fees, penalties or fines) the provider pays to the Postal Service in connection with the customer's returned payment.

(2) *Responsibility to comply with NACHA rules.* The provider is required to comply with the latest NACHA rules published by the North American Clearing House Association. Each provider must provide a written statement signed by an executive officer of the company attesting to that compliance at least annually. If the provider cannot provide that written statement attesting to compliance due to identified areas of non-compliance, the PC provider must provide to the Postal Service within 30 days a written plan describing its prioritized approach, including milestone dates, toward achieving compliance within a mutually agreed period. The Postal Service will provide specific written guidance separately if requested. Failure to comply may result in revocation of access to applicable Postal Service ACH programs.

(3) *Responsibility to maintain customer ACH agreements.* The provider must obtain and store an agreement with each and every customer utilizing ACH debit as a payment method. The customer agreement must authorize the provider to debit the designated bank account identified to pay for postage through the Postal Service account of its choice. The agreement must have at least the following elements: Company Name (if applicable), Name and Title and Address of the person entering into the agreement, Contact Information (Phone Number, Fax Number and eMail Address as applicable), Date and Signature (or appropriate electronic signature evidence) of Agreement, Customer's Bank Name and Address, Bank Routing Number, Account Number and Account Type (Checking or Savings, Business or Personal) being agreed to transact upon, an Attestation that the person submitting the form is authorized to act on behalf of the account, and Termination Date and Signature (or appropriate electronic signature evidence) of the Agreement (if applicable). The agreement must be stored for at least two years after termination of the agreement, must be easily reproducible, and must be provided electronically to the Postal Service within three business days of electronic written request by the Postal Service in a format that can be easily and readily used for all NACHA and ACH related purposes including, without limitation, audit and defense of claims. The Postal Service will provide specific written guidance separately if requested. Failure to comply may result in revocation of access to applicable Postal Service ACH programs.

(4) *Credit cards.* Unless otherwise established in a written agreement between the Postal Service and the provider, the provider is fully responsible for its own credit card compliance.

* * * * *

Sarah Sullivan,

Attorney, Ethics & Legal Compliance.

[FR Doc. 2023–25628 Filed 11–17–23; 8:45 am]

BILLING CODE 7710–12–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R01–OAR–2023–0187; FRL–11554–03–R1]

Approval and Promulgation of Air Quality Implementation Plans; New Hampshire; Regional Haze State Implementation Plan for the Second Implementation Period

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the Regional Haze State Implementation Plan (SIP) revision submitted by New Hampshire on May 5, 2022, as satisfying applicable requirements under the Clean Air Act (CAA) and EPA's Regional Haze Rule for the program's second implementation period. New Hampshire's SIP submission addresses the requirement that states must periodically revise their long-term strategies for making reasonable progress towards the national goal of preventing any future, and remedying any existing, anthropogenic impairment of visibility, including regional haze, in mandatory Class I Federal areas. The SIP submission also addresses other applicable requirements for the second implementation period of the regional haze program. The EPA is taking this action pursuant to sections 110 and 169A of the Clean Air Act.

DATES: Written comments must be received on or before December 20, 2023.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA- at *https://www.regulations.gov.* For comments submitted at *Regulations.gov*, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. For either manner of submission, 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, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: Eric Rackauskas, Air Quality Branch, U.S. Environmental Protection Agency, EPA Region 1, 5 Post Office Square—Suite 100, (Mail code 5–MI), Boston, MA 02109–3912, tel. (617) 918–1628, email *rackauskas.eric@epa.gov*.

SUPPLEMENTARY INFORMATION:

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I. What action is the EPA proposing?

On May 5, 2022, supplemented on September 21, 2023,[1] the New Hampshire Department of Environmental Services (NHDES) submitted a revision to its SIP to address regional haze for the second implementation period. NHDES made this SIP submission to satisfy the requirements of the CAA's regional haze program pursuant to CAA sections 169A and 169B and 40 CFR 51.308. The EPA is proposing to find that the New Hampshire regional haze SIP submission for the second implementation period meets the applicable statutory and regulatory requirements and thus proposes to approve New Hampshire's submission into its SIP.

II. Background and Requirements for Regional Haze Plans

A. Regional Haze Background

In the 1977 CAA Amendments, Congress created a program for protecting visibility in the nation's mandatory Class I Federal areas, which include certain national parks and wilderness areas.[2] CAA 169A. 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.'' CAA 169A(a)(1). The CAA further directs the EPA to promulgate regulations to assure reasonable progress toward meeting this national goal. CAA 169A(a)(4). On December 2, 1980, the EPA promulgated regulations to address visibility impairment in mandatory Class I Federal areas (hereinafter referred to as ''Class I areas'') that is ''reasonably attributable'' to a single source or small group of sources. (45 FR 80084, December 2, 1980). These regulations, codified at 40 CFR 51.300 through 51.307, represented the first phase of the EPA's efforts to address visibility impairment. In 1990, Congress added section 169B to the CAA to further address visibility impairment, specifically, impairment from regional haze. CAA 169B. The EPA promulgated the Regional Haze Rule (RHR), codified at 40 CFR 51.308,[3] on July 1, 1999. (64 FR 35714, July 1, 1999). These regional haze regulations are a central component of the EPA's comprehensive visibility protection program for Class I areas.

Regional haze is visibility impairment that is produced by a multitude of anthropogenic sources and activities which are located across a broad geographic area and that emit pollutants that impair visibility. Visibility impairing pollutants include fine and coarse particulate matter (PM) (*e.g.,* sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and their precursors (*e.g.,* sulfur dioxide (SO_2), nitrogen oxides (NO_X), and, in some cases, volatile organic compounds (VOC) and ammonia (NH_3)). Fine particle precursors react in the atmosphere to form fine particulate matter ($PM_{2.5}$), which impairs visibility by scattering and absorbing light. Visibility impairment reduces the perception of clarity and color, as well as visible distance.[4]

To address regional haze visibility impairment, the 1999 RHR established an iterative planning process that requires both states in which Class I areas are located and states ''the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility'' in a Class I area to periodically submit SIP revisions to address such impairment. CAA 169A(b)(2);[5] see also 40 CFR 51.308(b), (f) (establishing submission dates for iterative regional haze SIP revisions); (64 FR at 35768, July 1, 1999). Under the CAA, each SIP submission must contain ''a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal,'' CAA 169A(b)(2)(B); the initial round of SIP submissions also had to address the statutory requirement that certain older, larger sources of visibility impairing pollutants install and operate the best available retrofit technology (BART). CAA 169A(b)(2)(A); 40 CFR 51.308(d), (e). States' first regional haze SIPs were due by December 17, 2007, 40 CFR 51.308(b), with subsequent SIP submissions containing updated long-term strategies originally due July 31, 2018, and every ten years thereafter. (64 FR at 35768, July 1, 1999). The EPA established in the 1999 RHR that all states either have Class I areas within their borders or ''contain sources whose emissions are reasonably anticipated to contribute to regional haze in a Class I area''; therefore, all states must submit regional haze SIPs.[6] Id. at 35721.

Much of the focus in the first implementation period of the regional haze program, which ran from 2007 through 2018, was on satisfying states' BART obligations. First implementation period SIPs were additionally required to contain long-term strategies for making reasonable progress toward the national visibility goal, of which BART is one component. The core required elements for the first implementation period SIPs (other than BART) are laid out in 40 CFR 51.308(d). Those provisions required that states

[1] NH included a corrected Appendix W in a supplemental submission on September 21, 2023.

[2] Areas statutorily designated as mandatory Class I Federal areas consist of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. CAA 162(a). There are 156 mandatory Class I areas. The list of areas to which the requirements of the visibility protection program apply is in 40 CFR part 81, subpart D.

[3] In addition to the generally applicable regional haze provisions at 40 CFR 51.308, the EPA also promulgated regulations specific to addressing regional haze visibility impairment in Class I areas on the Colorado Plateau at 40 CFR 51.309. The latter regulations are applicable only for specific jurisdictions' regional haze plans submitted no later than December 17, 2007, and thus are not relevant here.

[4] There are several ways to measure the amount of visibility impairment, *i.e.,* haze. One such measurement is the deciview, which is the principal metric used by the RHR. Under many circumstances, a change in one deciview will be perceived by the human eye to be the same on both clear and hazy days. The deciview is unitless. It is proportional to the logarithm of the atmospheric extinction of light, which is the perceived dimming of light due to its being scattered and absorbed as it passes through the atmosphere. Atmospheric light extinction (b^{ext}) is a metric used to for expressing visibility and is measured in inverse megameters (Mm^{-1}). The EPA's Guidance on Regional Haze State Implementation Plans for the Second Implementation Period (''2019 Guidance'') offers the flexibility for the use of light extinction in certain cases. Light extinction can be simpler to use in calculations than deciviews, since it is not a logarithmic function. See, *e.g.,* 2019 Guidance at 16, 19, *https://www.epa.gov/visibility/guidance-regional-haze-state-implementation-plans-second-implementation-period,* The EPA Office of Air Quality Planning and Standards, Research Triangle Park (August 20, 2019). The formula for the deciview is 10 ln (b^{ext})/10 Mm^{-1}). 40 CFR 51.301.

[5] The RHR expresses the statutory requirement for states to submit plans addressing out-of-state class I areas by providing that states must address visibility impairment ''in each mandatory Class I Federal area located outside the State that may be affected by emissions from within the State.'' 40 CFR 51.308(d), (f).

[6] In addition to each of the fifty states, the EPA also concluded that the Virgin Islands and District of Columbia must also submit regional haze SIPs because they either contain a Class I area or contain sources whose emissions are reasonably anticipated to contribute regional haze in a Class I area. *See* 40 CFR 51.300(b), (d)(3).

containing Class I areas establish reasonable progress goals (RPGs) that are measured in deciviews and reflect the anticipated visibility conditions at the end of the implementation period including from implementation of states' long-term strategies. The first planning period RPGs were required to 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. In establishing the RPGs for any Class I area in a state, the state was required to consider four statutory factors: the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources. CAA 169A(g)(1); 40 CFR 51.308(d)(1).

States were also required to calculate baseline (using the five-year period of 2000–2004) and natural visibility conditions (*i.e.,* visibility conditions without anthropogenic visibility impairment) for each Class I area, and to calculate the linear rate of progress needed to attain natural visibility conditions, assuming a starting point of baseline visibility conditions in 2004 and ending with natural conditions in 2064. This linear interpolation is known as the uniform rate of progress (URP) and is used as a tracking metric to help states assess the amount of progress they are making towards the national visibility goal over time in each Class I area.[7] 40 CFR 51.308(d)(1)(i)(B), (d)(2). The 1999 RHR also provided that States' long-term strategies must include the ''enforceable emissions limitations, compliance, schedules, and other measures as necessary to achieve the reasonable progress goals.'' 40 CFR 51.308(d)(3). In establishing their long-term strategies, states are required to consult with other states that also contribute to visibility impairment in a given Class I area and include all measures necessary to obtain their shares of the emission reductions needed to meet the RPGs. 40 CFR 51.308(d)(3)(i), (ii). Section 51.308(d) also contains seven additional factors states must consider in formulating their long-term strategies, 40 CFR 51.308(d)(3)(v), as well as provisions governing monitoring and other implementation plan requirements. 40 CFR 51.308(d)(4). Finally, the 1999 RHR required states to submit periodic progress reports—SIP revisions due every five years that contain information on states' implementation of their regional haze plans and an assessment of whether anything additional is needed to make reasonable progress, see 40 CFR 51.308(g), (h)—and to consult with the Federal Land Manager(s)[8] (FLMs) responsible for each Class I area according to the requirements in CAA 169A(d) and 40 CFR 51.308(i).

On January 10, 2017, the EPA promulgated revisions to the RHR, (82 FR 3078, January 10, 2017), that apply for the second and subsequent implementation periods. The 2017 rulemaking made several changes to the requirements for regional haze SIPs to clarify States' obligations and streamline certain regional haze requirements. The revisions to the regional haze program for the second and subsequent implementation periods focused on the requirement that States' SIPs contain long-term strategies for making reasonable progress towards the national visibility goal. The reasonable progress requirements as revised in the 2017 rulemaking (referred to here as the 2017 RHR Revisions) are codified at 40 CFR 51.308(f). Among other changes, the 2017 RHR Revisions adjusted the deadline for States to submit their second implementation period SIPs from July 31, 2018, to July 31, 2021, clarified the order of analysis and the relationship between RPGs and the long-term strategy, and focused on making visibility improvements on the days with the most *anthropogenic* visibility impairment, as opposed to the days with the most visibility impairment overall. The EPA also revised requirements of the visibility protection program related to periodic progress reports and FLM consultation. The specific requirements applicable to second implementation period regional haze SIP submissions are addressed in detail below.

The EPA provided guidance to the states for their second implementation period SIP submissions in the preamble to the 2017 RHR Revisions as well as in subsequent, stand-alone guidance documents. In August 2019, the EPA issued ''Guidance on Regional Haze State Implementation Plans for the Second Implementation Period'' (''2019 Guidance'').[9] On July 8, 2021, the EPA issued a memorandum containing ''Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period'' (''2021 Clarifications Memo'').[10] Additionally, the EPA further clarified the recommended procedures for processing ambient visibility data and optionally adjusting the URP to account for international anthropogenic and prescribed fire impacts in two technical guidance documents: the December 2018 ''Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program'' (''2018 Visibility Tracking Guidance''),[11] and the June 2020 ''Recommendation for the Use of Patched and Substituted Data and Clarification of Data Completeness for Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program'' and associated Technical Addendum (''2020 Data Completeness Memo'').[12]

As previously explained in the 2021 Clarifications Memo, EPA intends the second implementation period of the regional haze program to secure

[7] EPA established the URP framework in the 1999 RHR to provide ''an equitable analytical approach'' to assessing the rate of visibility improvement at Class I areas across the country. The start point for the URP analysis is 2004 and the endpoint was calculated based on the amount of visibility improvement that was anticipated to result from implementation of existing CAA programs over the period from the mid-1990s to approximately 2005. Assuming this rate of progress would continue into the future, EPA determined that natural visibility conditions would be reached in 60 years, or 2064 (60 years from the baseline starting point of 2004). However, EPA did not establish 2064 as the year by which the national goal *must* be reached. 64 FR at 35731–32. That is, the URP and the 2064 date are not enforceable targets, but are rather tools that ''allow for analytical comparisons between the rate of progress that would be achieved by the state's chosen set of control measures and the URP.'' (82 FR 3078, 3084, January 10, 2017).

[8] The EPA's regulations define ''Federal Land Manager'' as ''the Secretary of the department with authority over the Federal Class I area (or the Secretary's designee) or, with respect to Roosevelt-Campobello International Park, the Chairman of the Roosevelt-Campobello International Park Commission.'' 40 CFR 51.301.

[9] Guidance on Regional Haze State Implementation Plans for the Second Implementation Period. *https://www.epa.gov/visibility/guidance-regional-haze-state-implementation-plans-second-implementation-period* The EPA Office of Air Quality Planning and Standards, Research Triangle Park (August 20, 2019).

[10] Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period. *https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf.* The EPA Office of Air Quality Planning and Standards, Research Triangle Park (July 8, 2021).

[11] Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program. *https://www.epa.gov/visibility/technical-guidance-tracking-visibility-progress-second-implementation-period-regional* The EPA Office of Air Quality Planning and Standards, Research Triangle Park. (December 20, 2018).

[12] Recommendation for the Use of Patched and Substituted Data and Clarification of Data Completeness for Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program. *https://www.epa.gov/visibility/memo-and-technical-addendum-ambient-data-usage-and-completeness-regional-haze-program* The EPA Office of Air Quality Planning and Standards, Research Triangle Park (June 3, 2020).

meaningful reductions in visibility impairing pollutants that build on the significant progress states have achieved to date. The Agency also recognizes that analyses regarding reasonable progress are state-specific and that, based on states' and sources' individual circumstances, what constitutes reasonable reductions in visibility impairing pollutants will vary from state-to-state. While there exist many opportunities for states to leverage both ongoing and upcoming emission reductions under other CAA programs, the Agency expects states to undertake rigorous reasonable progress analyses that identify further opportunities to advance the national visibility goal consistent with the statutory and regulatory requirements. See generally 2021 Clarifications Memo. This is consistent with Congress's determination that a visibility protection program is needed in addition to the CAA's National Ambient Air Quality Standards and Prevention of Significant Deterioration programs, as further emission reductions may be necessary to adequately protect visibility in Class I areas throughout the country.[13]

B. Roles of Agencies in Addressing Regional Haze

Because the air pollutants and pollution affecting visibility in Class I areas can be transported over long distances, successful implementation of the regional haze program requires long-term, regional coordination among multiple jurisdictions and agencies that have responsibility for Class I areas and the emissions that impact visibility in those areas. In order to address regional haze, states need to develop strategies in coordination with one another, considering the effect of emissions from one jurisdiction on the air quality in another. Five regional planning organizations (RPOs),[14] which include representation from state and tribal governments, the EPA, and FLMs, were developed in the lead-up to the first implementation period to address regional haze. RPOs evaluate technical information to better understand how emissions from State and Tribal land impact Class I areas across the country, pursue the development of regional strategies to reduce emissions of particulate matter and other pollutants leading to regional haze, and help states meet the consultation requirements of the RHR.

The Mid-Atlantic/Northeast Visibility Union (MANE–VU), one of the five RPOs described above, is a collaborative effort of state governments, tribal governments, and various Federal agencies established to initiate and coordinate activities associated with the management of regional haze, visibility, and other air quality issues in the Mid-Atlantic and Northeast corridor of the United States. Member states and tribal governments (listed alphabetically) include: Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Penobscot Indian Nation, Rhode Island, St. Regis Mohawk Tribe, and Vermont. The Federal partner members of MANE–VU are EPA, U.S. National Parks Service (NPS), U.S. Fish and Wildlife Service (FWS), and U.S. Forest Service (USFS).

III. Requirements for Regional Haze Plans for the Second Implementation Period

Under the CAA and EPA's regulations, all 50 states, the District of Columbia, and the U.S. Virgin Islands are required to submit regional haze SIPs satisfying the applicable requirements for the second implementation period of the regional haze program by July 31, 2021. Each state's SIP must contain a long-term strategy for making reasonable progress toward meeting the national goal of remedying any existing and preventing any future anthropogenic visibility impairment in Class I areas. CAA 169A(b)(2)(B). To this end, § 51.308(f) lays out the process by which states determine what constitutes their long-term strategies, with the order of the requirements in § 51.308(f)(1) through (f)(3) generally mirroring the order of the steps in the reasonable progress analysis [15] and (f)(4) through (f)(6) containing additional, related requirements. Broadly speaking, a state first must identify the Class I areas within the state and determine the Class I areas outside the state in which visibility may be affected by emissions from the state. These are the Class I areas that must be addressed in the state's long-term strategy. See 40 CFR 51.308(f), (f)(2). For each Class I area within its borders, a state must then calculate the baseline, current, and natural visibility conditions for that area, as well as the visibility improvement made to date and the URP. See 40 CFR 51.308(f)(1). Each state having a Class I area and/or emissions that may affect visibility in a Class I area must then develop a long-term strategy that includes the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress in such areas. A reasonable progress determination is based on applying the four factors in CAA section 169A(g)(1) to sources of visibility-impairing pollutants that the state has selected to assess for controls for the second implementation period. See 40 CFR 51.308(f)(2). Additionally, as further explained below, the RHR at 40 CFR 51.308(f)(2)(iv) separately provides five ''additional factors'' [16] that states must consider in developing their long-term strategies. A state evaluates potential emission reduction measures for those selected sources and determines which are necessary to make reasonable progress. Those measures are then incorporated into the state's long-term strategy. After a state has developed its long-term strategy, it then establishes RPGs for each Class I area within its borders by modeling the visibility impacts of all reasonable progress controls at the end of the second implementation period, *i.e.,* in 2028, as well as the impacts of other requirements of the CAA. The RPGs include reasonable progress controls not only for sources in the state in which the Class I area is located, but also for sources in other states that contribute to visibility impairment in that area. The RPGs are then compared to the baseline visibility conditions and the URP to ensure that progress is being made towards the statutory goal of preventing any future and remedying any existing anthropogenic visibility impairment in Class I areas. 40 CFR 51.308(f)(2)–(3).

In addition to satisfying the requirements at 40 CFR 51.308(f) related to reasonable progress, the regional haze SIP revisions for the second implementation period must address the requirements in § 51.308(g)(1) through (5) pertaining to periodic reports describing progress towards the RPGs, 40 CFR 51.308(f)(5), as well as requirements for FLM consultation that

[13] See, *e.g.,* H.R. Rep No. 95–294 at 205 (''In determining how to best remedy the growing visibility problem in these areas of great scenic importance, the committee realizes that as a matter of equity, the national ambient air quality standards cannot be revised to adequately protect visibility in all areas of the country.''), (''the mandatory class I increments of [the PSD program] do not adequately protect visibility in class I areas'').

[14] RPOs are sometimes also referred to as ''multi-jurisdictional organizations,'' or MJOs. For the purposes of this notice, the terms RPO and MJO are synonymous.

[15] EPA explained in the 2017 RHR Revisions that we were adopting new regulatory language in 40 CFR 51.308(f) that, unlike the structure in 51.308(d), ''tracked the actual planning sequence.'' (82 FR 3091, January 10, 2017).

[16] The five ''additional factors'' for consideration in section 51.308(f)(2)(iv) are distinct from the four factors listed in CAA section 169A(g)(1) and 40 CFR 51.308(f)(2)(i) that states must consider and apply to sources in determining reasonable progress.

apply to all visibility protection SIPs and SIP revisions. 40 CFR 51.308(i).

A state must submit its regional haze SIP and subsequent SIP revisions to the EPA according to the requirements applicable to all SIP revisions under the CAA and EPA's regulations. See CAA 169(b)(2); CAA 110(a). Upon EPA approval, a SIP is enforceable by the Agency and the public under the CAA. If EPA finds that a state fails to make a required SIP revision, or if the EPA finds that a state's SIP is incomplete or if disapproves the SIP, the Agency must promulgate a federal implementation plan (FIP) that satisfies the applicable requirements. CAA 110(c)(1).

A. Identification of Class I Areas

The first step in developing a regional haze SIP is for a state to determine which Class I areas, in addition to those within its borders, ''may be affected'' by emissions from within the state. In the 1999 RHR, the EPA determined that all states contribute to visibility impairment in at least one Class I area, 64 FR at 35720–22, and explained that the statute and regulations lay out an ''extremely low triggering threshold'' for determining ''whether States should be required to engage in air quality planning and analysis as a prerequisite to determining the need for control of emissions from sources within their State.'' *Id.* at 35721.

A state must determine which Class I areas must be addressed by its SIP by evaluating the total emissions of visibility impairing pollutants from all sources within the state. While the RHR does not require this evaluation to be conducted in any particular manner, EPA's 2019 Guidance provides recommendations for how such an assessment might be accomplished, including by, where appropriate, using the determinations previously made for the first implementation period. 2019 Guidance at 8–9. In addition, the determination of which Class I areas may be affected by a state's emissions is subject to the requirement in 40 CFR 51.308(f)(2)(iii) to ''document the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the State is relying to determine the emission reduction measures that are necessary to make reasonable progress in each mandatory Class I Federal area it affects.''

B. Calculations of Baseline, Current, and Natural Visibility Conditions; Progress to Date; and the Uniform Rate of Progress

As part of assessing whether a SIP submission for the second implementation period is providing for reasonable progress towards the national visibility goal, the RHR contains requirements in § 51.308(f)(1) related to tracking visibility improvement over time. The requirements of this subsection apply only to states having Class I areas within their borders; the required calculations must be made for each such Class I area. EPA's 2018 Visibility Tracking Guidance [17] provides recommendations to assist states in satisfying their obligations under § 51.308(f)(1); specifically, in developing information on baseline, current, and natural visibility conditions, and in making optional adjustments to the URP to account for the impacts of international anthropogenic emissions and prescribed fires. See 82 FR at 3103–05.

The RHR requires tracking of visibility conditions on two sets of days: the clearest and the most impaired days. Visibility conditions for both sets of days are expressed as the average deciview index for the relevant five-year period (the period representing baseline or current visibility conditions). The RHR provides that the relevant sets of days for visibility tracking purposes are the 20% clearest (the 20% of monitored days in a calendar year with the lowest values of the deciview index) and 20% most impaired days (the 20% of monitored days in a calendar year with the highest amounts of anthropogenic visibility impairment).[18] 40 CFR 51.301. A state must calculate visibility conditions for both the 20% clearest and 20% most impaired days for the baseline period of 2000–2004 and the most recent five-year period for which visibility monitoring data are available (representing current visibility conditions). 40 CFR 51.308(f)(1)(i), (iii). States must also calculate natural visibility conditions for the clearest and most impaired days,[19] by estimating the conditions that would exist on those two sets of days absent anthropogenic visibility impairment. 40 CFR 51.308(f)(1)(ii). Using all these data, states must then calculate, for each Class I area, the amount of progress made since the baseline period (2000–2004) and how much improvement is left to achieve in order to reach natural visibility conditions.

Using the data for the set of most impaired days only, states must plot a line between visibility conditions in the baseline period and natural visibility conditions for each Class I area to determine the URP—the amount of visibility improvement, measured in deciviews, that would need to be achieved during each implementation period in order to achieve natural visibility conditions by the end of 2064. The URP is used in later steps of the reasonable progress analysis for informational purposes and to provide a non-enforceable benchmark against which to assess a Class I area's rate of visibility improvement.[20] Additionally, in the 2017 RHR Revisions, the EPA provided states the option of proposing to adjust the endpoint of the URP to account for impacts of anthropogenic sources outside the United States and/or impacts of certain types of wildland prescribed fires. These adjustments, which must be approved by the EPA, are intended to avoid any perception that states should compensate for impacts from international anthropogenic sources and to give states the flexibility to determine that limiting the use of wildland-prescribed fire is not necessary for reasonable progress. 82 FR 3107 footnote 116.

EPA's 2018 Visibility Tracking Guidance can be used to help satisfy the 40 CFR 51.308(f)(1) requirements, including in developing information on baseline, current, and natural visibility conditions, and in making optional adjustments to the URP. In addition, the 2020 Data Completeness Memo provides recommendations on the data completeness language referenced in § 51.308(f)(1)(i) and provides updated natural conditions estimates for each Class I area.

C. Long-Term Strategy for Regional Haze

The core component of a regional haze SIP submission is a long-term

[17] The 2018 Visibility Tracking Guidance references and relies on parts of the 2003 Tracking Guidance: ''Guidance for Tracking Progress Under the Regional Haze Rule,'' which can be found at *https://www3.epa.gov/ttnamti1/files/ambient/visible/tracking.pdf.*

[18] This notice also refers to the 20% clearest and 20% most anthropogenically impaired days as the ''clearest'' and ''most impaired'' or ''most anthropogenically impaired'' days, respectively.

[19] The RHR at 40 CFR 51.308(f)(1)(ii) contains an error related to the requirement for calculating two sets of natural conditions values. The rule says ''most impaired days or the clearest days'' where it should say ''most impaired days and clearest days.'' This is an error that was intended to be corrected in the 2017 RHR Revisions but did not get corrected in the final rule language. This is supported by the preamble text at 82 FR 3098: ''In the final version of 40 CFR 51.308(f)(1)(ii), an occurrence of ''or'' has been corrected to ''and'' to indicate that natural visibility conditions for both the most impaired days and the clearest days must be based on available monitoring information.''

[20] Being on or below the URP is not a ''safe harbor''; *i.e.,* achieving the URP does not mean that a Class I area is making ''reasonable progress'' and does not relieve a state from using the four statutory factors to determine what level of control is needed to achieve such progress. *See, e.g.,* 82 FR at 3093.

strategy that addresses regional haze in each Class I area within a state's borders and each Class I area that may be affected by emissions from the state. The long-term strategy ''must include the enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress, as determined pursuant to (f)(2)(i) through (iv).'' 40 CFR 51.308(f)(2). The amount of progress that is ''reasonable progress'' is based on applying the four statutory factors in CAA section 169A(g)(1) in an evaluation of potential control options for sources of visibility impairing pollutants, which is referred to as a ''four-factor'' analysis. The outcome of that analysis is the emission reduction measures that a particular source or group of sources needs to implement in order to make reasonable progress towards the national visibility goal. See 40 CFR 51.308(f)(2)(i). Emission reduction measures that are necessary to make reasonable progress may be either new, additional control measures for a source, or they may be the existing emission reduction measures that a source is already implementing. See 2019 Guidance at 43; 2021 Clarifications Memo at 8–10. Such measures must be represented by ''enforceable emissions limitations, compliance schedules, and other measures'' (*i.e.,* any additional compliance tools) in a state's long-term strategy in its SIP. 40 CFR 51.308(f)(2).

Section 51.308(f)(2)(i) provides the requirements for the four-factor analysis. The first step of this analysis entails selecting the sources to be evaluated for emission reduction measures; to this end, the RHR requires states to consider ''major and minor stationary sources or groups of sources, mobile sources, and area sources'' of visibility impairing pollutants for potential four-factor control analysis. 40 CFR 51.308(f)(2)(i). A threshold question at this step is which visibility impairing pollutants will be analyzed. As EPA previously explained, consistent with the first implementation period, EPA generally expects that each state will analyze at least SO_2 and NO_X in selecting sources and determining control measures. See 2019 Guidance at 12, 2021 Clarifications Memo at 4. A state that chooses not to consider at least these two pollutants should demonstrate why such consideration would be unreasonable. 2021 Clarifications Memo at 4.

While states have the option to analyze *all* sources, the 2019 Guidance explains that ''an analysis of control measures is not required for every source in each implementation period,'' and that ''[s]electing a set of sources for analysis of control measures in each implementation period is . . . consistent with the Regional Haze Rule, which sets up an iterative planning process and anticipates that a state may not need to analyze control measures for all its sources in a given SIP revision.'' 2019 Guidance at 9. However, given that source selection is the basis of all subsequent control determinations, a reasonable source selection process ''should be designed and conducted to ensure that source selection results in a set of pollutants and sources the evaluation of which has the potential to meaningfully reduce their contributions to visibility impairment.'' 2021 Clarifications Memo at 3.

EPA explained in the 2021 Clarifications Memo that each state has an obligation to submit a long-term strategy that addresses the regional haze visibility impairment that results from emissions from within that state. Thus, source selection should focus on the in-state contribution to visibility impairment and be designed to capture a meaningful portion of the state's total contribution to visibility impairment in Class I areas. A state should not decline to select its largest in-state sources on the basis that there are even larger out-of-state contributors. 2021 Clarifications Memo at 4.[21]

Thus, while states have discretion to choose any source selection methodology that is reasonable, whatever choices they make should be reasonably explained. To this end, 40 CFR 51.308(f)(2)(i) requires that a state's SIP submission include ''a description of the criteria it used to determine which sources or groups of sources it evaluated.'' The technical basis for source selection, which may include methods for quantifying potential visibility impacts such as emissions divided by distance metrics, trajectory analyses, residence time analyses, and/or photochemical modeling, must also be appropriately documented, as required by 40 CFR 51.308(f)(2)(iii).

Once a state has selected the set of sources, the next step is to determine the emissions reduction measures for those sources that are necessary to make reasonable progress for the second implementation period.[22] This is accomplished by considering the four factors—''the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements.'' CAA 169A(g)(1). The EPA has explained that the four-factor analysis is an assessment of potential emission reduction measures (*i.e.,* control options) for sources; ''use of the terms 'compliance' and 'subject to such requirements' in section 169A(g)(1) strongly indicates that Congress intended the relevant determination to be the requirements with which sources would have to comply in order to satisfy the CAA's reasonable progress mandate.'' 82 FR at 3091. Thus, for each source it has selected for four-factor analysis,[23] a state must consider a ''meaningful set'' of technically feasible control options for reducing emissions of visibility impairing pollutants. *Id.* at 3088. The 2019 Guidance provides that ''[a] state must reasonably pick and justify the measures that it will consider, recognizing that there is no statutory or regulatory requirement to consider all technically feasible measures or any particular measures. A range of technically feasible measures available to reduce emissions would be one way to justify a reasonable set.'' 2019 Guidance at 29.

EPA's 2021 Clarifications Memo provides further guidance on what constitutes a reasonable set of control options for consideration: ''A reasonable four-factor analysis will consider the full range of potentially reasonable options for reducing emissions.'' 2021

[21] Similarly, in responding to comments on the 2017 RHR Revisions EPA explained that ''[a] state should not fail to address its many relatively low-impact sources merely because it only has such sources and another state has even more low-impact sources and/or some high impact sources.'' Responses to Comments on Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule (81 FR 26942, May 4, 2016) at 87–88.

[22] The CAA provides that, ''[i]n determining reasonable progress there shall be taken into consideration'' the four statutory factors. CAA 169A(g)(1). However, in addition to four-factor analyses for selected sources, groups of sources, or source categories, a state may also consider additional emission reduction measures for inclusion in its long-term strategy, *e.g.,* from other newly adopted, on-the-books, or on-the-way rules and measures for sources not selected for four-factor analysis for the second planning period.

[23] ''Each source'' or ''particular source'' is used here as shorthand. While a source-specific analysis is one way of applying the four factors, neither the statute nor the RHR requires states to evaluate individual sources. Rather, states have ''the flexibility to conduct four-factor analyses for specific sources, groups of sources or even entire source categories, depending on state policy preferences and the specific circumstances of each state.'' 82 FR at 3088. However, not all approaches to grouping sources for four-factor analysis are necessarily reasonable; the reasonableness of grouping sources in any particular instance will depend on the circumstances and the manner in which grouping is conducted. If it is feasible to establish and enforce different requirements for sources or subgroups of sources, and if relevant factors can be quantified for those sources or subgroups, then states should make a separate reasonable progress determination for each source or subgroup. 2021 Clarifications Memo at 7–8.

Clarifications Memo at 7. In addition to add-on controls and other retrofits (*i.e.,* new emission reduction measures for sources), EPA explained that states should generally analyze efficiency improvements for sources' existing measures as control options in their four-factor analyses, as in many cases such improvements are reasonable given that they typically involve only additional operation and maintenance costs. Additionally, the 2021 Clarifications Memo provides that states that have assumed a higher emission rate than a source has achieved or could potentially achieve using its existing measures should also consider lower emission rates as potential control options. That is, a state should consider a source's recent actual and projected emission rates to determine if it could reasonably attain lower emission rates with its existing measures. If so, the state should analyze the lower emission rate as a control option for reducing emissions. 2021 Clarifications Memo at 7. The EPA's recommendations to analyze potential efficiency improvements and achievable lower emission rates apply to both sources that have been selected for four-factor analysis and those that have forgone a four-factor analysis on the basis of existing ''effective controls.'' See 2021 Clarifications Memo at 5, 10.

After identifying a reasonable set of potential control options for the sources it has selected, a state then collects information on the four factors with regard to each option identified. The EPA has also explained that, in addition to the four statutory factors, states have flexibility under the CAA and RHR to reasonably consider visibility benefits as an additional factor alongside the four statutory factors.[24] The 2019 Guidance provides recommendations for the types of information that can be used to characterize the four factors (with or without visibility), as well as ways in which states might reasonably consider and balance that information to determine which of the potential control options is necessary to make reasonable progress. See 2019 Guidance at 30–36. The 2021 Clarifications Memo contains further guidance on how states can reasonably consider modeled visibility impacts or benefits in the context of a four-factor analysis. 2021 Clarifications Memo at 12–13, 14–15. Specifically, EPA explained that while visibility can reasonably be used when comparing and choosing between multiple reasonable control options, it should not be used to summarily reject controls that are reasonable given the four statutory factors. 2021 Clarifications Memo at 13. Ultimately, while states have discretion to reasonably weigh the factors and to determine what level of control is needed, § 51.308(f)(2)(i) provides that a state ''must include in its implementation plan a description of . . . how the four factors were taken into consideration in selecting the measure for inclusion in its long-term strategy.''

As explained above, § 51.308(f)(2)(i) requires states to determine the emission reduction measures for sources that are necessary to make reasonable progress by considering the four factors. Pursuant to § 51.308(f)(2), measures that are necessary to make reasonable progress towards the national visibility goal must be included in a state's long-term strategy and in its SIP.[25] If the outcome of a four-factor analysis is a new, additional emission reduction measure for a source, that new measure is necessary to make reasonable progress towards remedying existing anthropogenic visibility impairment and must be included in the SIP. If the outcome of a four-factor analysis is that no new measures are reasonable for a source, continued implementation of the source's existing measures is generally necessary to prevent future emission increases and thus to make reasonable progress towards the second part of the national visibility goal: preventing future anthropogenic visibility impairment. See CAA 169A(a)(1). That is, when the result of a four-factor analysis is that no new measures are necessary to make reasonable progress, the source's existing measures are generally necessary to make reasonable progress and must be included in the SIP. However, there may be circumstances in which a state can demonstrate that a source's existing measures are *not* necessary to make reasonable progress. Specifically, if a state can demonstrate that a source will continue to implement its existing measures and will not increase its emission rate, it may not be necessary to have those measures in the long-term strategy in order to prevent future emission increases and future visibility impairment. EPA's 2021 Clarifications Memo provides further explanation and guidance on how states may demonstrate that a source's existing measures are not necessary to make reasonable progress. See 2021 Clarifications Memo at 8–10. If the state can make such a demonstration, it need not include a source's existing measures in the long-term strategy or its SIP.

As with source selection, the characterization of information on each of the factors is also subject to the documentation requirement in § 51.308(f)(2)(iii). The reasonable progress analysis, including source selection, information gathering, characterization of the four statutory factors (and potentially visibility), balancing of the four factors, and selection of the emission reduction measures that represent reasonable progress, is a technically complex exercise, but also a flexible one that provides states with bounded discretion to design and implement approaches appropriate to their circumstances. Given this flexibility, § 51.308(f)(2)(iii) plays an important function in requiring a state to document the technical basis for its decision making so that the public and the EPA can comprehend and evaluate the information and analysis the state relied upon to determine what emission reduction measures must be in place to make reasonable progress. The technical documentation must include the modeling, monitoring, cost, engineering, and emissions information on which the state relied to determine the measures necessary to make reasonable progress. This documentation requirement can be met through the provision of and reliance on technical analyses developed through a regional planning process, so long as that process and its output has been approved by all state participants. In addition to the explicit regulatory requirement to document the technical basis of their reasonable progress determinations, states are also subject to the general principle that those determinations must be reasonably moored to the statute.[26] That is, a state's decisions about the emission

[24] See, *e.g.,* Responses to Comments on Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule (81 FR 26942, May 4, 2016), Docket Number EPA–HQ–OAR–2015–0531, U.S. Environmental Protection Agency at 186; 2019 Guidance at 36–37.

[25] States may choose to, but are not required to, include measures in their long-term strategies beyond just the emission reduction measures that are necessary for reasonable progress. See 2021 Clarifications Memo at 16. For example, states with smoke management programs may choose to submit their smoke management plans to EPA for inclusion in their SIPs but are not required to do so. See, *e.g.,* 82 FR at 3108–09 (requirement to consider smoke management practices and smoke management programs under 40 CFR 51.308(f)(2)(iv) does not require states to adopt such practices or programs into their SIPs, although they may elect to do so).

[26] *See Arizona ex rel. Darwin* v. *U.S. EPA,* 815 F.3d 519, 531 (9th Cir. 2016); *Nebraska* v. *U.S. EPA,* 812 F.3d 662, 668 (8th Cir. 2016); *North Dakota* v. *EPA,* 730 F.3d 750, 761 (8th Cir. 2013); *Oklahoma* v. *EPA,* 723 F.3d 1201, 1206, 1208–10 (10th Cir. 2013); *cf. also Alaska Dep't of Envtl. Conservation* v. *EPA,* 540 U.S. 461, 485, 490 (2004); *Nat'l Parks Conservation Ass'n* v. *EPA,* 803 F.3d 151, 165 (3d Cir. 2015);.

reduction measures that are necessary to make reasonable progress must be consistent with the statutory goal of remedying existing and preventing future visibility impairment.

The four statutory factors (and potentially visibility) are used to determine what emission reduction measures for selected sources must be included in a state's long-term strategy for making reasonable progress. Additionally, the RHR at 40 CFR 51.3108(f)(2)(iv) separately provides five ''additional factors'' [27] that states must consider in developing their long-term strategies: (1) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment; (2) measures to reduce the impacts of construction activities; (3) source retirement and replacement schedules; (4) basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs; and (5) 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. The 2019 Guidance provides that a state may satisfy this requirement by considering these additional factors in the process of selecting sources for four-factor analysis, when performing that analysis, or both, and that not every one of the additional factors needs to be considered at the same stage of the process. See 2019 Guidance at 21. EPA provided further guidance on the five additional factors in the 2021 Clarifications Memo, explaining that a state should generally not reject cost-effective and otherwise reasonable controls merely because there have been emission reductions since the first planning period owing to other ongoing air pollution control programs or merely because visibility is otherwise projected to improve at Class I areas. Additionally, states generally should not rely on these additional factors to summarily assert that the state has already made sufficient progress and, therefore, no sources need to be selected or no new controls are needed regardless of the outcome of four-factor analyses. 2021 Clarifications Memo at 13.

Because the air pollution that causes regional haze crosses state boundaries, § 51.308(f)(2)(ii) requires a state to consult with other states that also have emissions that are reasonably anticipated to contribute to visibility impairment in a given Class I area. Consultation allows for each state that impacts visibility in an area to share whatever technical information, analyses, and control determinations may be necessary to develop coordinated emission management strategies. This coordination may be managed through inter- and intra-RPO consultation and the development of regional emissions strategies; additional consultations between states outside of RPO processes may also occur. If a state, pursuant to consultation, agrees that certain measures (*e.g.,* a certain emission limitation) are necessary to make reasonable progress at a Class I area, it must include those measures in its SIP. 40 CFR 51.308(f)(2)(ii)(A). Additionally, the RHR requires that states that contribute to visibility impairment at the same Class I area consider the emission reduction measures the other contributing states have identified as being necessary to make reasonable progress for their own sources. 40 CFR 51.308(f)(2)(ii)(B). If a state has been asked to consider or adopt certain emission reduction measures, but ultimately determines those measures are not necessary to make reasonable progress, that state must document in its SIP the actions taken to resolve the disagreement. 40 CFR 51.308(f)(2)(ii)(C). The EPA will consider the technical information and explanations presented by the submitting state and the state with which it disagrees when considering whether to approve the state's SIP. See *id.;* 2019 Guidance at 53. Under all circumstances, a state must document in its SIP submission all substantive consultations with other contributing states. 40 CFR 51.308(f)(2)(ii)(C).

D. Reasonable Progress Goals

Reasonable progress goals ''measure the progress that is projected to be achieved by the control measures states have determined are necessary to make reasonable progress based on a four-factor analysis.'' 82 FR at 3091. Their primary purpose is to assist the public and the EPA in assessing the reasonableness of states' long-term strategies for making reasonable progress towards the national visibility goal. See 40 CFR 51.308(f)(3)(iii)–(iv). States in which Class I areas are located must establish two RPGs, both in deciviews—one representing visibility conditions on the clearest days and one representing visibility on the most anthropogenically impaired days—for each area within their borders. 40 CFR 51.308(f)(3)(i). The two RPGs are intended to reflect the projected impacts, on the two sets of days, of the emission reduction measures the state with the Class I area, as well as all other contributing states, have included in their long-term strategies for the second implementation period.[28] The RPGs also account for the projected impacts of implementing other CAA requirements, including non-SIP based requirements. Because RPGs are the modeled result of the measures in states' long-term strategies (as well as other measures required under the CAA), they cannot be determined before states have conducted their four-factor analyses and determined the control measures that are necessary to make reasonable progress. See 2021 Clarifications Memo at 6.

For the second implementation period, the RPGs are set for 2028. Reasonable progress goals are not enforceable targets, 40 CFR 51.308(f)(3)(iii); rather, they ''provide a way for the states to check the projected outcome of the [long-term strategy] against the goals for visibility improvement.'' 2019 Guidance at 46. While states are not legally obligated to achieve the visibility conditions described in their RPGs, § 51.308(f)(3)(i) requires that ''[t]he long-term strategy and the reasonable progress goals must provide for an improvement in visibility for the most impaired days since the baseline period and ensure no degradation in visibility for the clearest days since the baseline period.'' Thus, states are required to have emission reduction measures in their long-term strategies that are projected to achieve visibility conditions on the most impaired days that are better than the baseline period and show no degradation on the clearest days compared to the clearest days from the baseline period. The baseline period for the purpose of this comparison is the baseline visibility condition—the annual average visibility condition for the period 2000–2004. See 40 CFR 51.308(f)(1)(i), 82 FR at 3097–98.

So that RPGs may also serve as a metric for assessing the amount of progress a state is making towards the

[27] The five ''additional factors'' for consideration in section 51.308(f)(2)(iv) are distinct from the four factors listed in CAA section 169A(g)(1) and 40 CFR 51.308(f)(2)(i) that states must consider and apply to sources in determining reasonable progress.

[28] RPGs are intended to reflect the projected impacts of the measures all contributing states include in their long-term strategies. However, due to the timing of analyses and of control determinations by other states, other on-going emissions changes, a particular state's RPGs may not reflect all control measures and emissions reductions that are expected to occur by the end of the implementation period. The 2019 Guidance provides recommendations for addressing the timing of RPG calculations when states are developing their long-term strategies on disparate schedules, as well as for adjusting RPGs using a post-modeling approach. 2019 Guidance at 47–48.

national visibility goal, the RHR requires states with Class I areas to compare the 2028 RPG for the most impaired days to the corresponding point on the URP line (representing visibility conditions in 2028 if visibility were to improve at a linear rate from conditions in the baseline period of 2000–2004 to natural visibility conditions in 2064). If the most impaired days RPG in 2028 is above the URP (*i.e.,* if visibility conditions are improving more slowly than the rate described by the URP), each state that contributes to visibility impairment in the Class I area must demonstrate, based on the four-factor analysis required under 40 CFR 51.308(f)(2)(i), that no additional emission reduction measures would be reasonable to include in its long-term strategy. 40 CFR 51.308(f)(3)(ii). To this end, 40 CFR 51.308(f)(3)(ii) requires that each state contributing to visibility impairment in a Class I area that is projected to improve more slowly than the URP 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 2019 Guidance provides suggestions about how such a ''robust demonstration'' might be conducted. See 2019 Guidance at 50–51.

The 2017 RHR, 2019 Guidance, and 2021 Clarifications Memo also explain that projecting an RPG that is on or below the URP based on only on-the-books and/or on-the-way control measures (*i.e.,* control measures already required or anticipated before the four-factor analysis is conducted) is not a ''safe harbor'' from the CAA's and RHR's requirement that all states must conduct a four-factor analysis to determine what emission reduction measures constitute reasonable progress. The URP is a planning metric used to gauge the amount of progress made thus far and the amount left before reaching natural visibility conditions. However, the URP is not based on consideration of the four statutory factors and therefore cannot answer the question of whether the amount of progress being made in any particular implementation period is ''reasonable progress.'' See 82 FR at 3093, 3099–3100; 2019 Guidance at 22; 2021 Clarifications Memo at 15–16.

E. Monitoring Strategy and Other State Implementation Plan Requirements

Section 51.308(f)(6) requires states to have certain strategies and elements in place for assessing and reporting on visibility. Individual requirements under this subsection apply either to states with Class I areas within their borders, states with no Class I areas but that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area, or both. A state with Class I areas within its borders must submit with its SIP revision a monitoring strategy for measuring, characterizing, and reporting regional haze visibility impairment that is representative of all Class I areas within the state. SIP revisions for such states must also provide for the establishment of any additional monitoring sites or equipment needed to assess visibility conditions in Class I areas, as well as reporting of all visibility monitoring data to the EPA at least annually. Compliance with the monitoring strategy requirement may be met through a state's participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring network, which is used to measure visibility impairment caused by air pollution at the 156 Class I areas covered by the visibility program. 40 CFR 51.308(f)(6), (f)(6)(i), (f)(6)(iv). The IMPROVE monitoring data is used to determine the 20% most anthropogenically impaired and 20% clearest sets of days every year at each Class I area and tracks visibility impairment over time.

All states' SIPs must provide for procedures by which monitoring data and other information are used to determine the contribution of emissions from within the state to regional haze visibility impairment in affected Class I areas. 40 CFR 51.308(f)(6)(ii), (iii). *S*ection 51.308(f)(6)(v) further requires that all states' SIPs provide for a statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area; the inventory must include emissions for the most recent year for which data are available and estimates of future projected emissions. States must also include commitments to update their inventories periodically. The inventories themselves do not need to be included as elements in the SIP and are not subject to EPA review as part of the Agency's evaluation of a SIP revision.[29] All states' SIPs must also provide for any other elements, including reporting, recordkeeping, and other measures, that are necessary for states to assess and report on visibility. 40 CFR 51.308(f)(6)(vi). Per the 2019 Guidance, a state may note in its regional haze SIP that its compliance with the Air Emissions Reporting Rule (AERR) in 40 CFR part 51 subpart A satisfies the requirement to provide for an emissions inventory for the most recent year for which data are available. To satisfy the requirement to provide estimates of future projected emissions, a state may explain in its SIP how projected emissions were developed for use in establishing RPGs for its own and nearby Class I areas.[30]

Separate from the requirements related to monitoring for regional haze purposes under 40 CFR 51.308(f)(6), the RHR also contains a requirement at § 51.308(f)(4) related to any additional monitoring that may be needed to address visibility impairment in Class I areas from a single source or a small group of sources. This is called ''reasonably attributable visibility impairment.'' [31] Under this provision, if the EPA or the FLM of an affected Class I area has advised a state that additional monitoring is needed to assess reasonably attributable visibility impairment, the state must include in its SIP revision for the second implementation period an appropriate strategy for evaluating such impairment.

F. Requirements for Periodic Reports Describing Progress Towards the Reasonable Progress Goals

Section 51.308(f)(5) requires a state's regional haze SIP revision to address the requirements of paragraphs 40 CFR 51.308(g)(1) through (5) so that the plan revision due in 2021 will serve also as a progress report addressing the period since submission of the progress report for the first implementation period. The regional haze progress report requirement is designed to inform the public and the EPA about a state's implementation of its existing long-term strategy and whether such implementation is in fact resulting in the expected visibility improvement. See 81 FR 26942, 26950 (May 4, 2016), (82 FR at 3119, January 10, 2017). To this end, every state's SIP revision for the second implementation period is required to describe the status of implementation of all measures included in the state's long-term strategy, including BART and reasonable progress emission reduction measures from the first implementation period, and the resulting emissions reductions. 40 CFR 51.308(g)(1) and (2).

[29] See ''Step 8: Additional requirements for regional haze SIPs'' in 2019 Regional Haze Guidance at 55.

[30] *Id.*

[31] EPA's visibility protection regulations define ''reasonably attributable visibility impairment'' as ''visibility impairment that is caused by the emission of air pollutants from one, or a small number of sources.'' 40 CFR 51.301.

A core component of the progress report requirements is an assessment of changes in visibility conditions on the clearest and most impaired days. For second implementation period progress reports, § 51.308(g)(3) requires states with Class I areas within their borders to first determine current visibility conditions for each area on the most impaired and clearest days, 40 CFR 51.308(g)(3)(i)(B), and then to calculate the difference between those current conditions and baseline (2000–2004) visibility conditions in order to assess progress made to date. See 40 CFR 51.308(g)(3)(ii)(B). States must also assess the changes in visibility impairment for the most impaired and clearest days since they submitted their first implementation period progress reports. See 40 CFR 51.308(g)(3)(iii)(B), (f)(5). Since different states submitted their first implementation period progress reports at different times, the starting point for this assessment will vary state by state.

Similarly, states must provide analyses tracking the change in emissions of pollutants contributing to visibility impairment from all sources and activities within the state over the period since they submitted their first implementation period progress reports. See 40 CFR 51.308(g)(4), (f)(5). Changes in emissions should be identified by the type of source or activity. Section 51.308(g)(5) also addresses changes in emissions since the period addressed by the previous progress report and requires states' SIP revisions to include an assessment of any significant changes in anthropogenic emissions within or outside the state. This assessment must include an explanation of whether these changes in emissions were anticipated and whether they have limited or impeded progress in reducing emissions and improving visibility relative to what the state projected based on its long-term strategy for the first implementation period.

G. Requirements for State and Federal Land Manager Coordination

Clean Air Act section 169A(d) requires that before a state holds a public hearing on a proposed regional haze SIP revision, it must consult with the appropriate FLM or FLMs; pursuant to that consultation, the state must include a summary of the FLMs' conclusions and recommendations in the notice to the public. Consistent with this statutory requirement, the RHR also requires that states ''provide the [FLM] with an opportunity for consultation, in person and at a point early enough in the State's policy analyses of its long-term strategy emission reduction obligation so that information and recommendations provided by the [FLM] can meaningfully inform the State's decisions on the long-term strategy.'' 40 CFR 51.308(i)(2). Consultation that occurs 120 days prior to any public hearing or public comment opportunity will be deemed ''early enough,'' but the RHR provides that in any event the opportunity for consultation must be provided at least 60 days before a public hearing or comment opportunity. This consultation must include the opportunity for the FLMs to discuss their assessment of visibility impairment in any Class I area and their recommendations on the development and implementation of strategies to address such impairment. 40 CFR 51.308(i)(2). In order for the EPA to evaluate whether FLM consultation meeting the requirements of the RHR has occurred, the SIP submission should include documentation of the timing and content of such consultation. The SIP revision submitted to the EPA must also describe how the state addressed any comments provided by the FLMs. 40 CFR 51.308(i)(3). Finally, a SIP revision 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, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas. 40 CFR 51.308(i)(4).

IV. The EPA's Evaluation of New Hampshire's Regional Haze Submission for the Second Implementation Period

A. Background on New Hampshire's First Implementation Period SIP Submission

NHDES submitted its regional haze SIP for the first implementation period to the EPA on January 9, 2010, and supplemented it on January 14, 2011, and August 14, 2011. The EPA approved New Hampshire's first implementation period regional haze SIP submission on August 22, 2012 (77 FR 50602). Pursuant to 40 CFR 51.308(g), New Hampshire was also responsible for submitting a five-year progress report as a SIP revision for the first implementation period, which it did on December 16, 2014. The EPA approved the progress report into the New Hampshire SIP on October 12, 2016 (81 FR 70360).

B. New Hampshire's Second Implementation Period SIP Submission and the EPA's Evaluation

In accordance with CAA sections 169A and the RHR at 40 CFR 51.308(f), on May 5, 2022, NHDES submitted a revision to the New Hampshire SIP to address its regional haze obligations for the second implementation period, which runs through 2028. The New Hampshire submission also included the revised New Hampshire's Code of Administrative Rules Env-A 2300, ''Mitigation of Regional Haze,'' which contains updated emissions limits for certain facilities located in the State. New Hampshire made a draft Regional Haze SIP submission available for public comment on November 4, 2019, with a second notice made available for public comment on December 10, 2021. A public hearing was also held on February 23, 2022. NHDES has included the public comments and its responses to those comments in the submission.

The following sections describe New Hampshire's SIP submission, including analyses conducted by MANE–VU and New Hampshire's determinations based on those analyses, New Hampshire's assessment of progress made since the first implementation period in reducing emissions of visibility impairing pollutants, and the visibility improvement progress at its Class I areas and nearby Class I areas. This notice also contains EPA's evaluation of New Hampshire's submission against the requirements of the CAA and RHR for the second implementation period of the regional haze program.

C. Identification of Class I Areas

Section 169A(b)(2) of the CAA requires each state in which any Class I area is located or ''the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility'' in a Class I area to have a plan for making reasonable progress toward the national visibility goal. The RHR implements this statutory requirement at 40 CFR 51.308(f), which provides that each state's plan ''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,'' and (f)(2), which requires each state's plan to include a long-term strategy that addresses regional haze in such Class I areas.

The EPA explained in the 1999 RHR preamble that the CAA section 169A(b)(2) requirement that states submit SIPs to address visibility impairment establishes ''an 'extremely

low triggering threshold' in determining which States should submit SIPs for regional haze.'' 64 FR at 35721. In concluding that each of the contiguous 48 states and the District of Columbia meet this threshold,[32] the EPA relied on ''a large body of evidence demonstrat[ing] that long-range transport of fine PM contributes to regional haze,'' *id.,* including modeling studies that ''preliminarily demonstrated that each State not having a Class I area had emissions contributing to impairment in at least one downwind Class I area.'' *Id.* at 35722. In addition to the technical evidence supporting a conclusion that each state contributes to *existing* visibility impairment, the EPA also explained that the second half of the national visibility goal—preventing *future* visibility impairment—requires having a framework in place to address future growth in visibility-impairing emissions and makes it inappropriate to ''establish criteria for excluding States or geographic areas from consideration as potential contributors to regional haze visibility impairment.'' *Id.* at 35721. Thus, the EPA concluded that the agency's ''statutory authority and the scientific evidence are sufficient to require all States to develop regional haze SIPs to ensure the prevention of any future impairment of visibility, and to conduct further analyses to determine whether additional control measures are needed to ensure reasonable progress in remedying existing impairment in downwind Class I areas.'' *Id.* at 35722. EPA's 2017 revisions to the RHR did not disturb this conclusion. *See* 82 FR at 3094.

New Hampshire has two mandatory Class I Federal areas within its borders, the Great Gulf Wilderness Area and the Presidential Range-Dry River Wilderness Area. Visibility monitoring in these areas is accomplished with instruments located at a single site at Camp Dodge. This monitoring station represents both Class 1 wilderness areas, and for this reason, both of New Hampshire's Federal Class I areas are often referred to collectively as simply the Great Gulf Wilderness. For the second implementation period, MANE–VU performed technical analyses [33] to help assess source and state-level contributions to visibility impairment and the need for interstate consultation. MANE–VU used the results of these analyses to determine which states' emissions ''have a high likelihood of affecting visibility in MANE–VU's Class I areas.'' [34] Similar to metrics used in the first implementation period,[35] MANE–VU used a greater than 2 percent of sulfate plus nitrate emissions contribution criteria to determine whether emissions from individual jurisdictions within the region affected visibility in any Class I areas. The MANE–VU analyses for the second implementation period used a combination of data analysis techniques, including emissions data, distance from Class I areas, wind trajectories, and CALPUFF dispersion modeling. Although many of the analyses focused only on SO_2 emissions and resultant particulate sulfate contributions to visibility impairment, some also incorporated NO_X emissions to estimate particulate nitrate contributions.

One MANE–VU analysis used for contribution assessment was CALPUFF air dispersion modeling. The CALPUFF model was used to estimate sulfate and nitrate formation and transport in MANE–VU and nearby regions originating from large electric generating unit (EGU) point sources and other large industrial and institutional sources in the eastern and central United States. Information from an initial round of CALPUFF modeling was collated for the 444 EGUs that were determined to warrant further scrutiny based on their emissions of SO_2 and NO_X. The list of EGUs was based on an enhanced ''Q/d'' analysis [36] that considered recent SO_2 emissions in the eastern United States and an analysis that adjusted previous 2002 MANE–VU CALPUFF modeling by applying a ratio of 2011 to 2002 SO_2 emissions. This list of sources was then enhanced by including the top five SO_2 and NOx emission sources for 2011 for each state included in the modeling domain. A total of 311 EGU stacks (as opposed to individual units) were included in the CALPUFF modeling analysis. Initial information was also collected on the 50 industrial and institutional sources that, according to 2011 Q/d analysis, contributed the most to visibility impact in each Class I area. The ultimate CALPUFF modeling run included a total of 311 EGU stacks and 82 industrial facilities. The summary report for the CALPUFF modeling included the top 10 most impacting EGUs and the top 5 most impacting industrial/institutional sources for each Class I area and compiled those results into a ranked list of the most impacting EGUs and industrial sources at MANE–VU Class I areas.[37]

The CALPUFF modeling results identified GSP Merrimack (units 1 and 2) and Newington as New Hampshire's EGU emissions sources impacting Great Gulf above a 1 Mm^{-1} light extinction impact threshold. NHDES also performed CALPUFF screening on several other New Hampshire emission sources. The selection of emission units for modeling was based on the MANE–VU EGU and peaking unit criteria, the MANE–VU industrial, commercial, and institutional (ICI) facility criteria, and requests from EPA and the National Park Service through consultation. The New Hampshire sources which had maximum estimated visibility extinction above 1 Mm^{-1} at federal Class I areas were included in the list of New Hampshire sources for further analysis.[38]

The second MANE–VU contribution analysis used a meteorologically weighted Q/d calculation to assess states' contributions to visibility impairment at MANE–VU Class I areas.[39] This analysis focused predominantly on SO_2 emissions and used cumulative SO_2 emissions from a source and a state for the variable ''Q,'' and the distance of the source or state to the IMPROVE monitor receptor at a Class I area as ''d.'' The result is then multiplied by a constant (C_i), which is determined based on the prevailing wind patterns. MANE–VU selected a meteorologically weighted Q/d analysis as an inexpensive initial screening tool that could easily be repeated to determine which states, sectors, or sources have a larger relative impact and warrant further analysis. Although MANE–VU did not originally estimate nitrate impacts, the MANE–VU Q/d analysis was subsequently extended to

[32] EPA determined that ''there is more than sufficient evidence to support our conclusion that emissions from each of the 48 contiguous states and the District of Columba may reasonably be anticipated to cause or contribute to visibility impairment in a Class I area.'' 64 FR at 35721. Hawaii, Alaska, and the U.S. Virgin Islands must also submit regional haze SIPs because they contain Class I areas.

[33] The contribution assessment methodologies for MANE–VU Class I areas are summarized in appendix E of the docket. ''Selection of States for MANE–VU Regional Haze Consultation (2018).''

[34] *Id.*

[35] See docket EPA–R01–OAR–2023–0187 for MANE–VU supporting materials.

[36] ''Q/d'' is emissions (Q) in tons per year, typically of one or a combination of visibility-impairing pollutants, divided by distance to a class I area (d) in kilometers. The resulting ratio is commonly used as a metric to assess a source's potential visibility impacts on a particular class I area.

[37] See appendix C in the Docket, ''2016 MANE–VU Source Contribution Modeling Report, CALPUFF Modeling of Large Electrical Generating Units and Industrial Sources'' and appendix D ''MANE–VU TSC'', (April 2016) and ''MANE–VU Updated Q/d*C Contribution Assessment.''

[38] See table 2–6 ''New Hampshire Visibility Impairing EGU and ICI Point Sources'' in the NH Regional Haze SIP—Final May 2022.

[39] See appendix D, ''Contribution Assessment 2006—Final.''

account for nitrate contributions from NO_X emissions and to approximate the nitrate impacts from area and mobile sources. MANE–VU therefore developed a ratio of nitrate to sulfate impacts based on the previously described CALPUFF modeling and applied those to the sulfate Q/d results in order to derive nitrate contribution estimates. Several states did not have CALPUFF nitrate to sulfate ratio results, however, because there were no point sources modeled with CALPUFF.

In order to develop a final set of contribution estimates, MANE–VU weighted the results from both the Q/d and CALPUFF analyses. The MANE–VU mass-weighted sulfate and nitrate contribution results were reported for the MANE–VU Class I areas. (The Q/d summary report included results for several non-MANE–VU areas as well). If a state's contribution to sulfate and nitrate concentrations at a particular Class I area was 2 percent or greater, MANE–VU regarded that state as contributing to visibility impairment in that area. According to MANE–VU's analyses, sources in New Hampshire have been found to contribute to visibility impairment at its own Class I areas, Acadia National Park and Moosehorn Wilderness Area in Maine, and, by extension, Roosevelt-Campobello International Park in New Brunswick.

As explained above, the EPA concluded in the 1999 RHR that ''all [s]tates contain sources whose emissions are reasonably anticipated to contribute to regional haze in a Class I area,'' 64 FR at 35721, and this determination was not changed in the 2017 RHR. Critically, the statute and regulation both require that the cause-or-contribute assessment consider all emissions of visibility-impairing pollutants from a state, as opposed to emissions of a particular pollutant or emissions from a certain set of sources. Consistent with these requirements, the 2019 Guidance makes it clear that ''all types of anthropogenic sources are to be included in the determination'' of whether a state's emissions are reasonably anticipated to result in any visibility impairment. 2019 Guidance at 8.

First, as an aside, the screening analyses on which MANE–VU relied are useful for certain purposes. MANE–VU used information from its technical analysis to rank the largest contributing states to sulfate and nitrate impairment in seven Class I areas in the MANE–VU region and three additional, nearby Class I areas.[40] The rankings were used to determine upwind states that were deemed important to include in state-to-state consultation (based on an identified impact screening threshold). Additionally, large individual source impacts were used to target MANE–VU control analysis ''Asks'' [41] of states and sources both within and upwind of MANE–VU.[42] The EPA finds the nature of the analyses generally appropriate to support decisions on states with which to consult. However, we have cautioned that source selection methodologies that target the largest regional contributors to visibility impairment across multiple states may not be reasonable for a particular state if it results in few or no sources being selected for subsequent analysis. 2021 Clarifications Memo at 3.

With regard to the analysis and determinations regarding New Hampshire's contribution to visibility impairment at out-of-state Class I areas, the MANE–VU technical work focuses on the magnitude of visibility impacts from certain New Hampshire emissions on its Class I area and other nearby Class I areas. However, the analyses did not account for all emissions and all components of visibility impairment (*e.g.,* primary PM emissions, and impairment from fine PM, elemental carbon, and organic carbon). In addition, Q/d analyses with a relatively simplistic accounting for wind trajectories and CALPUFF applied to a very limited set of EGUs and major industrial sources of SO_2 and NOx are not scientifically rigorous tools capable of evaluating contribution to visibility impairment from *all* emissions in a state. The EPA does agree that the contribution to visibility impairment from New Hampshire's emissions at nearby out-of-state Class I areas is smaller than that from numerous other MANE–VU states.[43] And while some MANE–VU states noted that the contributions from several states outside the MANE–VU region are significantly larger than its own, we again clarify that each state is obligated under the CAA and RHR to address regional haze visibility impairment resulting from emissions from within the state, irrespective of whether another state's contribution is greater. See 2021 Clarifications Memo at 3. Additionally, we note that the 2 percent or greater sulfate-plus-nitrate threshold used to determine whether New Hampshire emissions contribute to visibility impairment at a particular Class I area may be higher than what EPA believes is an ''extremely low triggering threshold'' intended by the statute and regulations. In sum, based on the information provided, it is clear that emissions from New Hampshire contribute to visibility impairment in the Class I areas in Maine, New Brunswick, and New Hampshire and have relatively small contributions to the other nearby Class I areas. EPA generally agrees with this conclusion. However, due to the low triggering threshold implied by the Rule and the lack of rigorous modeling analyses, we do not necessarily agree with the level of the State's 2% contribution threshold as a general matter.

Regardless, we note that New Hampshire did determine that sources and emissions within the state contribute to visibility impairment at both in-state wildernesses and three out-of-state Class I areas. Furthermore, the state took part in the emission control strategy consultation process as a member of MANE–VU. As part of that process, MANE–VU developed a set of emissions reduction measures identified as being necessary to make reasonable progress in the seven MANE–VU Class I areas. This strategy consists of six Asks for states within MANE–VU and five Asks for states outside the region that were found to impact visibility at Class I areas within MANE–VU.[44] New Hampshire's submission discusses each of the Asks and explains why or why not each is applicable and how it has complied with the relevant components of the emissions control strategy MANE–VU has laid out for its states. New Hampshire worked with MANE–VU to determine potential reasonable measures that could be implemented by 2028, considering the cost of compliance, the time necessary for

[40] The Class I areas analyzed were Acadia National Park in Maine, Brigantine Wilderness in New Jersey, Great Gulf Wilderness and Presidential Range—Dry River Wilderness in New Hampshire, Lye Brook Wilderness in Vermont, Moosehorn Wilderness in Maine, Roosevelt-Campobello International Park in New Brunswick, Shenandoah National Park in Virginia, James River Face Wilderness in Virginia, and Dolly Sods/Otter Creek Wildernesses in West Virginia.

[41] As explained more fully in section IV.E.a, MANE–VU refers to each of the components of its overall strategy as an ''Ask ''of its member states.

[42] The MANE–VU consultation report (Appendix G) explains that ''[t]he objective of this technical work was to identify states and sources from which MANE–VU will pursue further analysis. This screening was intended to identify which states to invite to consultation, not a definitive list of which states are contributing.''

[43] Because MANE–VU did not include all New Hampshire's emissions or contributions to visibility impairment in its analysis, we cannot definitively state that New Hampshire's contribution to visibility impairment is not the most significant. However, that is very likely the case.

[44] See appendix G ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

compliance, the energy and non-air quality environmental impacts, and the remaining useful life of any potentially affected sources. As discussed in further detail below, the EPA is proposing to find that New Hampshire has submitted a regional haze plan that meets the requirements of 40 CFR 51.308(f)(2) related to the development of a long-term strategy. Thus, although we have concerns regarding some aspects of MANE–VU's technical analyses supporting states' contribution determinations as a general matter, we propose to find that New Hampshire has nevertheless satisfied the applicable requirements for making reasonable progress towards natural visibility conditions in Class I areas that may be affected be emissions from the state.

D. Calculations of Baseline, Current, and Natural Visibility Conditions; Progress to Date; and the Uniform Rate of Progress

Section 51.308(f)(1) requires states to determine the following for ''each mandatory Class I Federal area located within the State'': baseline visibility conditions for the most impaired and clearest days, natural visibility conditions for the most impaired and clearest days, progress to date for the most impaired and clearest days, the differences between current visibility conditions and natural visibility conditions, and the URP. This section also provides the option for states to propose adjustments to the URP line for a Class I area to account for visibility impacts from anthropogenic sources outside the United States and/or the impacts from wildland prescribed fires that were conducted for certain, specified objectives. 40 CFR 51.308(f)(1)(vi)(B).

The Great Gulf and Presidential Range—Dry River Wilderness areas have 2000–2004 baseline visibility conditions of 7.65 deciviews on the 20% clearest days and 21.88 deciviews on the 20% most impaired days.[45] New Hampshire calculated an estimated natural background visibility of 3.73 deciviews on the 20% clearest days and 9.78 deciviews on the 20% most impaired days for the Great Gulf and Presidential Range—Dry River Wilderness areas.[46] The current visibility conditions, which are based on 2015–2019 monitoring data, were 4.69 deciviews on the clearest days and 12.33 deciviews on the most impaired days,[47] which represents an improvement from the baseline period of 2.96 deciviews on the 20% clearest days and 9.55 deciviews on the 20% most impaired days.[48] In addition, current visibility conditions are 0.96 and 2.55 deciviews greater than natural conditions on the respective sets of days.[49] New Hampshire calculated an annual URP of 0.202 deciviews needed to reach natural visibility on the 20% most impaired days.[50] New Hampshire noted that, at 12.33 deciviews, current visibility conditions on the most impaired days in the Great Gulf/Presidential-Dry River Wilderness Area are already below the URP glidepath for both 2018—the end of the first SIP planning period—and 2028—the end of the second SIP planning period.[51] New Hampshire has not proposed any adjustments to the URP to account for impacts from anthropogenic sources outside the United States or from wildland prescribed fires. EPA is proposing to find that New Hampshire has submitted a regional haze plan that meets the requirements of 40 CFR 51.308(f)(1) related to the calculations of baseline, current, and natural visibility conditions; progress to date; and the uniform rate of progress for the second implementation period.

E. Long-Term Strategy for Regional Haze

a. New Hampshire's Response to the Six MANE–VU Asks

Each state having a Class I area within its borders or emissions that may affect visibility in a Class I area must develop a long-term strategy for making reasonable progress towards the national visibility goal. CAA section 169A(b)(2)(B). As explained in the Background section of this notice, reasonable progress is achieved when all states contributing to visibility impairment in a Class I area are implementing the measures determined—through application of the four statutory factors to sources of visibility impairing pollutants—to be necessary to make reasonable progress. 40 CFR 51.308(f)(2)(i). Each state's long-term strategy must include the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress. 40 CFR 51.308(f)(2). All new (*i.e.,* additional) measures that are the outcome of four-factor analyses are necessary to make reasonable progress and must be in the long-term strategy. If the outcome of a four-factor analysis and other measures necessary to make reasonable progress is that no new measures are reasonable for a source, that source's existing measures are necessary to make reasonable progress, unless the state can demonstrate that the source will continue to implement those measures and will not increase its emission rate. Existing measures that are necessary to make reasonable progress must also be in the long-term strategy. In developing its long-term strategies, a state must also consider the five additional factors in § 51.308(f)(2)(iv). As part of its reasonable progress determinations, the state must describe the criteria used to determine which sources or group of sources were evaluated (*i.e.,* subjected to four-factor analysis) for the second implementation period and how the four factors were taken into consideration in selecting the emission reduction measures for inclusion in the long-term strategy. 40 CFR 51.308(f)(2)(i).

In this section of the NPRM, EPA summarizes how New Hampshire addresses the requirements of § 51.308(f)(2)(i), including a discussion of the six Asks developed by MANE–VU and how New Hampshire addressed each. In section IV.E.b of the NPRM, EPA evaluates New Hampshire's compliance with the requirements of § 51.308(f)(2)(i).

States may rely on technical information developed by the RPOs of which they are members to select sources for four-factor analysis and to conduct that analysis, as well as to satisfy the documentation requirements under § 51.308(f). Where an RPO has performed source selection and/or four-factor analyses (or considered the five additional factors in § 51.308(f)(2)(iv)) for its member states, those states may rely on the RPO's analyses for the purpose of satisfying the requirements of § 51.308(f)(2)(i) so long as the states have a reasonable basis to do so and all state participants in the RPO process have approved the technical analyses. 40 CFR 51.308(f)(2)(iii). States may also satisfy the requirement of § 51.308(f)(2)(ii) to engage in interstate consultation with other states that have emissions that are reasonably

[45] See ''Table 4–1: Baseline Visibility for the 20% Clearest and 20% Worst Days for the Baseline Period in New Hampshire Class I Areas'' in the NH Regional Haze SIP submission—Final (May 2022).

[46] See ''Table 4–3: Comparison of Natural, Baseline, and Current Visibility for the 20% Clearest and 20% Most Impaired Days in New Hampshire Class I Areas'' in the NH Regional Haze SIP submission—Final (May 2022).

[47] See ''Table 4–2: Current Visibility for the 20% Clearest and 20% Most Impaired Days during 2015–2019 in New Hampshire Class I Areas'' in the NH Regional Haze SIP submission—Final (May 2022).

[48] NH Regional Haze SIP submission—Final, at 39 (May 2022).

[49] See ''Table 4–4: Current Visibility (2015–2019) vs. Natural Visibility Conditions (dv)'' in the NH Regional Haze SIP submission—Final (May 2022).

[50] See ''Table 4–6: Baseline, Current and Reasonable Progress Goal Haze Index Levels for New Hampshire's Class I Areas'' in the NH Regional Haze SIP submission—Final (May 2022).

[51] NH Regional Haze SIP submission—Final, at 40–41 (May 2022).

anticipated to contribute to visibility impairment in a given Class I area under the auspices of intra- and inter-RPO engagement.

New Hampshire is a member of the MANE–VU RPO and participated in the RPO's regional approach to developing a strategy for making reasonable progress towards the national visibility goal in the MANE–VU Class I areas. MANE–VU's strategy includes a combination of: (1) Measures for certain source sectors and groups of sectors that the RPO determined were reasonable for states to pursue, and (2) a request for member states to conduct four-factor analyses for individual sources that it identified as contributing to visibility impairment. MANE–VU refers to each of the components of its overall strategy as an Ask of its member states. On August 25, 2017, the Executive Director of MANE–VU, on behalf of the MANE–VU states and tribal nations, signed a statement that identifies six emission reduction measures that comprise the Asks for the second implementation period.[52] The Asks were ''designed to identify reasonable emission reduction strategies that must be addressed by the states and tribal nations of MANE–VU through their regional haze SIP updates.'' [53] The statement explains that ''[i]f any State cannot agree with or complete a Class I State's Asks, the State must describe the actions taken to resolve the disagreement in the Regional Haze SIP.'' [54]

MANE–VU's recommendations as to the appropriate control measures were based on technical analyses documented in the RPO's reports and included as appendices to or referenced in New Hampshire's regional haze SIP submission. One of the initial steps of MANE–VU's technical analysis was to determine which visibility-impairing pollutants should be the focus of its efforts for the second implementation period. In the first implementation period, MANE–VU determined that sulfates were the most significant visibility impairing pollutant at the region's Class I areas. To determine the impact of certain pollutants on visibility at Class I areas for the purpose of second implementation period planning, MANE–VU conducted an analysis comparing the pollutant contribution on the clearest and most impaired days in the baseline period (2000–2004) to the most recent period (2012–2016) [55] at MANE–VU and nearby Class I areas. MANE–VU found that while SO_2 emissions were decreasing and visibility was improving, sulfates still made up the most significant contribution to visibility impairment at MANE–VU and nearby Class I areas. According to the analysis, NO_X emissions have begun to play a more significant role in visibility impacts in recent years as SO_2 emissions have decreased. The technical analyses used by New Hampshire are included in their submission and are as follows:

- 2016 Updates to the Assessment of Reasonable Progress for Regional Haze in MANE–VU Class I Areas (Appendix L NH);
- Impact of Wintertime SCR/SNCR Optimization on Visibility Impairing Nitrate Precursor Emissions. November 2017. (Appendix Q NH);
- High Electric Demand Days and Visibility Impairment in MANE–VU. December 2017. (Appendix R NH);
- Benefits of Combined Heat and Power Systems for Reducing Pollutant Emissions in MANE–VU States. March 2016. (Appendix S NH);
- 2016 MANE–VU Source Contribution Modeling Report—CALPUFF Modeling of Large Electrical Generating Units and Industrial Sources April 4, 2017 (Appendix C NH);
- Contribution Assessment Preliminary Inventory Analysis. October 10, 2016. (Appendix D NH);
- Four-Factor Data Collection Memo. March 2017. (Appendix K NH);
- Status of the Top 167 Stacks from the 2008 MANE–VU Ask. July 2016. (Appendix M NH).

To support development of the Asks, MANE–VU gathered information on each of the four statutory factors for six source sectors it determined, based on an examination of annual emission inventories, ''had emissions [of SO_2 and/or NO_X] that were reasonabl[y] anticipated to contribute to visibility degradation in MANE–VU:'' electric generating units (EGUs), industrial/commercial/institutional boilers (ICI boilers), cement kilns, heating oil, residential wood combustion, and outdoor wood combustion.[56] MANE–VU also collected data on individual sources within the EGU, ICI boiler, and cement kiln sectors.[57] Information for the six sectors included explanations of technically feasible control options for SO_2 or NO_X, illustrative cost-effectiveness estimates for a range of model units and control options, sector-wide cost considerations, potential time frames for compliance with control options, potential energy and non-air-quality environmental impacts of certain control options, and how the remaining useful lives of sources might be considered in a control analysis.[58] Source-specific data included SO_2 emissions [59] and existing controls [60] for certain existing EGUs, ICI boilers, and cement kilns. MANE–VU considered this information on the four factors as well as the analyses developed by the RPO's Technical Support Committee when it determined specific emission reduction measures that were found to be reasonable for certain sources within two of the sectors it had examined—EGUs and ICI boilers. The Asks were based on this analysis and looked to optimize the use of existing controls, have states conduct further analysis on EGU or ICI boilers with considerable visibility impacts, implement low sulfur fuel standards, or lock-in lower emission rates.

MANE–VU Ask 1 is ''ensuring the most effective use of control technologies on a year-round basis'' at EGUs with a nameplate capacity larger than or equal to 25 megawatts (MW) with already installed NO_X and/or SO_2 controls.[61] Twelve EGUs at seven stationary sources in New Hampshire were identified as meeting the criteria of Ask 1. These sources include Burgess BioPower (EU01), Essential Power Newington (EU01 and EU02), Granite Ridge Energy (EU01 and EU02), Stored Solar Tamworth (EU01), GSP Merrimack Station (MK1 and MK2), GSP Schiller Station (SR4, SR5, and SR6), and GSP Newington Station (NT1). Additionally, the National Park Service identified Wheelabrator Concord as a facility of interest. NHDES determined that no further limitations as a result of MANE–VU Ask 1 were required of these sources.

New Hampshire explained that Burgess BioPower's operation was subject to Nonattainment New Source Review (NNSR) for NO_X at the time of the facility's initial permitting; hence, the NO_X limit represents the Lowest Available Emission Rate (LAER). This limit is incorporated into Title V Operating Permit TV–0065, issued on December 24, 2020, which limits NO_X

[52] See appendix G ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

[53] *Id.*

[54] *Id.*

[55] The period of 2012–2016 was the most recent period for which data were available at the time of analysis. NH also included 2015–2019 data, discussed above in part D of this section.

[56] See appendix K ''MANE–VU Four Factor Data Collection Memo at 1, March 30, 2017.''

[57] See appendix L ''2016 Updates to the Assessment of Reasonable Progress for Regional Haze in MANE–VU Class I Areas, Jan. 31, 2016.''

[58] *Id.*

[59] See appendix K ''Four Factor Data Collection Memo.''

[60] See appendix M ''Status of the Top 167 Stacks from the 2008 MANE–VU Ask. July 2016.''

[61] See appendix G ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

emissions from the biomass boiler to 0.060 lbs/MMBtu on a 30-day rolling average, based on the use of Selective Catalytic Reduction (SCR) technology and SO_2 emissions to 0.012 lbs/MMBtu.

Essential Power Newington was subject to NNSR for NO_X at the time of initial permitting in July 2010; these NO_X limits were established as LAER-based limits. The Newington units use dry low NO_X (DLN) combustion combined with SCR (as well as water injection during limited firing on ultra-low sulfur fuel oil). The facility is required by permit to use inherently low sulfur fuels (natural gas and ultra-low sulfur fuel oil). The units at this facility were subject to Prevention of Significant Deterioration (PSD) review for SO_2 at the time of their initial permitting; these SO_2 limits (0.0071 lbs/MMBtu for natural gas, and 0.0015 lbs/MMBtu for No. 2 fuel oil) were established as Best Available Control Technology (BACT) limits. These limits are incorporated into Title V Operating Permit TV–0058, which limits NO_X and SO_2 emissions on a year-round basis.

The units at Granite Ridge Energy were subject to NNSR for NO_X at the time of their initial permitting; these limits were established as LAER-based limits. The facility uses inherently low sulfur fuel (natural gas). The units at this facility were subject to PSD review for SO_2 at the time of their initial permitting; this limit (0.0023 lbs/MMBtu) was established as a BACT-based limit. These limits are included in Title V Operating Permit TV–0056, which limits NO_X and SO_2 emissions on a year-round basis.

Stored Solar Tamworth's operation is subject to an emission limit that was established when the facility was initially permitted under the PSD permit program in 1987. This control limits NO_X emissions to 0.265 lbs/MMBtu over any consecutive 24-hour period. In 2008, this facility installed overfire air (OFA) and flue gas recirculation (FGR) technologies, as well as a Selective Noncatalytic Reduction (SNCR) system and a SCR system. These limits are included in the facility's Title V Operating Permit TV–0018. Stored Solar Tamworth has voluntarily chosen to maintain NO_X emissions at or below 0.075 lb/MMBtu, on a quarterly average for the purpose of generating renewable energy certificates.

In response to the MANE–VU ''Ask,'' Stored Solar Tamworth agreed to take lower year-round, enforceable NO_X emission limitations. NHDES revised New Hampshire's Code of Administrative Rules Env-A 2300, ''Mitigation of Regional Haze'' to include these limits and submitted the rule to EPA as part of this SIP revision. This rule will lower the NO_X emissions limitations to a 30-day rolling average of 0.075 lb/MMBtu or a 24-hour calendar day average of 0.085 lb/MMBtu.

GSP Merrimack Station's operation is covered by Title V Operating Permit TV–0055 which limits NO_X and SO_2 emissions. On May 3, 2018, NHDES requested information from GSP regarding NO_X RACT and Regional Haze Rule requirements associated with the MANE–VU ''Ask.'' This request for information was focused on the most effective use of existing control technologies for MK1 and MK2. In addition, GSP completed an analysis of additional controls for NO_X and SO_2 for MK1 and MK2. After review, NHDES concluded the analysis validates the continued use of current enforceable measures for both SO_2 and NO_X. In response to the MANE–VU Ask, NHDES amended New Hampshire's Code of Administrative Rules Env-A 2300, ''Mitigation of Regional Haze'' to reference new NO_X RACT limits for MK1, which New Hampshire has made more stringent, changing from 1.22 lb/MMBtu (rolling 7-calendar day average), or 18.1 tons per calendar day (when MK2 is not in full operation), or 29.1 tons per calendar day (when combined with MK2) to 0.22 lb/MMBtu (24-hour calendar day average) or 4.0 tons per day on any calendar day during which a startup or shutdown occurs.[62] NHDES also revised Env-A 2300 to reference the new NO_X RACT limits for MK2 from 15.4 tons per 24-hour calendar day, or 29.1 tons per calendar day (when combined with MK1) to 0.22 lb/MMBtu (24-hour calendar day average) or 11.5 tons per day on any calendar day during which a startup or shutdown occurs. NHDES submitted the revised Env-A 2300 to EPA as part of New Hampshire's Regional Haze SIP revision for the second implementation period.[63]

GSP Schiller Station's operation is covered by Title V Operating Permit TV–0053 and NO_X RACT Orders RO–003 and ARD–06–001 which limit NO_X and SO_2 emissions. NHDES requested additional information from GSP regarding both NO_X RACT and Regional Haze Rule requirements associated with the MANE–VU ''Ask.'' For SR4 and SR6, NHDES requested that GSP conduct a NO_X RACT analysis for optimization of the SNCR including an evaluation of the technical and economic feasibility of operating the SNCR systems on a year-round basis to achieve various proposed NO_X emission levels. Also, GSP was requested to evaluate the most effective use of the DSI systems on SR4 and SR6 for SO_2 emission reductions. For ''Ask 1'' regarding SR5, NHDES requested GSP evaluate the most effective use of the SNCR for NO_X emission reductions and the limestone injection system for SO_2 emission reductions. GSP provided analyses to demonstrate that operation of low NO_X burners (LNB) and OFA on SR4 and SR6 were sufficient to achieve an emission limit of 0.25 lbs NO_X/MMBtu and that year-round operation of the SNCR would not result in any additional emissions reductions. NHDES issued NO_X RACT Order RO–003 on September 6, 2018, which established a NO_X emission limit for SR4 and SR6 of 0.25 lbs/MMBtu per 24-hour calendar day average that applies at all times, including periods of startup and shutdown on a year-round basis. New Hampshire submitted this NO_X RACT Order as a single-source SIP revision in September 2018. It was approved by the EPA on September 12, 2019 (84 FR 48068).

SR4 and SR6 also comply with the most current and strict federal standards for acid gases, the HCl limit required under MATS, and the 1-hr SO_2 NAAQS. GSP Schiller Station implements the most effective use of the existing control technology, which is year-round operation of the DSI systems, targeting reduction of multiple acid gases. SR5 is a wood-fired boiler that is also permitted to fire coal but has only fired coal for collecting performance test data in November 2006 during commissioning of the boiler. GSP has not combusted coal in SR5 since that time. Based on compliance stack testing and emissions monitoring data, sorbent injection is not needed to comply with the SO_2 emission limit while burning biomass. NHDES determined that the existing pollution control equipment (LNB, OFA, SNCR and DSI) installed on SR4, SR5 and SR6, the federally enforceable NO_X RACT emission limits and the NO_X and SO_2 emission limitations required by TV–0053 on a year-round basis satisfy Ask 1.

The GSP Newington Station's unit subject to ''Ask 1'' at this facility is an oil- and natural gas-fired EGU designated as NT1. NT1 is equipped

[62] See Table 4–15 ''Reductions in Allowable NO_X RACT Emission Limits for MK1 and MK2 Over Time'' of the NH RH SIP, Final 2022.

[63] Env-A 2300 incorporates by reference NO_X limits in Env-A 1300, which NHDES revised in 2018 as part of its SIP submittal for the 2008 and 2015 8-hr ozone standards. EPA has proposed in a separate action to approve Env-A 1300 into NH's SIP. *See* 88 FR 43483 (July 10, 2023). On September 6, 2023, EPA issued a final notice approving portions of Env-A 1300 in the NH SIP with the exception of New Hampshire's NO_X RACT limits applicable to coal-fired cyclone boilers. *See* 88 FR 60893 (September 6, 2023). EPA will issue a decision on New Hampshire's NO_X RACT requirements for coal-fired cyclone boilers in a subsequent rulemaking.

with an electrostatic precipitator (ESP) to control the emissions of particulate matter and LNB, OFA and water injection system to control NO_X emissions. GSP operates the water injection system on NT1 as necessary to maintain compliance with the NO_X emission limits. NT1 is subject to MATS as an existing EGU under the ''limited-use liquid oil-fired EGU72'' subcategory. These controls are included in the Title V Operating Permit TV–0054. TV–0054 contains a requirement to conduct a NO_X RACT analysis within six months of switching from the limited use MATS subcategory to continental liquid oil-fired EGU subcategory should they ever do so. NT1 does not have ''already installed'' SO_2 controls and therefore Ask 1 applies only to its NO_X emissions. NHDES determined that the existing pollution control equipment (LNB, OFA and water injection system) installed on NT1 combined with the federally enforceable NO_X emission limitations required by TV–0054 on a year-round basis satisfy Ask 1.

Wheelabrator Concord's operation is covered by Title V Operating Permit TV–0032, which was issued January 24, 2019. The two identical mass burn waterwall boilers at Wheelabrator Concord are considered large municipal waste combustion (MWC) units under New Hampshire's Code of Administrative Rules Env-A 3300, ''Municipal Waste Combustion.'' The two MWC units at Wheelabrator Concord are also subject to New Hampshire's Code of Administrative Rules Env-A 1300, ''NO_X RACT'' (approved September 6, 2023, 88 FR 60893). Therefore, NHDES determined that no further limitations from MANE–VU Ask 1 are required of this source.

MANE–VU Ask 2 consists of a request that states ''perform a four-factor analysis for reasonable installation or upgrade to emissions controls'' for specified sources. MANE–VU developed its Ask 2 list of sources for analysis by performing modeling and identifying facilities with the potential for 3.0 inverse megameters (Mm^{-1}) or greater impacts on visibility at any Class I area in the MANE–VU region. GSP Merrimack Station, in Bow, was identified as the only facility in NH with the potential for 3.0 Mm^{-1} or greater visibility impact at any MANE–VU Class I area.

GSP Merrimack Station's operation is already covered by Title V Operating Permit TV–0055 which limits NO_X and SO_2 emissions. MK1 and MK2 are cyclone-firing, wet-bottom utility boilers that burn bituminous coal and are each equipped with SCR for NO_X control as well as ESPs for particulate matter control. In addition, because of state law RSA 125–O, Multiple Pollutant Reduction Program, MK1 and MK2 are equipped with a common FGD system which is designed to reduce mercury emissions but has the co-benefit of acid gas (SO_2 and HCl) removal. New Hampshire asked GSP to perform four-factor analyses for both MK1 and MK2. As a result of this request, GSP considered various control measures for NO_X and SO_2, which, for NO_X, included review of fuel switching, OFA, SNCR, reburn, and upgrades to the existing SCR and, for SO_2, considered upgrades to the existing FGD, coal cleaning, dry FGD, FGD plus DSI and fuel switching. GSP further noted that both units already employ SCR for controlling NO_X emissions and that the existing FGD system already achieves a 95% reduction in SO_2 emissions. GSP concluded that both units are already effectively controlled and that no additional measures would result in any additional emissions reductions.[64] NHDES closely reviewed GSP's analysis and agreed with the company's conclusion that it supports the continued use of current enforceable measures for both SO_2 and NO_X, that no upgrade or replacement of the controls on MK1 and MK2 are necessary to make reasonable progress, and that a full four-factor analysis would not have identified any additional controls required for reasonable progress. New Hampshire therefore concluded that it satisfies Ask 2.

Ask 3 is for each MANE–VU state to pursue an ultra low-sulfur fuel oil standard if it has not already done so in the first implementation period. The Ask includes percent by weight standards for #2 distillate oil (0.0015% sulfur by weight or 15 ppm), #4 residual oil (0.25–0.5% sulfur by weight), and #6 residual oil (0.3–0.5% sulfur by weight). New Hampshire amended state law RSA 125–C:10-d, Sulfur Limits of Certain Liquid Fuels. Beginning on July 1, 2018, fuel imported into New Hampshire was required to meet the following reduced sulfur limits—0.0015% for No. 2 fuel oil, 0.25% for No. 4 fuel oil and 0.5% for Nos. 5 or 6 fuel oil—and as of February 1, 2019, non-compliant fuels are not allowed to be distributed for sale within the State. This law will result in further reductions in SO_2 emissions from industrial, area, and non-road sources beyond the 30% reduction seen in the 2008 vs. 2014 NEI data. The law was incorporated into New Hampshire's Code of Administrative Rules Env-A 1600, Fuel Specifications and was submitted to the EPA as a SIP revision on May 17, 2019, which EPA approved on April 26, 2021 (86 FR 21942). New Hampshire therefore concluded that it is meeting Ask 3.

MANE–VU Ask 4 requests states to update permits to ''lock in'' lower emissions rates for NO_X, SO_2, and PM at emissions sources larger than 250 million British Thermal Units (MMBtu) per hour heat input that have switched to lower emitting fuels. New Hampshire submitted that there are no such facilities in the State and therefore concluded it is meeting Ask 4.

Ask 5 requests that MANE–VU states ''control NO_X emissions for peaking combustion turbines that have the potential to operate on high electric demand days'' by either: (1) Meeting NO_X emissions standards specified in the Ask for turbines that run on natural gas and fuel oil, (2) performing a four-factor analysis for reasonable installation of or upgrade to emission controls, or (3) obtaining equivalent emission reductions on high electric demand days.[65] The Ask requests states to strive for NO_X emission standards of no greater than 25 ppm for natural gas and 42 ppm for fuel oil, or at a minimum, NO_X emissions standards of no greater than 42 ppm for natural gas and 96 ppm at for fuel oil. The peaking combustion turbines located at New Hampshire stationary sources that were identified as meeting the criteria of ''Ask #5'' are: GSP Lost Nation Station (LNCT1) GSP Merrimack Station (MKCT1 and MKCT2), GSP Schiller Station (SRCT), and GSP White Lake Station (WLCT1). GSP performed four-factor analyses for reasonable installation or upgrade to NO_X emission controls at these units, which indicated no additional NO_X controls that GSP could be employed on any of the combustion turbines that are both technically and economically feasible. All five GSP turbines are of the same era (1968–1970) and have similar NO_X emissions and specifications. Additionally, GSP has pledged to continue employing good combustion practices to optimize their NO_X emissions profile. New Hampshire reviewed and adopted the four-factor analyses and concluded it is meeting Ask 5.

The last Ask for states within MANE–VU (Ask 6) requests states to report in their regional haze SIPs about programs that decrease energy demand and increase the use of combined heat and power (CHP) and other distributed generation technologies such as fuel

[64] See NH SIP submittal Appendix T.

[65] See appendix G ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

cells, wind and solar. New Hampshire participates in RGGI,[66] a Northeast and Mid-Atlantic 10-state initiative to reduce greenhouse gas emissions that contribute to global climate change. The initiative creates a market for emissions allowances through a regional cap-and-trade program for greenhouse gas emissions from area power plants. As a co-benefit of this program, emissions of particle producing pollutants are also reduced. New Hampshire emissions allowances are sold at quarterly auctions and the proceeds fund the Greenhouse Gas Emission Reduction (GHGER) Fund. The GHGER Fund is administered by the Public Utilities Commission, which distributes the funds to programs across the state to support energy efficiency, conservation, and demand response programs.

New Hampshire's also explained the State's Renewable Portfolio Standard (RPS) statute, RSA 362–F: ''Electric Renewable Portfolio Standard'', requires each electricity provider to meet customer load by purchasing or acquiring certificates representing generation from renewable energy based on total megawatt-hours supplied. The RPS requirement increases from 4% in 2008 to 25.2% in 2025 and thereafter, based on type of renewable energy. A portion of this renewable portfolio energy generation comes from non-emitting sources such as hydro, solar and wind. New Hampshire therefore concluded it is meeting Ask 6.

In sum, New Hampshire identified several SIP approved mechanisms for controlling pollutants that impair visibility and that are necessary for reasonable progress—including its regulations limiting sulfur content in fuels, the updated RACT rules at Env-A 1300, and the more stringent NO_X limits at Stored Solar Tamworth implemented through Env-A 2300—which EPA is proposing to add to New Hampshire's SIP in this action. In addition to these SIP approved measures, New Hampshire also identified other federally enforceable and permanent controls including BACT and LAER limits from NNSR and PSD permitting that are incorporated into the facilities' Title V operating permits that have led to additional visibility improvements.

b. The EPA's Evaluation of New Hampshire's Response to the Six MANE–VU Asks and Compliance With § 51.308(f)(2)(i)

The EPA is proposing to find that New Hampshire has satisfied the requirements of § 51.308(f)(2)(i) related to evaluating sources and determining the emission reduction measures that are necessary to make reasonable progress by considering the four statutory factors. We are proposing to find that New Hampshire has satisfied the four-factor analysis requirement through its analysis and actions to address MANE–VU Asks 1, 2 3, and 5.

As explained above, New Hampshire relied on MANE–VU's technical analyses and framework (*i.e.,* the Asks) to select sources and form the basis of its long-term strategy. MANE–VU conducted an inventory analysis to identify the source sectors that produced the greatest amount of SO_2 and NO_X emissions in 2011; inventory data were also projected to 2018. Based on this analysis, MANE–VU identified the top-emitting sectors for each of the two pollutants, which for SO_2 include coal-fired EGUs, industrial boilers, oil-fired EGUs, and oil-fired area sources including residential, commercial, and industrial sources. Major-emitting sources of NO_X include on-road vehicles, non-road vehicles, and EGUs.[67] The RPO's documentation explains that ''[EGUs] emitting SO_2 and NO_X and industrial point sources emitting SO_2 were found to be sectors with high emissions that warranted further scrutiny. Mobile sources were not considered in this analysis because any ask concerning mobile sources would be made to EPA and not during the intra-RPO and inter-RPO consultation process among the states and tribes.'' [68] EPA proposes to find that New Hampshire reasonably evaluated the two pollutants—SO_2 and NO_X—that currently drive visibility impairment within the MANE–VU region and that it adequately explained and supported its decision to focus on these two pollutants through its reliance on the MANE–VU technical analyses cited in its submission.

Section 51.308(f)(2)(i) requires states to evaluate and determine the emission reduction measures that are necessary to make reasonable progress by applying the four statutory factors to sources in a control analysis. As explained previously, the MANE–VU Asks are a mix of measures for sectors and groups of sources identified as reasonable for states to address in their regional haze plans. While MANE–VU formulated the Asks to be ''reasonable emission reduction strategies'' to control emissions of visibility impairing pollutants,[69] EPA believes that New Hampshire, in four of the Asks in particular, engaged with the requirement that states determine the emission reduction measures that are necessary to make reasonable progress through consideration of the four factors. As laid out in further detail below, the EPA is proposing to find that MANE–VU's four-factor analysis conducted to support the emission reduction measures in Ask 3 (ultra-low sulfur fuel oil), in conjunction with New Hampshire's analysis and explanation of how it has complied with Asks 1 (ensure the most effective use of control technologies on a year-round basis at certain EGUs), 2 (perform four-factor analyses for sources with potential for $\geq 3.0\ Mm^{-1}$ impacts), and 5 (perform four-factor analyses for measures to control NO_X emissions at certain peaking combustion turbines) satisfy the requirement of § 51.308(f)(2)(i). The emission reduction measures that are necessary to make reasonable progress must be included in the long-term strategy, *i.e.,* in New Hampshire's SIP. 40 CFR 51.308(f)(2).

As for Ask 1, New Hampshire included an analysis of twelve EGUs at seven stationary sources that were identified as meeting the criteria of the Ask (i.e., capacity ≥25MW with already installed NO_X and/or SO_2 controls). New Hampshire, in response to an FLM request, also added two Wheelabrator Concord MWC units to this analysis. New Hampshire identified existing controls, updated RACT limits, and new limits implemented in Env-A 2300, *Mitigation of Regional Haze.* Technical analyses were also completed for two of the EGUs as discussed more below under Ask 2. New Hampshire asserted that it satisfies Ask 1 because its SIP-approved regulations include year-round emission limits and because it already requires that controls be run year-round for both NO_X and SO_2 by setting emission limits in permits that reflect the emission levels when the controls are run. As discussed in the previous section, New Hampshire included a description of existing rules, permit limits, and updated regulations to meet the requirements of Ask 1. New Hampshire has also increased controls on RACT (which EPA has proposed to approve in a separate notice), and EPA proposes to find that New Hampshire

[66] For more info: *https://www.energy.nh.gov/renewable-energy/regional-greenhouse-gas-initiative.*

[67] See appendix H ''Contribution Assessment—Final.''

[68] See Appendix G ''Asks—Final.''

[69] *Id.*

reasonably concluded that it has satisfied Ask 1.

Ask 2 addresses the sources MANE–VU determined have the potential for larger than, or equal to, 3.0 Mm^{-1} visibility impact at any MANE–VU Class I area; the Ask requests MANE–VU states to conduct four-factor analyses for the specified sources within their borders. This Ask explicitly engages with the statutory and regulatory requirement to determine the emission reduction measures necessary to make reasonable progress based on the four factors; MANE–VU considered it ''reasonable to have the greatest contributors to visibility impairment conduct a four-factor analysis that would determine whether emission control measures should be pursued and what would be reasonable for each source.'' [70]

As an initial matter, EPA does not generally agree that 3.0 Mm^{-1} visibility impact is a reasonable threshold for source selection. The RHR recognizes that, due to the nature of regional haze visibility impairment, numerous and sometimes relatively small sources may need to be selected and evaluated for control measures in order to make reasonable progress. See 2021 Clarifications Memo at 4. As explained in the 2021 Clarifications Memo, while states have discretion to choose any source selection threshold that is reasonable, ''[a] state that relies on a visibility (or proxy for visibility impact) threshold to select sources for four-factor analysis should set the threshold at a level that captures a meaningful portion of the state's total contribution to visibility impairment to Class I areas.'' 2021 Memo at 3. In this case, the 3.0 Mm^{-1} threshold identified only one unit at one source in New Hampshire (and only 22 across the entire MANE–VU region), indicating that it may be unreasonably high.

At 3.3 Mm^{-1}, Unit 2 at GSP Merrimack Station (MK2), in Bow, was identified as the only EGU in NH with the potential for 3.0 Mm^{-1} or greater visibility impact at any MANE–VU Class I area. As noted above, GSP Merrimack Station's operation is covered by Title V Operating Permit TV–0055 which limits NO_X and SO_2 emissions. MK1 and MK2 are each equipped with SCR for NO_X control as well as ESPs for particulate matter control. In addition, because of state law NH RSA 125–O, Multiple Pollutant Reduction Program, MK1 and MK2 are equipped with a common FGD system which is designed to reduce mercury emissions but has the co-benefit of acid gas (SO_2 and HCl) removal. While only Unit 2 was identified by MANE–VU as contributing a 3.0 Mm_{-}^{-1} or greater visibility impact at any MANE–VU Class I area, New Hampshire asked GSP to perform four-factor analyses for both Units 1 and 2. GSP responded that both units already employ SCR for controlling NO_X emissions and that the existing FGD system already achieves a 95% reduction in SO_2 emissions. Consequently, GSP concluded that both units are already effectively controlled and that any additional control measures would not result in any additional emissions reductions.[71] Based on a showing of existing effective controls, New Hampshire concluded that the result of a four-factor analysis would likely be no new controls and that no upgrade or replacement of the existing pollution control equipment was required as a result of Ask 2.

The EPA proposes to find that New Hampshire reasonably determined it has satisfied Ask 2. As explained above, we do not generally agree that a 3.0 Mm^{-1} threshold for selecting sources for four-factor analysis results in a set of sources the evaluation of which has the potential to meaningfully reduce the state's contribution to visibility impairment. MANE–VU's threshold identified only one source in New Hampshire for four-factor analysis. However, EPA notes that New Hampshire considered the four statutory factors in determining the emissions reduction measures necessary for some of its other top-impacting EGUs as part of Ask 5,[72] including Lost Nation and White Lake, which, according to New Hampshire's submission, have the potential for visibility impacts at the Presidential Range-Dry River Wilderness of 1.87 and 2.2 Mm^{-1}, respectively.[73] EPA is basing this proposed finding on the state's examination of its largest operating EGU sources, at the time of SIP submission, and on the emissions from and controls that apply to those sources, as well as on New Hampshire's existing SIP-approved NO_X and SO_2 rules that effectively control emissions from the largest contributing stationary-source sectors.

Ask 3, which addresses the sulfur content of heating oil used in MANE–VU states, is based on a four-factor analysis for the heating oil sulfur reduction regulations contained in that Ask; specifically, for the control strategy of reducing the sulfur content of distillate oil to 15 ppm. The analysis started with an assessment of the costs of retrofitting refineries to produce 15 ppm heating oil in sufficient quantities to support implementation of the standard, as well as the impacts of requiring a reduction in sulfur content on consumer prices. The analysis noted that, as a result of previous EPA rulemakings to reduce the sulfur content of on-road and non-road-fuels to 15 ppm, technologies are currently available to achieve sulfur reductions and many refiners are already meeting this standard, meaning that the capital investments for further reductions in the sulfur content of heating oil are expected to be relatively low compared to costs incurred in the past. The analysis also examined, by way of example, the impacts of New York's existing 15 ppm sulfur requirements on heating oil prices and concluded that the cost associated with reducing sulfur was relatively small in terms of the absolute price of heating oil compared to the magnitude of volatility in crude oil prices. It also noted that the slight price premium is compensated by cost savings due to the benefits of lower-sulfur fuels in terms of equipment life and maintenance and fuel stability. Consideration of the time necessary for compliance with a 15-ppm sulfur standard was accomplished through a discussion of the amount of time refiners had needed to comply with the EPA's on-road and non-road fuel 15 ppm requirement, and the implications existing refinery capacity and distribution infrastructure may have for compliance times with a 15-ppm heating oil standard. The analysis concluded that with phased-in timing for states that have not yet adopted a 15 ppm heating oil standard there ''appears to be sufficient time to allow refiners to add any additional heating oil capacity that may be required.'' [74] The analysis further noted the beneficial energy and non-air quality environmental impacts of a 15 ppm sulfur heating oil requirement and that reducing sulfur content may also have a salutary impact on the remaining useful life of residential furnaces and boilers.[75]

The EPA proposes to find that New Hampshire reasonably relied on MANE–VU's four-factor analysis for a low-sulfur fuel oil regulation, which engaged with each of the statutory factors and explained how the information supported a conclusion that a 15 ppm-sulfur fuel oil standard for fuel oils is

[70] See Appendix E ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

[71] See NH SIP submittal Appendix T.

[72] See NH SIP submittal Appendix T.

[73] *See* page 22 of the NH Regional Haze SIP submission—(May 2022).

[74] *Id.* see 8–7.

[75] *Id.* see 8–8.

reasonable. New Hampshire's SIP-approved ultra-low sulfur fuel oil rule [76] is consistent with Ask 3's sulfur content standards for the three types of fuel oils (distillate oil, #4 residual oil, #6 residual oil). EPA therefore proposes to find that New Hampshire reasonably determined that it has satisfied Ask 3.

New Hampshire concluded that no additional updates were needed to meet Ask 4, which requests that MANE–VU states pursue updating permits, enforceable agreements, and/or rules to lock-in lower emission rates for sources larger than 250 MMBtu per hour that have switched to lower emitting fuels. EPA agrees that New Hampshire does not contain any sources encompassed by this Ask, except that Schiller Station Unit 5 technically maintains the ability to operate by burning coal. We note, however, that Schiller Station Unit 5 has not burned coal other than for stack testing at installation, and it is reasonable to conclude, for a number of reasons—including historic operation, financial viability, fuel availability, and the overall direction of the fuels market—that it is unlikely that this source will ever burn coal again. GSP reportedly laid off union staff at Schiller Station and locked the gates to the facility in June of 2020.[77] [78] All three of the steam units at Schiller have reported zero operating hours and zero emissions since 2020.[79] Additionally, Schiller does not have any current capacity supply obligation for its steam units (which includes Unit 5) in the Forward Capacity Market and did not offer a bid for them in ISO New England's latest Forward Capacity Auction (FCA 17), which secures future power supply obligations through May 2027, making it unlikely that these units will ever operate in any capacity again.[80]

Ask 5 addresses NO_X emissions from peaking combustion turbines that have the potential to operate on high electric demand days. New Hampshire identified five combustion turbines in the State as meeting the criteria of this Ask: GSP Lost Nation Station (LNCT1), GSP Merrimack Station (MKCT1 and MKCT2), GSP Schiller Station (SRCT), and GSP White Lake Station (WLCT1). The Ask requests states to strive for certain NO_X emission standards for such sources or to perform four-factor analyses for reasonable installation or upgrade to emission controls. None of the five turbines New Hampshire identified are currently meeting the NO_X emissions standards in the Ask, so New Hampshire requested four-factor analyses for each source. Each combustion turbine is owned by Granite Shore Power, was originally installed around the same time (1968–1970), has a similar unit rating (290 MMBtu/hr–319 MMBtu/hr), operates at an annual capacity factor below 1%, and has NO_X emissions ranging from 0.7 lbs/MMBtu to 0.9 lbs/MMBtu. The total average yearly emissions for these sources from 2018–2022 were: GSP Lost Nation Station (LNCT1)—2.698 tons, GSP Merrimack Station (MKCT1)—2.596 tons, (MKCT2)—2.738 tons, GSP Schiller Station (SRCT)—2.582 tons, and GSP White Lake Station (WLCT1)—3.595 tons. Based on the four-factor analyses, New Hampshire concluded that no additional NO_X controls are both technically and economically feasible for these sources EPA proposes to find that New Hampshire reasonably concluded that it has met the requirements of Ask 5.

Finally, with regard to Ask 6, New Hampshire explains the clean energy requirements within the state including New Hampshire's Renewable Portfolio Standard (RPS) statute, NH RSA 362–F: Electric Renewable Portfolio Standard, and the State's participation in RGGI to reduce greenhouse gas emissions. The EPA is proposing to find that New Hampshire has satisfied Ask 6's request to consider and report in its SIP measures or programs related to energy efficiency, cogeneration, and other clean distributed generation technologies.

In sum, New Hampshire identified several mechanisms for controlling pollutants that impair visibility—including its regulations limiting sulfur content in fuels (which are in New Hampshire's SIP), the previously discussed updated RACT rules at Env-A 1300 (which EPA has in a separate action recently proposed to approve into the SIP), and the more stringent NO_X limits at Stored Solar Tamworth implemented through Env-A 2300 (which EPA is proposing to add to the SIP in this action). EPA proposes that New Hampshire has reasonably concluded that these measures are necessary to make reasonable progress for the second planning period. In addition to these SIP approved measures, New Hampshire also identified other federally enforceable and permanent controls including BACT and LAER limits from NNSR and PSD permitting, that are incorporated into the facilities' Title V operating permits.

EPA is proposing to find—based on New Hampshire's participation in the MANE–VU planning process, how it has addressed the Asks, and the EPA's assessment of New Hampshire's emissions and point sources—that New Hampshire has complied with the requirements of § 51.308(f)(2)(i).

EPA is proposing to find the state's approach reasonable for several reasons. New Hampshire reasonably evaluated and explained its decision to focus on SO_2 and NO_X to address visibility impairment within the MANE–VU region. And New Hampshire adequately supported that decision through reasonable reliance on the MANE–VU technical analyses cited in its submission. In addition, New Hampshire selected the sources with the greatest modeled impacts on visibility and also analyzed sources identified by the FLMs through the consultation process. New Hampshire's submittal also includes four-factor analyses and demonstrates that the sources of SO_2 and NO_X within the state that would be expected to contribute to visibility impairment have small emissions of NO_X and SO_2, are subject to stringent emission control measures, or both. In addition, New Hampshire's SIP-approved sulfur in fuel rule sets stringent limits for sulfur content and SO_2 emissions for fuels. The New Hampshire SIP submittal also includes Env-A 2300, which lowers NO_X emission limits for Stored Solar Tamworth and incorporates by reference an updated Env-A 1300, which includes lower NO_X limits for several sources including Merrimack Station and Wheelabrator Concord.

EPA proposes to find that New Hampshire's SIP submittal satisfies the requirements that states determine the emission reduction measures that are necessary to make reasonable progress by considering the four factors, and that their long-term strategies include the enforceable emission limitations, compliance schedules, and other measures necessary to make reasonable progress.

[76] Env-A 1600, *Fuel Specifications* was approved by EPA as a SIP revision on April 26, 2021 [86 FR 21942].

[77] *N.H. Coal Plant Will Run Through At Least 2025 After Latest Grid Auction,* NH Pub. Radio (Mar. 1, 2021), *available at https://www.nhpr.org/climate-change/2021-03-01/n-h-coal-plant-will-run-through-at-least-2025-after-latest-grid-auction; Union says Schiller coal-fired power plant is shut for good,* Granite Geek (Jan. 12, 2021), *available at https://granitegeek.concordmonitor.com/2021/01/12/union-says-schiller-coal-fired-power-plant-is-shut-for-good/.*

[78] See *https://www.ibew1837.org/content/schiller-station-closing-end-era,* or see PDF version of this article in the docket.

[79] See EPA's Clean Air Markets Program Data (CAMPD) at *https://campd.epa.gov/data.*

[80] See *https://www.iso-ne.com/markets-operations/markets/forward-capacity-market/* to download ISO New England forward capacity auction results. This spreadsheet has also been added to the docket for this notice.

c. Additional Long-Term Strategy Requirements

The consultation requirements of § 51.308(f)(2)(ii) provide that states must consult with other states that are reasonably anticipated to contribute to visibility impairment in a Class I area to develop coordinated emission management strategies containing the emission reductions necessary to make reasonable progress. Section 51.308(f)(2)(ii)(A) and (B) respectively require states to include in their SIPs measures agreed to during state-to-state consultations or a regional planning process and to consider the emission reduction measures identified by other states as necessary for reasonable progress. Section 51.308(f)(2)(ii)(C) speaks to what happens if states cannot agree on what measures are necessary to make reasonable progress.

New Hampshire participated in and provided documentation of the MANE–VU intra- and inter-RPO consultation processes, which included consulting with both MANE–VU and non-MANE–VU states about emissions reasonably anticipated to contribute to visibility impairment in New Hampshire's Class I areas and emissions from New Hampshire reasonably anticipated to contribute to visibility impairment in other Class I areas. The consultations addressed developing coordinated emission management strategies containing the emission reductions necessary to make reasonable progress at the Class I areas. New Hampshire addressed impacts to the MANE–VU Class I areas by providing information on the measures it has in place that satisfy each MANE–VU Ask.[81] New Hampshire received comments from North Carolina, Virginia, and West Virginia on New Hampshire's Draft SIP. The comments generally disagree with MANE–VU's requests of non-MANE–VU states. The comments do not include any requests that New Hampshire consider additional measures to address visibility impairment in Class I areas in those respective States. MANE–VU documented these and other disagreements that occurred during consultation. For instance, MANE–VU noted in its Consultation Report that upwind states expressed concern regarding the analyses the RPO used for the selection of states for the consultation. MANE–VU agreed that these tools, as all models, have their limitations, but nonetheless deemed them appropriate. Additionally, there were several comments regarding the choice of the 2011 modeling base year. MANE–VU agreed that the choice of base year is critical to the outcome of the study. MANE–VU acknowledged that there were newer versions of the emission inventories and the need to use the best available inventory for each analysis. However, MANE–VU disagreed that the choice of these inventories was not appropriate for the analysis.

In sum, New Hampshire participated in the MANE–VU intra- and inter-RPO consultation and included in its SIP submittal the measures identified and agreed to during those consultations, thereby satisfying § 51.308(f)(2)(ii)(A) and (B). New Hampshire satisfied § 51.308(f)(2)(ii)(C) by participating in MANE–VU's consultation process, which documented the disagreements between the upwind states and MANE–VU and explained MANE–VU's reasoning on each of the disputed issues. Based on the entirety of MANE–VU's intra- and inter-RPO consultation and both MANE–VU's and New Hampshire's responses to states' comments on the SIP submission[82] and various technical analyses therein, we propose to determine that New Hampshire has satisfied the consultation requirements of § 51.308(f)(2)(ii).

The documentation requirement of § 51.308(f)(2)(iii) provides that states may meet their obligations to document the technical bases on which they are relying to determine the emission reductions measures that are necessary to make reasonable progress through an RPO, as long as the process has been ''approved by all State participants.'' As explained above, New Hampshire chose to rely on MANE–VU's technical information, modeling, and analysis to support development of its long-term strategy. The MANE–VU technical analyses on which New Hampshire relied are listed in the state's SIP submission and include source contribution assessments, information on each of the four factors and visibility modeling information for certain EGUs, and evaluations of emission reduction strategies for specific source categories. New Hampshire also provided information to further demonstrate the technical bases and emission information on which it relied on to determine the emission reductions measures that are necessary to make reasonable progress. Based on the documentation provided by the state, we propose to find New Hampshire satisfies the requirements of § 51.308(f)(2)(iii).

Section 51.308(f)(2)(iii) also requires that the emissions information considered to determine the measures that are necessary to make reasonable progress include information on emissions for the most recent year for which the state has submitted triennial emissions data to the EPA (or a more recent year), with a 12-month exemption period for newly submitted data. New Hampshire's SIP submission included 2017 NEI emission data for NO_X, SO_2, PM, VOCs and NH3 and 2016–2019 Air Markets Program Data (AMPD) emissions for NO_X and SO_2. Based on New Hampshire's consideration and analysis of the emission data in their submittal, the EPA proposes to find that New Hampshire has satisfied the emissions information requirement in 51.308(f)(2)(iii).

We also propose to find that New Hampshire reasonably considered the five additional factors in § 51.308(f)(2)(iv) in developing its long-term strategy. Pursuant to § 51.308(f)(2)(iv)(A), New Hampshire noted that existing and ongoing state and federal emission control programs that contribute to emission reductions through 2028 would impact emissions of visibility impairing pollutants from point and nonpoint sources in the second implementation period. New Hampshire included in its SIP a list of control measures with their effective dates, pollutants addressed, and corresponding State regulations.[83]

New Hampshire's consideration of measures to mitigate the impacts of construction activities as required by § 51.308(f)(2)(iv)(B) includes a list of measures that New Hampshire has implemented to mitigate the impacts from such activities. New Hampshire's Code of Administrative Rules Env-A 1000, *Prevention, Abatement, and Control of Open Source Air Pollution,* requires the control of direct emissions of particulate matter (primarily crustal material) from mining, transportation, storage, use, and removal activities. These requirements apply to such sources as quarries, unpaved roads, cement plants, construction sites, rock-crushing operations, and general earth-moving activities. Controls may include wet suppression, covering, vacuuming, and other approved means. EPA originally approved the rule effective March 19, 2018 [83 FR 6972]. Additionally, New Hampshire's Code of Administrative Rules Env-A 2800, *Sand and Gravel Sources: Non-Metallic Mineral Processing Plants; Cement and Concrete Sources,* requires the control of

[81] See appendix G ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

[82] See NH Submittal, Appendix W.

[83] See Section 4.2.8 of the New Hampshire SIP.

fugitive dust and standards for particulate matter emissions and visible emissions from sand and gravel sources, non-metallic mineral processing plants, and cement and concrete sources. EPA approved the rule effective December 7, 2016 [81 FR 78052].

Pursuant to § 51.308(f)(2)(iv)(C), New Hampshire acknowledged the most impactful of the State's sources are the fossil-fuel-fired EGUs. While recent developments in the oil and gas industry have forced rapid changes in the power production sector, and some generating units have experienced sharp reductions in utilization, no retirements or replacements of New Hampshire's EGUs have occurred or been announced since the regional haze SIP was first submitted in 2010. Although Schiller Station has been in an extended outage since June of 2020, no official word from the Facility's owner has been announced regarding a permanent shut down. As noted earlier, however, the facility reportedly laid off staff and locked the gates to the facility in June of 2020. Furthermore, as also previously noted, Schiller Station does not have a current capacity supply obligation for any coal unit and did not place a bid for any of these units in ISO New England's FCA 17, which secures power supply obligations through May of 2027.

In considering smoke management as required in 40 CFR 51.308(f)(2)(iv)(D), New Hampshire explained that it addresses smoke management through the New Hampshire Prescribed Fire Council. The U.S. Forest Service and NHDES are members of the Council and assisted in the development of burn standards.[84] Federal Class I areas are not specifically identified as smoke sensitive features. New Hampshire's Class I areas are within the White Mountain National Forest; thus, the FLM for New Hampshire's two Class I areas (in this case, the U.S. Forest Service) would be informed of any planned burn in nearby lands. For any prescribed fire within this area, the burn plan would have to meet the FLM's own requirements for protection of Federal Class I areas, which are even more stringent than the New Hampshire Prescribed Fire Council's standards.

New Hampshire considered the anticipated net effect of projected changes in emissions as required by 51.308(f)(2)(iv)(E) by discussing the photochemical modeling for the 2018–2028 period it conducted in collaboration with MANE–VU. The two modeling cases run were a 2028 base case, which considered only on-the-books controls, and a 2028 control case that considered implementation of the MANE–VU Ask. New Hampshire presented the differences between the base and control cases on the 20% most impaired and 20% clearest days for the Great Gulf Wilderness Area[85] and noted the success of measures implemented during the first planning period to reduce impairment.

Because New Hampshire has reasonably considered each of the five additional factors, the EPA proposes to find that New Hampshire has satisfied the requirements of 40 CFR 51.308(f)(2)(iv).

F. Reasonable Progress Goals

Section 51.308(f)(3) contains the requirements pertaining to RPGs for each Class I area. Because New Hampshire is host to a Class I area, it is subject to both § 51.308(f)(3)(i) and, potentially, to (ii). Section 51.308(f)(3)(i) requires a state in which a Class I area is located to establish RPGs—one each for the most impaired and clearest days—reflecting the visibility conditions that will be achieved at the end of the implementation period as a result of the emission limitations, compliance schedules and other measures required under paragraph (f)(2) to be in states' long-term strategies, as well as implementation of other CAA requirements. The long-term strategies as reflected by the RPGs must provide for an improvement in visibility on the most impaired days relative to the baseline period and ensure no degradation on the clearest days relative to the baseline period. Section 51.308(f)(3)(ii) applies in circumstances in which a Class I area's RPG for the most impaired days represents a slower rate of visibility improvement than the uniform rate of progress calculated under 40 CFR 51.308(f)(1)(vi). Under § 51.308(f)(3)(ii)(A), if the state in which a mandatory Class I area is located establishes an RPG for the most impaired days that provides for a slower rate of visibility improvement than the URP, the state must demonstrate that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the state that would be reasonable to include in its long-term strategy. Section 51.308(f)(3)(ii)(B) requires that if a state contains sources that are reasonably anticipated to contribute to visibility impairment in a Class I area in *another* state, and the RPG for the most impaired days in that Class I area is above the URP, the upwind state must provide the same demonstration.

Table 4–19 of New Hampshire's SIP submittal summarizes baseline visibility conditions (*i.e.,* visibility conditions during the baseline period of 2000–2004) for the most impaired and clearest days and the 2028 RPG for the most impaired days for New Hampshire's Class I areas, as well as information on natural visibility conditions, the rate of progress described by the URP in 2028, and the modeled 2028 base case (representing visibility conditions in 2028 with existing controls). Baseline visibility conditions at New Hampshire's Class I areas were 7.65 and 21.88 deciviews for the clearest and most impaired days, respectively. By comparison, New Hampshire has established 2028 RPGs for the clearest and most impaired days of 5.11 and 12.13 deciviews.[86] [87]

New Hampshire's 2028 most impaired base case of 12.13 deciviews reflects the visibility conditions that are projected to be achieved based on states' existing measures. As such, EPA considers the 2028 modeled base case value of 12.13 deciviews to be the appropriate estimate of the RPG for the 20% most impaired visibility days (as opposed to the 12.00 deciviews value that includes measures from the MANE–VU Asks). EPA expects that the observed deciview value in 2028 will actually be equal to or lower than the 12.13 deciview estimate due to numerous coal-fired utility boilers in upwind states having recently retired or being expected to retire under enforceable commitments before 2028. Even the conservative estimate of 12.13 deciviews on the most impaired days in 2028 constitutes improvement over the baseline visibility conditions of 21.88 deciviews. Therefore, the long-term strategy and the reasonable progress goals provide for an improvement in visibility for the most impaired days since the baseline period and ensure no degradation in visibility for the clearest days since the baseline period. 40 CFR 51.308(f)(3)(i).

As noted in the RHR at 40 CFR 51.308(f)(3)(iii), the reasonable progress goals 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

[84] NH Prescribed Fire Council, (March 2019). Planning for Prescribed Burning in New Hampshire—Minimum Recommended Standards for Planning & Implementing Prescribed Burns. Available at *https://extension.unh.edu/resources/files/Resource001886_Rep2781.pdf.*

[85] See Table 4–19 of the NH Regional Haze SIP.

[86] See Table 4–6 of the NH Regional Haze SIP. These values were modeled not including the MANE–VU Asks. The values for the clearest and most impaired days including the Asks were 5.06 and 12.00 deciviews, respectively.

[87] *See also* NH Submittal, Appendix W at 7 (indicating that the RPG for New Hampshire's Class I Areas is 12.13 deciviews).

towards achieving natural visibility conditions at that area. The 2028 RPG for the most impaired days of 12.13 deciviews fulfills the regulatory purpose of the RPGs because visibility conditions at New Hampshire's Class I areas have improved since the baseline period. EPA is therefore proposing to find that New Hampshire's RPGs satisfy the applicable requirements and provide for reasonable progress towards achieving natural conditions.

Table 4–19 of New Hampshire's submission shows the URP glidepath value for New Hampshire's Class I areas in 2028 as 17.04 deciviews. New Hampshire's RPG is well below the glidepath value, thus the demonstration requirement under § 51.308(f)(3)(ii)(A) is not triggered. Under § 51.308(f)(3)(ii)(B), a state that contains sources that are reasonably anticipated to contribute to visibility impairment in a Class I area in another state for which a demonstration by the other state is required under 51.308(f)(3)(ii)(B) must demonstrate that there are no additional emission reduction measures that would be reasonable to include in its long-term strategy. New Hampshire's SIP revision included the modeled MANE–VU 2028 visibility projections at nearby Class I areas.[88] While these projections may not represent the final RPGs for these Class I areas, all of the base case 2028 projections for the most impaired days at these areas (Acadia, Brigantine, Campobello, Lye Brook, Moosehorn, Dolly Sods, James River Face, Otter Creek, and Shenandoah) are well below the respective 2028 points on the URPs. Therefore, we propose it is reasonable to assume that the demonstration requirement under § 51.308(f)(3)(ii)(B) as it pertains to these areas will not be triggered for New Hampshire.

G. Monitoring Strategy and Other Implementation Plan Requirements

Section 51.308(f)(6) specifies that each comprehensive revision of a state's regional haze SIP must contain or provide for certain elements, including monitoring strategies, emissions inventories, and any reporting, recordkeeping and other measures needed to assess and report on visibility. A main requirement of this subsection is for states with Class I areas to submit monitoring strategies for measuring, characterizing, and reporting on visibility impairment. Compliance with this requirement may be met through participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) network.

The IMPROVE monitor for the Great Gulf Wilderness (GRGU1) is located at Camp Dodge, in the mid-northern area of Greens Grant in the White Mountain National Forest. The monitor site lies just east and south of where Route 16 crosses the Greens Grant/Martins Location boundary, south of Gorham, New Hampshire, at elevation 454 meters, latitude 44.31°, and longitude of −71.22°. This monitor, which also represents the Presidential Range—Dry River Wilderness, is operated and maintained by the U.S. Forest Service.

Section 51.308(f)(6)(i) requires SIPs to provide for 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. New Hampshire has not received any recommendations or advice from EPA or affected FLM that additional monitoring is required pursuant to 40 CFR 51.308(f)(4). Therefore, New Hampshire has no current plans to alter the current strategy as long as this monitoring continues to be federally supported.

Section 51.308(f)(6)(ii) requires SIPs to provide for 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. New Hampshire relied on the MANE–VU contribution assessment analysis.[89] The analysis included Eulerian (grid-based) source models, Lagrangian (air parcel-based) source dispersion models, as well as a variety of data analysis techniques that include source apportionment models, back trajectory calculations, and the use of monitoring and inventory data.

Section 51.308(f)(6)(iii) does not apply to New Hampshire, as it has a Class I area.

Section 51.308(f)(6)(iv) requires the SIP to provide for the reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state. As noted above, the Great Gulf Wilderness IMPROVE monitor is operated and maintained by the U.S. Forest Service. The monitoring strategy for New Hampshire relies upon the continued availability of the IMPROVE network. The IMPROVE monitor for the Great Gulf Wilderness (indicated as GRGU1 in the IMPROVE monitoring network database) is located at the base of Mt. Washington. New Hampshire supports the continued operation of the IMPROVE network through both state and Federal funding mechanisms.

Section 51.308(f)(6)(v) requires SIPs to provide for a statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment, including emissions for the most recent year for which data are available and estimates of future projected emissions. It also requires a commitment to update the inventory periodically. New Hampshire provides for emissions inventories and estimates for future projected emissions by participating in the MANE–VU RPO and complying with EPA's Air Emissions Reporting Rule (AERR). In 40 CFR part 51, subpart A, the AERR requires states to submit updated emissions inventories for criteria pollutants to EPA's Emissions Inventory System (EIS) every three years. The emission inventory data are used to develop the NEI, which provides for, among other things, a triennial state-wide inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment.

Section 5 of New Hampshire's submission includes tables of NEI data. The source categories of the emissions inventories included are: (1) Point sources, (2) nonpoint sources, (3) non-road mobile sources, and (4) on-road mobile sources. The point source category is further divided into Air Markets Program Data (AMPD) point sources and non-AMPD point sources.[90] New Hamshire included NEI emissions inventories for the following years: 2002 (one of the regional haze program baseline years), 2008, 2011, 2014, and 2017; and for the following pollutants: SO_2, NO_X, PM_{10}, $PM_{2.5}$, VOCs, CO, and NH3. New Hampshire also provided a summary of SO_2 and NOx emissions for AMPD sources for the years of 2016, 2017, 2018, and 2019.

Section 51.308(f)(6)(v) also requires states to include estimates of future projected emissions and include a commitment to update the inventory periodically. New Hampshire relied on the MANE–VU 2028 emissions projections for MANE–VU states. MANE–VU completed two 2028 projected emissions modeling cases—a 2028 base case that considers only on-the-books controls and a 2028 control case that considers implementation of

[88] See Appendix B ''Mid-Atlantic/Northeast U.S. Visibility Data 2004–2019 (2nd RH SIP Metrics.''

[89] See Appendix G for the contribution assessments.

[90] AMPD sources are facilities that participate in EPA's emission trading programs. The majority of AMPD sources are electric generating units (EGUs).

the MANE–VU Asks.[91] New Hampshire's SIP submittal also includes a commitment to update the statewide emissions inventory periodically.

The EPA proposes to find that New Hampshire has met the requirements of 40 CFR 51.308(f)(6) as described above, including through its continued participation in the IMPROVE network and the MANE–VU RPO and its on-going compliance with the AERR, and that no further elements are necessary at this time for New Hampshire to assess and report on visibility pursuant to 40 CFR 51.308(f)(6)(vi).

H. Requirements for Periodic Reports Describing Progress Towards the Reasonable Progress Goals

Section 51.308(f)(5) requires that periodic comprehensive revisions of states' regional haze plans also address the progress report requirements of 40 CFR 51.308(g)(1) through (5). The purpose of these requirements is to evaluate progress towards the applicable RPGs for each Class I area within the state and each Class I area outside the state that may be affected by emissions from within that state. Sections 51.308(g)(1) and (2) apply to all states and require a description of the status of implementation of all measures included in a state's first implementation period regional haze plan and a summary of the emission reductions achieved through implementation of those measures. Section 51.308(g)(3) applies only to states with Class I areas within their borders and requires such states to assess current visibility conditions, changes in visibility relative to baseline (2000–2004) visibility conditions, and changes in visibility conditions relative to the period addressed in the first implementation period progress report. Section 51.308(g)(4) applies to all states and requires an analysis tracking changes in emissions of pollutants contributing to visibility impairment from all sources and sectors since the period addressed by the first implementation period progress report. This provision further specifies the year or years through which the analysis must extend depending on the type of source and the platform through which its emission information is reported. Finally, § 51.308(g)(5), which also applies to all states, requires an assessment of any significant changes in anthropogenic emissions within or outside the state that have occurred since the period addressed by the first implementation period progress report, including whether such changes were anticipated and whether they have limited or impeded expected progress towards reducing emissions and improving visibility.

New Hampshire's submission describes the status of measures of the long-term strategy from the first implementation period. As a member of MANE–VU, New Hampshire considered the MANE–VU Asks and adopted corresponding measures into its long-term strategy for the first implementation period. The MANE–VU Asks were: (1) Timely implementation of Best Available Retrofit Technology (BART) requirements; (2) EGU controls including Controls at 167 Key Sources that most affect MANE–VU Class I areas; (3) Low sulfur fuel oil strategy; and (4) Continued evaluation of other control measures. New Hampshire met all the identified reasonable measures requested during the first implementation period. During the first planning period for regional haze, programs that were put in place focused on reducing sulfur dioxide (SO_2) emissions. The reductions achieved led to vast improvements in visibility at the MANE–VU Federal Class I Areas due to reduced sulfates formed from SO_2 emissions. New Hampshire lists in its submission an expansive list of control measures that help control the emissions of VOCs, NO_X, PM and SO_2 from a wide range of sources.[92] New Hampshire's SIP submission includes emission data demonstrating the reductions achieved throughout the state through implementation of the measures mentioned. The state included periodic emission data that demonstrate a decrease in VOCs, NO_X, PM and SO_2 emissions throughout the state. The measured visibility improvement from emission reductions at the two New Hampshire EGUs that were subjected to BART and other targeted strategies showed drastic emission decreases from 2007–2017 for SO_2, NO_X and particulate matter.[93]

The EPA proposes to find that New Hampshire has met the requirements of 40 CFR 51.308(g)(1) and (2) because its SIP submission describes the measures included in the long-term strategy from the first implementation period, as well as the status of their implementation and the emission reductions achieved through such implementation.

New Hampshire's SIP submission includes the assessments of visibility conditions and changes at the State's class I areas, expressed in terms of 5-year averages, required by section 51.308(f)(3). In particular, New Hampshire's submission reports current (2015–2019) visibility conditions for the most impaired and clearest days of 12.33 and 4.69 deciviews, respectively, indicating that haze index levels have decreased by 9.55 deciviews on the most impaired days and 2.96 deciviews on the clearest days from baseline visibility conditions (2000–2004).[94] The SIP submission also indicates that, since the period addressed in New Hampshire's previous progress report (2009–2013), haze index levels have decreased by 3.07 and 1.18 deciviews on the most impaired and clearest days, respectively. EPA therefore proposes to find that New Hampshire has satisfied the requirements of 40 CFR 51.308(g)(3).

Pursuant to § 51.308(g)(4), New Hampshire provided a summary of emissions of NO_X, SO_2, PM_{10}, $PM_{2.5}$, VOCs, and NH_3 from all sources and activities, including from point, nonpoint, non-road mobile, and on-road mobile sources, for the time period from 2002 to 2017, based on emission inventory information submitted pursuant to the AERR in 40 CFR part 51, subpart A. With respect to sources that report directly to the EPA, New Hampshire also included AMPD data for SO_2 and NO_X emissions for 2016 through 2019.

The reductions achieved by New Hampshire emission control measures are seen in the emissions inventory. Based on New Hampshire's SIP submission, NO_X emissions have continuously declined in New Hampshire from 2002 through 2017, especially in the point, nonroad and onroad mobile sectors. NO_X emissions are expected to continue to decrease as fleet turnover occurs and the older more polluting vehicles and equipment are replaced by newer, cleaner ones. New Hampshire sources that report to the EPA's AMPD showed a decline in NO_X emissions in the period since the last progress report (2,753 tons in 2014 and 1,018 tons in 2019).[95]

Emissions of SO_2 have shown a steady significant decline in New Hampshire over the period 2002 to 2017, particularly in the point, nonroad and onroad mobile sectors. Large decreases

[91] See ''OTC MANE–VU 2011 Based Modeling Platform Support Document October 2018—Final.'' At *https://otcair.org/manevu/document.asp?fview=Reports.*

[92] See Section 5.1 of the NH Regional Haze SIP—Final May 2022.

[93] See Figure 5–1: ''Emissions in SO_2, NO_X and PM from Two New Hampshire EGUs, 2007–2017 (tpy)''in the New Hampshire SIP submission.

[94] See Section 5.3 of the New Hampshire SIP submission.

[95] See Figure 5–4 ''NO_X Emissions in New Hampshire for all Data Categories, 2002–2017 (tpy)'' and Figure 5–7: ''MANE–VU State NO_X Emissions from AMPD, 2016–2019 (tpy)''in the New Hampshire SIP submission.

are attributable to the installation of scrubbers at Merrimack Station, which became operational in late 2011, and to New Hampshire's adoption of the MANE–VU low sulfur fuel strategy.[96] Since some components of the low sulfur fuel strategy have milestones of 2016 and 2018, and as MANE–VU states continue to adopt rules to implement the strategy, additional SO_2 emissions reductions have likely been obtained since 2017 and are expected to continue into the future. Other SO_2 emissions decreases are due to fuel switching due to the availability of less expensive natural gas in recent years, and the reduction of use of coal-fired EGUs at Merrimack and Schiller Station.

New Hampshire's submission analyzes the change in PM_{10} emissions from all NEI data categories point, nonpoint, non-road, and onroad in New Hampshire, noting that PM_{10} emissions have generally remained constant, particularly between the 2002/2008 inventories and the 2011/2017 inventories. The apparent change in point source emissions of PM_{10} is due to a large point source in the State mistakenly reporting its PM_{10} emissions in pounds, rather than tons. The variations in the onroad category are due to changes in emission inventory calculation methodologies, which resulted in higher particulate matter estimates in the other years than in 2002. The large variation in emissions in the nonpoint category is due to changes in calculation methodologies for residential wood burning and fugitive dust categories, which have varied significantly.

New Hampshire also analyzes $PM_{2.5}$ emissions from all NEI data categories for the period from 2002 to 2017, noting that, similar to PM_{10} emissions, they have remained generally constant in New Hampshire. $PM_{2.5}$ emissions show some decrease in the nonroad category for the period from 2002 to 2017 because of Federal new engine standards for nonroad vehicles and equipment. Overall, there is a decrease in onroad emissions due to Federal and State regulations, but the increase from 2002 to 2008 is due to changes in emission inventory calculation methodologies and a model change, as previously explained, which resulted in higher fine particulate matter estimates in the years after 2002. The variation in emissions in the nonpoint category is due to changes in calculation methodologies for residential wood burning and fugitive dust categories, which have varied significantly.

Figure 5–20 of New Hampshire's submission shows VOC emissions from all NEI data categories for the period 2002 to 2017 in New Hampshire. VOC emissions have shown a decline in New Hampshire over the period 2002 to 2017. Much of the decrease in VOC is attributable to Federal and state rules for evaporative sources of VOC emissions such as portable fuel containers; architectural, industrial, and maintenance coatings; consumer products; and solvent degreasing. VOC emissions from non-road and on-road mobile sources are expected to continue to decrease as older, more polluting vehicles are replaced by newer, cleaner ones.

Figure 5–23 of New Hampshire's submission shows ammonia (NH_3) emissions from all NEI data categories for the period 2002 to 2017 and show a general downward trend in New Hampshire. Ammonia decreases were achieved in the onroad sectors due to Federal new engine standards for vehicles and equipment. Point source increases from 2002 to 2008 are due to reporting, grouping and methodology changes, not actual emission increases. Nonpoint increases and decreases from 2002 to 2017 are due to reporting, grouping and methodology changes. For many MANE–VU states, ammonia emissions for 2014 and 2017 are lower than they were for earlier years. Most MANE–VU states saw increases in 2017 relative to 2014; this could likely be the result of estimation methodology changes. Emissions from 2002–2008 are not comparable to post-2008 emissions due to methodology changes.

The EPA is proposing to find that New Hampshire has satisfied the requirements of § 51.308(g)(4) by providing emissions information for NO_X, SO_2, PM_{10}, $PM_{2.5}$, VOCs, and NH_3 broken down by type of source.

The emissions trend data in the SIP submission[97] supports New Hampshire's assessment that no significant increase of haze-causing pollutant emissions has occurred in New Hampshire during the reporting period and that changes in emissions have not limited or impeded progress in reducing pollutant emissions and improving visibility. New Hampshire notes that, both within and outside the State, there has been a shift to cleaner generation of electricity using natural gas in place of fuels such as coal or oil that has contributed to reduced emissions of haze-causing pollutants. The EPA is proposing to find that New Hampshire has met the requirements of § 51.308(g)(5).

I. Requirements for State and Federal Land Manager Coordination

Section 169A(d) of the Clean Air Act requires states to consult with FLMs before holding the public hearing on a proposed regional haze SIP, and to include a summary of the FLMs' conclusions and recommendations in the notice to the public. In addition, section 51.308(i)(2)'s FLM consultation provision requires a state to provide FLMs with an opportunity for consultation that is early enough in the state's policy analyses of its emission reduction obligation so that information and recommendations provided by the FLMs can meaningfully inform the state's decisions on its long-term strategy. If the consultation has taken place at least 120 days before a public hearing or public comment period, the opportunity for consultation will be deemed early enough. Regardless, the opportunity for consultation must be provided at least sixty days before a public hearing or public comment period at the state level. Section 51.308(i)(2) further provides that FLMs must be given an opportunity to discuss their assessment of visibility impairment in any Class I area and their recommendations on the development and implementation of strategies to address visibility impairment. Section 51.308(i)(3) requires states, in developing their implementation plans, to include a description of how they addressed FLMs' comments.

The states in the MANE–VU RPO conducted FLM consultation early in the planning process concurrent with the state-to-state consultation that formed the basis of the RPO's decision making process. As part of the consultation, the FLMs were given the opportunity to review and comment on the technical documents developed by MANE–VU. The FLMs were invited to attend the intra- and inter-RPO consultations calls among states and at least one FLM representative was documented to have attended seven intra-RPO meetings and all inter-RPO meetings. New Hampshire participated in these consultation meetings and calls.[98]

As part of this early engagement with the FLMs, on April 12, 2018, the U.S National Park Service (NPS) sent letters to the MANE–VU states requesting that they consider specific individual

[96] NH SIP Submission at 88 (Figure 5–15); *see also id.* at 71–72.

[97] See Chapter 5 ''Progress Report and Periodic Reports'' in New Hampshire SIP submission.

[98] See Appendix G ''MANE–VU Regional Haze Consultation Report and Consultation Documentation—Final.''

sources in their long-term strategies.[99] NPS used an analysis of emissions divided by distance (Q/d) to estimate the impact of MANE–VU facilities. To select the facilities, NPS first summed 2014 NEI NO_X, PM_{10}, SO_2, and SO_4 emissions and divided by the distance to a specified NPS mandatory Class I Federal area. NPS summed the Q/d values across all MANE–VU states relative to Acadia, Mammoth Cave and Shenandoah National Parks, ranked the Q/d values relative to each Class I area, created a running total, and identified those facilities contributing to 80% of the total impact at each NPS Class I area. NPS merged the resulting lists of facilities and sorted them by their states. NPS suggested that a state consider those facilities comprising 80% of the Q/d total, not to exceed the 25 top ranked facilities. The NPS originally identified five facilities in New Hampshire in this letter.[100] New Hampshire included the NPS initial letter in their proposed SIP. In a subsequent letter dated October 22, 2018, NPS identified four facilities for which more control information was desired. New Hampshire detailed the emission controls and updates to the four facilities to address the NPS's request for more information, as discussed previously.[101]

On June 9, 2021, the NPS Air Resources Division (ARD) and NPS Interior Region 1 staff hosted a consultation meeting with New Hampshire Department of Environmental Services (NHDES) to discuss a draft of the New Hampshire Regional Haze SIP. Representatives from the U.S. Forest Service and U.S. Fish & Wildlife Service also attended the meeting.[102] On June 11, 2021, the NPS sent a summary of this meeting and NPS' comments to New Hampshire via email, stating that the NPS ''commend[s] the state on its level of analysis and commitment to emissions reductions.'' [103] On June 16, 2021, the U.S. Forest Service indicated by letter that it was ''satisfied with the document as provided and offer[ed] no suggestions for change.'' [104] In accordance with CAA § 169A(d) and 40 CFR 51.308(i)(3), New Hampshire included summaries of the consultation and copies of the FLM correspondence in appendices G and W of the SIP submission. New Hampshire also noted that it has responded to FLM feedback on the selection and evaluation of specific sources potentially impacting visibility in Class I areas during development of the SIP submission and, as a result, expanded the number of sources evaluated to ensure a robust analysis and adequate controls to improve visibility.[105]

New Hampshire held two public comment periods and one public hearing related to this Regional Haze SIP Revision. On November 4, 2019, NHDES published a notice in the Manchester, NH, Union Leader announcing a 30-day public comment period providing for submission of written comments and allowing any member of the public the opportunity to request a public hearing on the SIP revision. A second public notice period was conducted starting on December 10, 2021 (and extended on December 27, 2021), with published notices in the Union Leader. A public hearing was held in Room 208C at NHDES Offices in Concord, NH and online via WebEx at 1:30 p.m. on February 23, 2022.

For the reasons stated above, the EPA proposes to find that New Hampshire has satisfied the requirements under CAA section 169A(d) and 40 CFR 51.308(i) regarding consultation with the FLMs on its regional haze SIP for the second implementation period.

New Hampshire's May 5, 2022, SIP submission includes a commitment to revise and submit a subsequent regional haze SIP by July 21, 2033, and every ten years thereafter. The state's commitment includes submitting periodic progress reports in accordance with § 51.308(f) and a commitment to evaluate 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 in accordance with § 51.308(g).[106]

V. Proposed Action

The EPA is proposing to approve New Hampshire's May 5, 2022, supplemented on September 21, 2023, SIP submission as satisfying the regional haze requirements for the second implementation period contained in 40 CFR 51.308(f). Additionally, EPA is proposing to approve the revised state rule Env-A 2300, ''Mitigation of Regional Haze,'' into the SIP.

VI. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference New Hampshire's Env-A 2300 ''Mitigation of Regional Haze,'' which contains updated emissions limits for certain facilities located in the State. The EPA has made, and will continue to make, these documents generally available through *https://www.regulations.gov* and at the EPA Region 1 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VII. Statutory and Executive Order Reviews

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

- Is not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of Section 12(d) of the National

[99] *Id.*

[100] *Id.*

[101] See Appendix W email from NPS to NHDES.

[102] *See* NH SIP Submittal, App. W (Email from H. Salazar, Reg'l Air Res. Coord., NPS, to C. Beahm, Air Res. Div., NHDES (June 11, 2021)).

[103] Id.

[104] *Id.* (Ltr. from D. Ibarguen, Forest Supervisor, White Mtn. Nat'l Forest, to C. Wright, Air Res. Div. Dir., NHDES (June 16, 2021)).

[105] NH SIP Submittal, App. W.

[106] See the preface and Chapter 9 of the ''NH Regional Haze SIP—Final March 2022.''

Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

In addition, this proposed rulemaking action, pertaining to New Hampshire regional haze SIP submission for the second planning period, is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, Feb. 16, 1994) directs Federal agencies to identify and address ''disproportionately high and adverse human health or environmental effects'' of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. EPA defines environmental justice (EJ) as ''the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.'' EPA further defines the term fair treatment to mean that ''no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies.'' The air agency did not evaluate environmental justice considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. EPA did not perform an EJ analysis and did not consider EJ in this action. Consideration of EJ is not required as part of this action, and there is no information in the record inconsistent with the stated goal of E.O. 12898 of achieving environmental justice for people of color, low-income populations, and Indigenous peoples.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides.

Dated: November 13, 2023.

David Cash,

Regional Administrator, EPA Region 1.

[FR Doc. 2023–25336 Filed 11–17–23; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R04–OAR–2023–0097; FRL–11564–03–R4]

Air Plan Approval; Kentucky; Revisions to Jefferson County Emissions Monitoring and Reporting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve changes to the Jefferson County portion of the Kentucky State Implementation Plan (SIP), submitted by the Commonwealth of Kentucky, through the Energy and Environment Cabinet (Cabinet), in a letter dated June 15, 2022. The changes were submitted by the Cabinet on behalf of the Louisville Metro Air Pollution Control District (District) and amend the District's stationary source emissions monitoring and reporting requirements. The EPA is proposing to approve the changes because they are consistent with the Clean Air Act (CAA or Act).

DATES: Comments must be received on or before December 20, 2023.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R04–OAR–2023–0097 at *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. 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 *www.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: Tiereny Bell, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303–8960. The telephone number is (404) 562–9088. Ms. Bell can also be reached via electronic mail at *bell.tiereny@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. Overview

On June 15, 2022,[1] the Commonwealth of Kentucky submitted changes to the Jefferson County portion of the Kentucky SIP for EPA approval.[2] [3] In this rulemaking, EPA is proposing to approve changes to Regulation 1.06, *Stationary Source Self-Monitoring, Emissions Inventory Development, and Reporting,* in the Jefferson County portion of the Kentucky SIP, submitted on June 15, 2022. This regulation provides the District with the authority to require emissions monitoring at stationary sources and requires certain sources to maintain emissions records and to provide annual emissions statements to the District. This regulation does not impose any emissions limits or control requirements on any emissions source.

II. EPA's Analysis of Kentucky's SIP Revision

The June 15, 2022, SIP submission contains a version of Regulation 1.06 adopted by the District on March 16, 2022 (referred to as ''Version 11'' by the District). District Regulation 1.06, *Stationary Source Self-Monitoring,*

[1] On June 15, 2022, Kentucky provided multiple SIP revisions that are not addressed in this rulemaking. One of the June 15, 2022, submittals contains changes to District Regulation 2.04, *Construction or Modification of Major Sources in or Impacting upon Non-Attainment Areas (Emission Offset Requirements)* in the Kentucky SIP. These changes are not addressed in this notice. EPA will act on these changes in a separate rulemaking. Another June 15, 2022, SIP revision contained changes to District Regulation 2.17, *Federally Enforceable District Origin Operating Permits,* in the Kentucky SIP. EPA finalized its approval of changes to Regulation 2.17 on March 1, 2023. *See* 88 FR 12831.

[2] EPA received this submission on June 13, 2022, via a letter dated June 15, 2022. Throughout this notice of proposed rulemaking, this submission will be referred to as the June 15, 2022, submission.

[3] In 2003, the City of Louisville and Jefferson County governments merged, and the ''Jefferson County Air Pollution Control District'' was renamed the ''Louisville Metro Air Pollution Control District.'' However, to be consistent with the terminology used in the subheading in Table 2 of 40 CFR 52.920(c), throughout this notice we refer to the District regulations contained in the Jefferson County portion of the Kentucky SIP as the ''Jefferson County'' regulations.