ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R10–OAR 2024–0545; FRL–11879–01–R10]

Air Plan Approval; ID; Regional Haze 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 Idaho regional haze State Implementation Plan (SIP) revision submitted on August 5, 2022, and supplemented on May 8, 2024. Idaho submitted the SIP revision to address the requirement to make reasonable progress toward the national goal of preventing any future, and remedying any existing, anthropogenic impairment of visibility in certain national parks and wilderness areas.

DATES: Written comments must be received on or before April 23, 2025.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R10–OAR–2024–0545 at *https://www.regulations.gov.* For comments submitted at *regulations.gov,* follow the online instructions for submitting comments. Once submitted, comments may not 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 or other information the disclosure of which 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 confidential business information or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: John Chi, EPA Region 10, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101, at (206) 553–1185 or *chi.john@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, the use of ''we'' and ''our'' means ''the EPA.''

Table of Contents

I. Background and Requirements for Regional Haze Plans

A. Regional Haze Background

In the 1977 Clean Air Act Amendments, Congress created a program[1] to protect visibility in the nation's mandatory class I Federal areas, which include certain national parks and wilderness areas.[2] Congress established 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.'' [3] Congress further directed the EPA to promulgate regulations to assure reasonable progress toward meeting this national goal.[4]

In 1990, Congress added section 169B to the Clean Air Act to further address visibility impairment, specifically, impairment from regional haze. The EPA subsequently promulgated the Regional Haze Rule on July 1, 1999 (64 FR 35714), codified at 40 CFR 51.308.[5] 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.[6]

To address regional haze visibility impairment, the 1999 Regional Haze Rule 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

[1] Clean Air Act section 169A.

[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. Clean Air Act 162(a). There are 156 mandatory class I Federal areas. The list of areas to which the visibility protection program applies is set forth in 40 CFR part 81, subpart D.

[3] Clean Air Act section 169A(a)(1).

[4] Clean Air Act section 169A(a)(4).

[5] 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.

[6] 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 Regional Haze Rule. 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}).

contribute to any impairment of visibility'' in a Class I area to periodically submit SIP revisions to address such impairment.[7] Under the Clean Air Act, each SIP revision must contain ''a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal''.[8] The initial round of SIP revisions 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).[9] States' first regional haze SIPs were due by December 17, 2007,[10] with subsequent SIP revisions containing updated long-term strategies originally due July 31, 2018, and every ten years thereafter.[11] The EPA established in the 1999 Regional Haze Rule 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.[12]

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).

On January 10, 2017, the EPA promulgated revisions to the Regional Haze Rule that apply for the second and subsequent implementation periods (82 FR 3078). 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 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 Regional Haze Rule Revisions) are codified at 40 CFR 51.308(f). Among other changes, the 2017 Regional Haze Rule 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 Federal Land Manager consultation. The specific requirements applicable to second implementation period regional haze SIP revisions are addressed in detail in the following paragraphs.

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),[13] which include representation from State and tribal governments, the EPA, and Federal Land Managers, were developed in the lead-up to the first implementation period to address regional haze. Regional planning organizations evaluate technical information to better understand how emissions 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 Regional Haze Rule.

1. The Western Regional Air Partnership

The Western Regional Air Partnership (WRAP)[14] is one of five regional air quality planning organizations across the United States.[15] The WRAP functions as a voluntary partnership of State, tribal, Federal, and local air agencies whose purpose is to understand current and evolving regional air quality issues in the west. There are 15 member States in the WRAP, including Idaho, in addition to 28 Tribes and 30 Local air agency members.[16] The WRAP Federal partners include the EPA, National Park Service, Fish and Wildlife Service, Forest Service, and Bureau of Land Management.

Based on emissions and monitoring data supplied by its membership, the WRAP produced technical tools to support regional modeling of visibility impacts at Class I areas across the west.[17] The ''WRAP Technical Support System'' consolidated air quality monitoring data, meteorological and receptor modeling data analyses, emissions inventories and projections, and gridded air quality/visibility regional modeling results. The WRAP Technical Support System is accessible by members and allows for the creation of maps, figures, and tables to export and use in developing regional haze SIP revisions, and maintains the original source data for verification and further analysis.

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

Under the Clean Air Act and the EPA's regulations, all 50 States, the District of Columbia, and the United States (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

[7] Clean Air Act section 169A(b)(2). See also 40 CFR 51.308(b), (f) (establishing submission dates for iterative regional haze SIP revisions (64 FR 35714, July 1, 1999, at page 35768). The Regional Haze Rule 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).

[8] Clean Air Act section 169A(b)(2)(B).

[9] Clean Air Act section 169A(b)(2)(A); 40 CFR 51.308(d), (e).

[10] 40 CFR 51.308(b).

[11] 64 FR 35714, July 1, 1999, at page 35768.

[12] 64 FR 35714, July 1, 1999, at page 35721. 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).

[13] 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.

[14] The WRAP website may be found at *https://www.wrapair2.org/*.

[15] *See https://www.epa.gov/visibility/visibility-regional-planning-organizations/* for information about the regional planning organizations, or RPOs, for visibility.

[16] The WRAP membership list may be found at *https://www.wrapair2.org/membership.aspx/*.

[17] Technical information may be found at *https://www.wrapair2.org/RHPWG.aspx/* and in the docket for this action.

visibility impairment in Class I areas.[18] To this end, 40 CFR 51.308(f) lays out the process by which States determine what constitutes their long-term strategies, with the order of the requirements in section 51.308(f)(1) through (3) generally mirroring the order of the steps in the reasonable progress analysis [19] and (f)(4) through (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.[20] For each Class I area within its borders, a State must then calculate the baseline (five-year average period of 2000–2004), current, and natural visibility conditions (*i.e.,* visibility conditions without anthropogenic visibility impairment) for that area, as well as the visibility improvement made to date and the ''uniform rate of progress'' (URP). The URP is 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 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.[21] 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 Clean Air Act section 169A(g)(1) to sources of visibility-impairing pollutants that the State has selected to assess for controls for the second implementation period.[22]

Additionally, as further explained below, the Regional Haze Rule at 40 CFR 51.308(f)(2)(iv) separately provides five ''additional factors'' [23] 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 Clean Air Act. 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 uniform rate of progress 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.[24]

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 section 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 Federal Land Manager consultation that apply to all visibility protection SIPs and SIP revisions.[25]

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 Clean Air Act and the EPA's regulations.[26] Upon EPA approval, a SIP is enforceable by the EPA and the public under the Clean Air Act. If the EPA finds that a State fails to make a required SIP revision, or if the EPA finds that a SIP is incomplete or disapproves the SIP, the EPA must promulgate a Federal implementation plan (FIP) that satisfies the applicable requirements.[27]

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 Regional Haze Rule, the EPA determined that all States contribute to visibility impairment in at least one Class I area 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.'' [28]

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. 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 revision for the second implementation period is providing for reasonable progress towards the national visibility goal, the Regional Haze Rule contains requirements in section 51.308(f)(1) related to tracking visibility improvement over time. The requirements of this section apply only to States having Class I areas within their borders; the required calculations must be made for each such Class I area. The EPA's 2018 Visibility Tracking Guidance [29] provides recommendations to assist States in satisfying their obligations under section 51.308(f)(1); specifically, in developing information on baseline, current, and natural visibility conditions, and in making optional adjustments to the uniform rate of progress to account for the impacts of international anthropogenic emissions and prescribed fires.[30]

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[18] Clean Air Act section 169A(b)(2)(B).

[19] The EPA explained in the 2017 Regional Haze Rule 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).

[20] 40 CFR 51.308(f), (f)(2).

[21] 40 CFR 51.308(f)(1).

[22] 40 CFR 51.308(f)(2).

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

[24] 40 CFR 51.308(f)(2)–(3).

[25] 40 CFR 51.308(i).

[26] See Clean Air Act section 169(b)(2); Clean Air Act section 110(a).

[27] Clean Air Act section 110(c)(1).

[28] 64 FR 35714, July 1, 1999, at pages 35720–35722.

[29] 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://www.epa.gov/sites/default/files/2021-03/documents/tracking.pdf* and in the docket for this action.

[30] 82 FR 3078, January 10, 2017, at pages 3103–05.

The Regional Haze Rule 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 Regional Haze Rule 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).[31] 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).[32] States must also calculate natural visibility conditions for the clearest and most impaired days [33] by estimating the conditions that would exist on those two sets of days absent anthropogenic visibility impairment.[34] 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 uniform rate of progress—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 uniform rate of progress 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. Additionally, in the 2017 Regional Haze Rule Revisions, the EPA provided States the option of proposing to adjust the endpoint of the uniform rate of progress to account for impacts of anthropogenic sources outside the U.S. 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.[35]

The 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 uniform rate of progress. In addition, the 2020 Data Completeness Memo provides recommendations on the data completeness language referenced in section 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 revision is a long-term 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).'' [36] The amount of progress that is ''reasonable progress'' is based on applying the four statutory factors in Clean Air Act 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.[37] 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 82 FR 3078, January 10, 2017, at pages 3092–93. 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.[38]

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, States should 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.[39] A threshold question at this step is which visibility impairing pollutants will be analyzed.

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 revision 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.[40] 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

[31] 40 CFR 51.301. 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.

[32] 40 CFR 51.308(f)(1)(i), (iii).

[33] The Regional Haze Rule 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 Regional Haze Rule Revisions but did not get corrected in the final rule language. This is supported by the preamble text on page 3098 in the document published at 82 FR 3078, January 10, 2017: ''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.''

[34] 40 CFR 51.308(f)(1)(ii).

[35] 82 FR 3078, January 10, 2017, at page 3107, footnote 116.

[36] 40 CFR 51.308(f)(2).

[37] 40 CFR 51.308(f)(2)(i).

[38] 40 CFR 51.308(f)(2).

[39] 40 CFR 51.308(f)(2)(ii).

[40] The Clean Air Act provides that, ''[i]n determining reasonable progress there shall be taken into consideration'' the four statutory factors. Clean Air Act section 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 implementation period.

existing source subject to such requirements.'' [41] 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 [Clean Air Act's] reasonable progress mandate.'' [42] Thus, for each source it has selected for four-factor analysis,[43] a State should consider a ''meaningful set'' of technically feasible control options for reducing emissions of visibility impairing pollutants.[44]

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 Clean Air Act and Regional Haze Rule to reasonably consider visibility benefits as an additional factor alongside the four statutory factors.[45] Ultimately, while States have discretion to reasonably weigh the factors and to determine what level of control is needed, section 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, section 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 section 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.[46] If the outcome of a four-factor analysis is that an emissions reduction measure is necessary to make reasonable progress towards remedying anthropogenic visibility impairment, that measure must be included in the SIP.

As with source selection, the characterization of information on each of the factors is also subject to the documentation requirement in section 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, section 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.[47] That is, a State's decisions about the emission 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 Regional Haze Rule at 40 CFR 51.308(f)(2)(iv) separately provides five ''additional factors'' [48] 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.

Because the air pollution that causes regional haze crosses State boundaries, section 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-regional planning organization consultation and the development of regional emissions strategies; additional consultations between States outside of

[41] Clean Air Act 169A(g)(1).

[42] 82 FR 3078, January 10, 2017, at page 3091.

[43] ''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 Regional Haze Rule 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 3078, January 10, 2017, at page 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 pages 7–8.

[44] 82 FR 3078, January 10, 2017, at page 3088.

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

[46] 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 the EPA for inclusion in their SIPs but are not required to do so. See, *e.g.,* 82 FR 3078, January 10, 2017, at pages 3108–3109, (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).

[47] 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 *National Parks Conservation Association* v. *EPA,* 803 F.3d 151, 165 (3d Cir. 2015); *Alaska Department of Environmental Conservation* v. *EPA,* 540 U.S. 461, 485, 490 (2004).

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

regional planning organization 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.[49] Additionally, the Regional Haze Rule 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.[50] 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.[51] 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 SIP revision. Under all circumstances, a State must document in its SIP revision all substantive consultations with other contributing States.[52]

D. Reasonable Progress Goals

Reasonable progress goals (RPGs) ''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.'' [53] 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.[54] 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.[55] 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. The RPGs also account for the projected impacts of implementing other Clean Air Act 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 Clean Air Act), they cannot be determined before States have conducted their four-factor analyses and determined the control measures that are necessary to make reasonable progress.[56]

For the second implementation period, the RPGs are set for 2028. RPGs are not enforceable targets, 40 CFR 51.308(f)(3)(iii). While States are not legally obligated to achieve the visibility conditions described in their RPGs, section 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 shows 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.[57]

So that RPGs may also serve as a metric for assessing the amount of progress a State is making towards the national visibility goal, the Regional Haze Rule requires States with Class I areas to compare the 2028 RPG for the most impaired days to the corresponding point on the uniform rate of progress 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 uniform rate of progress (*i.e.,* if visibility conditions are improving more slowly than the rate described by the uniform rate of progress), 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.[58] 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 uniform rate of progress 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.''

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.[59] 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.[60] Section 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

[49] 40 CFR 51.308(f)(2)(ii)(A).
[50] 40 CFR 51.308(f)(2)(ii)(B).
[51] 40 CFR 51.308(f)(2)(ii)(C).
[52] 40 CFR 51.308(f)(2)(ii)(C).
[53] 82 FR 3078, January 10, 2017, at page 3091.
[54] 40 CFR 51.308(f)(3)(iii)–(iv).
[55] 40 CFR 51.308(f)(3)(i).
[56] 82 FR 3078, January 10, 2017, at page 3092.
[57] 40 CFR 51.308(f)(1)(i); 82 FR 2078, January 10, 2017, at pages 3097–98.
[58] 40 CFR 51.308(f)(3)(ii).
[59] 40 CFR 51.308(f)(6), (f)(6)(i), (f)(6)(iv).
[60] 40 CFR 51.308(f)(6)(ii), (iii).

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 EPA's evaluation of a SIP revision.

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.[61] A State may note in its regional haze SIP that its compliance with the Air Emissions Reporting Rule 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.

Separate from the requirements related to monitoring for regional haze purposes under 40 CFR 51.308(f)(6), the Regional Haze Rule also contains a requirement at section 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.'' [62] Under this provision, if the EPA or the Federal Land Manager 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.[63] 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.[64]

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, section 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.[65] 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.[66] Since different States submitted their first implementation period progress reports at different times, the starting point for this assessment will vary.

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.[67] 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 Federal Land Manager or Federal Land Managers; pursuant to that consultation, the State must include a summary of the Federal Land Managers' conclusions and recommendations in the notice to the public. Consistent with this statutory requirement, the Regional Haze Rule also requires that States ''provide the [Federal Land Manager] 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 [Federal Land Manager] can meaningfully inform the State's decisions on the long-term strategy.'' [68] Consultation that occurs 120 days prior to any public hearing or public comment opportunity will be deemed ''early enough,'' but the Regional Haze Rule 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 Federal Land Managers 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.[69]

In order for the EPA to evaluate whether Federal Land Manager consultation meeting the requirements of the Regional Haze Rule has occurred, the SIP revision 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 Federal Land Managers.[70] Finally, a SIP revision must provide procedures for continuing consultation between the State and Federal Land Managers 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.[71]

[61] 40 CFR 51.308(f)(6)(vi).

[62] The 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.

[63] 81 FR 26942, May 4, 2016, at page 26950; 82 FR 3078, January 10, 2017, at page 3119.

[64] 40 CFR 51.308(g)(1) and (2).

[65] 40 CFR 51.308(g)(3)(ii)(B).

[66] 40 CFR 51.308(g)(3)(iii)(B), (f)(5).

[67] 40 CFR 51.308(g)(4), (f)(5).

[68] 40 CFR 51.308(i)(2).

[69] *Ibid.*

[70] 40 CFR 51.308(i)(3).

[71] 40 CFR 51.308(i)(4).

III. The EPA's Evaluation of the Idaho Regional Haze SIP Revision for the Second Implementation Period

A. Background on the Idaho First Implementation Period SIP Revision

Idaho submitted its regional haze plan for the first implementation period on October 25, 2010.[72] The Clean Air Act required that first implementation period plans include, among other things, a long-term strategy for making reasonable progress and best available retrofit technology (BART) requirements for certain older facilities, where applicable.[73] The EPA approved Idaho's first implementation period plan in two actions on June 22, 2011 (76 FR 36329), and November 8, 2012 (77 FR 66929). Subsequently, on June 29, 2012, Idaho submitted BART revisions that the EPA approved on April 28, 2014 (79 FR 23273). On June 28, 2016, the State submitted a five-year progress report, approved by the EPA on July 15, 2019 (84 FR 33697).[74] In the action to approve the progress report, the EPA determined that the Idaho regional haze plan for the first implementation period was adequate and required no substantive revision.[75]

B. The Idaho Second Implementation Period SIP Revision and the EPA's Evaluation

On August 5, 2022, Idaho submitted a regional haze plan for the second implementation period.[76] Idaho made the submission available for public comment from June 22, 2022, through July 21, 2022, and held a public hearing on July 21, 2022.[77] The State received and responded to public comments and included the comments and responses in the submission.[78] Later, on September 27, 2024, Idaho submitted an additional action to supplement the August 5, 2022, submission. Idaho made the supplement available for public comment from August 12, 2024, to September 11, 2024, and received no public comments.[79]

The following sections of this preamble describe the Idaho 2022 plan submission and the Idaho 2024 supplemental submission (herein referred to as ''the Idaho submissions'' or ''the submissions'') and detail the EPA's evaluation of the submission against the requirements of the Clean Air Act and Regional Haze Rule. The Idaho submission and the EPA's supporting documentation may be found in the docket for this action.

C. Identification of Class I Areas

Section 169A(b)(2) of the Clean Air Act 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 Regional Haze Rule 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.

1. Idaho Class I Areas

There are five mandatory Class I areas, or portions of such areas, within Idaho.[80] Craters of the Moon National Monument and Preserve, Sawtooth Wilderness Area, and Selway-Bitterroot Wilderness Area lie completely within Idaho State borders. The Hells Canyon Wilderness Area is a shared Class I area with Oregon and Yellowstone National Park is a shared Class I area with Wyoming. In its submissions, Idaho addresses all regional haze requirements in the three Class I areas that lie completely within Idaho.[81] Idaho's submissions also include a long-term strategy that addresses visibility impairment in the Hells Canyon Wilderness and Yellowstone National Park. By agreement with Idaho, Oregon and Wyoming, respectively, address core regional haze requirements for these two Class I areas, including calculations of visibility conditions, long-term strategy, reasonable progress goals, and monitoring.[82] Finally, Idaho's submissions address regional haze visibility impairment in other Class I areas in neighboring States.

a. Craters of the Moon National Monument and Preserve

The Craters of the Moon National Monument and Preserve is made up of 43,243 acres on the Snake River Plain in south-central Idaho.[83] It is managed by the National Park Service and contains more than 25 volcanic cones and 60 distinct lava flows that are part of the Great Rift volcanic zone that continues along the Snake River Plain.[84]

b. Hells Canyon Wilderness Area

The Hells Canyon Wilderness Area, managed by the U.S. Forest Service, is located on the border between Oregon and Idaho. The Snake River divides the wilderness, with 131,133 acres in Oregon, and 83,811 acres in Idaho.[85]

c. Sawtooth Wilderness Area

The Sawtooth Wilderness Area is comprised of 216,383 acres in central Idaho managed by the U.S. Forest Service.[86] The wilderness area includes the Sawtooth Mountains, home to approximately 40 peaks over 10,000 feet.[87]

d. Selway-Bitterroot Wilderness Area

The Selway-Bitterroot Wilderness Area is located in north Idaho and crosses the Idaho-Montana border.[88] The area, managed by the U.S. Forest Service, spans 1,240,700 acres of rough mountainous terrain, dense forests, mountain lakes, and the Selway River.[89]

e. Yellowstone National Park

Yellowstone National Park, managed by the National Park Service, covers 2.2 million acres, primarily in Wyoming.[90] A small portion of the park is located in eastern Idaho.

2. Idaho Visibility Monitors

Haze species are measured and analyzed via the Interagency Monitoring of Protected Visual Environments (IMPROVE) network.[91] Table 1 of this preamble lists the IMPROVE monitors representing visibility at Idaho Class I areas.

[72] 2008 through 2018.

[73] The requirements for regional haze SIPs for the first implementation period are contained in Clean Air Act section 169A(b)(2)(B) and 40 CFR 51.308(d) and (e). See also 40 CFR 51.308(b).

[74] For details, please see the progress report in the EPA's prior action at *https://www.regulations.gov* under docket number EPA–R10–OAR–2017–0571.

[75] 84 FR 33697, July 15, 2019, at page 33698.

[76] 2018 through 2028.

[77] Idaho Regional Haze Plan State Implementation Plan for the 2nd Implementation Period (Idaho 2022 plan submission) at Appendix C. Consultation Dates and Appendix G. Public Comment Period.

[78] *Id.* at Appendix H. DEQ Responses to Public Comments.

[79] See Idaho supplemental submission dated September 27, 2024, at page 36 and Appendix G. Public Comment Period.

[80] See 40 CFR 81.410.

[81] Idaho 2022 plan submission, tables 23–28.

[82] *Id.,* pages 3–4.

[83] *Id.,* page 3.

[84] *Ibid.*

[85] See 40 CFR 81.410.

[86] *Ibid.*

[87] *Ibid.*

[88] *Ibid.*

[89] *Ibid.*

[90] *Ibid.*

[91] IMPROVE website at *http://vista.cira.colostate.edu/Improve.*

TABLE 1—MONITORS REPRESENTING VISIBILITY AT IDAHO CLASS I AREAS [92]

Monitor ID	Sponsor	Class I area	Years operated
CRMO1	National Park Service	Craters of the Moon National Monument and Preserve	2001–present.
HECA1	U.S. Forest Service	Hells Canyon Wilderness Area	2001–present.
SAWT1	U.S. Forest Service	Sawtooth Wilderness Area	2001–present.
SULA1	U.S. Forest Service	Selway-Bitterroot Wilderness Area	2001–present.
YELL2	National Park Service	Yellowstone National Park	1991–present.

In the submissions, Idaho documented that the State had consulted with Montana, Nevada, Oregon, Utah, Washington, and Wyoming on potential interstate visibility impacts to shared Class I areas and Class I areas outside of Idaho.[93] The Idaho Department of Environmental Quality (Idaho DEQ) shared source selection and evaluation data, however, no other State requested Idaho undertake additional four-factor analyses on top of those already conducted by Idaho.[94] Idaho committed to continued consultation with states in the west on interstate visibility contributions.[95]

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 uniform rate of progress. This section also provides the option for States to propose adjustments to the uniform rate of progress line for a Class I area to account for visibility impacts from anthropogenic sources outside the U.S. and/or the impacts from wildland prescribed fires that were conducted for certain, specified objectives.[96]

1. Idaho Visibility Conditions

The Idaho submissions addressed baseline, current and natural visibility conditions and the uniform rate of progress for Craters of the Moon National Monument and Preserve, Sawtooth Wilderness Area, and Selway-Bitterroot Wilderness Area, as required by the 2017 Regional Haze Rule and the EPA's technical guidance on tracking visibility progress.[97] Table 2 of this preamble summarizes visibility progress on the clearest days. Table 3 of this preamble summarizes visibility progress on the most impaired days, including adjustments to each Class I area's uniform rate of progress (URP) and natural conditions endpoint that the EPA modeled to account for certain international anthropogenic emissions and wildland prescribed fires.[98]

TABLE 2—CLEAREST DAYS VISIBILITY CONDITIONS AT IDAHO CLASS I AREAS IN DECIVIEWS [99]

Monitor ID	Class I area	Baseline 2000–2004	Current 2014–2018	Natural 2064	Progress to date [a]	Current minus Natural [b]
CRMO1	Craters of the Moon National Monument and Preserve.	4.31	2.68	1.73	1.63	0.95
SAWT1	Sawtooth Wilderness Area	4.00	2.58	1.51	1.42	1.07
SULA1	Selway-Bitterroot Wilderness Area	2.57	1.60	1.12	0.97	0.48

[a] Progress to date is the difference between the baseline and current conditions. A positive value indicates that visibility has improved.
[b] A positive value indicates that current visibility has not reached natural conditions.

TABLE 3—MOST IMPAIRED DAYS VISIBILITY CONDITIONS AT IDAHO CLASS I AREAS IN DECIVIEWS [100]

Monitor ID	Class I Area	Baseline 2000–2004	Current 2014–2018	Un-adjusted URP 2028	EPA-adjusted URP 2028	Natural 2064	Progress to date	Current minus Natural	EPA-adjusted Natural 2064
CRMO1	Craters of the Moon National Monument and Preserve.	11.91	8.50	9.13	10.17	4.97	3.41	3.53	7.56
SAWT1	Sawtooth Wilderness Area	9.61	8.61	7.64	8.33	4.67	1	3.91	6.41
SULA1	Selway-Bitterroot Wilderness Area.	10.06	8.37	8.23	9.07	5.48	1.69	2.92	7.58

[92] Sources: Idaho 2022 plan submission at page 11 and Federal Land Manager Environmental Database at *https://views.cira.colostate.edu/fed/*.

[93] Idaho 2022 plan submission, pages 86–90.

[94] *Id.,* pages 89–90.

[95] *Id.,* page 96.

[96] 40 CFR 51.308(f)(1)(vi)(B).

[97] EPA Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program, December 2018. Idaho defers to Oregon and Wyoming to provide this information for Hells Canyon Wilderness Area and Yellowstone National Park. See 89 FR 13622, February 23, 2024, at page 13636; 89 FR 95121, December 2, 2024, at page 95125.

[98] Technical Support Document for the EPA's 2028 Updated Regional Haze Modeling, September 19, 2019.

[99] Source: Idaho 2022 plan submission, table 6, page 12.

[100] Sources: Idaho 2022 plan submission, table 4, page 11, and Technical Support Document for the EPA's 2028 Updated Regional Haze Modeling, September 19, 2019.

The data in Tables 2 and 3 of this preamble indicate that current visibility has improved since the baseline period for both the clearest and most impaired days for each Class I area. In addition, Idaho included both the URP and an adjusted URP.

Idaho relied upon the WRAP regional scale modeling using CAMx 2028OTBa2 H–L SA to adjust the URP.[101] The model projected international emissions and prescribed fire contributions, which the WRAP then used to adjust the natural visibility conditions in 2064.[102] The EPA proposes to determine that Idaho used scientifically valid data and methods for estimating the impacts of international emissions and wildland prescribed fire in the three Class I areas.[103] The EPA proposes to find that the Idaho submissions meet the requirements of 40 CFR 51.308(f)(1) to calculate baseline, current, and natural visibility conditions; progress to date; and the uniform rate of progress, including an adjusted URP, for the second implementation period.

E. Long-Term Strategy for Regional Haze

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.[104] As explained in the background discussion in section I. of this preamble, 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.[105] Each state's long-term strategy must include the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress.[106] After considering the four statutory factors, all measures that are determined to be necessary to make reasonable progress must be in the long-term strategy. In developing its long-term strategy, a State must also consider five additional factors.[107] 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.[108]

States may rely on technical information developed by the regional planning organizations 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 section 51.308(f). Where a regional planning organization has performed source selection and/or four-factor analyses (or considered the five additional factors in section 51.308(f)(2)(iv)) for its member States, those States may rely on the regional planning organization's analyses for the purpose of satisfying the requirements of section 51.308(f)(2)(i) so long as the States have a reasonable basis to do so and all State participants in the regional planning organization process have approved the technical analyses.[109] States may also satisfy the requirement of section 51.308(f)(2)(ii) to engage in interstate consultation with other States that have emissions that are reasonably anticipated to contribute to visibility impairment in a given Class I area under the auspices of intra- and inter-regional planning organization engagement.

The following paragraphs describe how the Idaho submissions addressed the requirements of 40 CFR 51.308(f)(2) and summarizes the EPA's evaluation of Idaho's submissions.

1. Pollutants Impacting Visibility at Idaho Class I Areas

Idaho evaluated the haze composition at each of the IMPROVE monitors representing visibility at the Craters of the Moon National Monument and Preserve (CRMO1), Sawtooth Wilderness Area (SAWT1), and Selway-Bitterroot Wilderness Area (SULA1). In the submissions, Idaho illustrated that ammonium nitrate contributed the most to total light extinction at the CRMO1 monitor, followed by ammonium sulfate for each year from 2001 through 2018.[110] Idaho determined that the most impaired days at CRMO1 occurred mainly in the fall and winter and that nitrate and sulfate contributed the most to light extinction on these fall and winter most impaired days.[111]

The Idaho submissions documented that organic carbon contributed the most to total light extinction at the SAWT1 monitor followed by ammonium sulfate for each year from 2001 through 2018.[112] Idaho determined that the anthropogenic contributions of ammonium nitrate were smaller at SAWT1, and that the anthropogenic fractions of organic carbon, elemental carbon and sulfate light extinction were the predominant contributors to annual haze at the monitor.[113]

With respect to the SULA1 monitor, Idaho stated in the submissions that average aerosol light extinction on the most impaired days was largely from organic carbon and ammonium sulfate (47% and 25%, respectively), however lower levels of coarse mass, elemental carbon, ammonium nitrate, and fine soil were also present.[114] Idaho stated that the most impaired days occurred in the spring, summer, and fall.[115] According to Idaho, during these months, organic carbon made up the largest proportion of visibility impairing pollutants.[116]

A review of IMPROVE data confirms the State's analysis of average haze composition at Idaho IMPROVE monitors and supports the State's decision to evaluate NO_X, SO_2, and PM_{10} contributions to haze.[117] Importantly, Idaho evaluated specific pollutant emissions on a unit-by-unit basis for each source as described in the following paragraphs of this preamble.

2. Idaho Source Selection

According to the State's submissions, Idaho used the source selection methodology developed by the WRAP for western States.[118] The WRAP's approach used the Q/d method, where Q is the sum of visibility impairing pollutants (NO_X, SO_2 and PM_{10}), and d is the distance (kilometers) to the boundary of the nearest Class I area. The Idaho DEQ screened sources as described in the following steps:[119]

1. Identify those facilities with total facility-wide emissions of visibility impairing pollutants (NO_X, SO_2 and PM_{10}) greater than 25 tons per year (tpy) based on 2014 National Emissions Inventory (NEI) data.

2. Calculate the distance from each facility identified in Step 1 to the

[101] Idaho 2022 plan submission, page 92.

[102] *Id.*

[103] 40 CFR 51.308(f)(1)(vi)(B).

[104] Clean Air Act section 169A(b)(2)(B).

[105] 40 CFR 51.308(f)(2)(i).

[106] 40 CFR 51.308(f)(2).

[107] 40 CFR 51.308(f)(2)(iv).

[108] 40 CFR 51.308(f)(2)(iii).

[109] 40 CFR 51.308(f)(3)(iii).

[110] Idaho 2022 plan submission, pages 13–16.

[111] *Id.,* page 15.

[112] *Id.,* pages 16–19.

[113] *Ibid.*

[114] *Id.,* pages 19–22.

[115] *Ibid.*

[116] *Id.*

[117] *See* ''Haze Composition at Idaho Class I Areas.xls'' in the docket for this action. Annual average extinction composition for the years 2001 through 2022 for CRMO1, SAWT1, and SULA1. Data pulled from FED AQRV Visibility Tools. Federal Land Manager Environmental Database (FED); CSU and the Cooperative Institute for Research in the Atmosphere (CIRA).

[118] *See* the WRAP Technical Support System (TSS) at *www.wrapair2.org.*

[119] Idaho 2022 plan submission, page 54.

nearest Class I area boundary (including those in other States) in kilometers (km). Facilities greater than 400 km from the nearest Class I area were considered to have minimal impact on visibility and were excluded.

3. Identify those facilities with a Q/d greater than the State-defined threshold. Idaho used a Q/d threshold of 2.0 because the State estimated that the threshold captured 70% to 80% of emissions from Idaho facilities.

4. Refine the Q/d analysis using more recent 2017 NEI data to screen out sources that have a Q/d less than the State-defined threshold for 2017 emissions.

Idaho's initial source screening used 2014 emissions inventory data to identify 14 facilities in Idaho with Q/d greater than 2.0.[120] Refining the Q/d analysis using 2017 emissions inventory data screened out three additional facilities from the original 14 (Idaho Forest Group LLC-Riley Creek-Moyie Springs, Plummer Forest Group, Inc-Post Falls, and Rexburg Facility of Basic American Foods).[121] Idaho also screened out a facility outside of the State's regulatory purview (Boise Airport) and screened out a facility near Sawtooth Wilderness Area (Northwest Pipeline—Mountain Home) because the facility primarily emitted NO_X. Idaho stated this was appropriate because anthropogenic contributions to NO_X at SAWT1 were found to be negligible.[122] This screening process yielded nine Idaho facilities with Q/d greater than 2.0.

Idaho also used the WRAP weighted emissions potential (WEP) to confirm the selected sources.[123] According to Idaho's submissions, the WEP is a screening tool used to identified those sources contributing to visibility impairment in the 2014–2018 period and still operating in 2028 that have the potential to contribute to haze formation at Class I areas.[124] The rank point analysis consists of facility-level 2028 emissions for NO_X or SO_2 sources overlaid with the corresponding extinction-weighted residence time for ammonium nitrate or ammonium sulfate.[125]

Idaho also identified 27 Class I areas in five neighboring states (Montana, Nevada, Oregon, Washington, Wyoming) that could potentially be affected by emissions from sources within Idaho. However, applying the same source screening analysis yielded no additional Idaho facilities beyond the nine already selected for four-factor analysis.[126] Table 4 of this preamble lists the final nine selected sources.

TABLE 4—IDAHO SELECTED SOURCES [127]

Facility	Nearest Class I area	Distance (km)	2017 (tpy)	2017 Q/d
P4 Production LLC (TV Facility) (P4)	Grand Teton National Park	111.9	2,938.4	26.3
Clearwater Paper Corp–Pulp and Paper and Consumer Products (Clearwater Paper).	Hells Canyon Wilderness	70.9	1,554	21.9
The Amalgamated Sugar Company LLC-Twin Falls (TASCO-Twin Falls).	Jarbidge Wilderness	95.6	1,420	14.8
J.R. Simplot Company-Don Siding Pocatello (Simplot)	Craters of the Moon Wilderness.	86.1	876.3	10.2
The Amalgamated Sugar Company LLC-Paul (TASCO-Paul)	Craters of the Moon Wilderness.	78.0	577	7.3
Northwest Pipeline LLC-Soda Springs (NWP)	Grand Teton National Park	122.2	579.8	4.7
ITAFOS Conda LLC (ITAFOS)	Grand Teton National Park	104.0	477.7	4.6
The Amalgamated Sugar Company LLC-Nampa (TASCO-Nampa).	Sawtooth Wilderness	114.6	590.9	5.1
Tamarack Mill, LLC Dba Evergreen Forest and Tamarack Energy Partnership (Tamarack Mills).	Hells Canyon Wilderness	25.5	69.1	2.7

3. Emissions Units and Pollutants

After selecting the nine sources, Idaho used the following steps to identify specific emissions units at each source: (1) Exclude processes or emissions units that emitted less than 20 tons per year of NO_X, SO_2, and PM_{10} combined (based on 2014 and/or 2017 NEI data); (2) Identify those processes and emissions units where the summed emissions make up 70% or more of the total facility-wide emissions; (3) Identify the pollutant(s) of concern for the nearest Class I area for each facility, using the IMPROVE monitoring data and WEP ranking.[128] Table 5 of this preamble shows the emissions units and pollutants Idaho selected for review.

TABLE 5—IDAHO EMISSIONS UNITS AND POLLUTANT SELECTED FOR FOUR-FACTOR ANALYSIS [129]

Facility	Emissions unit	Pollutants
Clearwater Paper	No. 4 Power Boiler	NO_X, SO_2.
Clearwater Paper	No. 4 Recovery Furnace	NO_X, PM_{10}.
Clearwater Paper	No. 5 Recovery Furnace	NO_X, PM_{10}.
ITAFOS	East Sulfuric Acid Plant	SO_2.
NWP-Soda Springs	RICE 4 (TCVA–16)	NO_X.
NWP-Soda Springs	RICE 1–3 (TLA–6 Engines)	NO_X.
P4	Nodulizing Kiln	NO_X, SO_2, PM_{10}.
Simplot	No. 300 Sulfuric Acid Plant	SO_2, PM_{10}.

[120] Idaho 2022 plan submission, page 55. *See* table 22 as updated by Idaho 2024 supplemental submission.

[121] *Id.,* page 55.

[122] *Id.,* page 56. *See* also figure 11.

[123] *Id.,* pages 61–62.

[124] *Id.*

[125] *Id.*

[126] *Id.,* tables 24–28.

[127] Source: table 22 of Idaho 2022 plan submission, as corrected by Idaho 2024 supplemental submission.

[128] Idaho 2022 plan submission, appendix D.

[129] Source: Idaho 2022 plan submission, page 64. See table 31 as corrected by Idaho 2024 supplemental submission.

TABLE 5—IDAHO EMISSIONS UNITS AND POLLUTANT SELECTED FOR FOUR-FACTOR ANALYSIS [129]—Continued

Facility	Emissions unit	Pollutants
Simplot	No. 400 Sulfuric Acid Plant	NO_X, SO_2.
Tamarack Mills	Riley Cogeneration Boiler	NO_X, PM_{10}.
TASCO-Nampa	Riley Boiler	NO_X, SO_2, PM_{10}.
TASCO-Paul	B&W Boiler	NO_X.
TASCO-Paul	Rentech Boiler	NO_X.
TASCO-Paul	North and South Pulp Dryers	NO_X, SO_2, PM_{10}.
TASCO-Twin Falls	Foster Wheeler Boiler	NO_X, SO_2, PM_{10}.
TASCO-Twin Falls	B&W Boiler	NO_X, SO_2, PM_{10}.

Based on a review of the information provided in the submission, we propose to determine that the Idaho source, unit, and pollutant selection methodology used for the regional haze second implementation period satisfies the requirement in 40 CFR 51.308(f)(2)(i) that the State include in its SIP a description of the criteria it used to determine which sources it evaluated.

4. Idaho Control Analyses and Determinations

In developing its regional haze second implementation period plan submission, Idaho established a cost threshold of $6,100 per ton pollutant removed by adjusting the $5,000 per ton BART cost-effectiveness threshold (used during the first implementation period) for inflation.[130] The EPA did not establish a cost-effectiveness threshold for the second implementation period. Rather, the EPA's 2019 Guidance on Regional Haze State Implementation Plans for the Second Implementation Period (EPA 2019 Guidance) clarified that States have the flexibility to decide a reasonable approach to evaluating costs.[131]

Table 6 of this preamble lists the control technologies, fuel specifications, and emission limits that Idaho determined are necessary for reasonable progress in the second implementation period, and the associated permit conditions that make the controls enforceable as a practical matter, including compliance schedules, monitoring, recordkeeping and reporting requirements.

TABLE 6—IDAHO REGIONAL HAZE REQUIREMENTS [132]

Facility	Emissions unit	Requirement	Mechanism
Clearwater Paper	No. 4 Power Boiler	5.4 SO_2 emissions not to exceed 0.80 lb/MMBtu (30-day average). 5.5 NO_X emissions not to exceed 0.2 lb/MMBtu (3-hr rolling average) when burning wood waste/gas and 0.3 lb/MMBtu (3-hr rolling average) when burning wood waste/gas. 5.6 NO_X emissions not to exceed 0.20 lb/MMBtu (3-hr rolling average) when burning gaseous fossil fuel and 0.3 lb/MMBtu (3-hr rolling average) when burning liquid fossil fuel, liquid fossil fuel/wood, or gaseous fossil fuel/wood. 5.7 SO_2 emissions not to exceed 100 tons per any consecutive 12-month period.	Permit T1–2020.0024 issued March 30, 2023; conditions 5.4, 5.5, 5.6, 5.7, 5.10 through 5.15, 26.22, and 26.23.
Clearwater Paper	No. 4 Recovery Furnace.	8.1 PM emissions not to exceed 0.040 gr/dscf at 8% oxygen using ESP.	Permit T1–2020.0024 issued March 30, 2023; conditions 7.1, 7.4, 7.9, 7.10, 8.1, 8.6, 26.22, 26.23, 26.26, 26.27, 26.28, and 26.29.
Clearwater Paper	No. 5 Recovery Furnace.	9.1 PM emissions not to exceed 0.044 gr/dscf at 8% oxygen using ESP. 9.2 PM emissions not to exceed 58 lb/hr or 0.03 gr/dscf. 9.6 NO_X emissions not to exceed 160 lb/hr, 700 tons/year, or 100 ppm on a dry basis at 8% oxygen.	Permit T1–2020.0024 issued November 26, 2021; conditions 7.1, 7.4, 7.9, 7.10, 9.1, 9.2, 9.6, 9.11, 26.22, 26.23, 26.26, 26.27, 26.28, and 26.29.
ITAFOS	East Sulfuric Acid Plant.	5.1 SO_2 emissions not to exceed 258 lb/hr and 735.5 tpy.	Permit T1–2016.0015 issued March 2, 2022; conditions 5.1, 5.4, 5.5, 5.11, 16.22, and 16.23.
NWP-Soda Springs	RICE 1–3 (Clark TLA–6 Engines) RICE 4 (Clark TCVA–16).	Replace the four existing RICE engines with two gas-fired turbines by July 31, 2031.	Compliance Agreement Schedule Case No. E–2023.0011 dated September 1, 2023.
P4	Nodulizing Kiln	PM_{10} emissions not to exceed 30.0 lb/hr SO_2 emissions not to exceed 143 lb/hr	Permit T1–2020.0029 issued December 23, 2021; conditions 4.2, 4.4, 4.5, 4.6, 4.7, 4.19, 4.20, 4.21, 13.22, and 13.33.

[130] Idaho 2022 plan submission, pages 64 and 65.

[131] Guidance on Regional Haze State Implementation Plans for the Second Implementation Period. The EPA Office of Air Quality Planning and Standards, Research Triangle Park (August 20, 2019), page 38 (EPA 2019 Guidance), available in the docket for this action and at *https://www.epa.gov/visibility/guidance-regional-haze-state-implementation-plans-second-implementation-period.*

TABLE 6—IDAHO REGIONAL HAZE REQUIREMENTS [132]—Continued

Facility	Emissions unit	Requirement	Mechanism
P4	Nodulizing Kiln	Conduct NO_X emissions testing and establish NO_X emission limit.	Compliance Agreement Schedule Case No. E–2023.0013 dated November 27, 2023.
P4	Cooler Spray Tower	4.2 PM_{10} emissions not to exceed 27.0 lb/hr 4.2 SO_2 emissions not to exceed 177 lb/hr	Permit T1–2020.0029 issued December 23, 2021; conditions 4.2, 4.4, 4.5, 4.6, 4.7, 4.19, 4.20, 4.21, 13.22, and 13.33.
Simplot	No. 300 Sulfuric Acid Plant.	15.9 PM_{10} emissions not to exceed 11.4 lb/hr based on 24-hour average and 49.8 tpy based on any consecutive 12-month period using mist eliminators and wet scrubbers (Related Consent Agreement in Portneuf Valley PM 10 SIP). 15.10 SO_2 emissions not to exceed 2.5 lb/ton of 100% sulfuric acid produced on a rolling 3-hour average basis, except during periods of startup, shutdown, or malfunction. 15.10 SO_2 emissions not to exceed 1.5 lb/ton 100% sulfuric acid produced on a rolling 365-day average basis including periods of startup, shutdown, or malfunction. 15.11 SO_2 emissions not to exceed 4.0 lb/ton of 100% sulfuric acid produced (Portneuf Valley PM 10 SIP). 15.11 SO_2 emissions not to exceed 170 lb/hr calculated as a 3-hr rolling average and 750 tpy based on any consecutive 12-month period (Portneuf Valley PM 10 SIP). 15.11 SO_2 emissions not to exceed 28 lb/ton of 100% sulfuric acid produced in accordance with IDAPA 58.01.01.846 (Portneuf Valley PM 10 SIP).	Permit T1–2017.0024 issued March 29, 2023; conditions 15.9, 15.10, 15.11, 15.19, 15.20, 15.21, 15.22, 15.25, 15.27, 16.19, 18.22, and 18.23.
Simplot	No. 400 Sulfuric Acid Plant.	16.6 NO_X emissions not to exceed 10.1 lb/hr (24-hour average) (Portneuf Valley PM 10 SIP). 16.6 NO_X emissions not to exceed 42.1 tpy based on any consecutive 12-month period (Portneuf Valley PM 10 SIP). 16.9 SO_2 emissions not to exceed 2.5 lb/ton of 100% sulfuric acid produced on a rolling 3-hour average basis, except during periods of startup, shutdown, or malfunction. 16.9 SO_2 emissions not to exceed 1.6 lb/ton 100% sulfuric acid produced on a rolling 365-day average basis including periods of startup, shutdown, or malfunction. 16.10 SO_2 emissions not to exceed 4 lb/ton of 100% sulfuric acid produced and 999 lb per each running three-hour period (Portneuf Valley PM 10 SIP).	Permit T1–2017.0024 issued March 29, 2023; conditions 16.6, 16.9, 16.10, 16.19, 16.20, 16.21, 16.22, 16.26, 16.27, 18.22, and 18.23. Permit T1–9507–114–1 issued April 5, 2004 (incorporated by reference into the Idaho SIP at 40 CFR 52.670(d)); conditions.
Tamarack Mills	Riley Cogeneration Boiler.	5.2 $PM_{2.5}/PM_{10}$ emissions not to exceed 18.00 lb/hr. 5.2 NO_X emissions not to exceed 22.44 lb/hr 5.3 Particulate matter emissions not to exceed 0.080 gr/dscf at 8% oxygen. 5.5 Fire wood waste exclusively, as defined	Permit T1–2019–0024 issued October 17, 2022; conditions 5.2, 5.3, 5.5, 5.8, 5.17, 10.22, and 10.23.
TASCO-Nampa	Riley Boiler	4.8 Fire exclusively on natural gas and no longer fire coal by July 1, 2027.	Permit P–2018.0011 issued February 15, 2023; condition 4.8.
TASCO-Paul	B&W Boiler	NO_X emissions not to exceed 132.0 tpy Combust natural gas only. Operate up to two of the three boilers simultaneously except during startup and shutdown when the three boilers may be partially operated. Operation of the three boilers shall not exceed 40,000,000 therms (for all boilers combined) for the campaign year as defined.	Permit T1–2019–0020 issued November 5, 2021; conditions 4.4, 4.5, 4.6, 4.7, 4.10, 11.22, and 11.23.

TABLE 6—IDAHO REGIONAL HAZE REQUIREMENTS [132]—Continued

Facility	Emissions unit	Requirement	Mechanism
TASCO-Paul	Rentech Boiler	4.3 NO_X emissions not to exceed 0.10 lb/MMBtu (30-day average). 4.4 NO_X emissions not to exceed 132.0 tpy. 4.5 Combust natural gas only. 4.6 Operate up to two of the three boilers simultaneously except during startup and shutdown when the three boilers may be partially operated. 4.7 Operation of the three boilers shall not exceed 40,000,000 therms (for all boilers combined) for the campaign year as defined. 4.9 Maximum heat input capacity shall not exceed 385 MMBtu/hr.	Permit T1–2019–0020 issued November 5, 2021; conditions 4.3, 4.4, 4.5, 4.6, 4.7, 4.9, 4.10, 4.11, 4.12, 4.15, 4.16, 4.18, 11.22, and 11.23.
TASCO-Twin Falls	Foster Wheeler Boiler	4.9 On and after January 1, 2023, fuel exclusively by natural gas.	Permit T1–2016.0017, issued on January 21, 2022; condition 4.9.
TASCO-Twin Falls	B&W Boiler	5.2 Only combust natural gas as fuel	Permit T1–2016.0017, issued on January 21, 2022; condition 5.2.

The following paragraphs of this preamble describe the Idaho control analyses and determinations and summarize the EPA's review by facility. For the reasons set forth in the following paragraphs, the EPA is proposing to approve Idaho's 2022 and 2024 SIP submissions as meeting the requirement in 40 CFR 51.308(f)(2)(i) that the State submit a long-term strategy that includes the enforceable emissions limitations, compliance schedules, and other measures that are necessary for reasonable progress based on an evaluation of the four statutory factors.

a. Clearwater Paper (Idaho DEQ Facility ID 069–00001)

i. Background

Clearwater Paper is a large kraft pulp mill located in Lewiston, Idaho. The mill converts chipped wood and sawdust into bleached pulp through a series of digestion, washing, screening, delignification, and bleaching operations. In the two recovery furnaces, the bleached pulp is formed, dried, treated, and sized to produce paperboard or consumer products.[133] Both recovery furnaces fire black liquor and natural gas and are equipped with electrostatic precipitators (ESPs) to control particulate matter.[134]

Power for the facility is produced by three boilers that combust natural gas and fuel oil, in addition to a fourth high-pressure, high-temperature boiler that combusts cellulosic biomass (hog fuel, bark, lumber, chips sawdust, sander dust, wood pallets, clean wood), dewatered pulp and paper sludge, natural gas, and fuel oil.[135]

ii. Idaho Control Determination

Clearwater Paper: No. 4 and No. 5 Recovery Furnaces

Idaho conducted a review of NO_X and PM_{10} retrofit control options for the No. 4 and 5 recovery furnaces.

For NO_X, Idaho determined that it would not be technically feasible to retrofit the No. 4 and No. 5 recovery furnaces with low NO_X burners, ultra low NO_X burners (ULNB), flue gas recirculation, overfire air, selective non-catalytic reduction (SNCR), selective catalytic reduction (SCR), or low-temperature oxidation (LoTOx) technologies. Among other reasons, Idaho argued that those technologies have not been utilized on recovery furnaces that burn black liquor solids.[136] The facility stated that a quarternary air system has been implemented at just one similar facility in the U.S., where it was installed to comply with lowest achievable emission rate (LAER) requirements under Clean Air Act title I, part D (with an associated NO_X emissions limit of 85 parts per million by volume, dry (ppmvd) at 8% oxygen).[137] Because the No. 4 recovery furnace was previously found to be emitting NO_X at an even lower rate (75 ppmvd at 8% oxygen), Idaho determined that it was reasonable to conclude that installation of a quaternary air system would not reduce NO_X emissions from the No. 4 recovery furnace.[138]

Furthermore, Idaho stated that the No. 5 recovery furnace is already subject to major source pre-construction permitting limits for NO_X (160 pounds per hour or 700 tons per year or 100 ppm) as set forth in the facility's operating permit and that NO_X emissions have remained constant since 2014.[139] Idaho therefore determined that the NO_X emission limits established through the PSD process constituted existing effective controls for the No. 5 recovery furnace.

For PM_{10}, Idaho stated that the No. 4 and No. 5 recovery furnaces are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills at 40 CFR part 63, subpart MM.[140] The NESHAP requires the use of electrostatic precipitators (ESPs) to comply with Maximum Available Control Technology (MACT) limits of 0.044 and 0.030 grains per dry standard cubic foot (gr/dscf) corrected to 8% oxygen, respectively.[141] Idaho determined that these requirements constituted existing effective controls for PM_{10}.

Clearwater Paper: No. 4 Power Boiler

Idaho noted that the No. 4 power boiler was retrofitted with an overfire air system in 2016 and is currently subject to the NO_X emission limits in the New Source Performance Standards (NSPS) for Fossil-Fuel-Fired Steam

[132] Idaho 2022 plan submission as updated by Idaho 2024 supplemental submission. *See* tables 37a, 37b, 38, 39, 40, 41a, 41b, 42.

[133] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews. Clearwater Paper Corp.—Pulp and Paperboard Division.

[134] Idaho 2022 plan submission, pages 80 and 81.

[135] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews. Clearwater Paper Corp.—Pulp and Paperboard Division.

[136] *Ibid.*

[137] *Ibid.*

[138] *Id.* at page 10.

[139] Idaho 2022 plan submission, table 37; page 81.

[140] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews. Clearwater Paper Corp.—Pulp and Paperboard Division.

[141] *Ibid.*

Generators in 40 CFR part 60, subpart D, specifically 0.20 lb/MMBtu NO_X when firing natural gas and 0.30 lb/MMBtu NO_X when firing wood or fuel oil.[142] Idaho evaluated additional retrofit NO_X and SO_2 controls for the No. 4 power boiler under the four statutory factors.[143] For NO_X, Idaho assessed the feasibility and costs of retrofitting the boiler with additional NO_X controls, including LNB, ULNB, SNCR, SCR, and LoTOx.[144] Idaho determined that ULNB and flue gas recirculation were technologically infeasible. For the remaining, feasible controls, Idaho concluded that the cost to install any one of these systems would exceed the State's established cost-effectiveness threshold.[145]

Thus, the State concluded that the existing overfire air system and current permitted NO_X limits for the No. 4 power boiler were necessary for reasonable progress.

For SO_2, the State identified retrofitting the No. 4 power boiler with a wet scrubber, lime spray dryer and baghouse, circulating dry scrubber, and reducing the sulfur content of the fuel as potential SO_2 controls. Idaho determined that reducing the sulfur content of fuel fired in the No. 4 power boiler was not feasible, most notably because the sulfur content of the hog fuel fired in the boiler is variable and difficult to control.[146] The State determined that retrofitting the No. 4 power boiler with a wet scrubber, lime spray dryer and baghouse, or circulating dry scrubber were each technically feasible SO_2 control options, however, Idaho estimated the cost of compliance for each of these technically feasible SO_2 control options would exceed the State's established cost-effectiveness threshold.[147] Idaho therefore determined that the NSPS requirements for Fossil-Fuel-Fired Steam Generators in 40 CFR part 60, subpart D, specifically, limiting SO_2 emissions to 0.80 lb/MMBtu and particulate matter emissions to 0.10 lb/MMBtu, constituted existing effective controls.[148]

We note that as part of the September 27, 2024, supplement, Idaho obtained and submitted additional information from the facility assessing fuel usage and limits for the No. 4 power boiler.[149] The facility stated that to meet existing permitted NO_X and SO_2 limits, fuel oil is restricted to approximately 4–5% of annual MMBtu consumption. Upon review of the supplemental facility information, Idaho determined that it is not feasible to switch to low-sulfur fuel oil, because the use of fuel oil is limited.[150]

The State also considered the time necessary for installing the retrofit controls, energy and non-air quality environmental impacts of the controls, and remaining useful life of control technologies.[151] Idaho estimated that each of the technologically feasible NO_X and SO_2 controls would take 32 months to implement. Idaho also noted that operation of the NO_X and SO_2 controls would increase energy demand at the facility.[152] Idaho also indicated that a wet scrubber would increase the amount of water used, and LoTOx would increase the amount of nitrates in the facility's wastewater. Regarding remaining useful life of the controls, Idaho indicated the controls would have a lifetime of 20 years.[153]

Idaho submitted the permit conditions that implement the existing NO_X and SO_2 limits along with the associated monitoring, recordkeeping, and reporting requirements and compliance schedule for incorporation by reference into the Idaho SIP at 40 CFR 52.670(d).[154] See Table 6 of this preamble.

iii. EPA Evaluation

Clearwater Paper: No. 4 and No. 5 Recovery Furnaces

For PM_{10}, we concur with Idaho's determination that the existing ESPs and associated emission limits to meet MACT requirements constitute existing effective controls.[155] As stated in the EPA 2019 Guidance on page 24, for a unit that complies with MACT, it is unlikely that an analysis of control measures would conclude that even more stringent control of PM is necessary to make reasonable progress.

For NO_X, the EPA does not agree with the State's finding that selective catalytic reduction (SCR), or low-temperature oxidation (LoTOx) technologies would not be technically feasible because they had not been used on the sources in question. In fact, the EPA has frequently found that controls which have been demonstrated on one type of source are feasible on another, related source.[156] Nevertheless, the EPA agrees with Idaho's ultimate conclusion that additional controls are not necessary in this case because the current NO_X emission rate for the No. 4 recovery furnace (75 ppmvd at 8% oxygen) appears commensurate with LAER for recovery furnaces. Finally, we note that the No. 5 recovery furnace is subject to PSD BACT limits.[157]

Therefore, we agree with Idaho's determination that the existing NO_X controls on the No. 4 and No. 5 recovery furnaces are necessary for reasonable progress. Accordingly, we propose to find that the permit conditions submitted by Idaho for the No. 4 and No. 5 recovery furnaces are sufficient to make the above-described PM_{10} and NO_X requirements enforceable as a practical matter.[158] We propose to approve and incorporate by reference the permit conditions that implement the requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

Clearwater Paper: No. 4 Power Boiler

We have determined that Idaho adequately considered the four statutory factors when determining the NO_X and SO_2 controls necessary for the No. 4 power boiler. Idaho identified and evaluated a reasonable set of potential controls: three SO_2 controls and five NO_X controls, and Idaho adequately estimated the cost-effectiveness of each of the feasible controls, using vendor quotes or the EPA's Control Cost

[142] Idaho 2022 plan submission, page 80.

[143] *Id.,* page 2.

[144] *Id.,* page 3.

[145] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews. Clearwater Paper Corp.—Pulp and Paperboard Division.

[146] *Id.,* page 10.

[147] *Id.,* page 5–6.

[148] Idaho 2022 plan submission, page 80.

[149] Idaho 2022 plan submission, Appendix B. as supplemented by Idaho 2024 supplemental submission, Appendix F. Federal Land Managers Consultation Comments and DEQ Responses (Append), page 35.

[150] *Id.*

[151] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews. Clearwater Paper Corp.—Pulp and Paperboard Division, pages 7–9.

[152] *Id.*

[153] *Id.*

[154] Each control measure necessary for reasonable progress is to be submitted in a form that is enforceable as a practical matter. The practically-enforceable provisions are then incorporated by reference into the CFR to be made enforceable by the EPA and citizens. See 57 FR 13497, April 16, 1992, at page 13567 (explaining principles, including enforceability and accountability, to which SIPs and implementing instruments must adhere to help assure that planned emission reductions will be achieved); and 77 FR 74355, December 14, 2012, at page 74365 (State's SIP must contain monitoring, recordkeeping, and reporting components necessary to make regional haze-related emission limitations enforceable).

[155] EPA 2019 Guidance, pages 23 and 24.

[156] *See* 89 FR 67341, August 20, 2024, at page 67360.

[157] Idaho 2022 plan submission, page 80.

[158] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 1. Clearwater Paper Corp.—Pulp and Paperboard Division Redacted Permits.

Manual to estimate the cost-effectiveness of controls.[159]

After reviewing additional information submitted on fuel usage and associated limits for SO_2, we concur with Idaho's decision that it is not feasible to require the facility to fire lower sulfur fuel oil in the No. 4 power boiler at this time. Information in the September 27, 2024, supplemental submission stated that the No. 4 power boiler fires hog fuel and natural gas primarily, and while being permitted to fire higher sulfur fuel oil, the facility must limit the amount of fuel oil fired due to operational requirements and to ensure compliance with the current 100 ton per year SO_2 emission limit.[160] The oil emissions are limited by the existing NO_X permit limit of 0.3 lb/MMBtu or 842 tpy for oil/wood and the existing SO_2 permit limit of 0.80 lb/MMBtu or 100 tons per any consecutive 12-month period.[161] Additionally, there are several monitoring, recordkeeping, and reporting requirements in the existing permit that will ensure compliance with the existing NO_X and SO_2 emission limits.

The EPA concurs with Idaho's finding that the existing NO_X and SO_2 emission limits established pursuant to the NSPS requirements for Fossil-Fuel-Fired Steam Generators in 40 CFR part 60, subpart D are necessary for reasonable progress. We also find that the submitted permit conditions for the Clearwater Paper No. 4 Power Boiler are sufficient to make the existing NO_X and SO_2 requirements enforceable as a practical matter. We propose to approve and incorporate by reference the permit conditions that implement the existing requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

b. ITAFOS (Idaho DEQ Facility ID 029–00003)

i. Background

ITAFOS Conda LLC produces fertilizer in Soda Springs, Idaho. The East Sulfuric Acid Plant is a sulfur burning, dual-contact, dual-absorption plant that produces sulfuric acid and steam for use in other facility processes.[162] The plant combusts elemental sulfur in air to produce sulfur dioxide which is then passed through a series of four catalyst beds to convert the sulfur dioxide into sulfur trioxide. The primary pollutant emitted from this process is SO_2.[163] The gas exiting the plant stack is continuously monitored for SO_2.[164]

ii. Idaho Control Determination

ITAFOS: East Sulfuric Acid Plant

Idaho evaluated retrofit SO_2 controls for the East Sulfuric Acid Plant using the four statutory factors.[165] In its initial 2022 submission, Idaho submitted evaluations of five retrofit SO_2 controls: wet flue gas desulfurization (WFGD), hydrogen peroxide scrubber, dry sorbent injection (DSI), spray dry absorber (SDA), and circulating dry scrubber (CDS). Idaho's 2022 submission includes an evaluation of the technological feasibility of the controls, cost-effectiveness of the controls, time necessary for compliance, energy and non-air quality environmental impacts, and remaining useful life of the retrofit controls.[166] Idaho determined that SDA and CDS were not technologically feasible because the temperature of the exhaust gas in the East Sulfuric Acid Plant is too low for the controls to effectively remove SO_2.[167]

In its 2022 submission, Idaho determined that WFGD, hydrogen peroxide scrubbers, and DSI were technically feasible options for SO_2 retrofit controls.[168] Based on information obtained from the company, Idaho calculated the cost-effectiveness of the three technologically feasible controls. According to Idaho, WFGD was cost effective at $4,100 per ton, hydrogen peroxide scrubbers at $4,777 per ton, and DSI at $4,121 per ton.[169]

Idaho updated its evaluations of the three retrofit controls in its September 27, 2024, supplemental submission.[170] Idaho submitted additional information obtained from the facility that impacted the technologically feasibility and cost of certain retrofit controls. For DSI, Idaho determined that the following factors rendered it technologically infeasible: (1) physical constraints that would impact the ability to install add-on DSI control equipment in the immediate vicinity to the East Sulfuric Acid Plant stack; (2) concerns about how the sorbent used in the control equipment could impact the existing chemical process; and (3) added costs that Idaho did not consider in its 2022 submission, including ancillary equipment needed to support WFGD control technology.[171]

The revised cost estimates found that WFGD retrofit technology would cost $6,270 per ton, hydrogen peroxide scrubbers would cost $7,120 per ton, and DSI would cost $6,210 per ton.[172] All of these estimates were above the State-established cost-effectiveness threshold. Idaho also included an additional updated cost calculation for WFGD that further considered site-specific considerations.[173] According to this update, WFGD had a cost-effectiveness of $7,976.[174] Idaho ultimately determined that it would not require SO_2 retrofit control technology to be installed and that the inherent plant design (dual absorption contact process, vertical tube mist eliminator, and cesium catalyst in the fourth bed of the converter) and compliance with the NSPS standard for sulfur dioxide and acid mist (40 CFR part 60, subpart H) were necessary for reasonable progress.[175] Specifically, the current operating permit requires, among other things, that the owner or operator shall not cause to be discharged into the atmosphere from the East Sulfuric Acid Plant any gases which contain sulfur dioxide in excess of 2 kg per metric ton of acid produced (4 pounds per ton), the production being expressed as 100% sulfuric acid, in accordance with 40 CFR 60.82(a) (condition 5.7).[176]

As part of the Idaho 2024 supplemental submission, Idaho submitted the permit conditions that implement the existing SO_2 requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedule for incorporation by reference into the Idaho SIP at 40 CFR 52.670(d).[177]

[159] Idaho 2024 supplemental submission, appendix H, DEQ Responses to Public Comments (Replace), page 41.

[160] Idaho 2024 supplemental submission, appendix B, Clearwater power boiler fuel oil analysis.

[161] *Ibid.*

[162] Idaho 2022 plan submission, appendix B, ITAFOS Four-Factor Analysis Review, page 1.

[163] *Id.*

[164] *Id.,* pages 1 and 2.

[165] *Id.,* page 2.

[166] *Id.,* appendix B, ITAFOS Four-Factor Analysis Review, pages 3–6.

[167] *Id,* page 3.

[168] *Id.,* page 3. *See* table 2.

[169] *Id.,* pages 5 and 6.

[170] Idaho 2024 supplemental submission, appendix B Four Factor Analysis Reviews (Append).

[171] *Ibid.*

[172] *Id.,* pages 5 and 6.

[173] *Id.,* pages 7–8.

[174] *Id.,* page 10.

[175] *Ibid.*

[176] *Ibid.*

[177] Each control measure necessary for reasonable progress is to be submitted in a form that is enforceable as a practical matter. The practically enforceable provisions are then incorporated by reference into the CFR to be made enforceable by the EPA and citizens. See 57 FR 13497, April 16, 1992, at page 13567 (explaining principles, including enforceability and accountability, to which SIPs and implementing instruments must adhere to help assure that planned emission reductions will be achieved); and 77 FR 74355, December 14, 2012, at page 74365 (State's SIP must

Continued

iii. EPA Evaluation

ITAFOS: East Sulfuric Acid Plant

The EPA reviewed Idaho's evaluation of SO_2 controls at the ITAFOS East Sulfuric Acid Plant in the states 2022 and 2024 submissions and has determined that the State selected potential retrofit controls, evaluated the technological and economic feasibility of the retrofit controls, and adequately considered each of the statutory factors when determining the controls necessary for reasonable progress.[178]

Regarding technological feasibility, Idaho provided a valid basis to determine CDS and ammonia packed-bed scrubber were not feasible. For DSI and WFGD, the EPA does not agree that the factors Idaho cites render these options technologically infeasible. DSI and WFGD are common retrofit SO_2 controls that have proven effective in multiple applications. The need to construct baghouses, absorbing towers, and extended ductwork is not uncommon. These are factors the vendor should take into consideration in designing the system for a particular application. The EPA does recognize, however, that these same factors necessarily impact the cost of the controls and may impact the control efficiency.

With respect to cost calculations, the EPA recommended in the EPA 2019 Guidance that States follow the EPA's Control Cost Manual recommendations to ensure consistent cost calculations across controls and sources.[179] The EPA also recommended that States explain any deviations or alternative approaches.[180] Finally, the Control Cost Manual provides for generic cost estimates using a consistent methodology, but recommends States obtain facility-specific vendor cost quotes when practical.[181]

In evaluating the cost of WFGD, a hydrogen peroxide scrubber, and DSI, Idaho obtained cost information from equipment vendors.[182] Idaho conducted subsequent evaluations of its initial cost estimates to ensure the cost estimates took into consideration all the ancillary equipment necessary and site specific complexities. Idaho adequately explained its cost calculation methodology, its use of the Control Cost Manual, and its rationale for adjusting initial vendor estimates based on site-specific information. Therefore, based on the State's consideration of the four statutory factors, we agree with Idaho's determinations that additional SO_2 controls on the East Sulfuric Acid Plant are not necessary for reasonable progress.

We propose to approve and incorporate by reference the permit conditions that implement the existing SO_2 requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

c. NWP–Soda Springs (Idaho DEQ Facility ID 007–00008)

i. Background

Northwest Pipeline—Soda Springs (NWP) is a natural gas compressor station located near Soda Springs, Idaho. The compressor station operates remotely and is used to compress and transmit natural gas along the transmission pipeline.[183] The facility has four natural gas-fired lean-burn reciprocating internal-combustion engines (RICE) (three TLA–6 IC engines and one TCVA–16 IC engine) that utilize air/fuel ratio controls and ignition timing delay to control NO_X emissions.[184]

ii. Idaho Control Determination

NWP—Soda Springs: RICE Engines

Idaho evaluated the RICE engines for NO_X controls.[185] The facility identified seven available retrofit NO_X control technologies for the four RICE engines: air/fuel ratio controls, ignition timing delay, SCR, SNCR, NSCR, electrification, and low emission combustion retrofit (LEC).[186] Upon review, the facility concluded that LEC was the only technically feasible retrofit technology available and developed cost estimates.[187] Idaho estimated that the LEC retrofit would reduce NO_X emissions by 87%.[188] The Idaho DEQ reviewed the facility's cost estimates for LEC, adjusted certain aspects, including the interest rate used and equipment life, and concluded such a retrofit would cost $10,656 per ton removed for the TCVA–16 IC engine and $24,874 per ton removed for the TLA–6 IC engines, exceeding the State-established cost-effectiveness threshold.[189]

Idaho also evaluated the time necessary for compliance, the energy and non-air quality environmental impacts, and remaining useful life of an LEC retrofit.[190] Idaho estimated that such a retrofit would take 12 to 18 months to design and install. Idaho also indicated that the LEC retrofit would increase electricity consumption. Idaho estimated that the remaining lives of the engines were 20 years.

Based on its review of the four factors, Idaho determined that the LEC retrofit was not cost-effective. However, after the initial 2022 submission, Idaho entered into a compliance agreement schedule with the facility to replace the four RICE engines with two gas-fired turbines by July of 2031.[191] All four RICE engines will be removed and replaced with two gas-fired turbines, specifically a Solar Centaur 40–4700S 15 ppm NO_X unit and a Solar Taurus 70–10802S 9 ppm NO_X unit.[192] Idaho determined that the replacements would achieve a 98% reduction in NO_X—based on potential to emit.[193]

Idaho determined the engine replacements were necessary for reasonable progress and as part of the September 27, 2024, supplemental submission, Idaho included the compliance agreement schedule for incorporation by reference into the Idaho SIP at 40 CFR 52.670(d).[194] See Table 6 of this preamble for details.

iii. EPA Evaluation

The EPA concurs that Idaho adequately considered the four statutory

contain monitoring, recordkeeping, and reporting components necessary to make regional haze-related emission limitations enforceable).

[178] EPA 2019 Guidance, page 37 (''We anticipate that the outcome of the decision-making process by a state regarding a control measure may most often depend on how the state assesses the balance between the cost of compliance and the visibility benefits, with the other three statutory factors either being subsumed into the cost of compliance or not being major considerations.'').

[179] EPA 2019 Guidance, page 32.

[180] *Id.*

[181] *Id.*

[182] Idaho 2024 supplemental submission, appendix B Four Factor Analysis and Review (Append), page 5–10.

[183] Idaho 2022 plan submission, page 66.

[184] *Ibid.*

[185] Idaho 2022 plan submission, appendix B, Four-Factor Analyses Reviews, 4 Northwest Pipeline.

[186] *Ibid.*

[187] *Ibid.*

[188] *Ibid.*

[189] *Ibid.*

[190] *Ibid.*

[191] Idaho 2024 supplemental submission, appendix J. Redacted Permits and Attachments for Regional Haze (New), Northwest Pipeline, LLC, CAS dated September 1, 2023.

[192] *Ibid.*

[193] Idaho 2024 supplemental submission, page 10. Idaho estimates the total reduction of NO_X PTE upon completion of the equipment upgrade project will be 1687.17 tpy.

[194] Each control measure necessary for reasonable progress is to be submitted in a form that is enforceable as a practical matter. The practically enforceable provisions are then incorporated by reference into the CFR to be made enforceable by the EPA and citizens. See 57 FR 13497, April 16, 1992, at page 13567 (explaining principles, including enforceability and accountability, to which SIPs and implementing instruments must adhere to help assure that planned emission reductions will be achieved); and 77 FR 74355, December 14, 2012, at page 74365 (State's SIP must contain monitoring, recordkeeping, and reporting components necessary to make regional haze-related emission limitations enforceable).

factors in determining the control necessary for reasonable progress at the NWP-Soda Springs facility. Accordingly, the EPA concurs with Idaho's determination that the requirement to remove the four RICE engines and replace them with two gas-fired turbines by July 31, 2031, is necessary for reasonable progress.

We propose to approve and incorporate by reference the submitted compliance agreement schedule specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

d. P4 Productions LLC (P4) (Idaho DEQ Facility ID 029–00001)

i. Background

P4 Production LLC (P4) owns and operates an elemental phosphorus manufacturing facility located in Soda Springs, Idaho, where phosphate ore is nodulized in a rotary kiln.[195] Emissions from the nodulizing kiln are controlled by a dust knockout chamber, spray tower, four parallel cyclonic separator pairs, four parallel Hydro-Sonic scrubbers and demisters, and a lime concentrated dual alkali SO_2 scrubbing system.[196]

ii. Idaho Control Determination

P4: Nodulizing Kiln

Idaho selected the nodulizing kiln for four-factor analysis for NO_X, PM_{10}, and SO_2.

For NO_X, the facility identified the following potential retrofit technologies: good combustion practices, low NO_X burners, SCR, and SNCR.[197] However, all were eliminated by the facility as technically infeasible. P4's primary rationale was the temperature demands for sintering phosphate ore are inconsistent with the temperature needs for the controls and that high particulate loading would fowl the catalyst.[198]

Idaho concurred that no technically feasible control technologies were available. The nodulizing kiln is not subject to any existing NO_X controls or limits. Thus, Idaho did not determine that existing NO_X controls are necessary for reasonable progress. However, to establish a NO_X limit for the nodulizing kiln, the Idaho DEQ entered into a compliance agreement schedule (CAS) with the facility to establish a NO_X emission limit for the nodulizing kiln.[199] The CAS requires the facility to submit a performance test protocol for approval by the Idaho DEQ, conduct testing over 12 months, submit a NO_X emissions test report for approval by the Idaho DEQ, and submit a permit application to include a new NO_X emission limit.[200]

For PM_{10}, the facility reviewed four retrofit control technologies: good combustion practices, ESP, fabric filters, and wet scrubbers. Of these alternatives, wet scrubbers and wet ESPs were identified as technically feasible.[201] P4 Production already employs a Venturi wet scrubber system to control PM_{10} emissions from the nodulizing kiln.[202] Idaho estimated that the existing wet scrubber system achieves 95% PM_{10} control and concluded that it is the most effective control for PM_{10}.[203] Idaho determined that the current Venturi wet scrubber system constituted existing effective controls for the nodulizing kiln. In the 2024 submission, Idaho included the permit conditions establishing PM_{10} emissions limits reflecting operation of the Venturi wet scrubber system.[204]

For SO_2, the facility currently employs a lime concentrate dual alkali (LCDA) system that achieves 97% SO_2 emissions reductions.[205] Idaho identified process controls and flue gas desulfurization (FGD) as potential retrofit controls, however the Idaho ultimately determined these were either technically infeasible or would not achieve greater emissions reductions than the existing LCDA system. Thus, Idaho determined that the existing LCDA system constituted existing effective controls for SO_2. In the 2024 submission, Idaho included permit conditions establishing SO_2 emissions limits reflecting operation of the LCDA system.[206]

iii. EPA Evaluation

P4: Nodulizing Kiln

Idaho adequately considered the four statutory factors in determining the controls necessary for reasonable progress at P4 and adequately determined that there are no additional NO_X controls that are feasible. Given that there is no current limit on NO_X emissions from the nodulizing kiln, the EPA agrees that existing NO_X controls are not necessary for reasonable progress. The CAS will assist Idaho is establishing a NO_X emissions limit and thus: (1) help prevent future visibility impairment; and (2) assist the State in future regional haze planning efforts. The CAS includes a detailed timeline for testing, developing, and implementing a NO_X emission limit along with agreed upon methods, with associated monitoring and recordkeeping requirements. Therefore, the EPA is proposing to approve the CAS and incorporate it into Idaho's SIP as a SIP strengthening measure.

The EPA concurs with Idaho's determination that no new SO_2 controls are reasonable and the current LCDA system and associated SO_2 emission limit (143 lb/hr) are necessary for reasonable progress. The facility underwent a BACT review under PSD in 2009 for SO_2 and, consistent with the EPA 2019 Guidance, the EPA agrees that additional control technology review under the four regional haze factors is unlikely to find feasible, cost-effective controls. [207] Idaho's submissions indicate that the existing system is the best SO_2 control for the kiln.

For PM_{10}, the EPA concurs with Idaho's finding that the existing Venturi scrubbing system and associated PM_{10} emission limit (30.0 lb/hr) constitute existing effective controls that are necessary for reasonable progress. Idaho's submission indicates that this system achieves at least 95% PM_{10} emissions reductions.

We propose to find that the submitted permit conditions for the existing PM_{10} and SO_2 controls are sufficient to make the existing requirements enforceable as a practical matter. We propose to approve and incorporate by reference the CAS and permit conditions specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

e. Simplot (Idaho DEQ Facility ID 077–00006)

i. Background

The J.R. Simplot Company owns and operates a phosphate fertilizer

[195] Idaho 2022 plan submission, page 70.

[196] *Id.,* appendix B. Four-Factor Analyses and Reviews, P4 Production LLC.

[197] *Ibid.*

[198] *Ibid.*

[199] Idaho 2024 supplemental submission, page 11–12.

[200] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 5. P4 Production LLC Redacted Permit and Compliance Agreement Schedule.

[201] Idaho 2022 plan submission, appendix B, Four-Factor Analyses and Reviews, P4 Production LLC.

[202] The kiln also include a dust knockout chamber, a spray tower, four parallel Hydro-Sonic systems, eight parallel cyclonic separator, and four mist eliminators that each provide PM_{10} control.

[203] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews, P4 Production LLC.

[204] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 6. P4 Production LLC Redacted Permit.

[205] *Id.*

[206] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 6. P4 Production LLC Redacted Permit.

[207] EPA 2019 Guidance, page 23. Idaho 2022 plan submission, Appendix B. P4 Production LLC.

manufacturing plant, in Pocatello, Idaho (the Don Siding Plant). Elemental sulfur is brought to the plant, processed into sulfur trioxide, then passed through an absorber containing 93% sulfuric acid to allow absorption of sulfur trioxide to form more concentrated sulfuric acid.[208] This process is called ''single contact'' and is employed by the No. 300 Sulfuric Acid Plant at the Don Siding Plant. The No. 400 Sulfuric Acid Plant uses an additional converter to oxidize SO_2 to sulfur trioxide which, passes through a final absorber, called a ''double contact'' process.[209]

The No. 300 Sulfuric Acid Plant includes a DynaWave reverse-jet scrubber and an Ammsox scrubber, in series, to reduce SO_2 emissions and mist eliminators are installed on the Ammsox scrubber to reduce potential PM_{10} emissions.[210] The double-contact process used by the No. 400 sulfuric acid plant is more efficient at collecting SO_2 (as sulfuric acid) than the single contact process, and, as a result, no additional controls are installed on the No. 400 Sulfuric Acid Plant.[211]

ii. Idaho Control Determination

Idaho selected the No. 300 and No. 400 Sulfuric Acid Plants for four-factor analysis, specifically, to evaluate PM_{10} and SO_2 controls for the No. 300 Sulfuric Acid Plant and NO_X and SO_2 controls for the No. 400 Sulfuric Acid Plant. Idaho determined that there were existing effective SO_2 controls on both plants and therefore only reviewed PM_{10} controls for the No. 300 Sulfuric Acid Plant and NO_X controls for the No. 400 Sulfuric Acid Plant. Specifically, the plants are already subject to BACT-level SO_2 limits as established by Federal Consent Decree on December 3, 2015.[212] The SO_2 requirements are listed in Table 6 of this preamble.

The Federal Consent Decree establishes SO_2 limits for both the No. 300 and No. 400 Sulfuric Acid Plants to resolve differences surrounding PSD applicability.[213] Idaho determined that these Consent Decree limits constitute existing effective controls for SO_2 for both plants.[214] The Idaho DEQ incorporated these Consent Decree limits[215] and associated monitoring, recordkeeping, and reporting requirements into the facility's operating permit and into Idaho's SIP at 40 CFR 51.670(d). As part of its 2024 supplemental submission, Idaho submitted additional permit conditions limiting the SO_2 emissions from the No. 300 and No. 400 Sulfuric Acid Plants.

Simplot: No. 300 Sulfuric Acid Plant

For PM_{10}, the facility identified five control technologies, three of which were found to be technically feasible: mist eliminators, wet ESP, and wet scrubbers.[216] The facility already employs mist eliminators and a wet scrubber. Idaho determined that fabric filters were infeasible because particulate matter emissions from the plant are in liquid form and fabric filters are designed to remove particulate matter from a gas stream. Idaho also determined that cyclones were infeasible because they are designed to collect coarse-to-medium-sized particulate matter from gas streams, and particulate emissions from the plant are primarily less than 10 micrometers in diameter. Idaho evaluated the cost-effectiveness of the remaining control: wet ESP. Simplot provided Idaho with a vendor quote to determine the capital cost of the wet ESP as well as site-specific information bearing on the difficulty of retrofitting the No. 300 Sulfuric Acid Plant.[217] Based on this information, Idaho determined that installing a wet ESP would cost $39,721 per ton PM_{10} removed, exceeding the State-established cost-effectiveness threshold.[218] Idaho also considered the time to install the wet ESP, the energy and non-air quality environmental impacts, and remaining useful life of the wet ESP.[219] Based on consideration of the four statutory factors, Idaho determined that installing a wet ESP on the No. 300 Sulfuric Acid Plant was not necessary for reasonable progress. Therefore, Idaho determined that the existing mist eliminators and wet scrubbers were necessary for reasonable progress. The plant is already subject to a PM_{10} emissions limit of 11.4 lbs/hr.[220]

Simplot: No. 400 Sulfuric Acid Plant

According to Idaho's 2022 submission, the NO_X emission from sulfuric acid plants is intrinsically limited because the flame temperature of sulfur is too low to thermally create NO_X.[221] According to the 2022 submission, the No. 400 Sulfuric Acid Plant emits 10 ppmv NO_X, dry basis at 3 percent oxygen. Nevertheless, Idaho requested Simplot evaluate additional NO_X controls. The facility identified six technologies for the control of NO_X at the No. 400 Sulfuric Acid Plant: flue gas recirculation (FGR), low NO_X burners (LNBs), ultra-low NO_X burners (ULNBs), SCR, SNCR, and SNCR.[222] Based on information provided by Simplot, Idaho determined that each of these retrofit controls were technically infeasible. The primary reasons identified in Idaho's technological infeasibility determinations were that the exhaust gas temperature is too low for NO_X catalysts to function and that LNB technology requires low excess air to work.[223]

The facility proposed to retain the current design and operation of the No. 400 Sulfuric Acid Plant, stating that the most recent NO_X stack test yielded a result of 10 ppmv, dry basis at 3 percent oxygen, which it found to be comparable to the NO_X concentration in the exhaust of natural gas-fired combustion unit equipped with LNBs or ULNBs.[224]

iii. EPA Evaluation

The EPA concurs with Idaho's determination that the SO_2 limits for the No. 300 and No. 400 Sulfuric Acid Plants are existing effective controls. In the EPA 2019 Guidance, the EPA acknowledged that a control technology review under the four regional haze factors was unlikely to find feasible, cost-effective controls for sources that recently went through PSD BACT.[225] In this instance, both plants are subject to 2015 BACT limits imposed through a Federal Consent Decree with the EPA. Consistent with the EPA 2019 Guidance, and based on the submitted information, the EPA agrees that additional control technology review under the four

[208] Idaho 2022 plan submission, Appendix B. J.R. Simplot Company-Don Siding.

[209] *Ibid.*

[210] *Ibid.*

[211] *Ibid.*

[212] *Ibid.*

[213] See *https://www.epa.gov/enforcement/consent-decree-j-r-simplot-company/.*

[214] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze, 3. J.R. Simplot Company-Don Siding Plant Redacts Permit.

[215] For the No. 300 Sulfuric Acid Plant: SO_2 emissions not to exceed 2.5 lb/ton of 100% sulfuric acid produced on a rolling 3-hour average basis, except during periods of startup, shutdown, or malfunction; and SO_2 emissions not to exceed 1.5 lb/ton 100% sulfuric acid produced on a rolling 365-day average basis including periods of startup, shutdown, or malfunction. For the No. 400 Sulfuric Acid Plant: SO_2 emissions not to exceed 2.5 lb/ton of 100% sulfuric acid produced on a rolling 3-hour average basis, except during periods of startup, shutdown, or malfunction; and SO_2 emissions not to exceed 1.6 lb/ton 100% sulfuric acid produced on a rolling 365-day average basis including periods of startup, shutdown, or malfunction.

[216] *Ibid.*

[217] *Ibid.*

[218] *Ibid.*

[219] *Ibid.*

[220] 40 CFR 52.670(d); *See* Operating Permit T1–2017–0024, condition 15.9.

[221] Idaho 2022 plan submission, Appendix B. J.R. Simplot Company-Don Siding.

[222] *Ibid.*

[223] *Ibid.*

[224] *Ibid.*

[225] 2019 EPA Guidance, pages 22—23.

regional haze factors is unlikely to find feasible, cost-effective controls.[226]

For PM_{10} emissions, we concur with Idaho's determination that the existing controls on the No. 300 Sulfuric Acid Plant are necessary for reasonable progress and no additional controls are necessary. Idaho considered the four statutory factors in making its determination. Idaho's rationale for dismissing the fabric filter and cyclone as technologically infeasible are sound. The EPA also agrees with Idaho's determination that existing PM_{10} measures are necessary for reasonable progress for the regional haze second implementation period. The No. 300 Sulfuric Acid Plant is subject to PM_{10} emissions limits (11.4 lb/hr (24-hr average) and 49.8 tpy (tons per any consecutive 12-month period)) for purposes of nonattainment reasonable available control technology (RACT).

For NO_X emissions, we concur with Idaho's determination that the existing NO_X emission limits are necessary for reasonable progress and that no additional controls are necessary. Idaho adequately evaluated the feasibility of additional emissions controls. Idaho's justifications for determining these controls are technologically infeasible are sound. We also note that Idaho imposed the current NO_X limit on the No. 400 Sulfuric Acid Plant to meet nonattainment RACT requirements as part of the Portneuf Valley PM_{10} attainment plan (71 FR 39574, July 13, 2006). NO_X emissions are limited to 44.3 tpy based on any consecutive 12-month period and 10.1 lb/hr (24-hour average) for purposes of RACT. These limits are already incorporated into Idaho's SIP.

We propose to approve and incorporate by reference the permit conditions that implement Idaho's reasonable progress determinations and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

f. Tamarack Mill (Idaho DEQ Facility ID 003–00001)

i. Background

The Tamarack Mill, LLC dba Evergreen Forest and Tamarack Energy Partnership manufactures dry kiln lumber in New Meadows, Idaho.[227] The sawmill processes logs into green dimensional lumber to be kiln-dried. Wood waste is burned in the Riley Cogeneration Boiler to produce steam to power a turbine (generating electricity for the regional power grid) and to heat lumber drying kilns. The Riley Cogeneration Boiler, rated at 102 MMBtu, operates with an existing multi-clone and wet scrubber installed for PM_{10} control, and no add-on NO_X control technology.[228]

ii. Idaho Control Determination

Tamarack Mill: Riley Cogeneration Boiler

Idaho selected the Riley Cogeneration Boiler for PM_{10} and NO_X analysis. For PM_{10}, the facility already employs multi-clone and wet scrubbers. Per Idaho's request, the facility evaluated ESPs and baghouse or filter cartridge dust collector technologies. Based on information provided by the facility, Idaho determined that the baghouse or filter dust collector systems were technically infeasible due to exhaust temperature and fire risk.[229] Idaho determined that an ESP retrofit had a cost-effectiveness of $13,114 per ton PM_{10} reduced.[230]

Idaho also considered the time necessary to install the ESP and determined it would take 2.5 years. With respect to energy and non-air quality environmental impacts, Idaho noted that the ESP would increase fire risk and the risk of concentrating hazardous metals. Finally, Idaho determined the remaining useful life of the ESP would be 15 years. However, Idaho used a 30-year equipment life for consistency across sources. Thus, Idaho determined that the ESP retrofit was not necessary for reasonable progress in the second implementation period. Based on its consideration of these factors, Idaho determined that the existing PM_{10} controls were necessary for reasonable progress. Accordingly, Idaho submitted conditions from the Tamarack Mill's operating permit that limit PM_{10} emissions from the source. Under the permit $PM_{2.5}/PM_{10}$ emissions are not to exceed 18 lb/hr and particulate matter emissions not to exceed 0.080 gr/dscf at 8 percent oxygen.[231]

For NO_X, the facility identified SCR, LNB, FGR, and SNCR as potential retrofit technology for the Riley Cogeneration Boiler. Based on information provided by the facility, Idaho concluded that SNCR was the only commercially available retrofit technology for wood waste-fired boilers and estimated it would cost $10,855 per ton NO_X reduced to retrofit with SCNR.[232] Idaho thus determined that that an SNCR retrofit would exceed the State-established cost-effectiveness threshold of $6,100 per ton.

Idaho also considered the time necessary to install SNCR, its energy and non-air quality environmental impacts, and remaining useful life. Idaho determined it would take 1.5 years to install. Idaho also indicated that installing SNCR would increase energy demand. Finally, Idaho determined the system would last 15 years, but used a 30-year lifetime for the purposes of its cost calculations. Based on its consideration of these factors, Idaho determined that SNCR was not necessary for reasonable progress. Idaho determined that the existing NO_X limits were necessary for reasonable progress. Accordingly, Idaho submitted conditions from the Tamarack Mill's operating permit that limit NO_X emissions from the source. The permit limits NO_X emissions from the Riley Cogeneration Boiler to 22.44 lb/hr and requires the facility to burn wood waste only.[233]

iii. EPA Evaluation

For PM_{10}, the EPA concurs with Idaho's determination that the existing controls on the Riley Cogeneration Boiler are necessary for reasonable progress and that no additional controls are necessary. We note that the Riley Cogeneration Boiler already employs effective emissions controls. According to Idaho's 2022 submission, the 2018 actual emissions from the Riley Cogeneration Boiler were 28.2 tons PM_{10}.[234] Idaho's rationale for determining that the baghouse and filter dust collector systems are infeasible are sound. The EPA also agrees that Idaho adequately considered the four statutory factors when determining that installing a wet ESP was not necessary for reasonable progress for the second implementation period.

For NO_X, the EPA agrees with Idaho's determination that existing NO_X limits are necessary for reasonable progress and that no additional controls are necessary. Idaho's rationale for determining that all NO_X controls except SNCR are technologically infeasible are sound. Moreover, Idaho adequately considered the four statutory factors in determining that installing SNCR is not necessary for reasonable progress during the second

[226] *Ibid.*

[227] Idaho 2022 plan submission, Appendix B. Tamarack Mill, LLC dba Evergreen Forest and Tamarack Energy Partnership.

[228] *Ibid.*

[229] *Ibid.*

[230] *Ibid.*

[231] *Ibid.*

[232] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 7. Tamarack Mill, LLC dba Evergreen Forest and Tamarack Energy Partnership Redacted.

[233] *Ibid.*

[234] *Ibid.*

implementation period. The EPA also notes that, according to Idaho's 2022 submission, 2018 actual emissions from the Riley Cogeneration Boiler were relatively low, at 69.2 tons per year.

After reviewing the Idaho 2024 supplemental submission, we propose to find that the permit conditions submitted for the Riley Cogeneration Boiler are sufficient to make the existing PM_{10} and NO_X requirements enforceable as a practical matter.[235] We propose to approve and incorporate by reference the permit conditions that implement the requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

g. TASCO—Nampa (Idaho DEQ Facility ID 027–00010)

i. Background

The Amalgamated Sugar Company (TASCO) operates a beet sugar manufacturing plant in Nampa, Idaho that processes sugar beets into refined sugar. TASCO—Nampa includes the Riley Boiler. The Riley Boiler is a wall-fired, pulverized coal and natural gas-fired boiler with a maximum heat input rating of 358 MMBtu/hr, fires low-sulfur bituminous coal or natural gas.[236] It is equipped with a high efficiency fabric filter baghouse for particulate matter control.

ii. Idaho Control Determination

TASCO—Nampa: Riley Boiler

Idaho selected the Riley Boiler for four-factor analysis for PM_{10}, SO_2, and NO_X.[237] We note that the Riley Boiler is subject to BART for the first regional haze implementation period originally approved by the EPA on June 22, 2011 (76 FR 36329). The EPA approved revisions to the BART determination for the Riley Boiler on April 28, 2014 (79 FR 23273). The SIP-approved BART emissions limits for the Riley Boiler are: 12.4 lbs/hr PM_{10} operating a baghouse and 103 lbs/hr NO_X using LNBs.

For PM_{10}, per Idaho's request, the facility reviewed dry and wet ESPs, wet scrubbers, and mechanical collectors including cyclones and multi-clones.[238] Based on information provided by TASCO, Idaho determined that all controls are technically feasible but asserted mechanical collectors and wet gas scrubbers are inferior to fabric filter baghouses and dry ESPs, and also asserted that retrofitting the boiler with an ESP was unlikely to reduce PM emissions by more than a small amount.[239]

Therefore, Idaho determined that the most effective PM control device (a fabric filter baghouse) was already being employed on the Riley Boiler. Additionally, the facility asserted that none of the retrofit control options would reduce PM_{10} emissions below that achieved when firing natural gas.[240]

For SO_2 and NO_X, the Idaho DEQ evaluated several SO_2 and NO_X retrofit controls. These included DSI and WFGD for SO_2 and LNB, SCR, and SNCR for NO_X. Idaho determined these controls were technically feasible and the cost of several of the controls were less than the State-established cost-effectiveness threshold of $6,100.[241] Idaho also considered the time necessary to install the controls, the energy and non-air quality environmental impacts of the controls, and the remaining useful life of the controls.[242]

As part of its original 2022 submission, Idaho did not evaluate mandating that TASCO discontinue firing coal in the Riley Boiler. However, on June 2, 2022, the facility submitted a letter to the Idaho DEQ committing to discontinue the use of coal in the Riley Boiler at the TASCO—Nampa facility. The Idaho DEQ determined that the Riley Boiler fuel switch to combust only natural gas represented the greatest potential reduction in emissions (1,171.5 tons per year of combined NO_X, SO_2, and PM_{10}) of all cost-effective control options evaluated. Therefore, the Idaho DEQ determined the fuel switch was necessary for reasonable progress and submitted a revised permit P–2018.0011 issued February 15, 2023, where it states, ''the Riley boiler shall be fired exclusively on natural gas and no longer fire coal by July 1, 2027.'' [243]

iii. EPA Evaluation

We concur with Idaho's determination that mandating the Riley Boiler cease burning coal is necessary for reasonable progress. Idaho evaluated a reasonable set of potential controls and considered the four statutory factors in determining that discontinuing coal is necessary for reasonable progress. We note that switching to exclusively fire natural gas virtually eliminates PM_{10} emissions and SO_2 emissions. Switching to natural gas will achieve a 99.9% reduction in SO_2 and 34% reduction in NO_X emissions. We acknowledge that installation of SCR on the boiler could further reduce NO_X emissions. However, Idaho was not required under the Clean Air Act or Regional Haze Rule to evaluate every potential control scenario.[244] Here, Idaho was reasonable in selecting the control that could achieve the aggregate emissions reductions in haze-forming pollutants.

We propose to incorporate by reference the permit conditions that implement the fuel switch requirement specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

h. TASCO—Twin Falls (Idaho DEQ Facility ID 083–00001)

i. Background

The TASCO—Twin Falls facility processes sugar beets into refined sugar and also produces animal feed products such as pulp and betaine.[245] The TASCO—Twin Falls facility has a coal-fired boiler, a coal and natural gas-fired boiler, a natural gas fired boiler, a coal or natural gas-fired pulp dryer, and several other minor emission sources. The Foster Wheeler Boiler combusts only coal. The Babcock & Wilcox (B&W) Boiler can combust both coal and natural gas. The Foster Wheeler Boiler and B&W Boilers were both selected for four-factor analysis for NO_X, SO_2, and PM_{10}. The B&W Boiler is a wall-fired, pulverized coal or natural gas-fired boiler with a heat input rating of 268 million Btu per hour (mmBtu/hr).[246] The boiler is equipped with voluntary low NO_X burners for coal that were not in the permit and a high efficiency fabric filter baghouse for PM, PM_{10}, and $PM_{2.5}$ control that is listed in the permit as a control device.[247] The facility's Foster Wheeler Boiler is a moving grate stoker coal-fired boiler with a heat input rating of 285 MMBtu/hr.[248] The boiler fires low-sulfur bituminous coal and is equipped with a high-efficiency fabric filter baghouse for particulate matter control.[249]

[235] *Ibid.*

[236] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews, The Amalgamated Sugar Company—Nampa.

[237] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 8. The Amalgamated Sugar Company—Nampa Redacted Permit.

[238] Idaho 2022 plan submission, Appendix B. Four-Factor Analyses and Reviews, The Amalgamated Sugar Company—Nampa.

[239] *Ibid.*

[240] *Ibid.*

[241] *Ibid.*

[242] *Ibid.*

[243] Idaho 2024 supplemental submission, Appendix J. Redacted Permits and Attachments for Regional Haze (New), 8. The Amalgamated Sugar Company-Nampa Redacted Permit.

[244] EPA 2019 Guidance, pages 28–29.

[245] Idaho 2022 plan submission, Appendix B, Regional Haze Four-Factor Analysis Review—The Amalgamated Sugar Company LLC (TASCO)—Twin Falls.

[246] *Ibid.*

[247] *Ibid.*

[248] *Ibid.*

[249] *Ibid.*

ii. Idaho Control Determination

TASCO—Twin Falls: B&W Boilers

Idaho selected the B&W Boilers (coal and natural gas-fired) for four-factor analysis for NO_X, SO_2, and PM_{10}.[250] For PM_{10}, Idaho indicated that the B&W Boiler is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR part 63, subpart DDDDD (boiler MACT) limiting emissions of filterable PM, carbon monoxide, mercury, and hydrochloric acid. Therefore, Idaho did not review additional PM controls. As discussed in the following paragraphs, Idaho determined that requiring TASCO to cease burning coal in the B&W Boiler and only burn natural gas was necessary for reasonable progress.[251] This requirement reduces the PM_{10} emissions by 11.08 tons per year.[252]

For NO_X, based on information provided by TASCO, Idaho identified two feasible controls: low NO_X burners for coal and SCR. Idaho determined that ultra-low NO_X burners and SNCR were not technically feasible due to the size of the firebox.[253] Idaho reviewed low NO_X burners and SCR under the four statutory factors. Based on information provided by TASCO, Idaho determined the cost-effectiveness of low NO_X burners as $2,900 per ton and SCR as $4,580 per ton. Idaho determined that it would take 28 months to install SCR, that SCR would increase energy demand and requires the use of ammonia, and that SCR would have a 20-year remaining useful life.[254] Idaho determined that requiring TASCO to cease burning coal in the B&W Boiler and only burn natural gas was necessary for reasonable progress.[255] This requirement reduces the NO_X emissions by 126.39 tons per year.[256]

For SO_2, Idaho identified low sulfur coal, dry FGD, WFGD, and DSI as feasible controls based on information from TASCO. Idaho considered these controls under the four statutory factors. Idaho determined the cost-effectiveness of each control as: $625 per ton for low sulfur coal; $3,800 per ton for dry FGD, $3,810 per ton for WFGD, and $4,580 per ton for DSI.[257] Idaho estimated that the retrofit SO_2 controls would take 36 months to install. Idaho also indicated that the retrofit technologies may reduce the efficiency of the boiler, dry FGD increase particulate emissions, and WFGD increases water consumption and solid waste generation.[258] Idaho determined that the retrofit controls would have a remaining useful life of 20 years.[259] Idaho determined that requiring TASCO to cease burning coal in the B&W Boiler and only burn natural gas was necessary for reasonable progress.[260] This requirement reduces the SO_2 emissions by 556.43 tons per year.[261]

Idaho required TASCO to cease burning coal in the B&W Boiler as a potential multi-pollutant control.[262] Idaho determined that switching to burning natural gas exclusively would reduce combined NO_X, SO_2, and PM_{10} emissions by 693.9 tons per year and have a cost-effectiveness of $1,128 per ton. The B&W Boiler was already configured to fire natural gas, therefore no additional time is needed to install controls.

TABLE 7—COMPARISON OF CONTROL TECHNOLOGIES FOR B&W BOILER AT TASCO—TWIN FALLS[263]

Pollutant	Control option	Annual emission reduction (TPY)	Cost-effectiveness ($/ton)
NO_X	LNB natural gas	196	2,900
NO_X	SCR	202.1	4,580
SO_2	Low Sulfur Bituminous Coal	135.7	625
SO_2	Dry Sorbent Injection	278.3	4,580
SO_2	Wet FGD LSO	540	5,270
SO_2	Dry FGD LSD	528.8	5,040
NO_X, SO_2, PM_{10}	Existing Primary Fuel Replacement	693.9	1,128

Based on the considerations discussed in the preceding paragraphs, Idaho determined that removing coal as an allowable fuel in the B&W Boiler was necessary for reasonable progress.[264] On June 23, 2021, the Idaho DEQ received a permit amendment application to remove coal as a fuel option for the B&W Boiler, and the Idaho DEQ issued an amended permit on July 22, 2021, for the fuel change from coal to natural gas.[265] According to Idaho, switching the B&W boiler to natural gas resulted in a significant emissions reduction (694 tons per year of combined NO_X, SO_2, and PM_{10}) making it the most effective control option evaluated.

TASCO—Twin Falls: Foster Wheeler Boiler

Idaho selected the Foster Wheeler Boiler for four-factor analysis for NO_X, SO_2, and PM_{10}. For PM_{10}, Idaho noted in its 2022 submission that the Foster Wheeler Boiler is subject to the NSPS for Fossil-Fuel-Fired Steam Generators, 40 CFR part 60, subpart D, and the Boiler MACT, 40 CFR part 63, subpart DDDDD. Idaho also indicated that the boiler is equipped with a fabric filter baghouse.[266] In its 2022 submission, Idaho determined that the existing baghouse constituted effective controls. However, in its 2024 supplemental submission, Idaho required TASCO to cease burning coal and only burn natural gas in the Foster Wheeler Boiler.[267] According to Idaho, the fuel switch obviated the need to maintain the baghouse.[268] According to the 2022 submission, the decision to convert the Foster Wheeler Boiler to natural gas occurred after Idaho had completed consideration of additional controls assuming the boiler would continue to burn coal.[269] Thus, Idaho's evaluation of

[250] *Ibid.*

[251] *See* permit T1–2016–0017.

[252] Idaho 2024 supplemental submission, page 6.

[253] *Id.*

[254] *Id.*

[255] *See* permit T1–2016–0017.

[256] Idaho 2024 supplemental submission, page 6.

[257] *Id.*

[258] *Id.*

[259] *Id.*

[260] *See* permit T1–2016–0017.

[261] Idaho 2024 supplemental submission, page 6.

[262] *Id;* See also Idaho 2022 plan submission, pages 69–70; Idaho 2022 plan submission, Appendix B. Regional Haze Four-Factor Analysis Review—The Amalgamated Sugar Company LLC (TASCO)—Twin Falls.

[263] Idaho 2022 plan submission, page 69, table 34.

[264] Idaho 2022 plan submission, pages 69–70.

[265] *Ibid.*

[266] Idaho 2022 plan submission, Appendix B. Regional Haze Four-Factor Analysis Reviews, The Amalgamated Sugar Company—Twin Falls.

[267] Air Quality Tier I Operating Permit, Amalgamated Sugar Company, T1–2016–0017.

[268] *Id.*

[269] Idaho 2022 plan submission, page 69.

additional controls is based on higher emission rates associated with burning coal. Idaho submitted permit conditions requiring the fuel switch for approval and incorporation into the SIP.

For NO_X, based on information supplied by TASCO, Idaho identified five technologies for consideration under the four statutory factors: LNB, LNB and overfire air (OFA), LNB and flue gas recirculation (FGR), SCR, and SNCR. Idaho rejected LNB and similar burner controls as infeasible for stoker boilers. According to Idaho's submissions, stoker boilers do not have an actual burner.[270] Thus, Idaho evaluated the cost, time necessary to install, energy and non-air quality impacts, and remaining useful life of SCR and SNCR. As part of the 2022 submission, Idaho did not evaluate a fuel switch to natural gas because it would require a redesign of the boiler.[271] Based on information provided by TASCO, the cost-effectiveness of SNCR was $5,180/ton of NO_X reduced and SCR was $6,400/ton of NO_X reduced.[272] TASCO also noted that SCR may not be technically feasible for the Foster Wheeler Boiler, but did not elaborate. Idaho adjusted the cost calculations provided by TASCO for the purposes of consistency across units and sources. Based on these adjustments, Idaho determined that the cost effectiveness of SNCR was between $4,010 and $5,180/ton of NO_X reduced and SCR was between $3,780 and $6,400/ton of NO_X reduced.[273] Ultimately, Idaho determined that SNCR was the only cost-effective NO_X control option for the Foster Wheeler Boiler. According to Idaho's submission, installation of SNCR would achieve annual NO_X emissions reductions of 90.8 tons per year. As stated above, these calculations are based on the emissions rates from burning coal, not natural gas.

Based on the 2022 submission, the conversion to natural gas reduces NO_X emissions from the Foster Wheeler Boiler by 243.29 tons per year—from 302.59 tons per year (2014 baseline emissions) to projected emissions of 59.3 tons per year and more than 152.49 tons per year emissions reduction than with SNCR.[274] Given these emissions reductions, Idaho did not reevaluate the feasibility or cost of NO_X controls on the Foster Wheeler Boiler assuming the unit only fires natural gas.[275]

For SO_2, Idaho evaluated the cost, time necessary to install, energy and non-air quality impact and remaining useful life of WFGD, dry FGD, and DSI.[276] Idaho determined the cost-effectiveness of each of the controls as: $4,720 per ton for wet FGD, $4,810 per dry FGD, and $5,420 per ton for dry sorbent injection. Idaho noted that if a higher bank prime interest rate is used and a 20-year equipment life, then the cost-effectiveness of WFGD and dry FGD exceed $6,100 per ton.[277] Idaho indicated in its 2022 submission that dry sorbent injection was the only cost-effective control.[278] Idaho determined that it would take 36 months to install each of these controls. Idaho also noted that the energy and non-air quality impacts are similar to those for the B&W Boiler. Finally, Idaho determined that the equipment would have a remaining useful life of 20 years.[279] Installation of dry FGD as a best control option would result in a 250.2 tons per year annual SO_2 emissions reduction. However, as stated above, these calculations were based on the emissions rates from burning coal, not natural gas. Based on the 2022 submission, the conversion to natural gas reduces SO_2 emissions from the Foster Wheeler Boiler by over 499.91 tons per year—from 500.41 tons per year (2014 Baseline emissions) to a projected 0.5 tons per year, reducing annual emissions by 249.71 tons more than dry FGD.[280]

Idaho determined that no additional NO_X or SO_2 controls on the Foster Wheeler Boiler were necessary for reasonable progress, because the fuel switch at the B&W Boiler achieved the greatest emissions reductions across all controls evaluated.[281] Subsequent to the 2022 submission, TASCO conducted a fuel switch of the Foster Wheeler Boiler. As part of the 2024 supplemental submission, Idaho submitted a permit condition mandating that TASCO no longer burn coal in the Foster Wheeler Boiler.

iii. EPA Evaluation

The EPA concurs with Idaho's determination of the controls necessary for reasonable progress for both boilers. With respect to PM_{10}, the EPA agrees with Idaho that both boilers were subject to existing effective controls. Idaho adequately demonstrated that additional controls would be unlikely to reduce emissions beyond the Boiler MACT requirements and the already installed fabric filters.

With respect to NO_X and SO_2, Idaho identified and evaluated a range of potential controls. Idaho supported its technological feasibility determinations with adequate unit-specific rationales. Idaho also reasonably determined the cost of compliance and considered the time necessary to install the controls, energy and non-air quality impacts, and remaining useful life of the controls. With respect to cost, Idaho primarily relied on cost estimates based on the EPA Control Cost Manual—consistent with the EPA 2019 Guidance.[282]

The EPA notes that the cost-effectiveness of many of the retrofit NO_X and SO_2 controls Idaho considered were below Idaho's cost-effectiveness threshold of $6,100. However, the EPA concurs that Idaho was reasonable in not requiring these retrofits in light of the fuel switch to natural gas on both boilers. In this instance, fuel switching for the Foster Wheeler Boiler achieves greater SO_2 emissions reductions (499.91 tpy annual emission reductions) than any of the other retrofit SO_2 controls and achieves significant NO_X reductions (243.29 tpy annual emissions reductions).[283] The EPA acknowledges that installation of SCR on both boilers may further reduce NO_X emissions. However, the State was reasonable in not re-evaluating SCR for both boilers assuming the boilers only fire natural gas.

Given that Idaho's long-term strategy includes fuel switch requirements for both the B&W Boiler and Foster Wheeler Boiler, the EPA is not evaluating Idaho's determination in the 2022 submission that the fuel switch at the B&W Boiler are the only SO_2 and NO_X controls necessary for reasonable progress at the Twin Falls facility and no controls are necessary at the Foster Wheeler Boiler. We do recognize, however, that the fuel switch on both the B&W Boiler and Foster Wheeler Boiler achieves more emissions reductions than the retrofit controls Idaho determined were cost-effective as shown in Table 8 of this preamble.

[270] *Id.*

[271] Idaho 2022 plan submission, pages 69–70.

[272] Idaho 2022 plan submission, Appendix A. Fire Regime at Idaho's Class I Areas.

[273] *Ibid.*

[274] Idaho 2022 plan submission, page 72, table 35.

[275] *Ibid.*

[276] Idaho 2022 plan submission, Appendix B. Regional Haze Four-Factor Analysis Reviews, The Amalgamated Sugar Company—Twin Falls.

[277] *Ibid.*

[278] Idaho 2022 plan submission, pages 69–70.

[279] *Ibid.*

[280] Idaho 2022 plan submission, page 72, table 35.

[281] *Ibid; See* also Idaho 2022 plan submission, pages 69–70.

[282] 2019 EPA Guidance, pages 31–32.

[283] Idaho 2022 plan submission, Appendix B. Regional Haze Four-Factor Analysis Reviews, The Amalgamated Sugar Company—Twin Falls.

TABLE 8—ANNUAL EMISSION REDUCTIONS BY POLLUTANT AND CONTROL OPTION [284]

Emission unit	Pollutant	Control option	Annual emission reduction
Foster Wheeler Boiler	SO_2	DSI	[285] 250.2
Foster Wheeler Boiler	NO_X	SNCR	90.8
B&W Boiler	SO_2	Wet FGD LSO	540
B&W Boiler	NO_X	SCR	202.1
Total			1,083.1
Foster Wheeler Boiler	NO_X, SO_2, and PM_{10}	Fuel Switch	775.85
B&W Boiler	NO_X, SO_2, and PM_{10}	Fuel Switch	693.9
Total			1,469.75

We propose to approve and incorporate by reference the permit conditions that implement the requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

i. TASCO—Paul (Idaho DEQ Facility ID 067–00001)

i. Background

The TASCO—Paul facility produces refined sugar and animal feed products from sugar beets. Idaho selected the natural gas-fired Rentech Boiler and the natural gas-fired B&W Boiler for four-factor analysis for NO_X and the North and South Pulp Dryers for four-factor analysis for NO_X, SO_2, and PM_{10}.[286]

ii. Idaho Control Determination

TASCO—Paul: North and South Pulp Dryers

The pulp dryers fire both natural gas and coal. The units are equipped with cyclones and spray-impingement scrubbers for PM_{10} and flue-gas recirculation for NO_X. For NO_X, based on information provided by TASCO, Idaho identified LNB, LNB with overfire air (OFA), LNB and FGR, SCR, and SNCR for consideration under the four statutory factors. The State determined that LNB with OFA and SNCR were infeasible due to the design of the dryers and because the ammonia would contaminate the pulp.[287] Idaho indicated that SCR may be feasible, but that the flue gas temperature may be too low and the moisture content may be too high. Thus, Idaho considered the cost, time necessary to install, energy and non-air quality impacts, and remaining useful life of the remaining technically feasible NO_X controls. Idaho determined, based on information provided by TASCO, that LNB had a cost-effectiveness of between $1,500 and $3,000 per ton depending on the calculation methodology.[288] Idaho also determined that SCR had a cost-effectiveness of $6,160 for the North Pulp Dryer and $6,980 at the South Pulp Dryer.[289] Idaho determined that it would take 20 months to install LNB and 28 months for SCR. Idaho indicated that SCR would increase energy demand due to the need to reheat the flue gas and the need to store ammonia. According to the 2022 submission, Idaho estimated the remaining useful life of the NO_X, PM_{10}, and SO_2 controls was 20 years. However, Idaho used a 30-year equipment life when it adjusted its cost calculations.

For PM_{10}, Idaho considered additional add-on controls, including fabric filter baghouse, dry ESP, and wet ESP. Idaho determined that the cost-effectiveness of all of these controls exceeded $12,000 per ton. Idaho determined based on information provided by TASCO, that it would take 18 months to install add-on PM controls. Idaho indicated that installation of additional PM_{10} controls would increase ash and solids waste and increase energy use.

For SO_2, Idaho considered low sulfur bituminous coal, DSI, and dry FGD as potential controls. Idaho determined that all but DSI/dry FGD at the South Pulp Dryer exceeded $6,100 per ton of SO_2 reduced. Idaho indicated that it would take 18 months to install a new dry FGD system. With respect to energy and non-air quality impacts, Idaho indicated that the SO_2 retrofit controls would increase energy demand to run the new equipment and increase particulate loading from the sorbent.

Idaho also considered requiring both pulp dryers to exclusively fire natural gas as a multi-pollutant control option. Idaho determined that the cost-effectiveness of the requirement based on combined NO_X, PM_{10}, and SO_2 was between $1,903 and $2,099 per ton.

TASCO—Paul: B&W Boiler and Rentech Boiler

According to Idaho's 2022 submission, the B&W Boiler and Rentech Boiler provide steam to the facility. The B&W Boiler is equipped with LNB with FGR for NO_X.[290] Idaho considered SCR as an additional NO_X control under the four factors. Idaho determined, based on information supplied by TASCO, that ultra-low NO_X burners and SNCR were not technologically feasible due to the design of the boiler and flue gas residence time. Idaho determined that the cost-effectiveness of SCR was $7,474 per ton. Idaho determined that it would take 28 months to install the SCR. Idaho also noted the increased energy demand and need for ammonia storage as energy and non-air quality impacts. Finally, Idaho indicated that the SCR had a remaining useful life of 20 years, however, Idaho used a 30-year equipment life when adjusting cost figures supplied by TASCO for consistency across emission units. Based on its consideration of these factors, Idaho determined that additional NO_X controls on the B&W Boiler were not necessary for reasonable progress. Idaho submitted permit conditions reflecting the existing NO_X emissions limits as part of its long-term strategy.

For the Rentech Boiler, Idaho identified LNB, ultra-low NO_X burners, LNB with FGR, and SCR as feasible NO_X controls. Based on information provided by TASCO, Idaho determined that LNB with OFA and SNCR were technically infeasible. Idaho explained in the 2022 submission that overfire air is not

[284] Idaho 2024 supplemental submission, page 6.

[285] We note that if WFGD were cost-effective, it would achieve 481.2 tons per year of SO_2 reductions. This would yield total emissions reductions of 1,314.1 tons per year of total SO_2 and NO_X pollutants.

[286] Idaho 2022 plan submission, Appendix B. Regional Haze Four-Factor Analysis Reviews, The Amalgamated Sugar Company—Paul.

[287] *Ibid.*

[288] *Ibid.*

[289] *Ibid.*

[290] *Ibid.*

required for natural gas combustion because the staging of combustion is done within the burner itself. Idaho also indicated that the boiler may not achieve sufficient residence time for SNCR to be effective.

Idaho therefore considered the remaining controls based on the four statutory factors. Idaho determined that ultra-low NO_X burners had a cost-effectiveness of $1,090 per ton and SCR had a cost-effectiveness of $10,547 per ton. Despite the technological challenges with SNCR, Idaho calculated the cost and determined it had a cost-effectiveness of $7,738 per ton.[291] Idaho indicated that installing these retrofit control technologies would take between 24 and 36 months. According to Idaho, LNB have minimal energy and non-air quality impacts. Whereas, Idaho reiterated the impacts cited with respect to the B&W Boiler discussed in the preceding paragraphs. As discussed with respect to the B&W Boiler, Idaho determined the remaining useful life of the retrofit controls as 20 years, but used a 30-year lifetime for the purpose of its cost calculations.

Idaho's Determination of the Controls Necessary for Reasonable Progress—TASCO Paul

Based on its consideration of the four factors for North and South Pulp Dryers, B&W Boiler, and Rentech Boilers, in conjunction with the controls required at the nearby TASCO—Twin Falls facility, Idaho determined that additional controls were not necessary for reasonable progress. Accordingly, Idaho determined that the existing controls were necessary for reasonable progress and submitted permit conditions to the EPA as part of its 2024 supplemental submission.

Idaho acknowledged in its 2022 and 2024 submissions that requiring TASCO to fire natural gas exclusively at the North and South Pulp Dryers and ultra-low NO_X burners at the Rentech Boiler were cost-effective. However, after further consideration of all available emissions reduction opportunities, Idaho reasoned that mandating the switch to natural gas at the Foster Wheeler Boiler at the TASCO—Twin Falls facility achieves greater emissions reductions than imposing the controls deemed cost-effective at TASCO—Paul, better improves visibility in Idaho's Class I areas while minimizing costs, and is overall more consistent with reasonable progress than requiring retrofit controls at both TASCO—Paul and TASCO—Twin Falls.[292]

Idaho submitted a detailed justification in support of the decision that further controls at TASCO—Paul are not necessary for reasonable progress. In its justification, the State compared the emissions reductions that would have resulted if Idaho had required TASCO to implement the cost-effective retrofit controls at TASCO—Twin Falls and TASCO—Paul.[293] As discussed in the preceding paragraphs, Idaho determined that SNCR and dry FGD are cost-effective at TASCO—Twin Falls and they would achieve 341 tpy NO_X reduced, whereas the requirement to switch to burning natural gas reduces combined NO_X, SO_2, and PM_{10} emissions by 775.90 tons per year.[294] Thus, Idaho's requirement to burn only natural gas at the TASCO—Twin Falls Foster Wheeler Boiler achieves 434.9 tons per year more combined emissions reductions than what would have been achieved by the retrofit controls.[295] Idaho further explained that requiring a fuel switch at the TASCO—Paul North and South Pulp Dryers and ultra-low NO_X burners at the Rentech Boiler would achieve emissions reductions of 333.48 tons per year of combined NO_X and SO_2 emissions. Idaho observed that this was less than the surplus emissions reductions from the fuel switch at the Foster Wheeler Boiler at TASCO—Twin Falls. Tables 9 through 12 of this preamble illustrate Idaho's comparison of the emissions reductions from the cost-effective retrofit controls it evaluated versus the fuel switch requirements it ultimately imposed.

TABLE 9—TASCO PAUL COST-EFFECTIVE CONTROLS FROM FOUR-FACTOR ANALYSIS[296]

Emission unit	Pollutants for 4FA	Control option	Percent control	Annual emission reductions (tons/year)
North Pulp Dryer	NO_X	Switch to NG only *	88	150.37
	SO_2	Switch to NG only *	99	9.05
	PM_{10}	Switch to NG only *	0	0
South Pulp Dryer	NO_X	Switch to NG only *	87	118.45
	SO_2	Switch to NG only *	99	7.51
	PM_{10}	Switch to NG only *	0	0
Rentech Boiler	NO_X	Ultra-Low NO_X burner		48.1
Total				334.48

* Remove coal as a fuel option so the emission unit only uses natural gas.

TABLE 10—TASCO—TWIN FALLS COST-EFFECTIVE CONTROLS FROM FOUR-FACTOR ANALYSIS[297]

Emission unit	Pollutants for 4FA	Control option	Percent control	Annual emission reductions (tons/year)
Foster Wheeler Boiler	NO_X	SNCR	30	90.8
	SO_2	Dry FGD	50	250.2
	PM_{10}	Current FFB	0	0

[291] *Ibid.*

[292] Idaho 2024 supplemental submission, Appendix I. Justification for Not Requiring Controls at Amalgamated Sugar Company LLC—Paul (New).

[293] *Ibid.*

[294] *Ibid.*

[295] *Ibid.*

[296] *Ibid.*

TABLE 10—TASCO—TWIN FALLS COST-EFFECTIVE CONTROLS FROM FOUR-FACTOR ANALYSIS [297]—Continued

Emission unit	Pollutants for 4FA	Control option	Percent control	Annual emission reductions (tons/year)
Unit Total				341
B&W Boiler	NO_X	Existing Primary Fuel Replacement *	50	126.39
	SO_2	Existing Primary Fuel Replacement	100	556.43
	PM_{10}	Existing Primary Fuel Replacement		11.08
Unit Total				693.9
Facility Total				1,034.9

* Remove coal as a fuel option so the emission unit only uses natural gas.

TABLE 11—FEDERALLY ENFORCEABLE EMISSION REDUCTIONS DUE TO FUEL SWITCH ON THE FOSTER WHEELER BOILER AT TASCO—TWIN FALLS AND REQUIRING B&W BOILER TO USE ONLY NATURAL GAS [298]

Emission unit	Pollutants for 4FA	Percent control	2014 Baseline emissions	Projected emissions	Annual emission reductions (tons/year)
Foster Wheeler Boiler	NO_X	80	302.59	59.3	150.37
	SO_2	100	500.41	0.50	499.91
	PM_{10}	86	38.2	5.50	32.70
Unit Total (NO_X + SO_2 + PM_{10})					775.90
B&W Boiler	NO_X	50	251.23	124.84	126.39
	SO_2	100	556.97	0.54	556.43
	PM_{10}		17.86	6.78	11.08
Unit Total (NO_X + SO_2 + PM_{10})					693.9
Facility Total					1,469.80

TABLE 12—COMPARISON OF POTENTIAL EMISSION REDUCTIONS FROM RETROFIT CONTROLS VERSUS CONTROLS FROM FUEL SWITCHES REQUIRED BY IDAHO'S LONG-TERM STRATEGY

Control scenario	Emissions reductions (NO_X + SO_2 + PM_{10}) (tpy)
Total potential emissions reductions from best retrofit controls evaluated under the four statutory factors	1,368.38
Total potential emissions reductions from fuel switches required by Idaho's Long-Term Strategy	1,469.80

Idaho also explained that TASCO—Twin Falls is only 38 miles southwest of TASCO—Paul and the facilities impact the same Class I areas. Specifically, the facilities have the largest impact on Craters of the Moon National Park. Idaho also indicated that due to its location, the Twin Falls facility impacts more Class I areas than the Paul facility based on Idaho's WEP analysis. Table 12 demonstrates the number of emissions reductions achieved from the required fuel switches at TASCO—Twin Falls required by Idaho's long-term strategy. Thus, Idaho ultimately concluded that, based on the emissions reductions achieved at the Twin Falls facility, only the fuel switch at TASCO—Twin Falls was necessary for reasonable progress.

iii. EPA Evaluation

Idaho adequately considered the four statutory factors in determining the controls necessary for reasonable progress at the TASCO—Paul facility. Idaho identified a reasonable range of controls for review. Idaho justified its determinations regarding technological feasibility with unit-specific information. With respect to the cost of compliance, consistent with the EPA 2019 Guidance, Idaho used the EPA Control Cost Manual to generate cost estimates for control technologies.[299] Idaho also considered the time necessary to install the controls, energy and non-air quality impacts and remaining useful life of the controls. Idaho's consideration of these factors is well documented in its 2022 submission.

Based on the documentation provided in Idaho's 2022 and 2024 submissions, and the detailed analysis of the TASCO facilities, the EPA agrees with Idaho's determination that existing controls at the North and Source Pulp Dryers, B&W Boiler, and Rentech Boiler are necessary for reasonable progress and that no additional controls are necessary. The Regional Haze Rule requires States to ''evaluate and determine the emission reduction measures that are necessary to make reasonable progress by considering the four statutory factors.''

[297] *Ibid.*

[298] *Ibid.*

[299] *See* EPA 2019 Guidance, page 32; Idaho 2022 plan submission, Appendix B. Regional Haze Four-Factor Analysis Reviews, The Amalgamated Sugar Company—Paul.

The rule does not prohibit States from maximizing emissions reductions across multiple facilities impacting the same Class I area. Additionally, in the 2021 memo entitled, ''Clarifications Regarding Regional Haze Second Implementation Period Plans'' (2021 Clarifications Memo), the EPA reiterated that States are allowed to consider reasonable groups of sources, but that source-specific control determinations should be made where possible.[300] The EPA also cautioned against States improperly grouping sources for the purpose of avoiding imposing otherwise feasible controls.[301] In addition, the EPA stated that, ''[a]nother potentially reasonable approach might be for a [S]tate that identifies cost-effective new controls at a multitude of sources to choose to require controls at only a subset of those sources that constitute the vast majority of the visibility benefit. In this case, the [S]tate could rely on visibility benefits to prioritize which sources would receive new controls. By contrast, a [S]tate that has identified cost-effective controls for its sources but rejects most (or all) such cost-effective controls across those sources based on visibility benefits is likely to be improperly using visibility as an additional factor.'' [302]

Idaho's approach to determining the controls necessary for reasonable progress at TASCO—Paul and TASCO—Twin Falls is consistent with the Regional Haze Rule and the EPA 2019 Guidance. Here, Idaho did not group the TASCO—Paul facility with the other TASCO facilities for the purpose of determining that no additional controls are necessary for reasonable progress at any of these facilities. Idaho did not argue that no new controls were necessary for reasonable progress due to ''small'' visibility benefits. Rather, Idaho selected controls to achieve emissions reductions at TASCO—Nampa and TASCO—Twin Falls over TASCO—Paul because doing so would achieve greater overall emissions reductions and the former facilities have greater visibility impacts on Class I areas. Thus, Idaho did not run afoul of the EPA's caution in the 2021 Clarifications Memo with respect to improper grouping of sources.

The EPA acknowledges that Idaho's approach to determining the controls necessary for the TASCO—Paul facility deviates from its unit-specific approach for the other sources Idaho selected for review under the four statutory factors. However, Idaho provided a sufficient justification for not imposing additional controls at TASCO—Paul. As an initial matter, the EPA notes that Idaho was not required to consider eliminating burning coal as a possible control at the TASCO—Twin Falls Foster Wheeler Boiler because it required redesigning the boiler.[303] Importantly, Idaho demonstrated that the requirement to cease burning coal in the TASCO—Twin Falls Foster Wheeler Boiler will achieve more emissions reductions at less cost than if Idaho had merely imposed the controls it deemed cost-effective at both the TASCO—Twin Falls Foster Wheeler Boiler and TASCO—Paul. Thus, in this case, a rigid adherence to Idaho's unit-specific approach would have achieved less visibility benefits than the State's long-term strategy, and at a higher cost. Thus, Idaho's approach complies with the Regional Haze Rule and is consistent with the overall statutory goal of eliminating existing visibility impairment.[304]

We propose to approve and incorporate by reference the permit conditions that implement the requirements and associated monitoring, recordkeeping and reporting requirements and compliance schedules specified in Table 6 of this preamble into the Idaho SIP at 40 CFR 52.670(d).

5. Review of Other Source Categories

In addition to the individual facilities discussed in the preceding paragraphs, Idaho reviewed 2014 and 2017 emissions data for a number of source sectors, including point sources, nonpoint sources, mobile sources, fire sources, and natural/biogenic sources.

a. Nonpoint Sources

Nonpoint emission source categories include agricultural activities, fugitive dust, residential fuel combustion, commercial and consumer solvent use, and consumer activities. Nonpoint sources are emissions sources that are too small, widespread, or numerous to be inventoried individually. Emissions are estimated using aggregate activity data such as population, employment, and Statewide fuel use (after accounting for the fuel used by point sources). Pollutants in this category have increased from the 2014 NEI most likely due to increase in population growth. An increase in agricultural activities has contributed to increases in NH_3 emissions from 2014 to 2017. Fugitive dust is the largest source category followed by wildfire and prescribed fire for PM_{10} in Idaho. Common sources of fugitive dust include unpaved roads, agricultural tilling operations, aggregate storage piles, and heavy construction operations.

b. Mobile Sources

Mobile sources, include on-road, nonroad, commercial marine vessels, and rail. Emissions from these sources were calculated using the EPA's Motor Vehicle Emission Simulator (MOVES). The MOVES model incorporates user information supplemented by the states, such as vehicle types and vehicle miles traveled, to estimate mobile source emissions. In the 2014 National Emissions Inventory (NEI), the Idaho DEQ used MOVES2014a to calculate emissions from on-road and nonroad mobile sources for Idaho, updating the model's default inputs with local data.

On-road mobile sources encompass emissions from passenger cars, motorcycles, minivans, sport-utility vehicles, light-duty trucks, heavy-duty trucks, and buses. Idaho used the 2014 NEI emissions data for the on-road sector and no adjustments were made to the representative baseline.

Nonroad mobile sources include vehicles and equipment not intended for roadways, such as aircraft support equipment, marine shipping, rail, construction equipment, recreational vehicles, and lawn and garden equipment. Emissions from aircraft take-offs and landings are categorized as point sources and estimated separately by the EPA. The primary pollutant emitted from mobile sources is nitrogen oxides (NO_X). In comparison to the 2014 NEI, the 2017 NEI shows a significant reduction in mobile emissions, largely due to stricter Federal emissions standards for on-road vehicles and the gradual replacement of older, more polluting vehicles with newer, cleaner models.[305] Federal motor vehicle emissions standards are expected to decrease the amount of NO_X allowed from vehicles by 2028.

c. Fire Sources

The Idaho DEQ manages a Crop Residue Burning (CRB) program for all land outside reservation boundaries. This program tracks the location, acreage, and type of residue being burned throughout the year, allowing the Idaho DEQ to estimate emissions from agricultural fires for the National Emissions Inventory (NEI). For wildfires

[300] Clarifications Regarding Regional Haze Second Implementation Period Plans. The EPA Office of Air Quality Planning and Standards, July 8, 2021 (2021 Clarifications Memo) at pages 7–8. Available in the docket for this action and at *https://www.epa.gov/visibility/clarifications-regarding-regional-haze-state-implementation-plans-second-implementation/*.

[301] 2021 Clarifications Memo, pages 7–8.

[302] 2021 Clarifications Memo, pages 12–13.

[303] EPA 2019 Guidance, page 30.

[304] 2021 Clarifications Memo, page 8.

[305] Idaho 2022 plan submission, pages 28–29.

and prescribed burns, the EPA relies on satellite data, fire models, and activity information provided by state, local, and tribal air or forestry agencies. Idaho contributes activity data through the Montana-Idaho Airshed Group to assist the EPA in calculating emissions from these sources.

In Idaho, wildfire emissions significantly exceed those from agricultural and prescribed fires combined. The emissions from wildfires were notably higher in 2017 compared to 2014.[306] During high wildfire years, prescribed fire activity typically decreases to reduce smoke impacts on communities, which is reflected in the lower prescribed fire emissions in 2017 compared to 2014. Agricultural fire emissions remained relatively consistent between the two years.

The EPA proposes to find that Idaho's approach to evaluating other source categories is reasonable because the State demonstrated that the sources with the greatest potential impacts on visibility, as well as other sources that might be expected to impact visibility are subject to Federal controls outside the purview of State regulatory authority or are subject to existing and/or new control measures. Therefore, it is reasonable to assume that selecting additional sources for four-factor analysis would not have resulted in further controls necessary for reasonable progress.

d. Natural and Biogenic Sources

Biogenic emissions (decomposition processes, soil, and vegetation), volcanic eruptions, lightning NO_X, and sea salt are natural sources. The EPA estimates these emissions using spatial data on vegetation, land use, and environmental factors (*e.g.,* temperature and solar radiation). Individual States do not report these emissions.

6. Additional Long-Term Strategy Requirements

The consultation requirements of section 51.308(f)(2)(ii) provides 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 measures that are necessary to make reasonable progress. Section 51.308(f)(2)(ii)(A) and (B) require States to consider the emission reduction measures identified by other States as necessary for reasonable progress and to include agreed upon measures in their SIPs, respectively. Section 51.308(f)(2)(ii)(C) outlines requirements that apply if States cannot agree on what measures are necessary to make reasonable progress.

In the submissions, Idaho documented that the State had consulted with Montana, Nevada, Oregon, Utah, Washington, and Wyoming on potential interstate visibility impacts to shared Class I areas and Class I areas outside of Idaho.[307] The Idaho DEQ shared source selection and evaluation data, however, no other State requested Idaho undertake additional four-factor analyses on top of those already conducted by Idaho.[308] Idaho committed to continued consultation with States in the west on interstate visibility contributions.[309]

To address 40 CFR 51.308(f)(2)(ii)(A), (B), and (C), the Idaho DEQ participated in the WRAP-facilitated consultation process during which no disagreements were raised by other States with respect to Idaho's planning efforts for the regional haze second implementation period. We propose to determine that Idaho has satisfied the consultation requirements of section 51.308(f)(2)(ii).

The documentation requirement of section 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 reduction measures that are necessary to make reasonable progress through a regional planning organization, as long as the process has been ''approved by all State participants.'' As explained in section II, part D; of this preamble, Idaho relied on WRAP technical information, modeling, and analysis to support development of its long-term strategy as described in the submissions and detailed in the WRAP TSD in the docket for this action.

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.

The submissions include an assessment of the 2014 and 2017 NEIs, considered the most representative recent triennial inventories.[310] We propose to find that the requirements of section 51.308(f)(2)(iii) have been satisfied.

7. Five Additional Factors

In developing its long-term strategy, a State must also consider five additional factors set forth at 40 CFR 51.308(f)(2)(iv). The factors are: (1) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment; (2) Measures to mitigate the impacts of construction activities; (3) Source retirement and replacement schedules; (4) Smoke management practices for agricultural and forestry burning; and (5) Anticipated net effect on visibility over the period of the long-term strategy. The following paragraphs address each of the five additional factors.

a. Emissions Reductions Due to Ongoing Programs

Idaho's new source review program is the main tool the State uses to address potential future visibility impacts at Idaho's Class I areas from major stationary sources. The program requires new major sources and major modifications at existing major sources to install the best available control technology (BACT) in attainment and unclassifiable areas and meet the lowest achievable emission rate (LAER) in nonattainment areas. The SIP-approved Idaho new source review program is codified at IDAPA 58.01.01.200 through 228.

The submissions also pointed to Federal mobile source regulations that apply nationwide and that are expected to reduce haze-forming pollutants over time as requirements are phased-in and fleets turn over.[311]

The Idaho submissions stated that NO_X emissions from the mobile source sector is the dominant anthropogenic source of visibility impairment at Idaho Class I areas.[312] Federal fuel and engine rules are important for reducing existing visibility impairment in Idaho's Class I areas. Notably, the 2028 emissions projection show a decrease in NO_X emissions from the mobile sector indicating reduced nitrate light extinction at all three Idaho's Class I areas.[313]

The State also addressed the SIP-approved and implemented criteria pollutant control programs for nonattainment areas in Idaho. All areas

[306] Idaho 2022 plan submission, page 31.

[307] Idaho 2022 plan submission, pages 86–90.

[308] *Id.,* pages 89–90.

[309] *Id.,* page 96.

[310] *Id.,* pages 24–35. Note, the 2020 National Emissions Inventory was impacted by the pandemic and not considered to be a typical triennial year.

[311] Idaho 2022 plan submission, page 74.

[312] Idaho 2022 plan submission. *See* section 5.

[313] *Ibid.*

in Idaho have been redesignated to attainment.[314]

b. Measures To Mitigate the Impacts of Construction Activities

The Idaho submissions stated that fugitive and windblown dust are the primary categories of particulate matter associated with construction activities. Idaho addresses control of fugitive dust through regulations at IDAPA 58.01.01.651 that require reasonable precautions to be taken to prevent particulate matter from becoming airborne.[315] In determining what is reasonable, the rule identifies activities and factors, including the proximity to Class I areas to be considered. The types of control measures listed in the rule include using water or chemicals, applying dust suppressants, using control equipment, covering truckloads, paving roads, and promptly removing materials.[316]

c. Source Retirement and Replacement Schedules

Source retirements and replacements were considered in the Idaho submissions and corresponding updates were made to the 2014 NEI point source emissions inventory. Recent source retirements include the following.[317]

- Idaho removed J.R. Simplot Caldwell facility emissions data because the facility ceased operation in 2014 and was demolished.
- Idaho updated TASCO-Paul facility emissions data to account for the retired Erie City boiler, replaced by a new natural gas-burning boiler (Rentech boiler) in 2018. Because a full year of actual emissions for the natural gas boiler was not available, the Idaho DEQ used potential emissions estimates in place of actual emissions. The original 2014 emissions estimates for the pulp dryers were used because the dryers retain the ability to combust coal or natural gas.[318]

d. Smoke Management Practices

Idaho addressed smoke management in the submissions by citing to the Idaho SIP-approved open burning regulations at IDAPA 58.01.01.600 through 624. These rules include the State's wildland prescribed burning regulations and the crop residue burning (CRB) program.[319] The submissions stated that the purpose of the open burning rules is to protect human health and the environment from air pollutants resulting from open burning and to reduce visibility impairment in Class I areas per the State's regional haze long-term strategy.[320] IDAPA 58.01.01.617–624 addresses the burning of agricultural crop residue in Idaho. Idaho regulates all crop residue burning (CRB), outside the five Reservation boundaries, with a permit-by-rule. Idaho regulates all wildland prescribed burning, outside the five Reservation boundaries, under IDAPA 58.01.01.614. The Idaho DEQ's prescribed fire rules are designed to protect public health by ensuring smoke management considerations are included in all burning.

e. Anticipated Net Effect on Visibility

In the submissions, Idaho considered the anticipated net effect of projected changes in emissions by discussing the photochemical modeling for the 2018 through 2028 period conducted in collaboration with the WRAP and the EPA.[321] Emissions inventories in the Idaho submissions indicated that anthropogenic NO_X, SO_2 and PM_{10} emissions in Idaho are projected to decline as shown in table 36 of the Idaho 2022 submission.[322] The 2022 submission notes that international anthropogenic emissions and natural emissions from wildfires, account for the majority of the impairment at Idaho's Class I areas. U.S. anthropogenic emissions make a smaller contribution to the projected total light extinction at the three Idaho Class I areas.[323]

Because Idaho has reasonably considered each of the five additional factors, the EPA proposes to find that Idaho has satisfied the requirements of 40 CFR 51.308(f)(2)(iv). In conclusion, the EPA proposes to approve Idaho's 2022 and 2024 submissions as meeting the requirement that the State submit a long-term strategy that includes the enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress, as determined pursuant to 40 CFR 51.308(f)(2)(i) through (iv).

F. Reasonable Progress Goals

Section 51.308(f)(3) contains the requirements pertaining to reasonable progress goals (RPGs) for each Class I area. Because Idaho is host to Class I areas, it is subject to both section 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 Clean Air Act 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 RPGs for the most impaired days represents a slower rate of visibility improvement than the uniform rate of progress (URP) calculated under 40 CFR 51.308(f)(1)(vi). Under section 51.308(f)(3)(ii)(A), if the State in which a 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.

1. Idaho's RPGs Compared to the Uniform Rate of Progress (URP)

To address 51.308(f)(3)(i), the Idaho submissions stated that visibility on the 20% clearest days at all Class I areas in Idaho is projected to be below the baseline visibility condition satisfying the Regional Haze Rule requirement of no degradation in visibility for the clearest days since the baseline period.[324] For the most impaired days, Idaho compared the 2028 RPGs to the EPA-adjusted URPs.[325] To arrive at the EPA-adjusted URPs, the EPA conducting photochemical grid modeling using the CMAQ modeling platform, taking into account certain international anthropogenic sulfate emissions and prescribed fire

[314] 40 CFR 81.313.

[315] The EPA has approved these regulations into Idaho's SIP at 40 CFR 51.670(c).

[316] IDAPA 58.01.01.651.01; *See* Idaho 2022 plan submission, page 77.

[317] *Id.,* page 26.

[318] *Id.,* page 27.

[319] *Id.,* pages 77–78.

[320] *Id.,* pages 77–78.

[321] *Id.,* pages 91 and 92.

[322] *See* also Idaho 2022 plan submission, section 9.0.

[323] Idaho 2022 plan submission, page 90.

[324] *Id.,* table 45.

[325] *Id.,* figures 47 through 49.

emissions.[326] The EPA's modeling made use of 2016 emissions inventory data to represent emissions for the current visibility period and projected the data to 2028 to represent emissions for the end of the second implementation period. The projection was based on predicted economic growth, population expansion or contraction, and other factors.[327]

Tables 13 and 14 of this preamble compare the baselines, projected RPGs, and adjusted URPs.

TABLE 13—CLEAREST DAYS PROJECTED RPG COMPARED TO BASELINE IN DECIVIEWS[328]

Monitor	2000–2004 20% Clearest days baseline conditions (dv)	2014–2017 20% Clearest days (dv)	2028 Projected RPG 20% clearest days (dv)
CRMO1	4.31	2.68	2.56
SAWT1	4.00	2.58	2.31
SULA1	2.57	1.60	1.41

TABLE 14—MOST IMPAIRED DAYS PROJECTED RPG COMPARED TO ADJUSTED AND UNADJUSTED URP IN DECIVIEWS[329]

Class 1 area IMPROVE monitor	2014–2017 20% Most impaired days (dv)	2028 Projected RPG	2028 Un-adjusted URP	2028 EPA-adjusted URP
CRMO1	8.6	8.2	9.13	10.17
SAWT1	8.45	8.31	7.64	8.33
SULA1	7.91	7.79	8.23	9.07

Table 13 of this preamble indicates that visibility at Idaho Class I areas on the clearest days has not degraded since the baseline. Table 14 of this preamble shows that the projected 2028 RPGs on the most impaired days are below the default and the EPA-adjusted URPs at Craters of the Moon National Monument and Preserve (CRMO1) and Selway-Bitterroot Wilderness Areas (SELA1). At Sawtooth Wilderness Area (SAWT1), the 2028 RPG is above the default URP but below the EPA-adjusted URP. Therefore, we propose to approve the Idaho submissions for purposes of 40 CFR 51.308(f)(3)(i) and (f)(3)(ii)(A).

Under 40 CFR 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. Overall, no other neighboring States identified additional emission reductions measures on Idaho sources that were reasonable when Idaho coordinated emission strategy consultation with neighboring States. Idaho did not receive any request for specific SO_2 and NO_X controls for Idaho facilities.

As discussed in section III.E. of this preamble, in developing its long-term strategy, Idaho used the WEP and rank point analysis results to identify sources in Idaho impacting Class I areas in other States and whether Idaho needed to impose emission reduction measures on those sources. Ultimately, Idaho determined that the sources it selected for review under the four statutory factors captured the sources potentially contributing to visibility impairment in Class I areas in other States. Importantly, Idaho noted that all the sources it reviewed had greater visibility impacts on Idaho Class I areas. Specifically, the 2028OTBa2 State-level source apportionment results indicated that Idaho facilities had the most significant impact on visibility impairment at Class I areas within the State. Thus, Idaho reasoned, and the neighboring States agreed, that addressing visibility impairment in Idaho's Class I areas would adequately Idaho source's contribution to visibility impairment in Class I areas outside the State.

Therefore, we propose to approve 40 CFR 51.308(f)(2)(ii)(C) because there were no disagreements from any contacted surrounding States.

As noted in the Regional Haze Rule at 40 CFR 51.308(f)(3)(iii), the RPGs are not directly enforceable, but will be considered by the Administrator in evaluating the adequacy of the measures in the implementation plan in providing for reasonable progress towards achieving natural visibility conditions at that area. Because the long-term strategy control requirements drive the RPGs, and because we are proposing to approve the long-term strategy control requirements for Idaho Class I areas, we are also proposing to approve the applicable requirements of 40 CFR 51.308(f)(3) relating to RPGs for Idaho Class I areas.

Idaho has not been advised by the EPA or any FLM of the need to conduct additional monitoring to assess reasonably attributable visibility impairment and therefore the EPA proposes to determine that 40 CFR 51.308(f)(4) has been met.

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.

[326] Technical Support Document for the EPA's Updated 2028 Regional Haze Modeling, in the docket for this action.

[327] *Ibid.*

[328] Sources: Idaho 2022 plan submission, table 45; and Technical Support Document for the EPA's Updated 2028 Regional Haze Modeling.

[329] Sources: Idaho 2022 plan submission, figures 47 through 49 and Technical Support Document for the EPA's 2028 Updated Regional Haze Modeling, September 19, 2019.

The Idaho submissions describe visibility monitoring at Idaho Class I areas and asserts the IMPROVE network in Idaho continues to provide representative data.[330] The IMPROVE program was designated as the visibility monitoring network to carry out this responsibility. The IMPROVE monitors collect 24-hour samples, every three days. Each Class I area in Idaho has an IMPROVE monitor site located within the area: Craters of the Moon Wilderness Area (CRMO1), Sawtooth Wilderness Area (SAWT1), and Selway-Bitterroot Wilderness Area (SULA1) (located on Sula Peak in Sula, Montana). The three-monitor visibility monitoring network in Idaho is appropriate to ensure the air monitoring data collected is representative of the air quality within the Idaho Class I areas.

Section 51.308(f)(6)(i) requires SIPs to provide for the establishment of any additional monitoring sites or equipment needed to assess whether RPGs to address regional haze for all Class I areas within the State are being achieved.

As listed in Table 1 of this preamble, visibility data for Idaho's Class I areas are collected at IMPROVE monitors currently operated by the National Park Service at Craters of the Moon National Monument and Preserve (CRMO1) and Yellowstone National Park (YELL2), and the U.S. Forest Service at Hells Canyon Wilderness Area (HECA1), the Sawtooth Wilderness Area (SAWT1), and Selway-Bitterroot Wilderness Area (SULA1).

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 Class I areas both within and outside the State.

Idaho relied on WRAP emissions inventory and technical tools, and EPA modeling. The tools and analyses included the EPA's three-dimensional grid-based Eulerian air quality model (CMAQ), CAM_X-Particulate Source Apportionment Technology (PSAT), as well as a variety of data analysis techniques that include back trajectory calculations, area of influence and weighted emissions potential analysis, and the use of monitoring and inventory data. Therefore, we propose to approve the submissions for purposes of 40 CFR 51.308(f)(6)(ii).

We note that section 51.308(f)(6)(iii) does not apply to Idaho because it has Class I areas. 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. Idaho's reliance on the IMPROVE network depends on its maintenance by Federal Land Managers and other members of the Western Regional Air Partnership (WRAP), including States, Tribes, and the EPA. Idaho anticipates that operations and maintenance will encompass data collection, analysis, quality assurance, and reporting. Additionally, Idaho expects that the Federal Land Managers will continue to provide access to IMPROVE data for the public through WRAP-supported web platforms. Idaho also complies with the Air Emissions Reporting Rule. Therefore, the EPA proposes to determine that the Idaho 2022 submission and Idaho 2024 supplemental submission satisfy the requirement of 40 CFR 51.308(f)(6)(vi).

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.

The Idaho submissions use two main emission inventories which are found in the WRAP TSS emissions reference (WRAP 2021d). The representative baseline represents the 2014–2018 period and was developed with the 2014 National Emission Inventory with updates to account for the changes and variations in emissions between 2014 and 2018 for key source factors and is known as the representative baseline (RepBase2). The WRAP developed a future forecast 2028 inventory (2028OTBa2) to represent the end of the second implementation period. The 2028 inventory was put together by using methods applied by the EPA in the September 2019 technical support document for updated 2028 regional haze modeling (EPA 2019b) and Idaho updated source sectors to account for implementation by 2028 of all applicable Federal and State requirements for US anthropogenic emissions.[331]

Pollution inventories in the 2014 inventory were broken down by source category and air pollutant, including volatile organic compounds (VOCs), carbon monoxide [332] (CO), nitrogen oxides (NO_X), sulfur oxides (SO_X), ammonia (NH_3), and coarse and fine particulate matter (PM_{10} and $PM_{2.5}$, respectively). The inventories represent sources and source categories statewide including stationary point and areas sources, fugitive dust, anthropogenic and natural fires, and on-road and non-road mobile sources. The EPA used these inventories to complete modeling for Idaho and other states using (CMAQ) modeling platform. See section IV.F. of this preamble for more information on the EPA's CMAQ modeling for Idaho.

Chapter 4 *Emissions Inventory* of the Idaho 2022 submission includes tables of NEI data.[333] The source categories of the emissions inventories included are: (1) point sources; (2) nonpoint sources; (3) non-road mobile sources, (4) on-road mobile sources, (5) fire sources; and (6) natural and biogenic sources. Idaho included NEI emissions inventories based on 2017, the most recent year for which data are available. Idaho observed that Statewide NO_X emissions are primarily from mobile sources, followed by the point source sector. The 2017 NEI shows a decrease in NO_X mobile emissions since the 2014 NEI, largely due to more stringent Federal emissions standards for on-road mobile sources.[334] Point sources are the largest anthropogenic source of SO_2 in Idaho. Idaho stated there are lower emissions in the 2017 NEI compared to the 2014 NEI because of lower natural gas prices and facilities switching to natural gas when able to use multiple fuels. The remainder of the emissions in the inventory come from wildfire. For particulate matter, emissions are mostly from nonpoint sources such as fugitive dust.

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. Idaho relied on the WRAP 2028 emissions projections for WRAP states. WRAP developed a projected EI for 2028 following methods applied by the EPA in the September 2019 technical support document for updated 2028 regional haze modeling. States updated source sectors to account for implementation by 2028 of all applicable Federal and State requirements for U.S. anthropogenic emissions. This emissions inventory is referred to as 2028OTBa2 in Idaho's submissions.[335]

In sum, the EPA proposes to find that Idaho has met the requirements of 40 CFR 51.308(f)(6) as described in section IV.G. of this preamble, including through the State's continued

[330] Idaho 2022 plan submission, pages 13–22.

[331] Idaho 2022 plan submission, page 25.

[332] Carbon monoxide is not considered a haze pollutant but was included in the datasets because it is one of the criteria pollutants.

[333] Idaho 2022 plan submission, pages 24–35.

[334] Idaho 2022 plan submission, page 28–30.

[335] Idaho 2022 plan submission, page 25.

participation in the IMPROVE network and the WRAP and its on-going compliance with the Air Emissions Reporting Rule.

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. Section 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, section 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 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.

1. Idaho Progress Report

As part of the submissions, Idaho submitted a progress report covering the second half of the first implementation period. The Idaho submissions included five-year averages of the annual values for the most impaired and clearest days and describes the status of measures of the long-term strategy from the first implementation period.[336] In the progress report, Idaho concluded that sufficient progress was made toward the RPGs during the first implementation period.[337] Idaho stated that the most significant reductions were in anthropogenic nitrate and sulfate emissions since the baseline period achieved through emissions controls on Idaho BART-eligible sources, including the P4 Production and the TASCO—Nampa facilities. Idaho's progress report also included emissions data demonstrating the reductions achieved due to State and Federal controls.[338]

The EPA proposes to find that Idaho has met the requirements of 40 CFR 51.308(g)(1) and (2) because the submissions included a progress report that described the measures included in the long-term strategy from the first implementation period, as well as the implementation status and the emission reductions achieved through such implementation. The EPA also proposes to find that Idaho has satisfied the requirements of 40 CFR 51.308(g)(3) because the progress report included summaries of the visibility conditions and the trend of the five-year averages through 2018 at the Idaho Class I areas.[339]

Pursuant to section 51.308(g)(4), Idaho provided a summary of emissions data from sources and activities, including point, nonpoint, non-road mobile, on-road mobile sources, wildfires, and volcanic emissions.[340] Additionally, the EPA included a spreadsheet that tracks Idaho air pollutant emissions trends data through 2017 for all NEI pollutants.[341] The EPA is proposing to find that the requirements of section 51.308(g)(4) are met by providing emissions information for the various pollutants broken down by type of source. Therefore, the EPA is proposing to find that Idaho has met the requirements of section 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 Federal Land Managers before holding the public hearing on a proposed regional haze SIP, and to include a summary of the Federal Land Managers' conclusions and recommendations in the notice to the public. Section 51.308(i)(2)'s Federal Land Manager consultation provision requires a State to provide Federal Land Managers 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 Federal Land Managers' 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) also provides two substantive topics on which Federal Land Managers must be provided an opportunity to discuss with States: assessment of visibility impairment in any Class I area and 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 Federal Land Managers' comments.

1. Idaho Consultation and Coordination

The submissions made clear that Idaho consulted and coordinated with the Federal Land Managers early and often in the State's planning process.[342] The WRAP hosted State and Federal coordination calls and Technical Support System development calls on a routine basis and representatives from the Idaho DEQ regularly participated. The Idaho DEQ held multiple consultation meetings with the National Park Service and U.S. Forest Service.[343] After several years of engagement, the Federal Land Managers agreed to a 60-day review period for the initial draft Idaho submissions (from December 23, 2021 through March 1, 2022) and the Idaho supplement (from May 8, 2024 through July 8, 2024).[344] Idaho received and responded to comments from the National Park Service, the U.S. Forest Service, and the EPA. The Idaho DEQ included the comments and responses in appendix F of the submissions, included in the docket for this action. We have determined that Idaho provided adequate opportunity for Federal Land Manager consultation, consistent with 40 CFR 51.308(i)(3). Additionally, the Idaho submissions committed to continuing to provide the

[336] Idaho 2022 plan submission, pages 11–12.

[337] *Id.,* pages 8–10.

[338] 84 FR 13582, April 5, 2019.

[339] 84 FR 13582, April 5, 2019.

[340] *Id.,* pages 35–37.

[341] *See* Excel spreadsheet of Idaho Air Pollutant Emissions Trends Data in the docket for this action.

[342] Idaho 2022 plan submission, page 95 and Appendix C. Consultation Dates.

[343] *Ibid.*

[344] *Ibid.*

Federal Land Managers the opportunity for consultation.[345]

On June 22, 2022, Idaho published notice of the availability of the initial draft submissions and public hearing on the Idaho website.[346] Idaho held a public hearing on July 21, 2022. Written comments relevant to the proposal were accepted until the close of business July 21, 2022. On August 12, 2024, Idaho published notice of the availability of the draft supplement and public hearing on the Idaho website.[347] A public hearing on the draft supplement was scheduled for September 11, 2024. Written comments relevant to the proposal were accepted until the close of business September 11, 2024.

The EPA proposes to find that Idaho has satisfied the requirements of Clean Air Act section 169A(d) and 40 CFR 51.308(i) to consult with the Federal Land Managers on the August 5, 2022, Idaho submission and the September 27, 2024, supplemental submission.

IV. Proposed Action

On August 5, 2022, and September 27, 2024, Idaho submitted SIPs to address regional haze for the second implementation period (2018 through 2028). Idaho submitted the SIPs to meet visibility protection requirements pursuant to Clean Air Act sections 169A and 169B and the EPA's implementing regulations at 40 CFR 51.308.

We are proposing to approve the SIP revision as meeting the following requirements:

- Identification of Class I area requirements of 40 CFR 51.308(f);
- Calculation of baseline, current, and natural visibility conditions; progress to date; and uniform rate of progress requirements of 40 CFR 51.308(f)(1);
- Long-term strategy requirements of 40 CFR 51.308(f)(2);
- Reasonable progress goal requirements of 40 CFR 51.308(f)(3);
- Reasonably attributable visibility impairment requirements of 40 CFR 51.308(f)(4);
- Monitoring strategy and other plan requirements of 40 CFR 51.308(f)(6);
- 5-year progress report requirements of 40 CFR 51.308(f)(5) and (g); and
- State and Federal Land Manager coordination requirements of 40 CFR 51.308(i).

We are also proposing to approve and incorporate by reference into the Idaho SIP at 40 CFR 52.670(d), the following source-specific control requirements:

TABLE 15—REGIONAL HAZE LONG-TERM STRATEGY SOURCE SPECIFIC PROVISIONS

Name of source	Permit or compliance agreement number	State effective date	Explanations
Clearwater Paper	Permit T1–2020.0024	3/30/2023	Permit conditions 5.4, 5.5, 5.6, 5.7, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 7.1, 7.4, 7.9, 7.10, 8.1, 8.6, 9.1, 9.2, 9.6, 9.11, 26.22, 26.23, 26.26, 26.27, 26.28, and 26.29 only.
ITAFOS	Permit T1–2016.0015	3/2/2022	Permit conditions 5.1, 5.4, 5.5, 5.11, 16.22, and 16.23 only.
NWP-Soda Springs	Compliance Agreement Schedule Case No. E–2023.0011.	9/1/2023	
P4	Compliance Agreement Schedule Case No. E–2023.0013.	11/27/2021	
P4	Permit T1–2020.0029	12/23/2021	Permit conditions 4.2, 4.4, 4.5, 4.6, 4.7, 4.19, 4.20, 4.21, 13.22, and 13.33 only.
Simplot	Permit T1–2017.0024	3/29/2023	Permit conditions 15.9, 15.10, 15.11, 15.19, 15.20, 15.21, 15.22, 15.25, 15.27, 16.6, 16.9, 16.10, 16.19, 16.20, 16.21, 16.22, 16.26, 16.27, 18.22, and 18.23 only.
Tamarack Mills	Permit T1–2019–0024	10/17/2022	Permit conditions 5.2, 5.3, 5.5, 5.8, 5.17, 10.22, and 10.23 only.
TASCO-Nampa	Permit P–2018.0011	2/15/2023	Permit condition 4.8 only.
TASCO-Paul	Permit T1–2019–0020	11/5/2021	Permit conditions 4.3, 4.4, 4.5, 4.6, 4.7, 4.9, 4.10, 4.11, 4.12, 4.15, 4.16, 4.18, 11.22, and 11.23 only.
TASCO-Twin Falls	Permit T1–2016.0017	1/21/2022	Permit condition 4.9 and 5.2 only.

V. Incorporation by Reference

In this document, the EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the regulatory provisions described in section IV. of this preamble. The EPA has made, and will continue to make, these materials generally available through *https://www.regulations.gov* and at the EPA Region 10 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VI. Statutory and Executive Order Reviews

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

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- 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

[345] *Id.,* page 96.

[346] *https://www.deq.idaho.gov/events/public-hearing-regarding-an-update-to-the-idaho-state-implementation-plan/.*

[347] *https://www.deq.idaho.gov/deq-seeks-comment-on-idahos-supplement-to-the-regional-haze-state-implementation-plan-for-the-second-planning-period/.*

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 subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a State program;
- 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 Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act.

In addition, this proposed action 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). Consistent with EPA policy, the EPA contacted four Tribes, specifically the Coeur d'Alene Tribe, the Shoshone Bannock Tribes of the Fort Hall Reservation, the Nez Perce Tribe, and the Kootenai Tribe of Idaho, and offered an opportunity to consult on a government-to-government basis prior to this proposed action in letters dated July 22, 2022. We received no consultation or coordination requests prior to this proposed action. The letters may be found in the docket for this action.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

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

Dated: March 7, 2025.

Emma Pokon,

Regional Administrator, Region 10.

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