenic sources, but only when and if these impacts can be estimated with

sufficient accuracy. We do not believe that explicit consideration of impacts from anthropogenic sources outside the U.S. would actually affect the conclusions that states should make about what emission controls for their own sources are needed for reasonable progress. Even so, explicit quantification of international impacts, if accurate, could improve public understanding and effective participation in the development of regional haze SIPs. Also, taking international impacts into account in some cases may affect whether a state (and contributing states) are subject to the requirement of proposed §51.308(f)(3)(ii) regarding a demonstration that there are not additional emission reduction measures needed for reasonable progress. However, we are not convinced that such impacts can be estimated with sufficient accuracy at this time, in part due to great uncertainty about past, present and future emissions from sources in most other countries. However, it may be that by the time some future periodic comprehensive SIP revisions are to be prepared, for some states possibly as early as when they are preparing their second SIP, methods and data for estimating international impacts will be substantially more robust.

Therefore, the EPA is requesting comment on a proposed provision that would allow states with Class I areas significantly impacted by international emissions to make an adjustment to the URP with specific approval by the Administrator. The adjustment would consist of adding to the value of natural visibility conditions an estimate of international impacts, only for the

purpose of calculating the URP.<sup>29</sup> We believe that this adjustment should be permitted only if the Administrator determines the international impacts from anthropogenic sources outside the United States were estimated using scientifically valid data and methods. We are proposing specific rule text for this purpose in §51.308(f)(1)(vi). In addition, we are proposing small rule text changes in §51.308(f)(1)(i) and (vi) (compared to their counterparts in §51.308(d)) 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,<sup>30</sup> we recommend that a state seeking approval for such an adjustment first consult with contributing states. Such an adjustment would also be a topic for the required consultation with the FLM for the Class I area at issue. We welcome comments on this proposed rule text as well as comments in general support or opposition to this concept, noting that the EPA may or may not finalize this portion of the proposal.

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<sup>29</sup> As another possible approach to accounting for international impacts, the analysis of IMPROVE monitoring data to develop the estimates of 2000-2004 baseline visibility conditions could include steps to remove the influence of emissions from anthropogenic sources outside the U.S. The calculation of the URP would be based on this adjusted estimate of baseline visibility conditions (see “*The uniform rate of progress line starts at 2000-2004, for every implementation period*” in Section IV.B of this document) and the true value of natural visibility conditions. Also, for consistency, the values for current visibility conditions and for the projected RPG would exclude the influence of international emissions. We invite comment on this alternative approach, which we may include in the final rule as the only allowed approach or as another allowed approach.

<sup>30</sup> Contributing states may be affected because under proposed §51.308(f)(3)(iv)(B), a contributing state may have an additional analytical requirement if the RPG does not provide for the URP at an affected Class I area in another state.



*E. Impacts on Visibility from Wildland Fires Within the U.S.*

Fires on wildlands within the U.S. can significantly impact visibility in some Class I areas on some days and have lesser impacts on a greater number of days. Accordingly, we discuss here whether measures to reduce emissions from wildland wildfire and wildland prescribed fires may be needed for reasonable progress towards natural visibility conditions. We also discuss whether smoke from fires might cause the projected RPG to be above the URP line, thus triggering the additional analytical requirement (discussed in Section IV.B of this document) to show that there are no additional measures that are necessary for reasonable progress. We are proposing rule language to allow the Administrator to approve a state's proposal to adjust the URP to avoid subjecting a state to this additional analytical requirement due only to the impacts of specific types of wildland fire. This section does not address and does 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.

An extensive discussion of the background on 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), was presented in the recently proposed revisions to the Exceptional Events rule (80 FR 72840, November 20, 2015) and is not repeated here. We do wish to note, however, that the term "smoke management program" is not currently defined in the Regional Haze Rule. At the time of the 1999 Regional Haze Rule, the term was generally used to mean a framework that included (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 believe this usage of the term is still appropriate. By “authorization to burn,” we mean that a government authority restricts where, when and/or by whom a prescribed fire may be conducted. The proposed §51.308(f)(2)(v)(E) would make a certain state obligation depend on whether a “smoke management program” currently exists within a state. See “*Consideration of control measures for wildland prescribed fire*” in this section for further discussion of this point.

We do not consider the term smoke management program for the purposes of §51.308(f)(2)(v)(E) to mean programs that include only seasonal restrictions on burning because of fire safety concerns, voluntary educational programs designed to raise air quality awareness of potential prescribed fire users, voluntary programs in which land managers agree to coordinate their prescribed fire activities but are free to withdraw from the program at any time or some combination of the above. The EPA supports these latter types of programs, but we do not believe it is appropriate to have the obligation in §51.308(f)(2)(v)(E) triggered by the existence of these types of programs.<sup>31</sup>

The recently proposed revisions to the Exceptional Events Rule would clarify that in the context of the regulatory programs for the protection of the NAAQS, (i) wildland wildfires are natural events and prescribed fires are anthropogenic events; (ii) a wildland wildfire is not controllable or preventable (in the sense that generally it would not be reasonable to expect efforts at prevention of occurrence and/or control of emissions to have gone beyond the efforts actually made for a given wildfire by responsible land managers and fire safety officials); (iii) a

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<sup>31</sup> We note that the determining factor for the applicability of proposed §51.308(f)(2)(v)(E) would be the existence of a program and its elements, not whether the program has been incorporated into the SIP as an enforceable measure or described in the narrative portion of the SIP.

prescribed fire is not reasonably controllable (in the sense that it would not have been reasonable to do more to control its emissions) if it was conducted in accordance with a state-certified smoke management plan or if the burn manager has employed appropriate basic smoke management practices; and (iv) a prescribed fire is presumptively not reasonably preventable (in the sense that it not would have been reasonable to not conduct it, because of the multiple important benefits that would have been foregone) if a multi-year land or resource management plan<sup>32</sup> for a wildland area has a stated objective to establish, restore and/or maintain a sustainable and resilient wildland ecosystem and/or to preserve endangered or threatened species through a program of prescribed fire and the use of prescribed fire in the area has not exceeded the frequency indicated in that plan. These proposed revisions to the Regional Haze Rule do not include language to these same four effects because the Regional Haze Rule does not contain this level of specificity with respect to any source type. However, we do believe these same propositions apply in the regional haze context, and the remainder of this section is based on these propositions. We invite comment on these propositions, and on whether it is appropriate to include in the final rule explicit language reflecting them.

#### *Wildland Wildfires*

As natural events, two issues are associated with wildfires on wildland. The first is whether and how a state is obligated to consider measures which could reduce emissions from these wildfires as part of a regional haze program. The second issue is the one identified at the start of this section, namely the possible impact of wildland wildfires on whether the RPG is

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<sup>32</sup> These plans could also include State Forest Action Plans, fire management plans, prescribed fire on wildland management plans, landscape management plans or equivalent public planning documents.

above the URP line and thus whether a state is subject to the additional analytical requirement described Section IV.B of this document.

*Consideration of control measures for wildland wildfires.* Because wildland wildfires are considered natural events, emissions from wildfires are natural emissions that contribute to natural visibility conditions. Thus, states are not obligated to consider whether measures to reduce emissions from wildfires are necessary for reasonable progress towards natural visibility conditions. However, states may 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. Today's proposals are intended to 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 believe appropriate. The EPA is committed to working with states, tribes, federal land managers, other stakeholders and other federal agencies concerning the use of prescribed fire, as appropriate, to reduce the impact of wildland fire emissions on visibility.

*Possible effect on the comparison of the RPG to the URP line.* Because wildland wildfires are natural events, emissions from wildland wildfires do not contribute to "visibility impairment" given that this term refers only to reductions in visibility attributable to anthropogenic sources. Under the proposed approach of basing RPGs on the 20 percent most impaired days, we expect that days with large impacts from wildland wildfires will not be

included in the set of days selected as the 20 percent most impaired days in each year.<sup>33</sup> Thus, we expect that wildland wildfires with notable effects on visibility will not be a reason why a projected RPG for the 20 percent most impaired days would be above the URP line, simply because the URP line will be about visibility on other types of days. Thus, we expect that wildland wildfires will not affect whether a state becomes subject to the additional analytical requirement to show that there are no additional measures that are necessary for reasonable progress. Also, we expect that the 20 percent clearest days (selection of which is based on visibility as affected by all types of sources) will not include any days with notable effects from wildland wildfires. Thus, we expect that wildland wildfires will not affect whether a state is able to demonstrate that there is no deterioration in visibility on the 20 percent clearest days, which is a requirement for SIP approval.

#### *Wildland Prescribed Fires*

As anthropogenic events, two issues are associated with prescribed fires on wildland. The first is whether and how a state is obligated to consider measures that could reduce emissions from these prescribed fires as part of a regional required haze program. The second issue is the possible impact of wildland prescribed fires on whether the RPG is above the URP line.

*Consideration of control measures for wildland prescribed fire.* Under existing §51.308(d)(2)(i) and proposed revised §51.308(f)(2)(v), a state is required to identify all anthropogenic sources of visibility impairment considered by the state in developing its long-

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<sup>33</sup> We intend to recommend an approach to identifying the 20 percent most impaired days that uses the ambient concentration of carbon-containing material to separate total light extinction between natural sources, including wildfires, and anthropogenic sources. A day strongly affected by wildfire will have high concentrations of carbon-containing material and a very large fraction of light extinction will be attributed to natural causes, thus the day likely will not be one of the 20 percent most impaired days.

term strategy and the criteria used to select the sources for which additional emission reduction measures were considered in light of the four reasonable progress factors. Existing §51.308(d)(3)(v)(E) more specifically requires a state to consider “smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the State for these purposes.” As explained in Section IV.B of this document, in carrying this paragraph forward into the revision of §51.308(f) that will make it free standing, we are proposing to update some of the terminology and to require states to consider “basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs as currently exist within the state for these purposes.”

Taken together, we interpret these provisions to mean that every state must consider whether wildland prescribed fires contribute to impairment at their own Class I areas or Class I areas in other states. If they do not contribute to any meaningful degree, the SIP may take note of this and thereby satisfy both provisions. If prescribed fires in a state contribute meaningfully to impairment at a Class I area, the state is required to consider basic smoke management practices for prescribed fires in the development of its long-term strategy, regardless of whether or not those practices are currently being implemented, required by state law or mandated by an EPA-approved SIP. The state would be required to consider only smoke management programs as currently exist within the state.<sup>34</sup> We believe that the state should in this situation give new consideration to the effectiveness of its smoke management programs in protecting air quality while also allowing appropriate prescribed fire for ecosystem health and to reduce the risk of

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<sup>34</sup> We interpret “currently exist” in both referenced sections of the Regional Haze Rule to refer to programs that are operational as of the SIP due date, not the date the Regional Haze Rule was promulgated.

catastrophic wildfires. The state could also consider the implementation of a new smoke management program.

We would like to make clear that taken together, these two provisions do not necessarily require any state to “select” wildland prescribed fire (under §51.308(f)(2)(v)) as an anthropogenic source of visibility impairment for which it must consider and analyze emission reduction measures (such as a smoke management program or basic smoke management practices) based on the four reasonable progress factors listed in §51.308(f)(2)(i). Thus, a state is not necessarily required to develop cost estimates for smoke management programs or basic smoke management practices. However, if a state does not “select” wildland prescribed fire as a source for four-factor analysis, it must explain why it has not. As previously stated, the explanation may be as simple as taking note that prescribed fires do not make a meaningful contribution to visibility impairment at in-state and nearby Class I areas. Where prescribed fires are more important, it may be sufficient for the SIP revision to explain the role of properly planned and managed wildland prescribed fire as described in this section, the state’s ongoing smoke management programs, if any, and the current and possibly increased future use of basic smoke management practices by federal, state, local and private land managers, but not to “select” wildland prescribed fire as a source category for four-factor analysis.

If a state does “select” wildland prescribed fire as a source for four-factor analysis, the state must conclude this analysis by determining whether additional measures to reduce emissions from wildland prescribed fire are necessary for reasonable progress. Any such measures must be included in the long-term strategy. Because some of the basic smoke management practices are difficult to describe with the specificity needed to make them practically enforceable, it may not be appropriate to conclude that a SIP requirement for the use

of each practice is necessary for reasonable progress. For example, one basic smoke management practice is to monitor the effects on air quality due to the smoke plume from a prescribed fire. “Monitoring” could include ground-based visual observations, aircraft observations, meteorology-based modeling, fixed or portable air quality monitoring stations, hand-held monitors, etc. Because the most appropriate monitoring approach is often situation- and resource-specific, mandating a specific approach is inadvisable. Therefore, a SIP commitment for a state or local agency to include the use of basic smoke management practices could be more desirable than a SIP requirement for land managers to use each basic smoke management practice.

Given the benefits of prescribed fires including the reduction they can achieve in visibility-obscuring smoke from wildfires that affect visitor’s experiences even though not intended to be reflected in the metrics for tracking progress towards natural visibility conditions, a state may determine that reasonable progress does not require implementation of a new or revised smoke management program that includes an authorization to burn component,<sup>35</sup> or it may adopt or revise such a smoke management program. We recommend that a smoke management program be designed so that it does not inappropriately restrict prescribed fires with these benefits. If a state determines that compliance with a smoke management program of a particular design is required for reasonable progress, then the state must include the smoke management program in the SIP as part of the long-term strategy. We believe that states can include sufficiently detailed, enforceable language in their smoke management programs to make them practicably enforceable for SIP purposes (as may not be the case for all basic smoke

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<sup>35</sup> See the prior discussion of an authorization to burn component being one of the six distinguishing features of a “smoke management program” in the context of the Regional Haze Rule.



management practices). One of the distinguishing elements of a smoke management program is a provision for periodic program evaluation. We recommend that every smoke management program include a plan for this periodic assessment by the responsible authorities that provides for input from land managers, affected communities and stakeholders. This evaluation should include an assessment of whether the program is meeting its goals regarding improving ecosystem health and reducing the damaging effects of catastrophic wildfires. We are proposing to add to §51.308(g) a requirement for the periodic progress report on a state's regional haze program to include a summary of the most recent periodic assessment of any smoke management program that is part of the long term strategy.

While the Regional Haze Rule thus does not require regional haze SIPs to include measures to limit emissions from prescribed fire, it 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 other types of land. The EPA encourages all land owners and managers to apply appropriate basic smoke management practices to reduce emissions from prescribed fires. The EPA understands that the FLMs apply these measures routinely and will be available to consult with other agencies and private parties interested in doing the same.

*Possible effect on the comparison of the RPG to the URP line.* Prescribed fire on wildlands may contribute to impairment on some of the days that are among the 20 percent most impaired days. Therefore, the issue of whether prescribed fires might cause the projected RPG to be above the URP line is germane.

Generally, as discussed earlier in this section, we do not expect the total acreage subject to prescribed fires on wildlands to decrease in the future because prescribed fire is needed for

ecosystem health and to reduce the risk of catastrophic wildfires.<sup>36</sup> Thus, the occurrence of prescribed fire generally will not be projected to decline towards zero by 2064, nor to decline over any one implementation period at the proportional rate inherently assumed in the URP line. In fact, in many areas there may be reason to adopt policies that facilitate, and accordingly to forecast for purposes of setting the RPG, more use of prescribed fire and thus higher contributions to impairment on the 20 percent most impaired days. At this time, we do not know whether or where such a projected trend may affect whether the RPG for a Class I area will be above the URP line. However, we expect that if this is an issue, western Class I areas would be more likely to be affected.

If the projected RPG for a Class I area is above the URP line due only to the anticipated use of wildland prescribed fire needed for ecosystem health and to reduce the risk of catastrophic wildfires, we do not believe that states should expend valuable analytical and decision making resources on additional analysis of measures necessary for reasonable progress if basic smoke management practices have been applied to prescribed fires and the states have otherwise satisfied the terms of the Regional Haze Rule. Therefore, we are requesting comment on a proposed provision in §51.308(f)(1)(vi) that would allow states with Class I areas significantly impacted by emissions from wildland prescribed fires to make an adjustment to the URP with specific approval by the Administrator. The adjustment would consist of adding to the value of natural visibility conditions an estimate of wildland prescribed fire impacts, only for the purpose of calculating the URP and only for prescribed fires that were conducted with the objective to establish, restore and/or maintain sustainable and resilient wildland ecosystems, to reduce the

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<sup>36</sup> See the discussion of climate change effects on wildfire trends in the preamble to the proposed revisions of the Exceptional Events Rule. 80 FR 72866-72871, November 20, 2015.

risk of catastrophic wildfires and/or to preserve endangered or threatened species during which appropriate basic smoke management practices were applied. We would consider a plan for prescribed fire use on federal, state, tribal or private lands with this objective that has been reviewed and certified by the appropriate fire and/or resource management professionals and agreed to and followed by the land owner/manager to be sufficient to meet this restriction on the scope of the adjustment to the URP.<sup>37</sup> Other evidence of the objective of a prescribed fire would be considered on a case-by-case basis. We believe that this adjustment should be permitted only if such prescribed fire impacts have been estimated with methods and data approved by the Administrator as scientifically valid.<sup>38</sup>

We are also proposing changes to fire-related definitions in §51.301. One of the proposed changes is to remove the term “prescribed natural fire” from the definition of “fire” because we consider prescribed fires to be anthropogenic, although we recognize that some prescribed fires are intended to emulate and/or mitigate natural wildfires that would otherwise occur at some point in time. In addition, we are adding definitions for wildland, wildfire and prescribed fire. The proposed definitions are consistent with the definitions we recently proposed for inclusion in the Exceptional Events Rule.

#### *F. Clarification of and Changes to the Required Content of Progress Reports*

The EPA believes that additional amendments to §51.308(g) are appropriate at this time in order to clarify the substance of the regional haze progress reports. In its current form, there is

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<sup>37</sup> Examples of these plans include federal land or resource management plans, State Forest Action Plans, fire management plans, prescribed fire on wildland management plans or landscape management plans.

<sup>38</sup> The invitation, in the context of international impacts, for comment on alternative adjustment approaches also applies to this proposal regarding an adjustment to account for prescribed fire impacts. Our recommendation for consultation with other states and FLMs in the same context also applies to prescribed fire impacts.

ambiguity in this section with respect to the period to be used for calculating current visibility conditions, as well as ambiguity with respect to whether forward-looking, quantitative modeling is required in the progress reports to assess whether reasonable progress goals will be met. The EPA wishes to clarify both of these and other issues, and so proposes to amend §51.308(g) in the following ways. The EPA seeks comment on these proposed amendments as well as alternative approaches.

Section 51.308(g)(3)(ii) is proposed to be amended by adding a number of explanatory sentences to better indicate what “current visibility conditions” are and how to calculate them. Under the current version of the rule, it is not clear what “current visibility conditions” are, in part because the term is not defined in §51.301. Although §51.308(g)(3) makes reference to 5-year averages of annual values for most impaired and least impaired days, and §51.308(g)(3)(i) requires states to assess current visibility conditions for the most impaired and least impaired days, there is no clear indication as to which 5-year average the state should and can practicably use in a progress report for the current visibility conditions calculation. For example, the “current conditions” terminology does not explicitly allow for the time delay needed for the IMPROVE network manager to get quality assured data into its database so they are accessible to the states preparing progress reports. Practicality requires that “current conditions” should mean “conditions for the most recent period of available data.”<sup>39</sup> There is also an issue of whether this availability is to be determined based on the start of work on the progress report, the due date for the progress report, or the actual submission date of the progress report. The proposed text makes

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<sup>39</sup> In our guidance on the preparation of progress reports, the EPA has indicated that for “current visibility conditions,” the reports should include 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.

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. Because we are also proposing that progress reports no longer be submitted as SIP revisions, meaning that there would be a much simpler and expeditious state administrative process to submit a progress report once technical work on it is completed, we believe that this 6-month period would be sufficient for states to incorporate the most recent available data into their progress reports.<sup>40</sup> The EPA invites comment on other specific timeframes as the amount of time necessary for states to incorporate the most recent available data into their progress reports, including 3 months, 9 months and 12 months.

Section 51.308(g)(3)(iii), as currently written, requires a progress report to contain the value of the change in visibility impairment for the most and least impaired days over the past 5 years. This text fails to make clear what the “past 5 years” are for assessing the change in visibility impairment. 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. Moreover, it is important to ensure that each year of visibility information is included either in a periodic comprehensive SIP revision or the progress report that follows it. Therefore, the “past 5 years” text is proposed to be deleted and replaced with text indicating the change in visibility impairment is to be assessed over the period since the period addressed in the most recent periodic comprehensive SIP revision.

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<sup>40</sup> 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.C of this document), in light of the longer time needed for administrative steps between completion of technical work and submission to the EPA.

The same change to existing “past 5 years” text is proposed to be made to the first sentence of §51.308(g)(4) for the purposes of reporting changes in emissions of pollutants contributing to visibility impairment, for similar reasons. Like monitoring trend summaries, available emissions trend summaries will not line up with the periods defined by the submission dates of progress reports. Therefore, the proposed language removes the “past 5 years” text and replaces it with text indicating the change in emissions of pollutants contributing to visibility impairment is to be assessed over the period since the period addressed in the most recent periodic comprehensive SIP revision.

The final sentence of §51.308(g)(4) is proposed to be modified to revise and clarify the obligation of states regarding emissions inventories. The current rule text directs the analysis be based on the “most recent updated emissions inventory,” with emissions estimates “projected forward as necessary and appropriate to account for emissions changes during the applicable 5-year period.” States are otherwise required by 40 CFR part 51, subpart A (Air Emissions Reporting Requirements) to prepare complete emission inventories only for every third calendar year (2011, 2014, etc.) and to submit these inventories to the EPA’s National Emissions Inventory (NEI). (After aggregating and quality assuring these submissions, the EPA then publicly provides summaries of the inventories that have been submitted.) The current text of §51.308(g)(4) seemingly requires a state to “project” the most recent of these inventories to the end of the “applicable 5-year period” whenever that end is not the year of a triennial inventory required by subpart A. Emissions projection is not a simple or low-resource task even if limited to a projection date that is in the recent past, as would be the case here. We do not think the informational value of such projections is in balance with the effort and time that would be required. At the same time, we believe that progress reports should present for each significant

source sector the most recently available information, which may be newer for some sectors than for others. For most sectors, this will be the information for the triennial year of the most recent NEI submission. However, the EPA operates a data system that provides information on emissions from electric generating units (EGUs), which account for a significant percentage of visibility impairing pollution in many states, with only a few months lag time. This information comes from reports submitted by the EGU operators based on continuous emissions monitoring systems. Therefore, we are proposing text changes that explain clearly the most recent year through which the emissions analysis must be extended, by sector. States would be required to include in their progress reports emissions with respect to all sources and activities up to the triennial year for which information has already been submitted to the NEI. With regard to 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 this section makes 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. The EPA has never expected states to backcast in this context, but some states have expressed concern that other parties may interpret the current Regional Haze Rule as requiring such backcasting. This final change would remove any uncertainty about the sufficiency of a state's progress report.

Section 51.308(g)(5) involves assessments of any significant changes in anthropogenic emissions that have occurred, and is proposed to be changed in a similar fashion to other sections, deleting the reference to the "past 5 years" and instead directing that the period to be assessed involves that since the last periodic comprehensive SIP revision. Text is also proposed

to be added that would require states to report whether these changes were anticipated in the most recent SIP. Having this explanation within the progress report should not be a significant burden on the state and will 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 existing §51.308(g)(6) is proposed to be renumbered as §51.308(g)(7). Proposed changes to its provisions regarding assessment of progress toward meeting reasonable progress goals would clarify that the reasonable progress goals to be assessed are those established for the period covered by the most recent periodic comprehensive SIP revision. This does not change the intended meaning of this section, and only clarifies 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 new §51.308(g)(6) is proposed to include a provision requiring a state whose long-term strategy includes a smoke management program for prescribed fires on wildland to include 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 §51.308(g) is to remove the provisions of the existing §51.308(g)(7) entirely, relieving the state of the need to review its visibility monitoring strategy within the context of the progress report. This change was requested by many states during our pre-proposal consultations, and is appropriate in our view. Because all states currently rely on their participation in the IMPROVE monitoring program and expect to continue to do 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. As needed, the EPA will work with involved states and the IMPROVE Steering Committee to address any needed changes in the visibility monitoring program.

It should be noted that minor changes are proposed to §51.308(h) regarding actions the state is required to take based on the progress report. These changes merely remove the implication that all progress reports are to be submitted at 5-year intervals, and improve public understanding of the declaration that a state must make when it determines that no SIP revisions are required by removing the word “negative.” Minor changes are also proposed to §51.308(i) in order to create a stand-alone requirement that states must consult with FLMs regarding progress reports. This stand-alone requirement is needed if progress reports are not SIP revisions, because at present the FLM consultation requirements are applicable only to SIP revisions.

#### *G. Changes to Reasonably Attributable Visibility Impairment Provisions*

The EPA is proposing extensive changes to 40 CFR 51.300 through 51.308 in regard to reasonably attributable visibility impairment. As discussed in Section III of this document, the reasonably attributable visibility impairment provisions were originally promulgated in 1980, when technology for evaluating visibility impairment and its causes was in its infancy and visual observation of “plume blight” was the main method of determining whether a source was affecting a mandatory Class I area. Since that time, there have been many advances in ambient monitoring, emissions quantification, emission control technology and meteorological and air quality modeling. These advances have been built into the regional haze program, such that state compliance with the Regional Haze Rule’s requirements will largely ensure that progress is made towards the goal of natural visibility conditions. Therefore, it is likely that 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 over 3 decades ago. In addition, the reasonably attributable visibility impairment provisions have received few amendments over the years, including during amendments made by the Regional Haze Rule in 1999 where the changes to integrate the reasonably attributable visibility impairment assessment and mitigation provisions with the new regional haze program requirements were limited to putting the two separately designed programs on the same recurring schedule. This has left a substantial amount of confusing and outdated language within the current visibility regulations including seemingly overlapping and redundant requirements, particularly between §§51.302 and 51.306. Also, as noted in Section III.A of this document, in actual practice the portion of the reasonably attributable visibility impairment provisions mandating periodic assessment of reasonably attributable visibility impairment by states (or by the EPA in the case of states that do not have an approved reasonably attributable visibility impairment SIP) has not resulted in any additional emission control requirements being placed on emission sources. 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 believes it is time to bring clarity to the reasonably attributable visibility impairment provisions of the rule and enhance the potential for environmental protection. In brief, our proposed changes would (1) eliminate recurring requirements on states

that we believe have no significant benefit for visibility protection;<sup>41</sup> (2) clarify and strengthen the existing 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 existing 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 §§51.300-308 to make them clearer and more compatible with each other. The substantive and clarifying changes are described in the following discussion in order of section number. The EPA seeks comment on each of the following proposed changes, as well as suggestions for alternative approaches to modernizing the reasonably attributable visibility impairment provisions.

The EPA is proposing to amend §51.300, Purpose and applicability, to expand the reasonably attributable visibility impairment requirements to all states and territories, with the exceptions of Guam, Puerto Rico, American Samoa and the Northern Mariana Islands. These territories have no mandatory Class I areas and are sufficiently far from other Class I areas to have no anticipated impact on visibility in such areas. Under our proposal, the geographic coverage of the reasonably attributable visibility impairment provisions and the regional haze provisions would be the same. The EPA believes these changes would strengthen the visibility program and are appropriate 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. In other words, emissions occurring in states without Class I areas can affect downwind states with Class I areas.

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<sup>41</sup> These changes, when finalized, would mean that those states with SIPs that commit them to periodically assess whether reasonably attributable visibility impairment is occurring at their Class I areas could remove that commitment from their SIPs.

This proposed change would provide these areas with additional protection from reasonably attributable visibility impairment.

The EPA is proposing to amend §51.301, Definitions, to change the definition of *reasonably attributable*. The current definition of *reasonably attributable* is “attributable by visual observation or any other technique the State deems appropriate.” We are proposing to modify this definition to read “attributable by visual observation or any other appropriate technique.” This change would remove the current implication that only a state can determine what techniques are appropriate, even though the FLMs are charged with certifying reasonably attributable visibility impairment. The proposed change would make it clear that a state does not have complete discretion to determine what techniques are appropriate for attributing visibility impairment to specific sources. It is appropriate that the EPA be able to review the technique(s) that an FLM has relied upon to determine that reasonably attributable visibility impairment is occurring, in light of the views and supporting information provided by both the FLM and the state. While these views and supporting information, regardless of whether provided by the FLM or by the state, will not be presumptive in EPA’s ultimate determination as to whether any attribution technique used is appropriate, the universe of potentially appropriate attribution techniques is not limited to only those techniques that may have been utilized during past reasonably attributable visibility impairment certifications or that have been previously recommended or discussed via EPA guidance or actions. Rather, the aforementioned advances in ambient monitoring, emissions quantification, emission control technology and meteorological and air quality modeling that have occurred in the decades since 1980 make clear that modeling is one possible technique for determining that reasonably attributable visibility impairment is occurring.

Due to the confusing, and in large part outdated, content of §51.302, the EPA is proposing to delete the entire text of this section and replace it with new language. The new text clearly describes a state's responsibilities upon receiving a FLM certification of reasonably attributable visibility impairment.

The proposed §51.302(a) involves FLM certification of reasonably attributable visibility impairment and reads much like the existing §51.302(c), with the added language that FLMs would identify in the certification which single source or small number of sources is responsible for the reasonably attributable visibility impairment being certified.<sup>42</sup> Further, the original reasonably attributable visibility impairment formulation did not anticipate a situation where one or a small number of sources in one state could create impairment of visibility in other state(s). Therefore, proposed language is included to explain that the FLMs would provide the certification to the state in which the source or small number of sources is located, which may not necessarily be the state where the visibility impairment occurs. The proposed language also addresses the possible situation that a "small number of sources" may be partially in one state and partially in another, such that a certification might be addressed to multiple states.

The proposed §51.302(b) describes the required state action in response to any FLM reasonably attributable visibility impairment certification, i.e., regardless of the type of source, namely that a state shall revise its regional haze implementation plan to include a determination,

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<sup>42</sup> The existing rule text at §51.302(c)(1) does not explicitly require the FLM to identify a particular source or small number of sources as responsible for the reasonably attributable impairment, but the EPA and the FLMs understand that such identification should be part of a certification. See 45 FR 80086, "The Federal Land Manager may provide the State with a list of sources suspected of causing or contributing to visibility impairment in the mandatory Class I Federal area." Under the proposed new language of §51.302(b), if the FLM does not identify the source or small number of sources causing the impairment, the certification would not create any obligation on the state to respond with a SIP revision.

based on the four reasonable progress factors set forth in §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 preserves the current state obligation with much the same wording as in the current section, 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. In some cases, this SIP revision could be combined with an already required SIP revision. The EPA would review the responding SIP, and would be available to consult with the state and the certifying FLM as the state prepares its responding SIP. It would be the EPA, not the certifying FLM, that would determine whether the responding SIP is adequate and the response reasonable. The proposed section further maintains the current requirement that the state include emissions limitations and schedules for compliance, and adds the requirement that SIPs include monitoring, recordkeeping and reporting requirements in order to enforce those emissions limitations.

The proposed §51.302(c) addresses 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.<sup>43</sup> In such an instance, the proposed rule requires the state to revise its regional haze SIP to meet the requirements of §51.308(e), BART requirements for regional haze visibility impairment, and notes that this requirement exists in addition to the requirements of §51.302(b) regarding imposition of controls

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<sup>43</sup> 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 states at some time after the effective date of the final rule.

for reasonable progress. The new version of §51.302(c) clarifies two aspects of the current rule to match the EPA's past and current interpretations. First, a reasonably attributable visibility impairment certification 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 §51.308. However, the state's response to the reasonably attributable visibility impairment certification of a BART-eligible source must take into account current information. This may require a state to update an analysis prepared earlier in support of a BART SIP that has not been approved. Second, a reasonably attributable visibility impairment certification of 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. Rather, the state's obligation with respect to that source is the same as for a non-BART eligible source, as stated in the paragraph immediately earlier. This is true regardless of how the state's SIP has addressed the BART requirement for the source, whether through source-specific emission limits, an alternative better-than-BART analysis, or the special provisions of §51.309, which may have not resulted in any new emission limit for the source.

Regarding the time schedule for state response to an FLM certification of reasonably attributable visibility impairment, we are considering a number of possible approaches for the final rule, with proposed rule text provided for three alternative approaches referred to as options one, two and three.

The first alternative proposed rule text at, option one, §51.302(d) would retain the existing requirement for a state to respond to a reasonably attributable visibility impairment

certification with a SIP revision within 3 years regardless of when the certification is made in the cycle of periodic comprehensive SIP revisions.

The second alternative proposed rule text, option two, at §51.302(d) would require the state's responsive SIP revision to be submitted on the due date of the next progress report (but not as part of the progress report, if the final rule does not require progress reports themselves to be submitted as SIP revisions) or the next periodic comprehensive SIP revision, whichever is earlier, provided the earlier date is at least 2 years after the RAVI certification.

The third alternative proposed rule text, option three, at §51.302(d) provides for different deadlines for the state response to the certification depending on when in the cycle of periodic comprehensive SIP revisions the reasonably attributable visibility impairment certification is made. Table 1 provides specific examples of how application of the third alternative approach in the proposed rule text would determine due dates for the state response to a certification.

- If the certification is made more than 2 years prior to the due date for any periodic comprehensive regional haze SIP revision required under §51.308(f) (but, with respect to the SIP due for the just-prior period, not so early as to be within the 6-month window described next), then a state must respond to the certification in that upcoming SIP revision. Failure to respond adequately would prevent full approval of that SIP revision. If the certification is made more than 2 years before the SIP due date, the state would have more than 2 years to respond, except as provided in the next bullet.<sup>44</sup>

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<sup>44</sup> Under the third alternative proposed rule text, for a certification made between the 2021 and 2028 SIP due dates, the state might have up to 6.5 years to respond, assuming the next bullet does not apply. For a certification made between the 2028 and 2038 due dates, the state might have up to 9.5 years to respond.



- If the certification is made less than 2 years prior to the due date for any periodic comprehensive SIP revision (but no more than 6 months subsequent to the submission date of that periodic comprehensive regional haze SIP revision or a SIP revision that amends a previous submission in a way that affects the emission limits applicable to the reasonably attributable visibility impairment-certified source<sup>45</sup>), then the state must submit a revision to its regional haze SIP within 2 years from the date of certification. The EPA believes that in this second timing situation, when the state’s analytical infrastructure has been recently used to prepare a SIP revision and thus would not be in need of much, if any, refreshment, it is appropriate to require a responding SIP revision without waiting longer than 2 years for the next periodic comprehensive SIP revision. In this timing situation, the EPA would act on the state’s standard regional haze SIP without regard to the not-yet-due obligation for a reasonably attributable visibility impairment-response SIP revision.

**Table 1 - Example FLM Reasonably Attributable Visibility Impairment Certification Dates and Corresponding Due Dates for State Response Under the Third Alternative Proposed Rule Text (Option Three). All assume submission of a SIP revision by July 31, 2021, unless otherwise noted.**

<b>Date of FLM certification</b>	<b>Proposed due date for state response</b>
July 30, 2019	July 31, 2021
August 1, 2019	August 1, 2021
January 30, 2022	January 30, 2024
February 1, 2022	July 31, 2028
April 1, 2022, after late submission of a SIP on March 1, 2022	April 1, 2024
August 31, 2022, after revised SIP submission on July 31, 2021, affecting the source identified in the reasonably	August 31, 2024

<sup>45</sup> If a certification is made not too long after a SIP due date, this parenthetical provision contained in the third alternative proposed rule text would operate to require the SIP revision needed to respond to the reasonably attributable visibility impairment certification to be due sooner than the 6.5 or 9.5 year extreme noted in the previous footnote.

attributable visibility impairment certification	
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The final rule may incorporate any one of these three proposals, or may combine features of these proposals.

It is important to note that regardless how the final rule sets the deadline for the state's responsive SIP revision, if the reasonable progress goals in the periodic comprehensive regional haze SIP for a state with a Class I area (and thus required to have reasonable progress goals in its SIP for that area) have been approved prior to the approval of its own or a contributing state's separate reasonably attributable visibility impairment-response SIP, the state would not be required to revisit and revise its reasonable progress goals to take into account any additional emission reductions from the certified source until the next due date for a periodic comprehensive SIP revision.

Proposed changes to §51.303, Exemptions from control, are minor edits to paragraph (a) designed to correctly refer to the new §51.302(c) as well as to the BART provisions in §51.308(e). These proposed changes do not alter which existing facilities may apply to the Administrator for an exemption from BART. Rather, the proposed changes simply make the language more clear and direct the reader to the appropriate sections for reference information.

Proposed changes to §51.304, Identification of integral vistas, are more extensive. An integral vista is defined in §51.301 as a view perceived from within the Class I area of a specific landmark or panorama located outside the boundary of the Class I area. The current version of §51.304 was written at a time when FLMs were still in the process of identifying integral vistas. We are proposing to remove antiquated language in §51.304 in light of the fact that FLMs were required to identify any such integral vistas on or before December 31, 1985. The proposed language would explain this fact as well as list those few integral vistas that were properly

identified during the applicable time period. States would continue to be subject to the requirement that these integral vistas be listed in their SIPs. The EPA notes that the current version of 40 CFR part 51, subpart P is not perfectly clear on how the existence of an identified integral vista affects obligations on states and sources, but we are not proposing any clarification as part of this rulemaking.<sup>46</sup> We invite comment on whether all references to integral vistas should be removed from subpart P, and we may do so in the final rule.

Proposed changes to §51.305, Monitoring for reasonably attributable visibility impairment, involve adding language stating that the requirement for a state to include in a periodic comprehensive SIP revision a monitoring strategy specifically for evaluating 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. In concept, special monitoring for reasonably attributable visibility impairment purposes might be appropriate for a Class I area without an IMPROVE monitoring station or when the impairment is from a relatively narrow plume such that the existing IMPROVE monitoring site is not affected. The nature of the special monitoring might be situation-specific, and might be the same as or different than the IMPROVE monitoring protocols. These proposed changes would reduce the paperwork that states are required to submit to the EPA on a recurring schedule, since under the proposed language a state containing one or more Class I areas and participating in the IMPROVE monitoring program would be relieved of the need to include information in its SIP

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<sup>46</sup> Section 51.301 states that “*visibility* in any mandatory Class I Federal area includes any integral vista associated with that area” but also that “*adverse impact on visibility*” does not include effects on integral vistas. Section 307(b) requires that SIPs provide for the review of any new major stationary source or major modification that may have an impact on any integral vista of a mandatory Class I Federal area. Other references to “integral vista” are merely definitional or relate to the procedure for identifying integral vistas.

regarding monitoring to specifically assess reasonably attributable visibility impairment absent being advised to do so. A strategy for monitoring for regional haze visibility impairment under §51.308(d)(4) is still required and any monitoring for reasonably attributable visibility impairment under §51.305 would be in addition to that requirement.

Section 51.306, on long-term strategy requirements for reasonably attributable visibility impairment, is proposed to be completely removed and reserved. Like the current version of §51.302, the language of this section is outdated. In this case, the EPA believes it makes sense to delete the entire text of this section and instead refer to long-term strategy requirements for reasonably attributable visibility impairment within the text of §51.308, specifically in §51.308(f)(2). In this way, long-term strategy requirements for reasonably attributable visibility impairment would be retained in clearer form, and the visibility program would be more understandable to states and the public by listing the long-term strategy requirements for both regional haze and reasonably attributable visibility impairment in one place. Such a change would also reduce the planning burden on states by making clear in §51.308(f)(2) that a long-term strategy for reasonably attributable visibility impairment is not required without an FLM having made a reasonably attributable visibility impairment certification under §51.302(a).

Several proposed changes in §51.308 were discussed in Sections IV.A, B, C, D, E and F of this document. We are also proposing changes in §51.308 related to reasonably attributable visibility impairment. The proposed addition of §51.308(c) (currently a reserved section) explains the relationship between regional haze and reasonably attributable visibility impairment and the state requirements for each, including that a state would not be required to address reasonably attributable visibility impairment unless triggered to do so by an FLM certification under §51.302(a), and that a state would not be required to re-address its monitoring strategy for

reasonably attributable visibility impairment unless advised to perform monitoring as described in the proposed §51.305.

The EPA is also proposing changes to the language of §51.308(f)(2) to describe when reasonably attributable visibility impairment must be addressed in the long-term strategy required for regional haze. Finally, proposed changes to §51.308(f)(6) regarding the monitoring strategy requirements for SIPs would remove references to §51.305 that exist in the corresponding subsection in §51.308(d), namely, subsection (4) (again, regarding monitoring for reasonably attributable visibility impairment).

Proposed changes to §51.308(e), BART, relate to a state's option to enact an emissions trading program or other alternative measure in lieu of source-specific BART. Under the proposed approach, if a source is already covered for BART by an approved emissions trading program or other alternative measure (or the program codified in §51.309), certification of that source by an FLM would not trigger a new BART determination. However, certification would still trigger the requirement for a reasonable progress analysis. Proposed changes to §51.308(e)(4) are similar in nature and motivated by the same concerns.

Consistent with our proposal to remove the requirement for states to periodically assess reasonably attributable visibility impairment, we are also proposing to amend 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 reasonably attributable visibility impairment certification that may be directed to a state that does not have an approved reasonably attributable visibility impairment SIP. These changes include the removal of §§52.26

and 52.29, which now contain the statement of the EPA's obligations, and specific provisions for 30 states to establish that §§52.26 and 52.29 are applicable to those states.

#### *H. Consistency Revisions Related to Permitting of New and Modified Major Sources*

Proposed changes to §51.307, New Source Review, involve a few proposed changes to maintain consistency with other sections of the Regional Haze Rule and with the CAA. The first change involves §51.307(b)(1) concerning integral vistas, for which we are proposing deletion of obsolete language regarding the now-expired identification period for integral vistas. Instead, the newly proposed addition of a listing of integral vistas in §51.304(b) will be referenced. In section §51.307(b)(2), the deletion of a reference to specific sections of the CAA is proposed in order to remove unnecessary language, as the EPA believes a reference simply to section "107(d)(1)" is sufficient.

#### *I. Changes to FLM Consultation Requirements*

The EPA believes that state consultation with FLMs is a critical part of the creation of quality SIPs. As mentioned earlier, the EPA is proposing to extend the FLM consultation requirements of §51.308(i)(2) to progress reports that are not SIP revisions. In addition, the EPA believes further edits to §51.308(i)(2) are necessary because the current requirement for consultation at least 60 days prior to a public hearing may not occur sufficiently early in the state's planning process to meaningfully inform the state's development of the long-term strategy. This proposed rule change would add a requirement that such consultation 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 be deemed to have been “early enough.”

Finally, the EPA notes that pursuant to the existing provisions of §51.307(a), the SIP for every state must require the new source permitting authority to consult with FLMs regarding 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 that may affect visibility in any Class I Federal area. As required by the regulations, that consultation must include sharing with the FLMs a copy of all information relevant to the permit application for the proposed new stationary source or major modification. The regulations also specify that this material must be provided within particular time frames. Also, under §51.307(b)(2), a proposed new major source or major modification locating in a nonattainment area is subject to review if it may have an impact on visibility in any mandatory Class I area. Two EPA guidance documents interpret the consultation requirement, particularly with regard to evaluating whether a proposed new major source or major modification may affect visibility in a Class I area and thus consultation is required.<sup>47</sup> 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. No changes are being proposed to these consultation requirements.

*J. Extension of Next Regional Haze SIP Deadline from 2018 to 2021*

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<sup>47</sup> New Source Review Workshop Manual - Prevention of Significant Deterioration and Nonattainment Area Permitting (Draft), October 1990, available at: <https://www.epa.gov/sites/production/files/2015-07/documents/1990wman.pdf>; and Appendix A of Timely Processing of Prevention of Significant Deterioration (PSD) Permits when EPA or a PSD-Delegated Air Agency Issues the Permit, October 2012, available at: <https://www.epa.gov/sites/production/files/2015-07/documents/timely.pdf>.

The EPA is proposing to amend §51.308(f) to move the compliance deadline for the submission of the next periodic comprehensive SIP revisions from July 31, 2018, to July 31, 2021. Under this proposal, states would retain the option of submitting their SIP revisions before July 31, 2021. Regardless of the date on which a state chooses to submit its periodic comprehensive SIP revision, the EPA would evaluate that SIP using the same criteria. The EPA is proposing to leave the end date for the second implementation period at 2028, regardless of when SIP revisions are submitted. We are proposing this change as a one-time schedule adjustment. Periodic comprehensive SIP revisions for the third planning will be due on July 31, 2028, with future periodic comprehensive SIP revisions due every 10 years thereafter.

We are proposing this extension of the due date for periodic comprehensive SIP revisions to allow states to coordinate regional haze planning with other regulatory programs, including but not limited to the Mercury and Air Toxics Standards,<sup>48</sup> the 2010 1-hour SO<sub>2</sub> NAAQS,<sup>49</sup> the 2012 annual PM<sub>2.5</sub> NAAQS,<sup>50</sup> and the Clean Power Plan.<sup>51</sup> With this one-time extension, states would be able to gather more information on the effects of these programs and develop periodic comprehensive SIP revisions that are more integrated with state planning for these other programs, an advantage that was widely confirmed in our discussions with states. The Regional Haze Rule requires states to address the impacts of other regulatory programs when developing their regional haze SIPs. A number of other regulatory programs will be taking effect in the coming years, which presents an excellent opportunity for states to coordinate their strategies to

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<sup>48</sup> 77 FR 9304, February 16, 2012.

<sup>49</sup> 75 FR 35520, June 22, 2010.

<sup>50</sup> 78 FR 3086, January 15, 2013.

<sup>51</sup> 80 FR 64,662, October 23, 2015. The compliance deadlines in the Clean Power Plan have been stayed by the Supreme Court. Order in Pending Case, *West Virginia v. EPA*, No. 15A773 (Feb. 9, 2016).



address significant sources of emissions. The EPA expects this cross-program coordination to lead to better overall policies and enhanced environmental protection.

*K. Changes to Scheduling of Regional Haze Progress Reports*

The EPA is proposing to amend the requirements in 40 CFR 51.308(g) and (h) regarding the timing of submission of reports evaluating progress towards the natural visibility goal. Under the current rule, regional haze progress reports are required to be submitted 5 years after submission of periodic comprehensive SIP revisions. Because states submitted these first SIP revisions on dates spread across about a 3-year period, 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 that they would. Looking forward, the current Regional Haze Rule 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 proposed amendments to 40 CFR 51.308(f) regarding the deadlines for submittal of periodic comprehensive revisions, we propose to amend 40 CFR 51.308 (g) and (h) such that 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. The EPA believes that this timing provides a good balance between allowing the implementation of the most recent SIP revision to have proceeded far enough since its adoption 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.

Regarding the concept of a progress report also being useful at or near the time of submission of a periodic comprehensive SIP revision, as the EPA envisioned in the 1999 Regional Haze Rule, we note that although they are expressed with somewhat different terminology, in practical terms a progress report would provide little additional information beyond that required to be addressed in a periodic comprehensive SIP revision. The only significant additional information required in a progress report but not explicitly required in a periodic comprehensive SIP revision is the requirement to report on the trend in visibility over the whole period since the baseline period of 2000-2004. While the EPA believes that a state should be aware of, and share with the public, information on the trend in visibility over the whole period since the baseline period of 2000-2004, we believe it would be inefficient to require the preparation of a separate progress report for this purpose. Therefore, we are proposing 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 this trend information. The EPA believes this approach would substantially reduce administrative burdens and make progress reports of more informational use to the public, with no attendant reduction in environmental protection. The EPA solicits comment on this and any alternative approaches to progress report scheduling.

*L. Changes to the Requirement that Regional Haze Progress Reports be SIP Revisions*

The EPA is proposing to amend 40 CFR 51.308(g) regarding the requirements for the form of progress reports. Under the current regulations, progress reports must take the form of SIP revisions that 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. The EPA included the requirements for progress reports in the Regional Haze Rule primarily

with an emphasis toward ensuring that the states remain on track during the 10 years between periodic comprehensive SIP revisions. By requiring progress reports to be in the form of SIP revisions, the 1999 Regional Haze Rule ensured an opportunity for public input on the progress reports, while specifically pointing out that the EPA “intends for progress reports to involve significantly less effort than a comprehensive SIP revision.” 64 FR 35747 (July 1, 1999). For all SIP revisions, however, the state must provide public notice and a public hearing if requested, and it must conform to certain administrative procedural requirements and provide various administrative material. Also, the submission must be made by an official who is authorized by state law to submit a SIP revision. As a required SIP revision, a finding by the EPA that a state has not submitted a complete progress report by the deadline would start a “clock” for the EPA to prepare, take public comment on, and issue a progress report like the state was required to submit.

We are proposing that progress reports need not be in the form of SIP revisions, but that states must consult with FLMs and obtain public comment on their progress reports before submission to the EPA. We are also proposing that the SIP revision that would be due in 2021 must include a commitment to prepare and submit these progress reports to the EPA according to the proposed revised schedule (*see* previous section). These progress reports would be acknowledged and assessed by the EPA, but our review of these reports would not result in a formal approval or disapproval of them.

The EPA is proposing these changes because it believes these reports are not the kind of state submissions for which the formality of a SIP revision, and the accompanying requirement for the EPA to have to prepare the report within 2 years of finding that a state has failed to do so, are warranted. It is important to note that as part of the EPA’s review of the report, we will

follow up with the state on any appropriate next steps. There are also additional remedies, such as undertaking a less formal assessment of the results of the implementation of the previously submitted SIP, that are available to the EPA in the event a state fails to properly submit a progress report. These changes have been widely supported by state air agencies in our pre-proposal consultations because they would allow more efficient use of state resources. This option would relieve states of the obligation to follow the procedural requirements of 40 CFR 51.102 and 51.103. States have expressed concern that these procedural requirements are resource-intensive, and increase the burden on states by requiring formal procedures be followed when submitting progress reports. By avoiding the specific formal steps required for a SIP revision, including requirements imposed by state law that may involve time-consuming steps beyond those required by the EPA, this proposal may also reduce the time between the completion of the technical analysis in the progress report and when the final report becomes available to the EPA and the public. Thus, progress reports could contain fresher information on the environmental progress being made by a state. Removing the requirement that progress reports be submitted as SIP revisions is consistent with regulatory requirements for similar reports from states for progress reporting or planning purposes where control requirements are not imposed, such as annual monitoring plans required for planning and maintenance of state monitoring networks.<sup>52</sup>

The EPA invites comment on whether it should finalize this proposed change. Also, the EPA invites comment on changing the progress report scheduling as described in the previous section without making any change to the requirement that progress reports take the form of SIP revisions, and vice versa.

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<sup>52</sup> See 40 CFR 58.10(a)(1) and (2).

It is important to note that under this option, states would still be required to include the required progress report elements listed in 40 CFR 51.308(g)(1) through (g)(6). Also, §51.308(h) would 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. Where a state determines that its own SIP is or may be inadequate to ensure reasonable progress due to emissions from sources within the state, the state will continue to have an obligation to revise its SIP to address the plan's deficiencies within 1 year of its submission of such a determination.

Upon receipt of such progress reports, the EPA would review the reports. In addition, the EPA intends to create a system of logging progress reports as they are received, and making them available to the public. In addition to putting the public on notice that a progress report was received by the EPA, this system would provide the public an opportunity to view the contents of the progress report. Although the EPA would not formally approve or disapprove a progress report, the EPA would still have discretion to assess the adequacy of the SIP, relying in part on the information in the progress report. Under the CAA, a discretionary determination that the SIP is inadequate would create a non-discretionary duty for the EPA to issue a SIP call requiring the state to correct the inadequacy. A failure by the state to submit a progress report could be determined by the EPA to constitute failure to implement the regional haze SIP, given that we are proposing that every regional haze SIP include a commitment to submit the required progress reports (*see* next paragraph).

We are proposing that the next periodic comprehensive SIP revisions (currently due in 2018 but proposed to be due in 2021) would need to include a commitment for states to provide progress reports. The 1999 Regional Haze Rule does not require such a commitment because the

current requirement for progress reports to be submitted in the form of SIP revisions makes such a commitment superfluous. The EPA solicits comment on this or alternative approaches to ensuring that states continue to provide progress reports.

*M. Changes to Requirements Related to the Grand Canyon Visibility Transport Commission*

Section 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, and only to the first regional haze implementation period (i.e., through 2018). Nevertheless, certain conforming amendments at this time are appropriate to avoid confusion going forward. Section 51.309(d)(4)(v) is proposed to be amended to correctly refer to the new §51.302(b) (in lieu of (e), which no longer exists in the proposed section §51.302) and to delete the reference to BART since it does not appear in §51.302(b). The title of §51.309(c)(10), Periodic implementation plan revisions, is proposed to be amended to include “and progress reports” at the end. This insertion would complement the proposed amendments that will no longer require progress reports be considered SIP revisions by making clear from the title of the section that it applies to both SIP revisions and progress reports. Within §51.309(c)(10), amendments are proposed that would preserve the existing requirement that the progress reports due in 2013 were to take the form of SIP revisions, but direct the reader to the provisions of §51.308(g) for subsequent progress reports. In similar fashion, §51.309(c)(10)(i) and (ii) would be amended to specifically refer to the 2013 progress reports, while §51.309(c)(10)(iii) would point to §51.308(g) for subsequent progress reports. Section 51.309(c)(10)(iv) is proposed to be added to indicate that subsequent progress reports are subject to the requirements of §51.308(h) regarding determinations of adequacy of existing SIPs.

A final change in section 51.309 appears in §51.309(g)(2)(iii). This change is purely to correct a typographical error and the EPA will therefore not consider comments on this subsection.

## **V. Environmental Justice Considerations**

The EPA believes this action would not have disproportionately high and adverse human health, well-being or environmental effects on minority, low-income or indigenous populations because it would not negatively affect the level of protection provided to human health, well-being or the environment under the CAA's visibility protection program. When promulgated, these proposed regulations will revise procedural and timing aspects of the SIP requirements for visibility protection but will 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 proposed delay in submitting SIP revisions from 2018 to 2021 might cause delays in when sources must comply with any new requirements. However, because neither the CAA nor the existing Regional Haze Rule 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, whether or not these proposed rule changes are 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 all general segments of the population.

## **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 OMB for review because it raises novel policy issues. 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 proposed 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 2540.01. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060-0421. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The EPA is proposing these amendments 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 to provide states with an improved schedule and process for progress report submission. Further reductions in burden on states include this proposal's



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 proposed changes considered, the overall burden on states would represent a reduction compared to what would otherwise occur if the provisions of the current rule were to stay in place. Total estimated burden is estimated to be reduced from 10,307 hours (per year) to 5,974 hours (per year), and total estimated cost is expected to be reduced from \$510,498 (per year) to \$295,876 (per year). 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 Regional Haze Rule.

*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:* 5,974 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* \$295,876 (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.

Submit your comments on the agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *oira\_submissions@omb.eop.gov*, Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than **[INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**. The EPA will respond to any ICR-related comments in the final rule.

*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 this proposal include state governments, and for the purposes of the RFA, state governments are not considered small government. Tribes may choose to follow the provisions of the Regional Haze Rule but are not required to do so. Other types of small entities are not directly subject to the requirements of this rule. The EPA continues to be interested in the potential impacts of the proposed rule on small entities and welcomes comments on issues related to such impacts.

*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. The CAA imposes the obligation for states to submit regional haze SIPs. In this rule, the EPA is proposing to revise those requirements in a manner that would not increase the obligation of any state, local

or tribal governments or the private sector. In this rule, the EPA is also proposing to extend the reasonably attributable visibility impairment certification provisions to some additional states, but these states are not small governments and any mandate on the private sector would be indirect since this rule does not mandate how an affected state should address such a certification. Therefore, this action is not subject to the requirements of sections 202, 203 and 205 of the UMRA.

*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. The requirement to submit regional haze SIPs is mandated by the CAA. Thus, Executive Order 13132 does not apply to these proposed regulations.

In the spirit of Executive Order 13132 and consistent with the EPA policy to promote communications between the EPA and state and local governments, the EPA has already consulted extensively with state air agency officials prior to this proposal. The EPA specifically solicits comments on this proposed action from state and local officials. In addition, the EPA intends to meet with organizations representing state and local officials during the comment period for this action.

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

This proposed action does not have tribal implications as specified in Executive Order 13175. It would not have a substantial direct effect on one or more Indian tribes. Furthermore, these proposed 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. Thus, Executive Order 13175 does not apply to this action.

Although Executive Order 13175 does not apply to this action, the EPA solicits comment on this proposed action from tribal officials. The EPA also intends to offer to consult with any tribal government to discuss this proposal. *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 the human health or environmental risk addressed by this action will not have disproportionately high and adverse human health or environmental effects on minority,

low-income or indigenous populations. The results of our evaluation are contained in Section V of this document.

## **VII. Statutory Authority**

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

### **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: April 25, 2016.

Gina McCarthy,  
Administrator.



For the reasons stated in the preamble, Title 40, Chapter I of the Code of Federal Regulations is proposed to be 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.

2. In §51.300, revise 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. In §51.301:

- a. Add a definition for “Clearest days;”
- b. Revise the definition of “Deciview;”
- c. Add definitions for “Deciview index” and “End of the applicable implementation period;”
- d. Revise the definitions of “Federal Class I area,” “Least impaired days,” “Mandatory Class I Federal Area,” and “Most impaired days;”
- e. Add definitions for “ “Natural visibility conditions” and “Prescribed fire;”
- f. Revise the definition of “Reasonably attributable;”
- g. Add a definition for “Visibility;”
- h. Revise the definitions of “Visibility impairment;” and
- i. Add definitions for “Wildfire,” and “Wildland.”

The revisions and additions read as follows:

**§51.301 Definitions.**

\* \* \* \* \*

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

*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):

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

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

*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).

\* \* \* \* \*

*Federal Class I area* or *Class I Federal area* means any Federal land that is classified or reclassified Class I. Mandatory Federal Class I areas are identified in part 81, subpart D. Other Federal Class I areas are identified in part 52 of this title.

\* \* \* \* \*

*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 visibility impairment.

\* \* \* \* \*

*Natural visibility conditions* means visibility (contrast, coloration, and texture) that would have existed under natural conditions. Natural visibility conditions vary with time and location, and are estimated or inferred rather than directly measured.

\* \* \* \* \*

*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.

\* \* \* \* \*

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

*Visibility impairment* means any humanly perceptible difference between actual visibility conditions and natural visibility conditions. Because natural visibility conditions 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 been declared to be 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 impairment of visibility 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.

(b) The State(s) in which the source(s) is located shall revise its regional haze implementation plan, in accordance with the schedules set forth in paragraphs (d)(1) and (2) 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(d)(1)(i)(A), 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), (3), and (4), or for sources of SO<sub>2</sub> 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.

**Proposed Paragraph (d): Option One**

(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 paragraph (b) and (c) 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 the additional emission reductions required from the source or sources.]

**Proposed Paragraph (d): Option Two**

(d) For any existing reasonably attributable visibility impairment the Federal Land Manager certifies to the State(s) under paragraph (a) of this section more than 2 years prior to the due date

for a regional haze implementation plan revision required under §51.308(f) or the due date for a regional haze progress report required under §51.308(g), the State(s) shall include the elements described in paragraphs (b) and (c) in a plan revision by the due date for that implementation plan revision as part of such revision or by the due date for the progress report, whichever is due first, provided that the earlier date is at least 2 years after the certification. For plan revisions submitted by the due date for the progress report, the State(s) is not required at that time to also revise its reasonable progress goals to reflect the additional emission reductions required from the source or sources.]

**Proposed Paragraph (d): Option Three**

(d)(1) For any existing reasonably attributable visibility impairment the Federal Land Manager certifies to the State(s) under paragraph (a) of this section more than 2 years prior to the due date for a regional haze implementation plan revision required under §51.308(f), the State(s) shall include the elements described in paragraphs (b) and (c) in such revision and such elements shall be considered a required part of such revision.

(2) For any existing reasonably attributable visibility impairment the Federal Land Manager certifies to the State(s) under paragraph (a) of this section less than 2 years prior to the due date for a regional haze implementation plan revision required under §51.308(f), but no more than 6 months subsequent to the submission date of that implementation plan revision or no more than 6 months subsequent to a further plan revision that changes the emission limitation for the subject source, the State(s) shall submit a revision to its regional haze implementation plan that includes the elements described in paragraph (b) and (c) no later than 2 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 the additional emission reductions required from the source or sources.]

5. 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.

(d) [Reserved]

6. Section 51.305 is revised 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 a 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]**

7. Section 51.306 is removed and reserved.

8. In §51.307, revise 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.

\* \* \* \* \*

9. In §51.308:

a. Revise paragraph (b);

b. Add paragraph (c);

c. Revise paragraphs (d)(2)(iv), (d)(3), (e)(2)(v), (e)(4) and (5), and (f);

d. Revise paragraphs (g) introductory text, (g)(3) through (7), (h) introductory text, (h)(1), (i)(2) introductory text, 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.

(c) *What is the relationship between requirements for regional haze and requirements for reasonably attributable visibility impairment?* A State must address any reasonably attributable visibility impairment certified by a Federal Land Manager under §51.302(a) in its regional haze implementation plan, as required by §51.302(b)-(d). A State must also meet the requirements of §51.305 if the Administrator, Regional Administrator, or the Federal Land Manager has advised a State under §51.305 of a need for additional monitoring to assess reasonably attributable visibility impairment at a mandatory Class I Federal area.

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

\* \* \* \* \*

(4) A State subject to a trading program established in accordance with §52.38 or §52.39 under a Transport Rule Federal Implementation Plan 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 that chooses to meet the emission reduction requirements of the Transport Rule by submitting a SIP revision that establishes a trading program and is approved as meeting the requirements of §52.38 or §52.39 also 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 for a trading program established in accordance with §52.38 or §52.39 under the Transport Rule Federal Implementation Plan or established under a SIP revision that is approved as meeting the requirements of §52.38 or §52.39, for a geographic enhancement to the program to address any requirement under §51.302(b) 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 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). 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. For purposes of calculating and displaying the uniform rate of progress, baseline visibility conditions must be associated with the last day of this period. Baseline visibility conditions must be calculated, using available monitoring data, by establishing the average deciview index for the most impaired and clearest days for each calendar year from 2000 to 2004. The baseline visibility conditions are the average of these annual values. For mandatory Class I Federal areas without onsite monitoring data for 2000-2004, the State must establish baseline values using the most representative available monitoring data for 2000-2004, in consultation with the Administrator or his or her designee. For mandatory Class I Federal areas with incomplete data availability for 2000-2004, the State must establish baseline values using the closest 5 complete years of monitoring data.

(ii) *Natural visibility conditions for the most impaired and clearest days.* Natural visibility conditions must be calculated by estimating the deciview index existing under natural conditions for the most impaired and 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. Current visibility conditions must be calculated based on the annual average level of visibility impairment for the most impaired and clearest days for each of these 5 years. Current visibility conditions are the average of these annual values.

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

(v) *Difference between current visibility conditions and natural visibility conditions.* The number of deciviews by which current visibility conditions exceed natural visibility conditions, for the most impaired and clearest days, must be calculated.

(vi) *Uniform rate of progress.* (A) The uniform rate of progress for each mandatory Class I Federal area in the State must be calculated. To calculate this uniform rate of progress, the State must compare baseline visibility conditions to natural visibility conditions 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) The State may submit a request to the Administrator seeking an adjustment to the uniform rate of progress for a mandatory Class I Federal area to account for impacts from (1) anthropogenic sources outside the United States and/or (2) 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, the State must add the estimated impacts to natural

visibility conditions and compare the resulting value to baseline visibility conditions. If the Administrator determines that the State has estimated the impacts from anthropogenic sources outside the United States or wildland prescribed fires using scientifically valid data and methods, the Administrator may approve the proposed adjustment to the uniform rate of progress for use in the State's implementation plan.

*(2) Long-term strategy for regional haze and reasonably attributable visibility impairment.* Each State must submit a long-term strategy that addresses regional haze visibility impairment, and if necessary any reasonably attributable visibility impairment certified by the Federal Land Manager under §51.302(a), 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 achieve reasonable progress, as determined pursuant to (f)(2)(i) through (vi). In establishing its long-term strategy for regional haze, the State must meet the following requirements:

(i) The State must consider and analyze emission reduction measures based on 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 major or minor stationary source or group of sources. The State must document the criteria used to determine which sources or groups of sources were evaluated, and how these four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.

(ii) The State must consider the uniform rate of improvement in visibility, the emission reduction measures identified in (f)(2)(i), and additional measures being adopted by other contributing

states in (f)(2)(iii) as needed to make reasonable progress towards natural visibility conditions for the period covered by the implementation plan.

(iii) The State must consult with those States which may reasonably be anticipated to cause or contribute to visibility impairment in the mandatory Class I Federal area.

(A) *Contributing States.* Where the State has emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal area located in another State or States, the State must consult with the other State(s) in order to develop coordinated emission management strategies. The State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to provide for reasonable progress towards natural visibility conditions in the mandatory Class I Federal area located in the other State or States. If the State has participated in a regional planning process, the State must also ensure that it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process.

(B) *States affected by contributing States.* A State with a mandatory Class I Federal area must consult with any other State having emissions that are reasonably anticipated to contribute to visibility impairment in that area regarding the emission reductions needed in each State to provide for reasonable progress towards natural visibility conditions in that area. If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process.

(C) In any situation in which a State cannot agree with another State or group of States on the emission reductions needed for reasonable progress towards natural visibility conditions in any mandatory Class I Federal area, each involved State must describe in its submittal the actions

taken to resolve the disagreement. In reviewing the State's implementation plan submittal, the Administrator will take this information into account in determining whether the State's implementation plan provides for reasonable progress towards natural visibility conditions 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.

(iv) As part of the demonstration required by (f)(2)(i), the State must document the technical basis, including information on the factors listed in (f)(2)(i) and modeling, monitoring, and emissions information, on which the State is relying to determine the emission reductions from anthropogenic sources in the State that are necessary for achieving reasonable progress towards natural visibility conditions 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 State must identify the baseline emissions inventory on which its strategies are based. The baseline emissions inventory year shall be 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 unless the State adequately justifies the use of another inventory year.

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

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

(A) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment;

- (B) Measures to mitigate the impacts of construction activities;
- (C) Emissions limitations and schedules for compliance to achieve the reasonable progress goal;
- (D) Source retirement and replacement schedules;
- (E) Basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs as currently exist within the State for these purposes;
- (F) Enforceability of emissions limitations and control measures; and
- (G) The anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy.

(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 all enforceable emissions limitations, compliance schedules, and other measures required under paragraph (f)(2) and 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 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 of 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.

(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 a 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 past 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 a baseline year, emissions for the most recent year for which data are available, and estimates of future projected emissions. The State must also include a commitment to update the inventory periodically.

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

(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 60 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. 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. 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) For a state with a long-term strategy that includes a smoke management program for prescribed fires on wildland, 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.

(7) 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.

(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 technical and policy analyses of its long-term strategy emission reduction obligation and prior to development of reasonable progress goals so that information and recommendations provided by the Federal Land Manager can meaningfully inform the State's development of 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) or progress report for regional haze required by this subpart. The opportunity for consultation 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:

\* \* \* \* \*

(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.

10. In §51.309, revise paragraphs (d)(4)(v), (d)(10) introductory text, (d)(10)(i) introductory text, (d)(10)(ii) introductory text, add paragraphs (d)(10)(iii) and(iv), and revise paragraph (g)(2)(iii) to read as follows:

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

\* \* \* \* \*

(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 non air 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**

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

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

**§52.26 [Removed and Reserved]**

12. Section 52.26 is removed and reserved.

**§52.29 [Removed and Reserved]**

13. Section 52.29 is removed and reserved.

**§52.61 [Amended]**

14. In §52.61, remove and reserve paragraph (b).

15. In §52.145, revise paragraph (b) and remove and reserve 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]**

16. In §52.281, remove and reserve paragraphs (b) and (e).

17. In §52.344, revise 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.

18. In §52.633, revise paragraph (b) and remove and reserve 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]**

19. In §52.690, remove and reserve paragraphs (b) and (c).

**§52.1033 [Amended]**

20. In §52.1033, remove and reserve paragraphs (a) and (c).

21. In §52.1183, revise paragraph (b) and remove and reserve 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.

\* \* \* \* \*

22. In §52.1236, revise paragraph (b) remove and reserve 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]**

23. In §52.1339, remove and reserve paragraph (b).

**§52.1387 [Amended]**

24. In §52.1387, remove and reserve paragraph (b).

25. In §52.1488, revise paragraph (b) and remove and reserve 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.

\* \* \* \* \*

26. In §52.1531, revise paragraph (b) and remove and reserve 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]**

27. In §52.2132, remove and reserve paragraphs (b) and (c).

28. In §52.2179, revise paragraph (b) and remove and reserve 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]**

29. In §52.2304, remove and reserve paragraph (b).

30. In §52.2383, revise 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.

31. In §52.2452, revise paragraph (a) and remove and reserve 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.

\* \* \* \* \*

32. In §52.2533, revise paragraphs (a) and (b) and remove and reserve paragraph (c).

The revisions read 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.

\* \* \* \* \*

**§52.2781 [Amended]**

33. In §52.2781, remove and reserve paragraphs (b) and (c).