ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2021-0930; FRL-10403-01-R4]

Air Plan Approval; Florida; Second Planning Period Regional Haze Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve regional haze state implementation plan (SIP) revisions submitted by the Florida Department of Environmental Protection (FDEP) on October 8, 2021, and supplemented on June 14, 2024, and October 28, 2024, as satisfying applicable requirements under the Clean Air Act (CAA or Act) and EPA's Regional Haze Rule (RHR) for the program's second planning period. Florida's SIP submissions for the second planning period address the requirement that states must periodically revise their long-term strategies (LTSs) for making reasonable progress toward the national goal of preventing any future, and remedying any existing, anthropogenic impairment of visibility, including regional haze, in mandatory Class I Federal areas. These SIP submissions also address other applicable requirements for the second planning period of the regional haze program. EPA is taking this action pursuant to sections 110 and 169A of the Act.

DATES: Written comments must be received on or before **[Insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2021-0930, at https://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment

and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Pearlene Williams-Miles, Multi-Air Pollutant Coordination Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Ms. Williams-Miles can be reached via telephone at (404) 562-9144 or electronic mail at williamsmiles.pearlene@epa.gov.

SUPPLEMENTARY INFORMATION:

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I. What Action is EPA Proposing?

On October 8, 2021, and supplemented on June 14, 2024, and October 28, 2024, FDEP submitted revisions to its SIP to address regional haze for the second planning period. FDEP made these SIP submissions to satisfy the requirements of the CAA's regional haze program pursuant to CAA sections 169A and 169B and 40 CFR 51.308.[1] EPA is proposing to find that the Florida regional haze SIP submissions for the second planning period ("Haze Plan") meet the applicable statutory and regulatory requirements, and thus, EPA also proposes to approve Florida's submissions.[2]

II. Background and Requirements for Regional Haze Plans

A. Regional Haze Background

In the 1977 CAA Amendments, Congress created a program for protecting visibility in the nation's mandatory Class I Federal areas, which include certain national parks and wilderness areas.[3] *See* CAA 169A. The CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." *See* CAA 169A(a)(1). The CAA further directs EPA to promulgate regulations to assure reasonable progress toward meeting this national goal. *See* CAA 169A(a)(4). On December 2, 1980, EPA promulgated regulations to address visibility impairment in mandatory Class I Federal areas (hereinafter referred to as "Class I areas") that is "reasonably attributable" to a single source or small group of sources. (45 FR

[1] The 2021 Plan includes a request to remove source-specific and Best Available Retrofit Technology (BART) limits and conditions from the Florida SIP, which Florida provided to address BART and source-specific reasonable progress requirements during the first planning period. On June 14, 2024, FDEP withdrew this request. Thus, EPA will not act on this portion of Florida's 2021 Plan. FDEP's request to withdraw the portion of the 2021 plan that requests the removal of the first period planning period source specific and BART limits may be found the Materials to be Removed section of the 2024 Supplement.

[2] "Haze Plan" collectively refers to the October 8, 2021, June 14, 2024, and October 28, 2024, SIP submissions. The phrase "2021 Plan" refers to the October 8, 2021, SIP submission; "2024 Supplement" refers to the June 14, 2024, SIP submission which supplements the 2021 Plan; and "Second 2024 Supplement" refers to the October 28, 2024, SIP submission which also supplements the 2021 Plan. Each submission contains an administrative file which provides the specific permit conditions FDEP requests for incorporation into the Florida SIP under the Materials to be Incorporated into the SIP section.

[3] 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. *See* CAA 162(a). There are 156 mandatory Class I areas. The list of areas to which the requirements of the visibility protection program apply is in 40 CFR part 81, subpart D.

80084, December 2, 1980) These regulations, codified at 40 CFR 51.300 through 51.307, represented the first phase of EPA's efforts to address visibility impairment. In 1990, Congress added section 169B to the CAA to further address visibility impairment, specifically, impairment from regional haze. *See* CAA 169B. EPA promulgated the RHR, codified at 40 CFR 51.308,[4] on July 1, 1999. *See* 64 FR 35714, July 1, 1999. These regional haze regulations are a central component of 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 (NOx), and, in some cases, volatile organic compounds (VOC) and ammonia (NH_3)). Precursor pollutants react in the atmosphere to form fine particulate matter (particles less than or equal to 2.5 micrometers (μm) in diameter, $PM_{2.5}$), which impairs visibility by scattering and absorbing light. Visibility impairment reduces the perception of clarity and color, as well as visible distance.[5]

To address regional haze visibility impairment, the 1999 RHR established an iterative planning process that requires both states in which Class I areas are located and states "the emissions from which may reasonably be anticipated to cause or contribute to any impairment of

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[4] In addition to the generally applicable regional haze provisions at 40 CFR 51.308, 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.

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

visibility" in a Class I area to periodically submit SIP revisions to address such impairment. *See* CAA 169A(b)(2);[6] *see also* 40 CFR 51.308(b), (f) (establishing submission dates for iterative regional haze SIP revisions); 64 FR 35768, July 1, 1999. Under the CAA, each SIP submission must contain "a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal," CAA 169A(b)(2)(B); the initial round of SIP submissions also had to address the statutory requirement that certain older, larger sources of visibility impairing pollutants install and operate BART. CAA 169A(b)(2)(A); 40 CFR 51.308(d), (e). States' first regional haze SIPs were due by December 17, 2007, 40 CFR 51.308(b), with subsequent SIP submissions containing updated LTS originally due July 31, 2018, and every ten years thereafter. *See* 64 FR 35768, July 1, 1999. EPA established in the 1999 RHR that all states either have Class I areas within their borders or "contain sources whose emissions are reasonably anticipated to contribute to regional haze in a Class I area"; therefore, all states must submit regional haze SIPs.[7] *Id.* at 35721.

Much of the focus in the first planning period of the regional haze program, which ran from 2007 through 2018, was on satisfying states' BART obligations. First planning period SIPs were additionally required to contain LTSs for making reasonable progress toward the national visibility goal, of which BART is one component. The core required elements for the first planning period SIPs (other than BART) are laid out in 40 CFR 51.308(d). Those provisions require that states containing Class I areas establish RPGs that are measured in deciviews and reflect the anticipated visibility conditions at the end of the period including from implementation of states' LTSs. The first planning period RPGs were required to provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period. In

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

[7] In addition to each of the 50 states, 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).

establishing the RPGs for any Class I area in a state, the state was required to consider four statutory factors (also referenced herein as "the four factors"): the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources. *See* CAA 169A(g)(1); 40 CFR 51.308(d)(1).

States were also required to calculate baseline (using the five-year period of 2000–2004) and natural visibility conditions (*i.e.*, visibility conditions without anthropogenic visibility impairment) for each Class I area, and to calculate the linear rate of progress needed to attain natural visibility conditions, assuming a starting point of baseline visibility conditions in 2004 and ending with natural conditions in 2064. This linear interpolation is known as the uniform rate of progress (URP) and is used as a tracking metric to help states assess the amount of progress they are making toward the national visibility goal over time in each Class I area.[8] *See* 40 CFR 51.308(d)(1)(i)(B), (d)(2). The 1999 RHR also provided that states' LTSs must include the "enforceable emissions limitations, compliance, schedules, and other measures as necessary to achieve the reasonable progress goals." *See* 40 CFR 51.308(d)(3). In establishing their LTSs, states are required to consult with other states that also contribute to visibility impairment in a given Class I area and include all measures necessary to obtain their shares of the emission reductions needed to meet the RPGs. *See* 40 CFR 51.308(d)(3)(i), (ii). Section 51.308(d) also contains seven additional factors states must consider in formulating their LTSs, 40 CFR 51.308(d)(3)(v), as well as provisions governing monitoring and other implementation plan requirements. *See* 40 CFR 51.308(d)(4). Finally, the 1999 RHR required states to submit

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

periodic progress reports – SIP revisions due every five years that contain information on states' implementation of their regional haze plans and an assessment of whether anything additional is needed to make reasonable progress, *see* 40 CFR 51.308(g), (h) – and to consult with the FLMs[9] responsible for each Class I area according to the requirements in CAA 169A(d) and 40 CFR 51.308(i).

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

EPA provided guidance to the states for their second planning period SIP submissions in the preamble to the 2017 RHR Revisions as well as in subsequent stand-alone guidance documents. In August 2019, EPA issued its 2019 Guidance.[10] On July 8, 2021, EPA issued a

[9] EPA's regulations define "Federal Land Manager" as "the Secretary of the department with authority over the Federal Class I area (or the Secretary's designee) or, with respect to Roosevelt-Campobello International Park, the Chairman of the Roosevelt-Campobello International Park Commission." *See* 40 CFR 51.301.
[10] *See* footnote 4.

memorandum containing "Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period" ("2021 Clarifications Memo").[11] Additionally, EPA further clarified the recommended procedures for processing ambient visibility data and optionally adjusting the URP to account for international anthropogenic and prescribed fire impacts in two technical guidance documents: the December 2018 "Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program" ("2018 Visibility Tracking Guidance"),[12] and the June 2020 "Recommendation for the Use of Patched and Substituted Data and Clarification of Data Completeness for Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program" and associated Technical Addendum ("2020 Data Completeness Memo").[13]

As explained in the 2021 Clarifications Memo, EPA intends the second planning period of the regional haze program to secure meaningful reductions in visibility impairing pollutants that build on the significant progress states have achieved to date. The Agency also recognizes that analyses regarding reasonable progress are state-specific and that, based on states' and sources' individual circumstances, what constitutes reasonable reductions in visibility impairing pollutants will vary from state to state. While there exist many opportunities for states to leverage both ongoing and upcoming emission reductions under other CAA programs, the Agency expects states to undertake rigorous reasonable progress analyses that identify further opportunities to advance the national visibility goal consistent with the statutory and regulatory requirements. *See, generally,* 2021 Clarifications Memo. This is consistent with Congress's determination that a visibility protection program is needed in addition to the CAA's National

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

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

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

Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) programs, as further emission reductions may be necessary to adequately protect visibility in Class I areas throughout the country.[14]

B. Roles of Agencies in Addressing Regional Haze

Because the air pollutants 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),[15] which include representation from state and tribal governments, EPA, and FLMs, were developed in the lead-up to the first planning period to address regional haze. RPOs evaluate technical information to better understand how emissions from state and tribal land impact Class I areas across the country, pursue the development of regional strategies to reduce emissions of PM and other pollutants leading to regional haze, and help states meet the consultation requirements of the RHR.

The Southeastern States Air Resource Managers, Inc. (SESARM), one of the five RPOs described above, is a collaborative effort of state and local agencies and tribal governments established to initiate and coordinate activities associated with the management of regional haze, visibility, and other air quality issues in the Southeast. SESARM's coalition to conduct regional haze work is referred to as Visibility Improvement State and Tribal Association of the Southeast (VISTAS).[16] Member states, local air agencies, and tribal governments of VISTAS are

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

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

[16] The VISTAS technical work under SESARM is described at this website: https://www.metro4-sesarm.org/content/vistas-regional-haze-program.

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia; the local air agencies, represented by the President of Metro 4 or designee;[17] and the Tribes located within the VISTAS region, represented by the Eastern Band of the Cherokee Indians. The Federal partner members of VISTAS are EPA, U.S. National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and U.S. Forest Service (USFS).[18]

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

Under the CAA and EPA's regulations, all 50 states, the District of Columbia, and the U.S. Virgin Islands are required to submit regional haze SIPs satisfying the applicable requirements for the second planning period of the regional haze program by July 31, 2021. Each state's SIP must contain a LTS for making reasonable progress toward meeting the national goal of remedying any existing and preventing any future anthropogenic visibility impairment in Class I areas. *See* CAA 169A(b)(2)(B). To this end, 40 CFR 51.308(f) lays out the process by which states determine what constitutes their LTSs, with the order of the requirements in 40 CFR 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 LTS. *See* 40 CFR 51.308(f) introductory text, (f)(2). For each Class I area within its borders, a state must then calculate the baseline, current, and natural visibility conditions for that area, as well as the visibility improvement made to date and the URP. *See* 40 CFR 51.308(f)(1). Each state having a Class I area and/or emissions that may affect visibility in a Class I area must then develop a

[17] Metro 4 is a Tennessee corporation which represents the local air pollution control agencies in EPA's Region 4 in the Southeast. *See* https://www.metro4-sesarm.org/content/metro-4-about-us.
[18] The NPS, FWS, and USFS are collectively referred to as the "Federal Land Managers" or "FLMs" throughout this document.
[19] EPA explained in the 2017 RHR Revisions that the Agency was adopting new regulatory language in 40 CFR 51.308(f) that, unlike the structure in § 51.308(d), "tracked the actual planning sequence." *See* 82 FR 3091, January 10, 2017.

LTS that includes the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress in such areas. A reasonable progress determination is based on applying the four factors in CAA section 169A(g)(1) to sources of visibility impairing pollutants that the state has selected to assess for controls for the second planning period.

Additionally, as further explained below, the RHR at 40 CFR 51.3108(f)(2)(iv) separately provides five "additional factors"[20] that states must consider in developing their long-term strategies. *See* 40 CFR 51.308(f)(2). 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 LTS. After a state has developed its LTS, 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 planning period, *i.e.*, in 2028, as well as the impacts of other requirements of the CAA. The RPGs include reasonable progress controls not only for sources in the state in which the Class I area is located, but also for sources in other states that contribute to visibility impairment in that area. The RPGs are then compared to the baseline visibility conditions and the URP to ensure that progress is being made toward the statutory goal of preventing any future and remedying any existing anthropogenic visibility impairment in Class I areas. *See* 40 CFR 51.308(f)(2) and (3).

In addition to satisfying the requirements at 40 CFR 51.308(f) related to reasonable progress, the regional haze SIP revisions for the second planning period must address the requirements in 40 CFR 51.308(g)(1) through (5) pertaining to periodic reports describing progress toward the RPGs, 40 CFR 51.308(f)(5), as well as requirements for FLM consultation that apply to all visibility protection SIPs and SIP revisions. *See* 40 CFR 51.308(i).

A state must submit its regional haze SIP and subsequent SIP revisions to EPA according

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

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

A. Identification of Class I Areas

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

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

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

As part of assessing whether a SIP submission for the second planning period is providing for reasonable progress toward the national visibility goal, the RHR contains requirements in 40 CFR 51.308(f)(1) related to tracking visibility improvement over time. The requirements of this subsection apply only to states having Class I areas within their borders; the required calculations must be made for each such Class I area. EPA's 2018 Visibility Tracking Guidance[21] provides recommendations to assist states in satisfying their obligations under 40 CFR 51.308(f)(1); specifically, in developing information on baseline, current, and natural visibility conditions, and in making optional adjustments to the URP to account for the impacts of international anthropogenic emissions and prescribed fires. *See* 82 FR 3103–05.

The RHR requires tracking of visibility conditions on two sets of days: the clearest and the most impaired days. Visibility conditions for both sets of days are expressed as the average deciview index for the relevant five-year period (the period representing baseline or current visibility conditions).[22] The RHR provides that the relevant sets of days for visibility tracking purposes are the 20 percent clearest days (the 20 percent of monitored days in a calendar year with the lowest values of the deciview index) and 20 percent most impaired days (the 20 percent of monitored days in a calendar year with the highest amounts of anthropogenic visibility impairment).[23] *See* 40 CFR 51.301. A state must calculate visibility conditions for both the 20 percent clearest days and 20 percent 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). *See* 40 CFR 51.308(f)(1)(i), (iii). States must also

[21] 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. EPA Office of Air Quality Planning and Standards, Research Triangle Park (September 2003).

[22] The "deciview index" means a value for a day that is derived from calculated or measured light extinction, such that uniform increments of the index correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to very obscured. The deciview index is calculated using Interagency Monitoring of Protected Visual Environments (IMPROVE) aerosol measurements. *See* 40 CFR 51.301.

[23] This notice also refers to the 20 percent clearest and 20 percent most anthropogenically impaired days as the "clearest" and "most impaired" or "most anthropogenically impaired" days, respectively.

calculate natural visibility conditions for the clearest and most impaired days[24] by estimating the conditions that would exist on those two sets of days absent anthropogenic visibility impairment. *See* 40 CFR 51.308(f)(1)(ii). Using all these data, states must then calculate, for each Class I area, the amount of progress made since the baseline period (2000–2004) and how much improvement is left to achieve in order to reach natural visibility conditions.

Using the data for the set of most impaired days only, states must plot a line between visibility conditions in the baseline period and natural visibility conditions for each Class I area to determine the URP—the amount of visibility improvement, measured in deciviews, that would need to be achieved during each planning period in order to achieve natural visibility conditions by the end of 2064. The URP is used in later steps of the reasonable progress analysis for informational purposes and to provide a non-enforceable benchmark against which to assess a Class I area's rate of visibility improvement.[25] Additionally, in the 2017 RHR Revisions, EPA provided states the option of proposing to adjust the endpoint of the URP to account for impacts of anthropogenic sources outside the United States and/or impacts of certain types of wildland prescribed fires. These adjustments, which must be approved by 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. *See* 82 FR 3107, footnote 116.

EPA's 2018 Visibility Tracking Guidance can be used to help satisfy the 40 CFR 51.308(f)(1) requirements, including in developing information on baseline, current, and natural visibility conditions, and in making optional adjustments to the URP. In addition, the 2020 Data

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

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

Completeness Memo provides recommendations on the data completeness language referenced in 40 CFR 51.308(f)(1)(i) and provides updated natural conditions estimates for each Class I area.

C. Long-Term Strategy (LTS) for Regional Haze

The core component of a regional haze SIP submission is a LTS 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 LTS "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)." *See* 40 CFR 51.308(f)(2). The amount of progress that is "reasonable progress" is based on applying the four statutory factors in CAA section 169A(g)(1) in an evaluation of potential control options for sources of visibility impairing pollutants, which is referred to as a "four-factor" analysis (FFA). 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 toward the national visibility goal. *See* 40 CFR 51.308(f)(2)(i). Emission reduction measures that are necessary to make reasonable progress may be either new, additional control measures for a source or the existing emission reduction measures that a source is already implementing. *See* 2019 Guidance at 43; 2021 Clarifications Memo at 8–10. Such measures must be represented by "enforceable emissions limitations, compliance schedules, and other measures" in a state's LTS in its SIP. *See* 40 CFR 51.308(f)(2).

Section 51.308(f)(2)(i) provides the requirements for the FFA. The first step of this analysis entails selecting the sources to be evaluated for emission reduction measures; to this end, the RHR requires states to consider "major and minor stationary sources or groups of sources, mobile sources, and area sources" of visibility impairing pollutants for potential control analysis (*i.e.*, FFA). *See* 40 CFR 51.308(f)(2)(i). A threshold question at this step is which visibility impairing pollutants will be analyzed. As EPA previously explained, consistent with the first planning period, EPA generally expects that each state will analyze at least SO_2 and

NOx in selecting sources and determining control measures. *See* 2019 Guidance at 12 and 2021 Clarifications Memo at 4. A state that chooses not to consider at least these two pollutants should demonstrate why such consideration would be unreasonable. *See* 2021 Clarifications Memo at 4.

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

EPA explained in the 2021 Clarifications Memo that each state has an obligation to submit a LTS that addresses the regional haze visibility impairment that results from emissions from within that state. Thus, source selection should focus on the in-state contribution to visibility impairment and be designed to capture a meaningful portion of the state's total contribution to visibility impairment in Class I areas. A state should not decline to select its largest in-state sources on the basis that there are even larger out-of-state contributors. *See* 2021 Clarifications Memo at 4.[26]

Thus, while states have discretion to choose any source selection methodology that is reasonable, whatever choices they make should be reasonably explained. To this end, 40 CFR

[26] Similarly, in responding to comments on the 2017 RHR Revisions EPA explained that "[a] state should not fail to address its many relatively low-impact sources merely because it only has such sources and another state has even more low-impact sources and/or some high impact sources." Responses to Comments on Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule (81 FR 26942, May 4, 2016). (December 2016), Docket Number EPA-HQ-OAR-2015-0531, U.S. Environmental Protection Agency at 87–88, available at www.regulations.gov.

51.308(f)(2)(i) requires that a state's SIP submission include "a description of the criteria it used to determine which sources or groups of sources it evaluated." The technical basis for source selection, which may include methods for quantifying potential visibility impacts such as emissions divided by distance metrics, trajectory analyses, residence time analyses, and/or photochemical modeling, must also be appropriately documented, as required by 40 CFR 51.308(f)(2)(iii).

Once a state has selected the set of sources, the next step is to determine the emissions reduction measures for those sources that are necessary to make reasonable progress for the second planning period.[27] This is accomplished by considering the four factors—"the costs of compliance, the time necessary for compliance, and the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements." *See* CAA 169A(g)(1). EPA has explained that the FFA is an assessment of potential emission reduction measures (*i.e.*, control options) for sources; "use of the terms 'compliance' and 'subject to such requirements' in section 169A(g)(1) strongly indicates that Congress intended the relevant determination to be the requirements with which sources would have to comply in order to satisfy the CAA's reasonable progress mandate." *See* 82 FR 3091. Thus, for each source a state has selected for an FFA,[28] it must consider a "meaningful set" of technically feasible control options for reducing emissions of visibility impairing pollutants. *Id.* at 3088. The 2019 Guidance provides that "[a] state must reasonably

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

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

pick and justify the measures that it will consider, recognizing that there is no statutory or regulatory requirement to consider all technically feasible measures or any particular measures. A range of technically feasible measures available to reduce emissions would be one way to justify a reasonable set." *See* 2019 Guidance at 29.

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

After identifying a reasonable set of potential control options for the sources it has selected, a state then collects information on the four factors with regard to each option identified. EPA has also explained that, in addition to the four statutory factors, states have flexibility under the CAA and RHR to reasonably consider visibility benefits as an additional

factor alongside the four statutory factors.[29] The 2019 Guidance provides recommendations for the types of information that can be used to characterize the four factors (with or without visibility), as well as ways in which states might reasonably consider and balance that information to determine which of the potential control options is necessary to make reasonable progress. *See* 2019 Guidance at 30–36. The 2021 Clarifications Memo contains further guidance on how states can reasonably consider modeled visibility impacts or benefits in the context of an FFA. *See* 2021 Clarifications Memo at 12–13, 14–15. Specifically, EPA explained that while visibility can reasonably be used when comparing and choosing between multiple reasonable control options, it should not be used to summarily reject controls that are reasonable given the four statutory factors. *See* 2021 Clarifications Memo at 13. Ultimately, while states have discretion to reasonably weigh the factors and to determine what level of control is needed, 40 CFR 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, 40 CFR 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 40 CFR 51.308(f)(2), measures that are necessary to make reasonable progress toward the national visibility goal must be included in a state's LTS and in its SIP.[30] If the outcome of an FFA is a new, additional emission reduction measure for a source, that new measure is necessary to make reasonable progress toward remedying existing anthropogenic visibility impairment and must be included in the SIP. If the outcome of an FFA

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[29] *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 186; 2019 Guidance at 36–37.

[30] 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 SMP to EPA for inclusion in their SIPs but are not required to do so. *See, e.g.,* 82 FR 3108–09 (requirement to consider smoke management practices and smoke management programs under 40 CFR 51.308(f)(2)(iv) does not require states to adopt such practices or programs into their SIPs, although they may elect to do so).

is that no new measures are reasonable for a source, continued implementation of the source's existing measures is generally necessary to prevent future emission increases and thus to make reasonable progress toward the second part of the national visibility goal: preventing future anthropogenic visibility impairment. *See* CAA 169A(a)(1). That is, when the result of an FFA is that no new measures are necessary to make reasonable progress, the source's existing measures are generally necessary to make reasonable progress and must be included in the SIP. However, there may be circumstances in which a state can demonstrate that a source's existing measures are *not* necessary to make reasonable progress. Specifically, if a state can demonstrate that a source will continue to implement its existing measures and will not increase its emission rate, it may not be necessary to have those measures in the LTS in order to prevent future emission increases and future visibility impairment. EPA's 2021 Clarifications Memo provides further explanation and guidance on how states may demonstrate that a source's existing measures are not necessary to make reasonable progress. *See* 2021 Clarifications Memo at 8–10. If the state can make such a demonstration, it need not include a source's existing measures in the LTS or its SIP.

As with source selection, the characterization of information on each of the factors is also subject to the documentation requirement in 40 CFR 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, 40 CFR 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 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.[31] 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 LTS for making reasonable progress. Additionally, the RHR at 40 CFR 51.3108(f)(2)(iv) separately provides five "additional factors"[32] that states must consider in developing their LTSs: (1) emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment (RAVI); (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 LTS. The 2019 Guidance provides that a state may satisfy this requirement by considering these additional factors in the process of selecting sources for an FFA, when performing that analysis, or both, and that not every one of the additional factors needs to be considered at the same stage of the

[31] *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 Nat'l Parks Conservation Ass'n v. EPA, 803 F.3d 151, 165 (3d Cir. 2015); Alaska Dep't of Envtl. Conservation v. EPA, 540 U.S. 461, 485, 490 (2004).

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

process. *See* 2019 Guidance at 21. EPA provided further guidance on the five additional factors in the 2021 Clarifications Memo, explaining that a state should generally not reject cost-effective and otherwise reasonable controls merely because there have been emission reductions since the first planning period owing to other ongoing air pollution control programs or merely because visibility is otherwise projected to improve at Class I areas. Additionally, states generally should not rely on these additional factors to summarily assert that the state has already made sufficient progress and, therefore, no sources need to be selected or no new controls are needed regardless of the outcome of FFAs. *See* 2021 Clarifications Memo at 13.

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

considering whether to approve the state's SIP. *See id*.; 2019 Guidance at 53. Under all circumstances, a state must document in its SIP submission all substantive consultations with other contributing states. *See* 40 CFR 51.308(f)(2)(ii)(C).

D. Reasonable Progress Goals (RPGs)

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." *See* 82 FR 3091. Their primary purpose is to assist the public and EPA in assessing the reasonableness of states' LTSs for making reasonable progress toward the national visibility goal. *See* 40 CFR 51.308(f)(3)(iii) and (iv). States in which Class I areas are located must establish two RPGs – one representing visibility conditions on the clearest days and one representing visibility on the most anthropogenically impaired days – for each area within their borders. *See* 40 CFR 51.308(f)(3)(i). The two RPGs, measured in deciviews, are intended to reflect the projected impacts, on each set of days, of the emission reduction measures the state with the Class I area and other contributing states have included in their LTSs for the second planning period.[33] The RPGs also account for the projected impacts of implementing other CAA requirements, including non-SIP based requirements. Because RPGs are the modeled result of the measures in states' LTSs (as well as other measures required under the CAA), they cannot be determined before states have conducted their FFAs and determined the control measures that are necessary to make reasonable progress.[34] *See* 2021 Clarifications Memo at 6.

For the second planning period, the RPGs are set for 2028. RPGs are not enforceable targets, 40 CFR 51.308(f)(3)(iii); rather, they "provide a way for the states to check the projected

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

[34] The 2019 Guidance allows for the possibility of post-modeling adjustments to the RPGs to account for the fact that final LTS decisions for the State or for other States may not be known until late in the process, or even after SIPs are submitted. *See* 2019 Guidance at 46–48. *See* also, 82 FR 3078, 3080 (January 10, 2017).

outcome of the [long-term strategy] against the goals for visibility improvement." *See* 2019 Guidance at 46. While states are not legally obligated to achieve the visibility conditions described in their RPGs, 40 CFR 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 LTSs 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. *See* 40 CFR 51.308(f)(1)(i), 82 FR 3097–98.

So that RPGs may also serve as a metric for assessing the amount of progress a state is making toward the national visibility goal, the RHR requires states with Class I areas to compare the 2028 RPG for the most impaired days to the corresponding point on the URP line (representing visibility conditions in 2028 if visibility were to improve at a linear rate from conditions in the baseline period of 2000–2004 to natural visibility conditions in 2064). If the most impaired days RPG in 2028 is above the URP (*i.e.*, if visibility conditions are improving more slowly than the rate described by the URP), each state that contributes to visibility impairment in the Class I area must demonstrate, based on the FFA required under 40 CFR 51.308(f)(2)(i), that no additional emission reduction measures would be reasonable to include in its LTS. *See* 40 CFR 51.308(f)(3)(ii). To this end, 40 CFR 51.308(f)(3)(ii) requires that each state contributing to visibility impairment in a Class I area that is projected to improve more slowly than the URP provide "a robust demonstration, including documenting the criteria used to determine which sources or groups [of] sources were evaluated and how the four factors required by paragraph (f)(2)(i) were taken into consideration in selecting the measures for inclusion in its long-term strategy." The 2019 Guidance provides suggestions about how such a "robust

demonstration" might be conducted. *See* 2019 Guidance at 50–51.

The 2017 RHR, 2019 Guidance, and 2021 Clarifications Memo also explain that projecting an RPG that is on or below the URP based on only on-the-books and/or on-the-way control measures (*i.e.*, control measures already required or anticipated before the FFA is conducted) is not a "safe harbor" from the CAA's and RHR's requirement that all states must conduct an FFA to determine what emission reduction measures constitute reasonable progress.[35] The URP is a planning metric used to gauge the amount of progress made thus far and the amount left before reaching natural visibility conditions. However, the URP is not based on consideration of the four statutory factors and therefore cannot answer the question of whether the amount of progress being made in any particular planning period is "reasonable progress." *See* 82 FR 3093, 3099–3100; 2019 Guidance at 22; 2021 Clarifications Memo at 15–16.

E. Monitoring Strategy and Other State Implementation Plan Requirements

Section 51.308(f)(6) requires states to have certain strategies and elements in place for assessing and reporting on visibility. Individual requirements under this subsection apply either to states with Class I areas within their borders, states with no Class I areas but that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area, or both. A state with Class I areas within its borders must submit with its SIP revision a monitoring strategy for measuring, characterizing, and reporting regional haze visibility impairment that is representative of all Class I areas within the state. SIP revisions for such states must also provide for the establishment of any additional monitoring sites or equipment needed to assess visibility conditions in Class I areas, as well as reporting of all visibility monitoring data to EPA at least annually. Compliance with the monitoring strategy requirement may be met through a state's participation in the 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.

[35] In lieu of conducting an FFA, states may elect to show the source has existing effective controls for the particular pollutants under evaluation or that the source is shutting down by the end of the planning period (or close to it).

See 40 CFR 51.308(f)(6) introductory text, (f)(6)(i) and (iv). The IMPROVE monitoring data is used to determine the 20 percent most anthropogenically impaired and 20 percent 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. *See* 40 CFR 51.308(f)(6)(ii), (iii). 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 projected emissions. States must also include commitments to update their inventories periodically. The inventories themselves do not need to be included as elements in the SIP and are not subject to EPA review as part of the Agency's evaluation of a SIP revision.[36] 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. *See* 40 CFR 51.308(f)(6)(vi). Per the 2019 Guidance, a state may note in its regional haze SIP that its compliance with the Air Emissions Reporting Rule (AERR) in 40 CFR part 51, subpart A, satisfies the requirement to provide for an emissions inventory for the most recent year for which data are available. To satisfy the requirement to provide estimates of future projected emissions, a state may explain in its SIP how projected emissions were developed for use in establishing RPGs for its own and nearby Class I areas.[37]

Separate from the requirements related to monitoring for regional haze purposes under 40 CFR 51.308(f)(6), the RHR also contains a requirement at 40 CFR 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

[36] *See* "Step 8: Additional requirements for regional haze SIPs" in 2019 Guidance at 55.
[37] *Id.*

impairment"[38] or RAVI. Under this provision, if EPA or the FLM of an affected Class I area has advised a state that additional monitoring is needed to assess RAVI, the state must include in its SIP revision for the second planning period an appropriate strategy for evaluating such impairment.

F. Requirements for Periodic Reports Describing Progress Toward the RPGs

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 planning period. The regional haze progress report requirement is designed to inform the public and EPA about a state's implementation of its existing LTS and whether such implementation is in fact resulting in the expected visibility improvement. *See* 81 FR 26942, 26950 (May 4, 2016) (82 FR 3119, January 10, 2017). To this end, every state's SIP revision for the second planning period is required to describe the status of implementation of all measures included in the state's LTS, including BART and reasonable progress emission reduction measures from the first planning period, and the resulting emissions reductions. *See* 40 CFR 51.308(g)(1) and (2).

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

[38] 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." *See* 40 CFR 51.301.

reports. *See* 40 CFR 51.308(g)(3)(iii)(B), (f)(5). Since different states submitted their first planning period progress reports at different times, the starting point for this assessment will vary state by state.

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

G. Requirements for State and Federal Land Manager (FLM) Coordination

CAA section 169A(d) requires that before a state holds a public hearing on a proposed regional haze SIP revision, it must consult with the appropriate FLM or FLMs; pursuant to that consultation, the state must include a summary of the FLMs' conclusions and recommendations in the notice to the public. Consistent with this statutory requirement, the RHR also requires that states "provide the [FLM] with an opportunity for consultation, in person and at a point early enough in the State's policy analyses of its long-term strategy emission reduction obligation so that information and recommendations provided by the [FLM] can meaningfully inform the State's decisions on the long-term strategy." *See* 40 CFR 51.308(i)(2). Consultation that occurs 120 days prior to any public hearing or public comment opportunity will be deemed "early enough," but the RHR provides that in any event the opportunity for consultation must be provided at least 60 days before a public hearing or comment opportunity. This consultation must include the opportunity for the FLMs to discuss their assessment of visibility impairment in

any Class I area and their recommendations on the development and implementation of strategies to address such impairment. *See* 40 CFR 51.308(i)(2). In order for EPA to evaluate whether FLM consultation meeting the requirements of the RHR has occurred, the SIP submission should include documentation of the timing and content of such consultation. The SIP revision submitted to EPA must also describe how the state addressed any comments provided by the FLMs. *See* 40 CFR 51.308(i)(3). Finally, a SIP revision must provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas. *See* 40 CFR 51.308(i)(4).

IV. EPA's Evaluation of Florida's Regional Haze Submissions for the Second Planning Period

On October 8, 2021, June 14, 2024, and October 28, 2024, FDEP submitted revisions to the Florida SIP to address the State's regional haze obligations for the second planning period, which runs through 2028, in accordance with CAA section 169A and the RHR at 40 CFR 51.308(f).[39] The following sections contain EPA's evaluation of Florida's Haze Plan with respect to the requirements of the CAA and RHR for the second planning period of the regional haze program.

Florida has three mandatory Class I areas within its borders: Everglades National Park (Everglades), Chassahowitzka National Wilderness Area (Chassahowitzka), and St. Marks National Wilderness Area (St. Marks).[40] The following sections describe Florida's Haze Plan,

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[39] On December 30, 2011, EPA proposed a limited disapproval of the Florida regional haze SIP since Florida had relied on requirements of the Clean Air Interstate Rule to satisfy certain regional haze requirements. *See* 76 FR 82219. However, EPA determined not to finalize the limited disapproval for Florida because the State had requested additional time to modify its SIP to address the change in applicability of the Cross-State Air Pollution Rule to Florida in the final rule published on August 8, 2011. *See* 76 FR 48208. EPA then proposed a limited approval of Florida's first period regional haze plan submission on May 25, 2012. *See* 77 FR 31240. Later, on August 29, 2013, EPA approved Florida's first period regional haze plan submitted to EPA on March 19, 2010, as amended on August 31, 2010, and September 17, 2012. *See* 78 FR 53250.

[40] Bradwell Bay Wilderness Area is one of only two Class I areas in the country for which visibility is not considered an important value. As such, the RHR does not apply to Bradwell Bay Wilderness Area. *See* 44 FR 69122, (November 3, 1979).

including analyses conducted by VISTAS and Florida's determinations based on those analyses, Florida's assessment of progress made since the first planning period in reducing emissions of visibility impairing pollutants, and the visibility improvement progress at its Class I areas and nearby Class I areas.

A. Identification of Class I Areas

1. RHR Requirement: Section 169A(b)(2) of the CAA requires each state in which any Class I area is located or "the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility" in a Class I area to have a plan for making reasonable progress toward the national visibility goal. The RHR implements this statutory requirement at 40 CFR 51.308(f), which provides that each state's plan "must address regional haze in each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State that may be affected by emissions from within the State," and (f)(2), which requires each state's plan to include a LTS that addresses regional haze in such Class I areas. To develop a state's LTS, a state must first determine which Class I areas may be affected by its own emissions. For out-of-state Class I areas, states must assess their visibility impacts on a statewide basis, which is discussed in section IV.A.2 below, and on a source specific basis, which is discussed in IV.C.2 below.

2. State Assessment: To address 40 CFR 51.308(f)(2), Florida identified Class I areas affected by statewide emissions of the primary visibility impairing pollutants and then consulted states with Class I areas affected by Florida's statewide emissions. Specifically, FDEP presented the results of Particulate Matter Source Apportionment Technology (PSAT)[41] modeling, which VISTAS conducted to estimate the projected impact of statewide SO_2 and NOx emissions across all emissions sectors in 2028 on total light extinction for the 20 percent most impaired days in all

[41] PSAT is Particulate Matter Source Apportionment Technology, which is an option in the photochemical visibility impact modeling performed by VISTAS that is a methodology to track the fate of both primary and secondary PM. PSAT allows emissions to be tracked ("tagged") for individual facilities as well as various combinations of sectors and geographic areas (*e.g.*, by state). The PSAT results provide the modeled contribution of each of the tagged sources or groups of sources to the total visibility impacts.

Class I areas in the VISTAS modeling domain.[42]

In table 10-1 on page 297 of Florida's 2021 Plan, Florida listed the top 10 Class I areas outside of the State that are impacted by Florida sources' emissions of SO_2 and NOx, ranked by absolute impact in Mm^{-1}. The top 10 areas impacted by Florida's statewide emissions of SO_2 and NOx are located in the following six States: Alabama (Sipsey National Wilderness Area); Georgia (Cohutta National Wilderness Area (Cohutta), Okefenokee National Wilderness Area (Okefenokee), and Wolf Island National Wilderness Area (Wolf Island)); Louisiana (Breton National Wilderness Area (Breton)); North Carolina (Shining Rock National Wilderness Area and Swanquarter National Wilderness Area); North Carolina/Tennessee (Great Smoky Mountains National Park and Joyce Kilmer-Slickrock National Wilderness Area (Joyce Kilmer)); and South Carolina (Cape Romain National Wilderness Area (Cape Romain)).[43]

Florida consulted with the VISTAS states (*see* section 10.1 and appendix F-1 of the 2021 Plan) and the Mid-Atlantic/Northeast Visibility Union (MANE-VU) states (*see* section 10.3 and appendix F-4 of the 2021 Plan). Similarly, FDEP participated in multistate conference calls with the Central States Air Resource Agencies Association to discuss its statewide impacts to Class I areas, including Breton in Louisiana. In addition to these interstate consultations related to Florida's statewide visibility impacts to Class I areas, Florida consulted with Georgia on specific Florida sources impacting visibility at Georgia's Class I areas. FDEP documented consultations with these states in section 10 and appendix F of the 2021 Plan. Florida's interstate consultation is further discussed in section IV.C.2.e of this proposed rulemaking and section I.F of EPA's Technical Support Document (TSD).

3. EPA Evaluation: EPA proposes to find that Florida adequately addressed 40 CFR

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[42] FDEP did not include directly emitted PM data in this analysis because the PSAT analyses performed by VISTAS tagged statewide emissions of SO_2 and NOx and did not tag primary (directly emitted) direct PM emissions in the analysis after concluding that SO_2 and NOx emissions, particularly from point sources, are projected to have the largest impact on visibility impairment in 2028.

[43] The visibility impacts projected in 2028 to the top three Class I areas impacted by Florida's SO_2 and NOx emissions (excluding the three Florida Class I areas) are: 14.2 percent at Okefenokee (Georgia); 8.8 percent at Wolf Island (Georgia); and 4.1 percent at Cape Romain (South Carolina).

51.308(f)(2) regarding identification of its statewide visibility impacts to Class I areas outside of the State and consulting with states with Class I areas which may reasonably be anticipated to cause or contribute to any impairment of visibility due to Florida's emissions. EPA proposes to find that the State's approach of focusing on SO_2 and NOx impacts from Florida on the basis that, for current visibility conditions evaluated for the 2014–2018 period, ammonium sulfate is the dominant visibility impairing pollutant at most of the VISTAS Class I areas followed by organic carbon and ammonium nitrate (depending on the area), is reasonable.[44] VISTAS focused on controllable emissions from point sources and thus initially considered impacts from sulfates and nitrates on regional haze at Class I areas affected by VISTAS states. EPA proposes to find that FDEP satisfied the part of 40 CFR 51.308(f)(2) related to the identification of Class I areas outside of Florida that may be affected by emissions from within the State and consultation with affected states because the State analyzed its statewide sulfate and nitrate contributions to total visibility impairment at out-of-state Class I areas in table 10-1 of the 2021 Plan; and the State completed consultation with VISTAS and MANE-VU states via the RPO processes, and, in some cases, on a state-to-state basis and documented those consultations.[45]

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

1. RHR Requirement: 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 clearest days and most impaired days, natural visibility conditions for the clearest days and most impaired days, progress to date for the clearest days and most impaired days, the differences between current visibility conditions and natural visibility conditions, and the URP. This section also provides the option for states to propose adjustments to the URP line for a

[44] *See* figures 2-12 and 2-13 of the 2021 Plan for the VISTAS Class I areas. *See* also section IV.C.2.a of this document.
[45] *See* section IV.C.2.e of this document and section I.F of EPA's TSD for additional detail regarding consultation.

Class I area to account for visibility impacts from anthropogenic sources outside the United States and/or the impacts from wildland prescribed fires that were conducted for certain, specified objectives. *See* 40 CFR 51.308(f)(1)(vi)(B).

2. State Assessment: In the 2021 Plan, Florida calculated the baseline visibility conditions (2000–2004) in table 2-3; current visibility conditions (2014–2018) in table 2-5; and natural visibility conditions in table 2-2 for the 20 percent most impaired and 20 percent clearest days for the State's Class I areas in deciviews, as shown in table 1, below. Florida also calculated the actual progress made toward natural visibility conditions to date since the baseline period (current minus baseline), and the additional progress needed to reach natural visibility conditions from current conditions (natural minus current), in deciviews, in table 2-6 (for the 20 percent most impaired days) and table 2-7 (for the 20 percent clearest days) as shown in table 2, below.

Table 1: Baseline, Current, and Natural Visibility Conditions in Florida's Class I Areas in Deciviews (dv)

Class I Area	Baseline Clearest 20%	Baseline Most Impaired 20%	Current Clearest 20%	Current Most Impaired 20%	Natural Clearest 20%	Natural Most Impaired 20%
Chassahowitzka	15.60	24.52	12.41	17.41	6.00	9.03
Everglades	11.69	19.52	10.37	14.90	5.22	8.33
St. Marks	14.34	24.68	11.15	17.39	5.37	9.13

Table 2: Actual Progress for Visibility Conditions in Florida's Class I Areas in Deciviews (dv)

Class I Area	Current minus Baseline for Clearest 20%	Current minus Baseline for Most Impaired 20%	Natural minus Current for Clearest 20%	Natural minus Current for Most Impaired 20%
Chassahowitzka	-3.19	-7.11	-6.41	-8.38
Everglades	-1.32	-4.62	-5.15	-6.57
St. Marks	-3.19	-7.29	-5.78	-8.26

Additionally, figures 3-1, 3-2, and 3-3 of the 2021 Plan provide the URP figures on the 20 percent most impaired days for Chassahowitzka, Everglades, and St. Marks, respectively.

The URPs were developed using EPA guidance and data collected from the 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. All Florida Class I areas are projected to be below the 2028 URP values for the second planning period based on VISTAS' modeling. However, due to issues in the VISTAS model performance for Everglades, Florida relied on visibility modeling completed by EPA in 2019 for this Class I area.[46] EPA modeling tended to have better performance for Everglades due to the use of an expanded modeling domain, updated boundary conditions (including marine offshore emissions), and a more recent base year, allowing for more accurate 2028 emissions and visibility projections. Thus, Florida is relying on EPA's regional haze modeling for Everglades visibility projections and RPG development.

3. EPA Evaluation: EPA is proposing to find that Florida's Haze Plan meets the requirements of 40 CFR 51.308(f)(1) because the State provides for its three Class I areas: baseline, current and natural visibility conditions for the 20 percent clearest days and most impaired days, progress to date for the 20 percent clearest days and most impaired days, the differences between the current visibility condition and natural visibility condition, and the URP for each Class I area in Florida. Further, FDEP provided a reasonable explanation for using EPA's modeling for 2028 for Everglades is appropriate in this instance as mentioned above.[47]

C. LTS for Regional Haze

1. *RHR Requirement:* Each state having a Class I area within its borders or emissions that may affect visibility in a Class I area must develop a LTS for making reasonable progress toward the national visibility goal. *See* CAA 169A(b)(2)(B). As explained in the Background section of this document, reasonable progress is achieved when all states contributing to visibility impairment in a Class I area are implementing the measures determined – through

[46] *See* Memorandum from Richard A, Wayland, Office of Air Quality Planning and Standards, to Regional Air Division Directors re: Availability of Modeling Data and Associated Technical Support Document for the EPA's Updated 2028 Visibility Air Quality Modeling (September 19, 2019), available at: https://www.epa.gov/sites/default/files/2019-10/documents/updated_2028_regional_haze_modeling-tsd-2019_0.pdf.
[47] *See* section 6.6, "Model Performance for Everglades," on pp. 146–154 of Florida's 2021 Plan.

application of the four statutory factors to sources of visibility impairing pollutants – to be necessary to make reasonable progress. *See* 40 CFR 51.308(f)(2)(i). Each state's LTS must include the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress. *See* 40 CFR 51.308(f)(2).

All new (*i.e.*, additional) measures that are the outcome of FFAs are necessary to make reasonable progress and must be in the LTS. If the outcome of an FFA and other measures necessary to make reasonable progress is that no new measures are reasonable for a source, that source's existing measures are necessary to make reasonable progress, unless the state can demonstrate that the source will continue to implement those measures and will not increase its emission rate. Existing measures that are necessary to make reasonable progress must also be in the LTS. In developing its LTS, a state must also consider the five additional factors in 40 CFR 51.308(f)(2)(iv). As part of its reasonable progress determinations, the state must describe the criteria used to determine which sources or group of sources were evaluated (*i.e.*, subjected to FFA) for the second planning period and how the four factors were taken into consideration in selecting the emission reduction measures for inclusion in the LTS. *See* 40 CFR 51.308(f)(2)(iii).

States may rely on technical information developed by the RPOs of which they are members to select sources for FFA and to satisfy the documentation requirements under 40 CFR 51.308(f). Where an RPO has performed source selection and/or FFAs (or considered the five additional factors in 40 CFR 51.308(f)(2)(iv)) for its member states, those states may rely on the RPO's analyses for the purpose of satisfying the requirements of 40 CFR 51.308(f)(2)(i) so long as the states have a reasonable basis to do so and all state participants in the RPO process have approved the technical analyses. *See* 40 CFR 51.308(f)(2)(iii).

States may also satisfy the requirement of 40 CFR 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-RPO

engagement.

The consultation requirements of 40 CFR 51.308(f)(2)(ii) provide that states must consult with other states that are reasonably anticipated to contribute to visibility impairment in a Class I area to develop coordinated emission management strategies containing the emission reductions 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) speaks to what happens if states cannot agree on what measures are necessary to make reasonable progress.

The documentation requirement of 40 CFR 51.308(f)(2)(iii) provides that states may meet their obligations to document the technical bases on which they are relying to determine the emission reductions measures that are necessary to make reasonable progress through an RPO, as long as the process has been "approved by all State participants." 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 EPA (or a more recent year), with a 12-month exemption period for newly submitted data.

2. State Assessment: To develop Florida's LTS, FDEP set criteria to identify sources to evaluate for potential controls outlined in section II.B, selected sources based on those criteria, considered the four CAA factors for the selected sources (or demonstrated the sources have existing effective controls as explained in IV.C.2.b. below), provided emissions limits and supporting conditions for incorporation into the SIP, and evaluated the five additional factors at 40 CFR 51.308(f)(2)(iv).

a. Source Selection Criteria: With respect to 40 CFR 51.308(f)(2)(i), Florida, through

VISTAS, used a two-step source selection process: 1) Area of Influence (AoI) analysis,[48] and 2) PSAT[49] modeling for sources exceeding an AoI threshold. Florida considered the four factors (or demonstrated the sources have existing effective controls as explained in IV.C.2.b. below) for sources that exceeded both the AoI and PSAT thresholds. Both sulfates and nitrates were considered in the source selection process. To identify sources having the most impact on visibility at Class I areas for PSAT modeling, Florida used an AoI threshold of greater than or equal to five percent for sulfate and nitrate combined area for all sources within and outside of the State. Sources selected at the AoI screening step for PSAT modeling are listed in table 7-11 of the 2021 Plan. Of these 18 sources, 17 sources located within Florida exceeded the AoI threshold for any Class I area in the State: Cemex Miami Cement Plant, Duke Crystal River Power Plant (Duke-Crystal River), FPL Turkey Point, Georgia-Pacific – Foley Cellulose Perry Mill (Foley), Gulf Clean Energy Center – Crist Generating Plant, Homestead City Utilities, Jacksonville Electric Authority – Northside Generating Station (JEA Northside), Mosaic Fertilizer, LLC – New Wales (Mosaic-New Wales), Mosaic Fertilizer, LLC – Riverview (Mosaic-Riverview), Mosaic Fertilizer, LLC – Bartow (Mosaic-Bartow), Nutrien White Springs Agricultural Chemicals, Inc. (Nutrien), Rayonier Performance Fibers LLC, Tallahassee City Purdom Generating Station, Tampa Electric Company – Big Bend Power Station (TECO-Big Bend), Titan-Pennsuco, WestRock Fernandina Beach Paper Mill (WestRock-Fernandina), and WestRock Panama City Paper Mill (WestRock-Panama City).

Florida, in coordination with the other VISTAS states, selected sources for further

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[48] The AoI represents the geographical area around a Class I area in which emissions sources located in the AoI have the potential to contribute to visibility impairment at that Class I area. Emissions data from sources in the AoI is then evaluated to determine which of those sources are most likely contributing to visibility impairment at that Class I area. VISTAS used AoI analysis for all point source facilities in the VISTAS modeling domain to determine the relative visibility impairment impacts at each Class I area associated with sulfate and nitrate. The results of the facility-level AoI analyses were then used to rank and prioritize facilities for further evaluation via PSAT.

[49] PSAT modeling is a type of photochemical modeling which quantifies individual facility visibility impacts to an area. *See* footnote 40. FDEP applied its PSAT threshold by facility. In the regional haze SIPs developed for the first round of planning, many VISTAS states used the AoI approach and a one percent threshold by unit. Florida followed a different approach using emissions (tons per year) divided by distance (kilometers) (Q/d) but showed that this approach screened in a similar number of units to the AoI approach, and therefore, had similar screening stringency.

evaluation using a PSAT threshold of greater than or equal to one percent visibility impact for sulfate or nitrate. Sources both within and outside of Florida that were identified for an emissions control analysis are listed in tables 7-25 and 7-26 of the 2021 Plan, and Mosaic Fertilizer, LLC – South Pierce (Mosaic-South Pierce) is identified in section 7.6.4.1 of the 2024 Supplement. Twelve sources were selected by FDEP for an emissions control analysis. In addition, FDEP identified two additional sources in Georgia and Kentucky that were requested by FDEP for further analysis as part of the interstate consultation process. The 12 sources in Florida are: Duke-Crystal River, Foley, JEA Northside, Lakeland CD McIntosh Jr. Power Plant (CD McIntosh),[50] Mosaic-Bartow, Mosaic-New Wales, Mosaic-South Pierce, Nutrien, Seminole Electric Cooperative Incorporated (Seminole), TECO-Big Bend, WestRock-Fernandina, and WestRock-Panama City.[51] Because no sources exceeded the State's PSAT threshold for nitrates and because ammonium sulfate continues to be the dominant visibility impairing pollutant at Class I areas potentially impacted by Florida sources (as discussed in the following paragraphs), FDEP focused solely on evaluating potential SO_2 controls to address regional haze in potentially affected Class I areas. FDEP allowed the selected facilities to either demonstrate that units emitting greater than five tons per year (tpy) of SO_2 were already effectively controlled or complete an FFA for this pollutant.

FDEP determined that during the 2014 to 2018 timeframe, Florida's Class I areas were impacted most heavily by sulfate. *See* figures 2-9 through 2-11 of the 2021 Plan. In Florida's AoI analysis, Florida used extinction-weighted residence time plots to allow for a separate analysis of sulfates and nitrates. Figures 7-42, 7-43, and 7-44 of the 2021 Plan contain the

[50] The fossil fuel steam generating unit No. 3 (EU006) at CD McIntosh was permanently shut down in 2021. *See* appendices G-3 and G-5h of the 2021 Plan.

[51] In June 2022, the WestRock-Panama City facility announced its intention to permanently cease operations. *See* section 7.8.4 of the 2024 supplement. FDEP included documentation for closure of the WestRock-Panama City facility in its 2024 Supplement. In addition, on October 18, 2024, FDEP sent a site inspection report and other supporting documentation for the WestRock-Panama City closure as an addendum to the 2024 Supplement. The inspection report documents the permanent closure and inoperable status of the facility and notes that any project to restore the facility would be subjected to mandatory New Source Review and that multiple new source performance standards would inevitably apply. This additional documentation may be found in the docket for this proposed rulemaking.

sulfate extinction weighted residence time for Chassahowitzka, St. Marks, and Everglades, respectively, for the 20 percent most impaired days from 2011 to 2016. Figures 7-45, 7-46, and 7-47 contain the nitrate extinction weighted residence time for Chassahowitzka, St. Marks, and Everglades, respectively, for the 20 percent most impaired days from 2011 to 2016. The sulfate extinction weighted residence times are significantly higher (approximately ten times higher) than the nitrate extinction weighted residence times on the 20 percent most impaired days during this time period, demonstrating the importance of focusing on SO_2 emission reductions.

The Haze Plan shows the VISTAS modeled projections demonstrating that ammonium sulfate is expected to remain the dominant visibility impairing pollutant through 2028, by a factor of four or greater over ammonium nitrate at Class I areas in Florida.[52] In section 7.4 of the 2021 Plan, FDEP explains the VISTAS analyses relied upon to support the State's focus on SO_2 control evaluations. Section 10.4.1 provides the State's responses to FLM comments on the exclusion of NOx control evaluations from the FFAs.[53]

Additionally, in section 2.6 of the 2021 Plan, FDEP reviewed visibility monitoring data for the period 2014–2018 for Chassahowitzka, Everglades, and St. Marks. Figures 2-9 through 2-11 show the reconstructed light extinction for the 20 percent most impaired days at each Florida Class I areas, respectively. The data indicates that sulfates are the primary visibility impacting species in Florida's Class I areas during the 2014–2018 timeframe.

Furthermore, figures 7-22 (Chassahowitzka), 7-23 (St. Marks), and 7-24 (Everglades) in the 2021 Plan show that the majority of 2028 predicted nitrate light extinction on the 20 percent most impaired days at Florida's Class I areas is not caused by NOx emissions from electric generating unit (EGU) and non-EGU point sources.[54] At Chassahowitzka, St. Marks, and the

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[52] *See* figures 2-9 through 2-12 of the 2021 Plan. Figures 2-9 through 2-11 provide 2014–2018 speciated PM data for Florida's Class I areas showing that ammonium sulfate is the dominant visibility impairing pollutant. Figures 2-11 and 2-12 provide speciated PM data for 2014–2018 for the VISTAS Class I areas and neighboring areas on the 20 percent most impaired days and 20 percent clearest days, respectively.

[53] *See* section 2.5.2 (particularly figures 2-6 through 2-8 for 2009–2013) and section 2.4.1 of the 2021 Plan related to ammonium nitrate.

[54] Figures 7-20 and 7-21 provides the 2028 visibility impairment from sulfate and nitrate on the 20 percent most

Everglades, projected total sulfate extinction is greater than 10 Mm^{-1} and projected total nitrate extinction is less than five Mm^{-1}.

Section I.A of the TSD to this proposed rulemaking provides a summary of the State's source selection criteria, including the technical rationale for the State's focus on SO_2 controls for the second planning period and the outcomes of the State's source selection process.

b. Consideration of the Four CAA Factors:

As discussed in section IV.C.2.b.ii (*Existing, Effective Control Demonstrations*) below, eight of the 12 selected facilities in Florida demonstrated that some or all of the selected units are effectively controlled for SO_2. FDEP stated that there is a low likelihood that cost-effective technological advancements exist that could provide further reasonable emission reductions for these sources. For the remaining selected sources, FDEP fully considered the four CAA factors as discussed in section IV.C.2.b.i below.[55]

i. FFAs: Florida considered each of the four CAA factors for Foley, JEA Northside (Unit 3),[56] and WestRock-Fernandina and described how the four factors were taken into consideration in selecting the measures for inclusion in the State's LTS. Florida is proposing selected permit conditions summarized below for incorporation into the SIP as measures necessary for reasonable progress for the second planning period. *See* section I.B of the TSD to this proposed rulemaking for additional details.

a) Foley: Foley is a softwood Kraft Process Pulp Mill that manufactured bleached market pulps and dissolving cellulose pulps. FDEP requested that the facility complete an FFA for five units expected to emit more than five tpy of SO_2 in 2028. FDEP evaluated emissions reductions measures for SO_2 for the No. 1 Power Boiler; No. 1 Bark Boiler; and Nos. 2, 3, and 4

impaired days for all 18 Class I areas in VISTAS. The figures show the EGU and non-EGU contributions to total nitrate derived light extinction in 2028.

[55] As mentioned above, two of the 12 selected facilities permanently shut down (CD McIntosh Unit 3 and WestRock-Panama City).

[56] JEA Northside Unit 3 was selected for FFA and Units 1 and 2 were shown to be effectively controlled for SO_2.

Recovery Furnaces.[57, 58]

No. 1 Power Boiler: The No. 1 Power Boiler serves as the secondary control device for low volume, high concentration (LVHC) non-condensable gas (NCG) and fires natural gas, No. 6 fuel oil, tall oil, and on-specification used oil. When NCGs are routed to the No. 1 Power Boiler, a pre-scrubber is used to assist with reduction of total reduced sulfur (TRS) which in turn limits SO_2 production. The Mill identified a wet scrubber and a dry sorbent injection (DSI) system as available and feasible controls for this unit. The cost evaluation for the wet scrubber resulted in an estimated cost effectiveness of $13,547/ton to reduce actual SO_2 emissions by approximately 80 tpy. FDEP determined that installation of a wet scrubber on No. 1 Power Boiler is not cost effective. As for the DSI system, the cost evaluation resulted in an estimated cost-effectiveness value of $21,727/ton to reduce actual SO_2 emissions by approximately 73 tpy, which FDEP considered not cost effective. FDEP, however, determined that existing low-sulfur fuel restrictions on this unit were necessary for reasonable progress as follows: fire only natural gas except during specified times when natural gas is unavailable or there is a physical problem at the mill that prevents the firing of natural gas, in which case the unit may fire liquid fuels; tall oil is prohibited; No. 6 fuel oil purchases must meet a sulfur content limit of no more than 1.02 percent; and the unit is only permitted to burn LVHC NCG when the No. 1 Bark Boiler is unavailable or when necessary for compliance with 40 CFR part 63, subpart S, such as for monitoring for detectable leaks for the closed vent system. Florida has identified permit conditions for these restrictions for incorporation into the SIP.

Regarding the other CAA factors, there is no time necessary to comply with the low-

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[57] FDEP determined that an FFA was not needed for Bark Boiler No. 2 because annual SO_2 emissions from this unit are significantly lower than five tpy, Florida's threshold for the second planning period for determining which units are subject to an FFA for any selected source.

[58] On January 19, 2024, FDEP published in the Florida Administrative Register a public notice of hearing for consideration of a proposed SIP revision, which included the FFA for Foley. The comment period for this proposed SIP revision closed on March 8, 2024. However, in April 2024, the Foley facility announced its intent to permanently cease operations. FDEP provided documentation of the closure in their 2024 Supplement. *See* section 7.8.3. However, because Foley is in an ongoing process to dismantle the facility, FDEP was unable to provide documentation to EPA that the facility was inoperable. Thus, FDEP provided the FFA for Foley that was originally part of the January 19, 2024, public engagement plan.

sulfur fuel option, and the use of low sulfur fuel did not result in non-air environmental impacts. For the wet scrubber and DSI options, FDEP states that it may take up to four years to secure funding, make the required technical changes, and perform testing and monitoring to ensure proper system operation for the installation of wet scrubbers and DSI systems. Energy and non-air environmental impacts include additional electrical costs associated with DSI and scrubber operation, and additional fresh water and wastewater disposal use for the wet scrubber. Additionally, the No. 1 Power Boiler is assumed to have 30 years or more of remaining useful life, and an interest rate of 3.25 was used when considering the annualized costs of controls.

No. 1 Bark Boiler: The No. 1 Bark Boiler serves as the primary control device for LVHC NCGs and provides the Mill with 200,000 pounds per hour (lbs/hr) (24-hour block average basis) of steam. The No. 1 Bark Boiler fires natural gas, No. 6 fuel oil, tall oil, and on-specification used oil and is equipped with a cyclone collector and a wet venturi scrubber. Currently, permit conditions for No. 1 Bark Boiler require the wet venturi scrubber to meet pH and flow rate restrictions only when the TRS pre-scrubber is not operational. For the FFA, FDEP evaluated one control option which consists of running the existing wet venturi scrubber whenever NCGs or oil are combusted in the No. 1 Bark Boiler, maintaining a minimum pH of 8 (three-hour block average), and flow rate of 1,000 gallons per minute (gpm) (three-hour block average), rather than only when the TRS pre-scrubber is unavailable. The increase in the operation of the wet scrubber requires an increase in the amount of time caustic is added to the wet scrubber which requires the addition of an antiscalant to minimize fouling and scaling due to caustic buildup in the boiler. FDEP evaluated these operational changes as technically feasible, and the cost evaluation resulted in an estimated annualized cost effectiveness of $2,627/ton to remove approximately 96 tpy of SO_2 emissions. FDEP determined this control to be cost effective. Implementing the increased operation of the wet scrubber requires adding additional caustic and scalant to the scrubber control system, which could be done with within 12 months with no negative non-air environmental impacts. The No. 1 Bark Boiler is assumed to have 30 years or

more of remaining useful life, and an interest rate of 3.25 percent was used when considering the annualized costs of controls. Florida has identified permit conditions for these requirements for incorporation into the SIP.

FDEP also determined that certain existing measures are necessary for reasonable progress and proposed for incorporation into the SIP low sulfur fuel restrictions that are similar to the restrictions proposed for No. 1 Power, except the No. 1 Bark Boiler is permitted to burn wood in addition to natural gas as the primary fuel type. FDEP is proposing permit conditions reflecting these requirements for incorporation into the SIP.

Nos 2, 3, and 4 Recovery Furnaces: The three recovery furnaces are low-odor, non-direct contact evaporator units that burn the organic material present in black liquor (a byproduct in the Kraft Mill process). The furnaces fire natural gas, No. 6 fuel oil, No. 2 fuel oil, tall oil, ultra-low sulfur diesel, on-specification used oil, and methanol (methanol is only fired in select furnaces). Foley considered adding several common flue gas desulfurization (FGD) systems to the recovery furnaces, including spray dryer absorbers (SDA), DSI, and conventional wet scrubbers. Considering the antiquated design of the furnaces, FDEP found the addition of a wet scrubber to be the only feasible control technology.

FDEP identified a wet scrubber as a potential control option for the recovery furnaces, but noted that it is not aware of the installation of a wet scrubber on any recovery furnaces across the country. The cost effectiveness to add a wet scrubber was estimated at values of: $7,779/ton to reduce SO_2 by approximately 592 tons annually for Recovery Furnace No. 2; $5,197/ton to reduce SO_2 by approximately 1,050 tons annually for Recovery Furnace No. 3; and $6,587/ton to reduce SO_2 by approximately 831 tons annually for Recovery Furnace No. 4. FDEP determined that adding a wet scrubber was not cost effective. FDEP estimated that it would take up to four years to install new controls at the recovery furnaces. Typical energy and non-air quality impacts of compliance include caustic and sulfuric acid costs, additional electrical costs associated with scrubber operation, additional fresh water for scrubber needs and wastewater

disposal. It is assumed that the recovery furnaces have at least 30 years of remaining useful life, and an interest rate of 3.5 percent was used when considering the annualized costs of controls.

FDEP determined that the following existing measures at the recovery furnaces are necessary for reasonable progress: burn black liquor as the primary fuel; natural gas and liquid fuels may supplement recovery operations; a maximum sulfur content of 1.02 percent for purchased No. 6 fuel oil; and a SO_2 emissions cap of 3,200 tons per consecutive 12 operating months as measured by a continuous emissions monitoring system (CEMS).

State Conclusions: Regarding the No. 1 Power Boiler, FDEP determined that there were no cost-effective emission reductions for the No. 1 Power Boiler and determined that the existing measures at the No. 1 Power Boiler are necessary for reasonable progress. Thus, FDEP proposed low-sulfur fuel restrictions for incorporation into the SIP for the No. 1 Power Boiler as described above.

Regarding the No. 1 Bark Boiler, FDEP determined that continuously running the wet venturi scrubber with added caustic and scalant to maintain a minimum pH of 8 is cost-effective and, therefore, the State has determined that these controls are necessary for reasonable progress. FDEP also determined that certain existing low sulfur fuel restrictions are necessary for reasonable progress and proposed low sulfur fuel restrictions that are similar to the restrictions proposed for the No. 1 Power Boiler.

Regarding the Nos. 2, 3, and 4 Recovery Furnaces, after conducting a site visit at Foley and discussing the physical constraints and reviewing the costs, FDEP determined that installation of a wet scrubber located after the electro-static precipitator (ESP) is not cost-effective and, therefore, the existing measures described above for the Nos. 2, 3 and 4 Recovery Furnaces are necessary for reasonable progress.

FDEP identified permit conditions reflecting these new and existing SO_2 measures in the "Materials to be Incorporated into the SIP" section of the Second 2024 Supplement for incorporation into the regulatory portion of the Florida SIP.

b) JEA Northside (Unit 3): JEA Northside is a power plant located in north Jacksonville. The main sources of SO_2 emissions at JEA Northside are Nos. 1 and 2 (EU 026 and EU 027) circulating fluidized-bed (CFB) Boilers and the No. 3 (EU 003) Boiler. FDEP conducted an FFA for JEA Northside's No. 3 Boiler. For the Nos. 1 and 2 CFB Boilers, Florida relied on an existing effective controls demonstration, as discussed below in section IV.C.2.b.ii.

The No. 3 Boiler is a natural gas-fired electric utility steam generating unit as defined in 40 CFR 63.10042 that fires natural gas and limited amounts of No. 6 fuel oil. The FFA for the No. 3 Boiler identified the following available controls: using lower sulfur No. 6 fuel oil (from 1.8 percent to 1.0 percent), using ultra-low sulfur No. 2 fuel oil, or installing a wet FGD system. The cost effectiveness values for each control option are as follows: switching to a lower sulfur No. 6 fuel oil is $3,053/ton of SO_2 removed, reducing emissions by 49.9 tpy; switching to No. 2 fuel oil is $7,334/ton of SO_2 removed, reducing emissions by 122.81 tpy; and installing a wet FGD system is $177,856/ton of SO_2 removed.[59]

Regarding the other CAA factors, FDEP estimated that it would take nine months to one year to complete a switch to No. 2 or No. 6 fuel oil because a boiler outage of approximately two to three months would be necessary to perform the new burner installation, and the State found no non-air environmental impacts from a switch. FDEP estimates installing a wet FGD system would take 36 months based on EPA's Integrated Planning Model (IPM) estimates and the need for engineering design, equipment procurement, and installation, and testing. Regarding energy and non-air environmental impacts of the wet FGD, FDEP states that there are energy penalties due to the pressure drop through the absorbers and the energy usage by auxiliary systems and estimates that the total energy impacts would be about 30,000 megawatt-hours for the maximum possible operation of Unit 3 currently authorized. Operation of wet FGD will also require the

[59] FDEP provided these cost effectiveness values because FDEP contends the costs provided by JEA were not justified adequately or were inconsistent with EPA's "Air Pollution Control Cost Manual" (Cost Manual) in the cost analysis. In all calculations, JEA used a seven percent interest rate instead of 3.25 percent (the current bank prime interest rate), used a 20-year lifetime instead of a more conservative 30-year lifetime, and included property taxes, insurance, and administration costs in the direct operating costs, which FDEP contends were not justified.

delivery, handling, and storage of limestone; the handling and disposal of FGD by-product (*i.e.*, gypsum); and the use of process water. FDEP determined the remaining useful life factor for each control option to be 30 years and used a 3.25 percent interest rate when considering the annualized costs of controls.

State Conclusions: Regarding JEA Northside Unit 3, FDEP determined that switching to No. 2 fuel oil and installing a wet FGD system are not cost effective, and therefore, are not necessary for reasonable progress. FDEP determined that switching to a lower sulfur No. 6 fuel oil is cost effective, and selected it as a measure necessary for reasonable progress for JEA Northside Unit 3.

FDEP identified permit conditions reflecting this new SO_2 measure in the "Materials to be Incorporated into the SIP" section of the 2021 Plan for incorporation into the regulatory portion of the Florida SIP.[60]

c) WestRock-Fernandina: WestRock-Fernandina is a fully integrated Kraft linerboard mill that produces linerboard from wood pulp and pulp derived from recycled corrugated containers. The Mill conducted projects totaling $15.9 million in capital costs in 2016 and 2017 to reduce both actual and allowable SO_2 emissions so that modeled allowable emissions would demonstrate compliance with the 2010 SO_2 NAAQS. Table 7-31 in the 2021 Plan shows the decrease in emissions levels that have occurred since the 2016–2017 timeframe. The last line in table 7-31 contains the updated, projected emissions from this facility. The largest SO_2 sources at the Mill are the No. 5 and No. 7 Power Boilers and the No. 4 and No. 5 Recovery Boilers.

The No. 5 Power Boiler burns carbonaceous fuel such as biomass, natural gas, ultra-low sulfur diesel (ULSD), or No. 2 fuel oil. Currently, this unit is prohibited from using No. 6 fuel oil or being used as a backup NCG control device unless otherwise approved by FDEP's Division of Air Resource Management. Additionally, an engineering analysis must be submitted

[60] See p. 13 of 34 of the "Materials to be Incorporated into the SIP" section to the administrative file of the 2021 Plan.

providing reasonable assurance that the boiler can comply with SO_2 emissions standards of 15.0 lb/hour based on a 3-hour block average, as determined by data collected from a CEMS, during all periods of operation except when operating as a backup control device firing NCGs. The FFA for the No. 5 Power Boiler identified installation of a wet scrubber, installation of a wet scrubber with a stack liner, or installation of a DSI system as potential additional controls. The cost effectiveness values of these additional controls are as follows: installing a wet scrubber is $285,615/ton of SO_2 removed; installing a wet scrubber with stack liner is $298,499/ton of SO_2 removed; and installing DSI is $277,093/ton of SO_2 removed. According to the FFA, it would take at least four years to install a wet scrubber or DSI system, and there are energy and non-air environmental impacts that would result from installing these controls, such as an increase in water and electricity usage and wastewater generation. The No. 5 Power Boiler is assumed to have a remaining useful life of 20 years or more; however, FDEP conservatively used a lifetime of 30 years to annualize costs and used a 3.25 percent interest rate when considering the annualized costs of controls. FDEP determined that these controls are not cost effective.

The No. 7 Power Boiler serves as a backup NCG control device and fires coal, oil, or natural gas. The FFA for the No. 7 Power Boiler identified reducing coal usage to 125 tons per day (tpd), installing a wet scrubber after the existing ESP, installing a DSI with an existing ESP, installing SDA with new fabric filter, or removing all coal firing as potentially available controls. The cost effectiveness values of these controls are as follows: reducing coal usage is a cost savings of $1,868/ton of SO_2 removed; installing a wet scrubber is $5,641/ton of SO_2 removed, reducing emissions by 1,222 tpy; installing a wet scrubber with stack liner is $6,028/ton of SO_2 removed, reducing emissions by 1,222 tpy; installing DSI is $8,776/ton of SO_2 removed, reducing emissions by 748 tpy; installing an SDA is $16,398/ton of SO_2 removed, reducing emissions by 1,184 tpy; and removing all coal firing is $7,374/ton of SO_2 removed, reducing emissions by 1,171 tpy. WestRock-Fernandina indicated they would need until 2024 to fully implement the coal reduction option but could begin limiting coal usage as early as 2022,

because the Mill is contractually obligated to purchase a set amount of coal through 2021. There were no energy or non-air quality environmental impacts associated with the reduction of coal usage. The installation of a wet scrubber would increase water and electricity usage and wastewater generation. The installation of a DSI system or an SDA system would increase solid waste and electricity usage. The No. 7 Power Boiler fly ash is currently used in cement manufacturing but would have to be landfilled if contaminated with sorbent. The No. 7 Power Boiler has approximately 20 years or more of useful life remaining; however, FDEP conservatively used a useful life of 30 years to annualize the costs. FDEP used a 3.25 percent interest rate, a 98 percent control efficiency for FGD, a 60 percent control efficiency for DSI, a 95 percent control efficiency for SDA, and a 97 percent control efficiency for removing all coal in the calculations for No. 7 Power Boiler.

The No. 4 Recovery Boiler fires black liquor solids or No. 2 fuel oil and uses natural gas or No. 2 fuel oil for startup. No. 5 Recovery Boiler fires black liquor solids or No. 6 fuel oil and burns natural gas or No. 2 fuel oil for startup only. Currently, the SO_2 emissions from Nos. 4 and 5 Recovery Boilers recovery boilers shall not exceed 150.0 lb/hour based on a 3-hour block average as determined by data collected from a certified CEMS or other methods approved by the Division of Air Resource Management. Alternatively, Nos. 4 and 5 Recovery Boilers may comply with the combined SO_2 emissions cap which shall not exceed 300.0 lb/hour based on a 3-hour block average as determined by data collected from a certified CEMS. The FFA for the Nos. 4 and 5 Recovery Boilers identified the installation of wet scrubber as a potential additional control for each recovery boiler. FDEP determined that the cost effectiveness for the wet scrubber is $282,375/ton of SO_2 removed for the No. 4 Recovery Boiler and $169,425/ton of SO_2 removed for the No. 5 Recovery Boiler.[61] FDEP determined that WestRock-Fernandina would

[61] FDEP provided these cost effectiveness values because it contends that the costs provided by Westrock were not justified adequately or were inconsistent with the Cost Manual in the cost analysis provided by WestRock-Fernandina. WestRock used a 4.75% interest rate instead of 3.25% (the current bank prime interest rate), used a 15-year lifetime for equipment, and included property taxes without sufficient justification.

need a minimum of four years to install a wet scrubber and concluded that there are energy and non-air environmental impacts associated with the installation of a wet scrubber, including increased water and electricity usage and wastewater generation. The Nos. 4 and 5 Recovery Boilers are assumed to have 20 years of remaining useful life.

State Conclusions: For WestRock-Fernandina's No. 7 Power Boiler, FDEP determined that removing all coal-firing or installing a wet scrubber, DSI, or SDA are not cost effective, and are therefore not necessary for reasonable progress. For the No. 7 Power Boiler, FDEP determined that reducing coal usage to 125 tpd is cost effective and is a measure that is necessary for reasonable progress.[62] Thus, FDEP identified the permit conditions reflecting this new SO_2 measure for WestRock-Fernandina's No. 7 Power Boiler in the "Materials to be Incorporated into the SIP" sections[63] of the 2021 Plan and appendix A-1 of the 2024 Supplement for incorporation into the regulatory portion of the Florida SIP. These conditions may be found in permit number 0890003-072-AC of the 2021 Plan and 0890003-074-AC and of the 2024 Supplement.

For WestRock-Fernandina's No. 5 Power Boiler, FDEP determined that neither the installation of a wet scrubber – with or without the stack liner – nor the installation of a DSI system were cost effective. Likewise, FDEP determined that installation of wet scrubber for Nos. 4 and 5 Recovery Boilers was not cost effective. Therefore, FDEP determined that existing measures at the No. 5 Power Boiler and the Nos. 4 and 5 Recovery Boilers are necessary for reasonable progress. These existing measures, contained in permit number 0890003-046-AC, were already incorporated into the SIP through the Nassau County Florida SO_2 Attainment Plan SIP revision approved by EPA on July 3, 2017 (82 FR 30749).[64] A list of the specific conditions

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[62] FDEP is also proposing for incorporation into the SIP an interim coal usage restriction of 250 tpd. The 250 tpd coal usage limitation became effective on January 1, 2022, and was included in the 2021 Plan. It was intended as an interim measure that would apply until the facility could meet the 125 tpd usage restriction, which became effective on April 24, 2024. The facility is now subject to the more restrictive 125 tpd coal cap.

[63] *See* pp. 15-16 of the administrative file of the 2021 Plan.

[64] According to section 7.8.2 of the 2021 Plan, WestRock-Fernandina conducted projects totaling $15.9 million in capital costs in 2016 and 2017 to reduce both actual and allowable SO_2 emissions so that modeled allowable

included for regional haze informational purposes may be found in the "Materials Submitted for Informational Purposes Only" section, in appendix A-6 of the 2024 Supplement.

ii. Existing, Effective Control Demonstrations: As described in section 7.6.4.1 of the 2021 Plan, FDEP proposed existing SO_2 measures as necessary for reasonable progress for incorporation into the Florida SIP for the affected units at the following eight facilities: Duke-Crystal River, JEA Northside, Mosaic-Bartow, Mosaic-New Wales, Mosaic-South Pierce, Nutrien, Seminole, and TECO-Big Bend. FDEP contends that these sources are effectively controlled and are unlikely to have additional controls available for reasonable progress.

Regarding Duke-Crystal River, Florida is proposing for adoption into the SIP permit conditions that require compliance with a limit of 0.20 pound per million British thermal units (lb/MMBtu) of SO_2 for the fossil fuel steam generating Unit 4 and Unit 5 in lieu of performing a detailed FFA for these units. This emission limit is the alternative emission limit currently applicable to Duke-Crystal River under the Mercury and Air Toxics Standards (MATS) rule.[65] Including this emission limit in the SIP would also have the effect of removing the hydrogen chloride MATS compliance option for Duke-Crystal River. Florida concluded that these units are effectively controlled for SO_2 emissions and that additional reasonable controls are unlikely to be found. Therefore, Florida is proposing for adoption into the SIP permit conditions for the 0.20 lb/MMBtu SO_2 emission limitation and additional permit conditions that allow the citrus combined cycle station Units 1A, 1B, 2A, and 2B to combust only pipeline natural gas.[66]

Regarding JEA Northside, Florida proposed for adoption into the SIP permit conditions for Units 1 and 2 that include an SO_2 limit of 0.15 lb/MMBtu, and the MATS-based SO_2

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emissions would demonstrate compliance with the 2010 SO_2 NAAQS. With these projects, the SO_2 emission limit for the No. 5 Power Boiler was reduced from 550 pounds per hour (lb/hr) to 15 lb/hr. In 2020, the facility increased the black liquor solids content, which helps stabilize operation of the recovery boilers, thus, allowing for improved SO_2 emissions.

[65] The MATS rule is located at 40 CFR part 63, subpart UUUUU. The MATS rule provides the 0.20 lb/MMBtu SO_2 limit as an alternative to meeting an emission limit for hydrogen chloride.

[66] The permits are located in appendix G-3a1-2 of the 2021 Plan.

emission limit of 0.20 lb/MMBtu.[67] Florida is proposing both the SO_2 limit of 0.15 lb/MMBtu and the SO_2 emission limit of 0.20 lb/MMBtu as reflecting effective controls for JEA Northside Units 1 and 2 because the SO_2 emission limit of 0.15 lb/MMBtu had exemptions during period of startup, shutdown, and malfunction. The MATS limit applies continuously and has work practice standards which apply during startup and shutdown. Florida concluded that this unit is effectively controlled for SO_2 emissions and that additional reasonable controls are unlikely to be found. Therefore, Florida is proposing for incorporation into the SIP permit conditions for the 0.20 lb/MMBtu emission limitation.

Regarding Mosaic-Bartow, Florida reviewed existing SO_2 measures at three sulfuric acid plants (SAPs) at the facility, Nos. 4 through 6. This facility reduced SO_2 emissions to bring the Hillsborough-Polk nonattainment area into attainment for the 2010 SO_2 NAAQS, including upgrades to the catalyst beds. The SO_2 generated in these systems is catalytically oxidized to sulfur trioxide (SO_3) over the catalyst beds at a rate of 99.7 percent or higher. The facility is required to comply with a three-unit cap of 1,100 pounds/hour on a 24-hour block average as determined by continuous emission monitoring system (CEMS). Each SAP at the facility is required to meet a limit of four pounds (lbs) SO_2 per ton of 100 percent sulfuric acid produced. Florida states that this limit is consistent with the SO_2 best available control technology (BACT) determinations for sulfur burning, double-absorption sulfuric acid plants with cesium-promoted catalysts at a range of 3.0 to 4.0 lbs per ton in EPA's RACT/BACT/LAER Clearinghouse (RBLC) database.[68] Florida concluded that these units are effectively controlled for SO_2 emissions and that additional reasonable controls are unlikely to be found. These SO_2 limits are already incorporated into Florida's SIP.[69]

Regarding Mosaic-New Wales, Florida reviewed existing SO_2 measures at five SAPs at

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[67] The permits are located in appendix G-3c1-2 of the 2021 Plan and appendix A-2 of the 2024 Supplement. *See* section 7.6.4.1 and appendix A-2 of the 2024 Supplement.
[68] The RBLC is located at: www.epa.gov/catc/ractbactlaer-clearinghouse-rblc-basic-information.
[69] *See* 85 FR 9666 (February 20, 2020); 40 CFR 52.520(d).

the facility, Nos. 1 through 5. This facility also reduced SO_2 emissions to bring the Hillsborough-Polk nonattainment area into attainment for the 2010 SO_2 NAAQS. The facility was required to comply with a five-unit SO_2 emissions cap of 1,090 lbs per hour on a 24-hour block average as determined by CEMS. SAP Nos. 1–3 are each required to meet an SO_2 limit of 3.5 lbs per ton of 100 percent sulfuric acid produced on a 24-hr rolling average and four lbs per ton on a three-hour rolling average. SAPs 4 and 5 are each required to meet a limit of four lbs per ton of sulfuric acid produced. Florida affirms that this limit is consistent with the SO_2 BACT determinations for sulfur burning, double-absorption sulfuric acid plants with cesium-promoted catalysts which appear in a range of 3.0 to 4.0 lbs per ton of sulfuric acid produced in EPA's RBLC database. Florida concluded that these units are effectively controlled for SO_2, and additional reasonable controls are unlikely to be found. These SO_2 limits are already incorporated into Florida's SIP.[70]

Regarding Mosaic-South Pierce, FDEP requested that the facility evaluate whether any additional measures were available to reduce SO_2.[71] Specifically, FDEP requested that Mosaic-South Pierce complete an FFA for SAPs Nos. 10 and 11 or demonstrate that those units were already effectively controlled for SO_2. Sulfuric Acid Plants Nos. 10 and 11 are double absorption sulfuric acid systems equipped with two absorption towers in series to react SO_3 with water to produce sulfuric acid. The SO_2 generated in a double absorption system's sulfur furnace is catalytically oxidized to SO_3 over catalyst beds at a very high rate (99.7 percent or greater), which results in relatively low SO_2 emissions as compared to a single absorption system. The second bed uses a cesium-promoted catalyst, which increases the overall SO_2-to-SO_3 conversion rate. FDEP determined that the SAPs Nos. 10 and 11 at Mosaic-South Pierce are effectively controlled for SO_2 based on a review of EPA's RBLC database which identified the combination of dual absorption design and cesium-promoted catalysts as BACT for sulfur-burning, non-single

[70] *Id.*
[71] On February 1, 2023, the FDEP requested that Mosaic evaluate whether any additional measures were available to reduce SO_2 emission from the Mosaic-South Pierce facility. *See* section 7.6.4.1 of the 2024 Supplement.

absorption column sulfuric acid plants and are therefore unlikely to have additional SO_2 controls identified as part of an FFA. Florida has identified permit conditions for incorporation into the SIP that prohibit combined SO_2 emissions from SAPs 10 and 11 from exceeding 750 lbs SO_2 per hour on a 24-hour block average as determined by CEMS.[72]

Regarding Nutrien, this facility has recently completed significant work to reduce SO_2 emissions to achieve SO_2 limits imposed by a consent decree entered on February 26, 2015.[73] As part of the consent decree, Nutrien was required to reduce SO_2 emissions and meet more stringent SO_2 emission limits at SAPs C, D, E, and F. Nutrien elected to permanently shut down SAPs C and D in 2014, reducing SO_2 emissions from these SAPs to zero. On March 31, 2017, FDEP issued permit No. 0470002-107-AC to Nutrien to complete upgrades on SAP E and SAP F, which included changing out and augmenting the converter catalyst in the SAPs, allowing them to meet new SO_2 emission limits of 2.6 lbs per ton on a three-hour rolling average (excluding startups and shutdowns) and 2.3 lbs per ton limit on a 365-day rolling average (including startups and shutdowns), as required by the consent decree. Nutrien was required to comply with these limits on January 1, 2018, for SAP F and January 1, 2020, for SAP E. Additionally, on January 1, 2023, an 840 lbs/hour SO_2 limit on a 24-hour block averaging period was applied to the combined emissions from SAP E and F.[74] Florida states that these limits are consistent with recent BACT determinations made for similar double-absorption, sulfur-burning SAPs. Florida concluded that this unit is effectively controlled for SO_2 emissions and that additional reasonable controls are unlikely to be found. Florida did not identify the permit conditions from Permit No. 0470002-132-AC, issued on September 22, 2022, for incorporation into the SIP because they have already been incorporated through Florida's Supplemental SSM SIP as approved by EPA on August 4, 2023 (88 FR 51702).[75]

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[72] The permit is located in appendix A-5 of the 2024 Supplement.
[73] The consent decree entered on February 26, 2015, is located in the docket for this proposed rulemaking. This consent decree terminated on April 3, 2023.
[74] *See* section 7.6.4.1 of the 2024 Supplement.
[75] Permit No. 0470002-132-AC, issued on September 22, 2022, to Nutrien is located in appendix A-4 of the 2024 Supplement.

Regarding TECO-Big Bend, this facility has accepted the MATS SO_2 limit of 0.20 lb/MMBtu for fossil fuel steam generators No. 3 (EU003)[76] and No. 4 (EU004). This emission limit is the alternative emission limit currently applicable to TECO-Big Bend under the MATS rule. Including this emission limit in the SIP would also have the effect of removing the hydrogen chloride MATS compliance option for TECO-Big Bend. Florida concluded that this unit is effectively controlled for SO_2 emissions and that additional reasonable controls are unlikely to be found. Therefore, Florida identified permit conditions with these SO_2 limits for Unit 4 at TECO-Big Bend for incorporation into the Florida SIP.[77]

Regarding Seminole, this facility accepted the MATS SO_2 limit of 0.20 lb/MMBtu for the steam electric generator No. 1 (EU001) and No. 2 (EU002) in the same manner as discussed with TECO-Big Bend in the preceding paragraph. Florida concluded that this unit is effectively controlled for SO_2 emissions and that additional reasonable controls are unlikely to be found. Therefore, Florida identified permit conditions with these SO_2 limits for incorporation into the Florida SIP.[78]

Section I.B of the TSD to this proposed rulemaking provides a more detailed summary of the State's assessment of Florida's FFAs and existing effective controls, and the associated emissions control measures proposed for incorporation into the Florida SIP.

c. *Documentation of Technical Basis:* With respect to emissions information documentation pursuant to 40 CFR 51.308(f)(2)(iii), section 4 of the 2021 Plan explains the State's use of emissions inventories to develop the plan with additional documentation provided

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[76] Since submission of the 2021 Plan, Unit 3 at TECO-Big Bend retired on April 26, 2023. The Clean Air Markets Division (CAMD) Acid Rain Retired Unit Exemption Form is included in the docket for this proposed rulemaking. For additional information regarding the shutdown and demolition of Unit 3, see the May 16, 2024 news release from TECO titled "Tampa Electric has Demolished Old Chimneys at Big Bend Power Plant", available at: https://www.tampaelectric.com/mediacenter/2024/Tampa-Electric-has-Demolished-Old-Chimneys-at-Big-Bend-Power-Plant/#:~:text=The%20skyline%20of%20Apollo%20Beach,new%20view%20is%20Dramatically%20different.%E2%80%9D.

[77] The permits are located in appendix G-3 of the 2021 Plan and the permit conditions proposed for adoption into the SIP are listed under the "Materials to be Incorporated into the SIP" section in filename "Final SIP 2021-01 Regional Haze.pdf" included with the 2021 Plan.

[78] The permits are located in appendix G-3h of the 2021 Plan and the permit conditions proposed for adoption into the SIP are listed under the "Materials to be Incorporated into the SIP" section in filename "Final SIP 2021-01 Regional Haze.pdf" included with the 2021 Plan.

in appendix B. Florida, through VISTAS, developed a 2011 statewide base year emissions inventory which was used to project emissions out to 2028, the end of the second planning period.[79] FDEP also evaluated emissions data from 2017, the year of the most recent triennial emissions data available at the time of the development of the 2021 Plan. Statewide emissions from the 2014 and 2017 National Emissions Inventories (NEIs) are provided in tables 13-11, 13-12, and 13-13 of the 2021 Plan for $PM_{2.5}$, NOx, and SO_2, respectively.

With respect to cost and engineering information documentation pursuant to 40 CFR 51.308(f)(2)(iii), section 7.8 of the Haze Plan details the State's analysis of the FFAs for Foley, JEA Northside, and WestRock-Fernandina located in appendix G which evaluated the four factors, including the cost of compliance factor, and provided detailed cost calculations for potential new control measures assessed as part of the engineering analyses. In addition, section 7.6.4.1 of the 2021 Plan describes the State's analysis of seven sources with existing, effective SO_2 measures: Duke-Crystal River, JEA Northside (Units 1 and 2), Mosaic-Bartow, Mosaic-New Wales, Nutrien, Seminole, and TECO-Big Bend[80] and the 2024 Supplement summarizes existing, effective SO_2 measures at Mosaic-South Pierce in section 7.6.4.1 on pages 5-6 of the narrative and in appendix B-2 of the 2024 Supplement.

With respect to monitoring information documentation pursuant to 40 CFR 51.308(f)(2)(iii), the State assessed baseline (2000–2004), current (2014–2018), and natural visibility conditions for Florida's Class I areas in section 2 of the 2021 Plan with supporting information located in appendix C.

With respect to modeling information documentation pursuant to 40 CFR 51.308(f)(2)(iii), sections 5 and 6 of the 2021 Plan describe the modeling methods used to develop the plan with additional documentation provided in appendix E and results of the RPG modeling in section 8 of the plan. Appendix D contains AoI analyses documentation. Section

[79] Table 4-1 provides a summary of the 2011 baseline emissions inventory for Florida.
[80] FDEP also included the shutdown of Unit 3 of CD McIntosh in section 7.6.4.1, "Effective Controls Analyses," of the 2021 Plan.

I.E of the TSD to this proposed rulemaking provides a more detailed summary of the State's assessment of documentation of the technical basis for the 2021 Plan under 40 CFR 51.308(f)(2)(iii).

d. Assessment of the Five Additional Factors in 40 CFR 51.308(f)(2)(iv):

With respect to 40 CFR 51.308(f)(2)(iv), Florida considered each of the five additional factors in developing the State's LTS and evaluated their relevancy for the second period. With respect to 40 CFR 51.308(f)(2)(iv)(A), FDEP assessed emission reductions due to ongoing air pollution control programs, including measures to address RAVI, in the development of the State's 2011 baseline and 2028 projected emission inventories. The impact of these existing and on the way air pollution control programs are reflected in the 2028 RPGs for the Florida Class I areas, except for the measures listed in section 8.2 of the 2021 Plan.

With respect to 40 CFR 51.308(f)(2)(iv)(B), FDEP evaluated measures in the State designed to mitigate the impacts of construction activities in section 7.9.2 of the 2021 Plan. Florida's rules for air quality control include requirements to prevent fugitive dust from becoming airborne and also limit the opacity of fugitive emissions to equal to or less than 20 percent. The requirements of Florida rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards, include preventive measures for construction activities to prevent fugitive dust from becoming airborne.[81] FDEP also noted that fine soils were a relatively minor contributor to visibility impairment at the Class I areas in Florida from the baseline period of 2000–2004 through to the recent period of 2014–2018, as discussed in section 2.4.2 and shown in figures 2-1 through 2-5 (2000–2004 period); figures 2-6 through 2-8 (2009–2013 period); and figures 2-9 through 2-13 (2014–2018 period) of the 2021 Plan. Thus, any fine soil contributions to regional haze from Florida construction activities are relatively minor.

With respect to 40 CFR 51.308(f)(2)(iv)(C), FDEP discussed source retirement and replacement schedules in section 8.2.2 of the 2021 Plan, which describes existing and planned

[81] Florida's air quality rules are available at https://floridadep.gov/air/air-business-planning/content/current-air-rules.

source retirements by 2028.

With respect to 40 CFR 51.308(f)(2)(iv)(D), FDEP explained that particulate organic matter (POM) is the second most important contributor to fine particle mass and light extinction on the 20 percent most impaired and 20 percent clearest days in Florida Class I areas during the baseline period. POM and elemental carbon (a component of $PM_{2.5}$) are associated with wildfires, prescribed wildland fires, agricultural burning, and biogenic emissions from vegetation. Elemental carbon is a relatively minor contributor to visibility impairment at the Class I areas in Florida as discussed in section 2.4.2 and demonstrated in figures 2-1 through 2-5. Florida has a certified Smoke Management Plan (SMP) which was most recently updated in 2013. The Florida Forest Service operates a burn authorization program that considers the potential for smoke from the burn impacting smoke sensitive receptors (*e.g.*, airports, roads, hospitals, and urban areas). The SMP contains provisions to help minimize air pollutant and regional haze impacts. Florida's SMP may be found in appendix G-4 of the 2021 Plan for reference only.

With respect to 40 CFR 51.308(f)(2)(iv)(E), in section 7 of the 2021 Plan, FDEP evaluates the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS in development of the 2028 RPGs for the Florida Class I areas. Section 7.2 of the 2021 Plan identifies control measures included in the VISTAS 2028 emissions inventory. The 2028 RPGs are identified in section 8 of the 2021 Plan and section 8.2.2 includes source retirements and replacements for Florida sources. Section I.D of the TSD to this proposed rulemaking provides a more detailed summary of the State's assessment of the five additional factors in 40 CFR 51.308(f)(2)(iv).

e. Interstate Consultation: FDEP consulted with states and RPOs that identified Florida sources as impacting those states' (or states within the RPOs') Class I areas. FDEP consulted with the two states with one or more sources exceeding Florida's PSAT threshold at one or more of Florida's Class I areas.

i. State/RPOs Requesting Consultation with Florida:

a. MANE-VU's Ask: The following summarizes the conclusions of consultation related to the MANE-VU Ask[82] for Florida. Section I.F of the TSD to this rulemaking provides a more detailed summary of the State's assessment of Florida's interstate consultation pursuant to 40 CFR 51.308(f)(2)(ii).

In a letter dated August 25, 2017, MANE-VU requested that 14 states, including Florida, address the "Asks" outlined in the letter on the basis that Florida sources exceeded the visibility impact threshold set by MANE-VU for at least one Class I area in the MANE-VU region. On October 16, 2017, MANE-VU initiated consultations with the states including Florida. Florida disagreed with MANE-VU's assertion that Florida's statewide emissions are impacting visibility at MANE-VU Class I areas. Florida's viewpoints are reflected in the January 27, 2018, letter from VISTAS to MANE-VU. To resolve the disagreement, Florida sent a response letter on January 19, 2018, to MANE-VU and noted several disagreements with MANE-VU's analysis. Florida documented the State's responses and viewpoints with respect to the MANE-VU Ask in section 10 and appendices F-4 of the 2021 Plan. Florida believes that the State fulfilled the consultation requirements under 40 CFR 51.308(f)(2)(ii) by the State's participation in a series of five MANE-VU consultation calls held during the period from October 20, 2017, to March 23, 2018, and by the State's documented responses to MANE-VU. Thus, FDEP determined that no further action is required under the RHR to address MANE-VU's requests.

b. *Georgia's Request for Consultation with Florida*

In a letter dated November 24, 2020, the Georgia Environmental Protection Division requested that FDEP share Florida's FFA for its sources that impact Georgia's Class I areas – Cohutta, Okefenokee, and Wolf Island. Georgia, through VISTAS analysis, identified five

[82] MANE-VU refers to the emission reduction measures identified in other states as being necessary to make reasonable progress as "Asks." The MANE-VU Ask to states outside of the MANE-VU Region is available at https://otcair.org/manevu/Upload/Publication/Formal%20Actions/MANE-VU%20Inter-Regional%20Ask%20Final%208-25-2017.pdf.

Florida sources that had greater than one percent sulfate impact on at least one of Georgia's Class I areas,[83] including Nutrien, Foley, WestRock-Fernandina, JEA Northside, and Seminole. As described above, the Haze Plan includes FFAs or existing effective control analyses for these five facilities and identifies permit conditions that are incorporated into Florida's SIP or are proposed for incorporation into the SIP. The permit conditions proposed for incorporation are identified in the "Materials to be Incorporated into the SIP" sections of the 2021 Plan, the 2024 Supplement, and the Second 2024 Supplement for incorporation into the regulatory portion of the Florida SIP.

Florida responded to Georgia in a letter dated December 18, 2020, acknowledging that the Florida sources identified by Georgia met Florida's selection criteria and would be evaluated in FFAs.

ii. Other States with Sources Contributing to Regional Haze at Florida's Class I Areas:

Consultation with other states with sources contributing to regional haze at Florida's Class I areas is discussed in section 10 and appendix F of the 2021 Plan. As listed in table 7-26 of the 2021 Plan, Florida requested an FFA of two sources in two other states because these sources exceeded the State's sulfate PSAT threshold at one or more of Florida's Class I areas: Georgia Power Company – Plant Bowen (Plant Bowen) in Georgia and Tennessee Valley Authority–Shawnee Fossil Plant (TVA-Shawnee) in Kentucky. At the time of plan submission, FDEP documented in section 10 of the 2021 Plan that the State had not yet received a response from Georgia related to Plant Bowen or from Kentucky for TVA-Shawnee.[84] Additionally, FDEP consulted with Alabama on Sanders Lead Co. since that facility had initially ranked greater than Florida's one percent threshold for PSAT contribution. Alabama provided additional information in a letter showing that this facility's recent SO_2 emissions have

[83] None of Florida's sources exceeded the one percent PSAT nitrate emissions threshold.
[84] Regarding Plant Bowen, on August 11, 2022, Georgia submitted a final regional haze plan for the second planning period which included an FFA for Plant Bowen that concluded existing SO_2 measures for Units 1–4 at the facility are necessary for reasonable progress for the second period. EPA approved Georgia's regional haze plan on November 21, 2024. *See* 89 FR 92038. Kentucky has not yet submitted a final regional haze plan.

significantly reduced from the initial 2028 projections.[85] In the 2021 plan, FDEP stated that a scrubber went online in late 2019 and reduced the worst-case potential emissions from 7,961.1 tpy to approximately 1,400 tpy of SO_2 which brought Sanders Lead Co. well below the one percent PSAT. Therefore, Alabama did not select the facility for a control evaluation.

3. EPA Evaluation: EPA reviewed Florida's FFAs, determinations of controls necessary for reasonable progress, and submitted permit conditions. Based on this review, EPA proposes to determine that Florida's LTS meets the requirements of 40 CFR 51.308(f)(2)(i) through (iv).

a. Source Selection Criteria: EPA proposes to find that Florida has satisfied the requirements of 40 CFR 51.308(f)(2)(i) with respect to its description of source selection criteria, the outcomes of the source selection process, and the basis for using the AoI and PSAT thresholds and other criteria to select sources. Specifically, Florida provided: appendix B, which details how the State, in conjunction with VISTAS, created emissions inventories relied upon by the State for its Haze Plan; appendix C, which provides monitoring and meteorological data used to support selection of sources; and appendix D, which provides analyses supporting the AoI approach. In addition, FDEP summarized in the 2021 Plan the specific data that Florida used for its source selection analyses, including the AoI and PSAT analyses and results. FDEP followed EPA's 2019 Guidance recommendations to use 2028 emissions projections to select sources and checked the accuracy of its 2028 estimations by electing to evaluate differences between 2017–2019 emissions and 2028 emissions projections in section 7.6.5 of the 2021 Plan.

EPA proposes to find that Florida captured a reasonable set of in-state sources contributing to visibility impairment at Class I areas for the following reasons. AoI and PSAT are acceptable and well-established methods for selecting sources for a control analysis and they enable the identification of the sources that have the largest impacts on visibility at Class I areas

[85] The December 7, 2020, letter from the Alabama Department of Environmental Management confirming the lowered SO_2 emission rates can be found in appendix F-1c of the 2021 Plan.

in Florida and neighboring states.[86] Using a five percent AoI threshold and a one percent PSAT threshold, the State identified twelve Florida sources for a control evaluation that are projected to have the highest impact on visibility at both in-state and out-of-state Class I areas at the end of the second planning period.

Additionally, statewide SO_2 emissions are expected to decrease in the second planning period from 2017 levels of 78,173 tpy of SO_2 to projected 2028 levels of 66,979 tpy of SO_2 (approximately a 14 percent reduction), and statewide NOx emissions are expected to decrease from 2017 levels of 414,369 tpy NOx to projected 2028 levels of 265,453 tpy NOx (approximately a 36 percent reduction).[87] Additional emissions reductions which have not been reflected in the 2028 emissions projections and 2028 RPGs include the following: CD McIntosh, which permanently shut down Unit 3 in 2021; Foley, which had permanently ceased operations by May 2024;[88] OUC Stanton, which announced that it will end coal-firing by the end of 2027; and WestRock - Panama City, which permanently ceased operations in June 2022. Specific to second planning period visibility improvement, visibility conditions in Florida's Class I areas in 2028 are estimated to improve since the 2014–2018 period by 0.62 deciview (Chassahowitzka), 0.95 deciview (Everglades), and 0.96 deciview (St. Marks). When considered in relation to the amount of visibility improvement needed to reach natural conditions starting from the 2014-2018 period, these projected visibility improvements expected during the second planning period represent approximately the following amount of progress: 7.40 percent improvement (Chassahowitzka), 13.70 percent improvement (Everglades), and 11.62 percent improvement (St. Marks).[89] Based upon a comparison of the most recently available 20 percent most impaired

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[86] The State used the AoI process because it identifies the largest sources with potential visibility impacts to Class I areas and then used sophisticated photochemical source apportionment modeling to identify specific sources for control evaluations. *See* also 2019 Guidance, pp. 12–13.

[87] Florida's statewide emissions of SO_2 and NOx decreased during the period from 2011 to 2017 from 172,701 tpy SO_2 to 78,173 tpy SO_2 and decreased from 608,366 to 414,369 tpy NOx. *See* tables 4-1, 13-12, and 13-13 of the 2021 Plan.

[88] In appendix C-2 of the 2024 Supplement, Foley stated in a letter dated May 22, 2024, that the mill has ceased production operations as a pulp and paper mill.

[89] *See* visibility data for the 20 percent most impaired days data from table 8-1 and 2-6 of the 2021 Plan. Percentage

days IMPROVE data (2018–2022)[90] to the 20 percent most impaired days data from the end of the first planning period (2014–2018),[91] in the first four years of the second planning period Florida's Class I areas have already achieved the following amount of additional progress towards natural conditions: 4.5 percent (Chassahowitzka), 8.1 percent (Everglades), and 16.59 percent (St. Marks).[92] Also, Florida is appropriately focused on controlling point source SO_2 emissions based on data showing ammonium sulfate is the dominant visibility impairing pollutant at the Florida Class I areas.

b. Consideration of the Four CAA Factors:

i. FFAs: EPA proposes to find that FDEP's reasonable progress determinations and conclusions for the selected sources are reasonable and that Florida submissions satisfy the requirements of 40 CFR 51.308(f)(2)(i) as discussed below.[93]

a. *Foley*: Regarding Foley, EPA proposes to find FDEP's determinations of measures that are necessary for reasonable progress are reasonable as described below.

The State evaluated available and technically feasible SO_2 controls based on, where applicable, estimated values of capital costs, annualized costs, and cost per ton of emission reductions, consistent with recommendations in the Cost Manual.

For the No. 1 Power Boiler, the State evaluated adding a wet scrubber with an estimated cost of $13,547/ton, and DSI with an estimated cost of $21,727/ton and determined that these

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of progress toward natural conditions = [((2014-2018 IMPROVE data) – (2028 RPG)) / ((2014-2018 IMPROVE data) – (Natural visibility conditions))] x 100. Example calculation for Chassahowitzka [(17.41 – 16.79) / (17.41 – 9.03)] x 100 = 7.4 percent.

[90] The 2018–2022 IMPROVE data for the 20 percent most impaired days was obtained from under the header "Means for Impairment Metric:". The IMPROVE data includes visibility monitoring data for each Class I area. This data was filtered for each Class I area, listed as "CHAS1" (Chassahowitzka), "EVER1" (Everglades), and "SAMA1" (St. Marks), respectively, (in column "A", titled "site"). Then data was filtered for the years 2018 through 2022 (using column "B" titled "year"). These data points were then filtered for the 20 percent most impaired days, indicated by "90" (in column "C" titled "impairment_Group"). The resulting data points for each Florida Class I area within the "haze_dv" column "AK", corresponding to each of the five years, were averaged to determine the 20 percent most impaired days for the 2018-2022 five-year period. The 2018-2022 IMPROVE data for Florida's Class I areas are: 17.03 deciviews (Chassahowitzka), 14.37 deciviews (Everglades), and 16.02 deciviews (St. Marks).

[91] The 2014–2018 IMPROVE data was provided by Florida in table 2-6 of the 2021 Plan.

[92] Percentage of progress toward natural conditions = [((2014-2018 IMPROVE data) – (2018-2022 IMPROVE data)) / ((2014-2018 IMPROVE data) – (Natural visibility conditions))] x100. Example calculation for Chassahowitzka: [(17.41 – 17.03) / (17.41 – 9.03)] x 100 = 4.5 percent.

[93] *See* also section I.B of the TSD for additional details regarding Florida's FFAs.

controls are not cost effective.

FDEP determined that existing measures are necessary for reasonable progress. Specifically, the No. 1 Power Boiler shall fire only natural gas except for periods of natural gas curtailment, pipeline disruptions, or physical mill problems that otherwise prevent the firing of natural gas in this unit. For future additions of No. 6 fuel oil to the common tank, the maximum sulfur content shall be 1.02 percent by weight with compliance determined by maintaining records of fuel deliveries, analytical methods, and results of analysis. Tall oil is no longer an authorized fuel.

For the No. 1 Power Boiler, EPA proposes to find that FDEP's determination to impose limitations for existing measures is reasonable and necessary for reasonable progress.

For No. 1 Bark Boiler, as the unit was already equipped with a wet venturi scrubber, Florida considered operating scenarios to achieve additional SO_2 emissions reductions, and determined that running the wet venturi scrubber with requirements on minimum pH and flow rate whenever a LVHC-NCG or oil is fired is cost-effective and necessary for reasonable progress, resulting in a 51 percent reduction in SO_2 emissions annually. EPA proposes to find that FDEP's determination to require more frequent operation of the wet venturi scrubber for the No. 1 Bark Boiler is reasonable and that this measure is necessary for reasonable progress. Additionally, EPA proposes to find that FDEP's determination to impose the low-sulfur fuel restrictions for the No. 1 Bark Boiler that are similar to the restrictions proposed for No. 1 Power Boiler (except the No. 1 Bark Boiler is permitted to burn wood in addition to natural gas as the primary fuel type) is reasonable and that these measures are necessary for reasonable progress.

For the recovery boilers, the State evaluated wet scrubbers with estimated costs of $7,779/ton for Recovery Furnace No. 2; $5,197/ton for Recovery Furnace No. 3; and $6,587/ton for Recovery Furnace No. 4. Florida determined that these measures were not cost effective, but proposed existing measures as necessary for reasonable progress. EPA proposes to find that FDEP's determination to impose requirements for the following existing measures – black liquor

as the primary fuel; natural gas and liquid fuels as supplements to recovery operations; a maximum sulfur content of 1.02 percent for purchased no. 6 fuel oil; and a SO_2 emissions cap of 3,200 tons per consecutive 12 operating months as measured by CEMS – is reasonable and that these measures are necessary for reasonable progress.

Therefore, EPA proposes to incorporate into the Florida SIP the permit conditions from permit number 1230001-121-AC that are identified in the "Materials to be Incorporated into the SIP" section of the Second 2024 Supplement.[94]

b. *JEA Northside*: Regarding JEA Northside Unit 3,[95] EPA proposes to find that FDEP's determinations regarding applicable controls for this source at JEA Northside are reasonable. The State evaluated available and technically feasible SO_2 controls that were based on, where applicable, estimated values of capital costs, annualized costs, and cost per ton of emission reductions, consistent with recommendations in the Cost Manual. For NGS Unit 3, EPA proposes to find FDEP's determination that switching to lower sulfur No. 6 fuel oil at $3,053/ton of SO_2 removed is necessary for reasonable progress is reasonable. Thus, EPA proposes to incorporate into the Florida SIP the permit conditions from permit number 0310045-057-AC that are listed under "Materials to be Incorporated into the SIP" section of the 2021 Plan.[96]

c. *WestRock-Fernandina*: EPA proposes to find FDEP's determinations regarding applicable controls for the sources at WestRock-Fernandina are reasonable. The State evaluated available and technically feasible SO_2 controls based on, where applicable, estimated values of capital costs, annualized costs, and cost per ton of emission reductions, consistent with recommendations in the Cost Manual.

Regarding the No. 7 Power Boiler, FDEP evaluated removing coal as a fuel ($7,374/ton),

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[94] *See* pp. 8-14 under "Appendix A" of "Materials to be Incorporated into the SIP" contained within filename "SIP 2024-01 Part II SIP Regional Haze Amendment Supplement October 28 2024.pdf" included with the Second 2024 Supplement which is in the docket for this proposed rulemaking.

[95] The associated permits documenting proposed conditions and limits in the SIP may be found in appendix G-3 of the 2021 Plan.

[96] *See* p. 13 under "JEA Northside Unit 3…" under "Materials to be Incorporated into the SIP" in filename "Final SIP 2021-01 Regional Haze.pdf" included with the 2021 Plan which is in the docket for this rulemaking. These permit conditions are also summarized in section 7.8.1.1.5 of the 2021 Plan.

reducing coal usage (cost savings $1,868/ton), FGD without and with a stack liner ($5,641/ton and $6,028/ton, respectively), DSI ($8,776/ton), and SDA ($16,398/ton). EPA proposes to find FDEP's determination for the No. 7 Power Boiler that reducing coal usage to 125 tpd is cost-effective is reasonable, and proposes to find that reducing coal usage is necessary for reasonable progress for the No. 7 Power Boiler.[97] Therefore, EPA proposes to incorporate into the Florida SIP the permit conditions from permit number 0890003-072-AC that are listed under the "Materials to be Incorporated into the SIP" section of the 2021 Plan;[98] and the permit condition from permit number 0890003-074-AC and listed in appendix A-1 of the 2024 Supplement.

Regarding the No. 5 Power Boiler, FDEP evaluated a wet scrubber system without and with a stack liner ($285,615/ton and $298,499/ton, respectively) and DSI ($277,093/ton). For the Nos. 4 and 5 Recovery Boilers, FDEP evaluated a wet scrubber system at $282,375/ton and $169,425/ton, respectively. EPA proposes to find FDEP's determination that existing SO_2 measures at the No. 5 Power Boiler and the Nos. 4 and 5 Recovery Boilers previously approved into the SIP[99] are necessary for reasonable progress is reasonable.

ii. Existing, Effective Control Demonstrations:

EPA proposes to find that certain existing SO_2 measures at the affected units of the eight facilities evaluated for existing, effective control demonstrations are necessary for reasonable progress, and thus, EPA proposes to include these measures in the SIP.

EPA proposes to find that FDEP's proposed adoption of the 0.20 lb/MMBtu MATS limit for the fossil fuel steam generating Unit 4 and Unit 5 at Duke-Crystal River and the permit requirements that allow the citrus combined cycle station Units 1A, 1B, 2A, and 2B to combust only pipeline natural gas is reasonable. The 2019 Guidance provides several scenarios in which

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[97] Existing measures for the No. 7 Power Boiler can be found in section 7.8.2.1.5, *Summary of Findings for WestRock-Fernandina Beach No.7 Power Boiler (EU15)*, of the 2021 Plan and section 7.8.2.5.5, *Summary of Findings for No.7 Power Boiler*, of the 2024 Supplement.

[98] *See* pp. 15-16 under "WestRock Fernandina Beach Mill…" under "Materials to be Incorporated into the SIP" in filename "Final SIP 2021-01 Regional Haze.pdf" included with the 2021 Plan which is in the docket for this rulemaking. These permit conditions are also summarized in section 7.8.2.1.5 of the 2021 Plan.

[99] *See* 82 FR 30749 (July 3, 2017); 40 CFR 52.520(d).

EPA believes it may be reasonable for a state not to select a particular source for further analysis. One such scenario is applicable to Duke-Crystal River – a coal-fired EGU that has add-on FGD and meets the applicable alternative SO_2 emission limit of 0.2 lb/MMBtu in the MATS rule. The 2019 Guidance states that it is unlikely that an analysis of control measures for a source already equipped with a scrubber and meeting a 0.20 lb/MMBtu limit or having fuel combustion units that is restricted to combust only pipeline natural gas per enforceable requirements would conclude that even more stringent control of SO_2 is necessary to make reasonable progress. *See* 2019 Guidance at 23.

EPA evaluated FGD control efficiency data at Units 4 and 5 at Duke-Crystal River and calculated that the existing FGD systems routinely achieve 96.2–98.9 percent yearly average SO_2 removal efficiencies based on 2017-2023 data during periods when coal is one of the fuel sources consumed, with a seven-year average (2017–2023) SO_2 removal efficiencies of 97.0 and 96.8 percent, respectively.[100] Therefore, for Duke-Crystal River's Units 4 and 5, EPA proposes to find it reasonable that an FFA would likely result in the conclusion that no further SO_2 emissions controls (including FGD upgrades) are necessary for reasonable progress. Therefore, EPA proposes to find that FDEP's determination that these existing SO_2 measures are necessary for reasonable progress and must be adopted into the SIP is reasonable.

EPA proposes to find as reasonable FDEP's determination that an SO_2 limit of 0.15 lb/MMBtu in combination with the MATS-based SO_2 emission limit of 0.20 lb/MMBtu at CFB Boilers 1 and 2 at JEA Northside demonstrate existing, effective SO_2 measures for these units. Regarding FGD control efficiencies at CFB Boilers 1 and 2 JEA Northside, EPA evaluated data from 2017–2023 and calculated that the existing FGD systems routinely achieve 94.8 to 96.6 percent yearly average SO_2 removal efficiencies when consuming coal, having seven-year average (2017–2023) SO_2 removal efficiencies of 95.8 percent.[101] Therefore, EPA proposes to

[100] *See* Florida EGU scrubber efficiency data file that is included in the docket for this proposed action.
[101] *See* Florida EGU scrubber efficiency data file that is included in the docket for this proposed action.

find FDEP's determination that an FFA would likely result in the conclusion that no further SO_2 emissions controls (including FGD upgrades) is reasonable and that these measures are necessary for reasonable progress. Therefore, EPA proposes to find that the proposed emissions limits are necessary for reasonable progress and must be adopted into the SIP.

EPA proposes to find as reasonable FDEP's determination that Mosaic-Bartow's SAPs 4, 5, and 6 have existing, effective controls. Currently, these units use dual absorption process with cesium catalyst to control SO_2 emissions and restrictions in the SIP to limit the three SAPs at the facility to four lbs/ton of 100 percent sulfuric acid produced, which is consistent with controls identified in EPA's RBLC. In addition, the facility has a three-unit cap at 1,100 lbs/hour on a 24-hour block average and had recent upgrades to reduce SO_2 emissions. Thus, EPA proposes to find FDEP's determination that SAPs 4, 5, and 6 are effectively controlled reasonable, and that an FFA would likely result in the conclusion that no further SO_2 emissions controls these measures are necessary for reasonable progress.

EPA proposes to find that FDEP's determination is reasonable that existing SO_2 measures at Mosaic-New Wales' SAPs 1-5, which use dual absorption process with cesium-promoted catalyst, constitute existing, effective SO_2 controls. The combination of the dual absorption design and the cesium-promoted catalysts represents BACT for sulfur-burning, non-single absorption column SAPs in accordance with the RBLC. Current restrictions in the SIP limit the Nos. 1–3 SAPs to 3.5 lbs/ton of 100 percent sulfuric acid produced on a 24-hr rolling average and four lbs/ton of sulfuric acid produced on a three-hour rolling average, while SAPs 4 and 5 are each required to meet a limit of 4.0 lbs/ton of sulfuric acid produced. In addition, the facility has a five-unit cap at 1,090 lbs/hour on a 24-hour block average. Thus, EPA proposes to find FDEP's determination reasonable that SAPs 1-5 have effective SO_2 control measures for Mosaic-New Wales, and that an FFA would likely result in the conclusion that no further SO_2 emissions controls are necessary for reasonable progress.

EPA proposes to find that FDEP's determination is reasonable that existing SO_2 measures

at Mosaic-South Pierce's SAPs 10 and 11, which use dual absorption process with cesium-promoted catalyst, constitute existing effective SO_2 controls. The combination of the dual absorption design and the cesium-promoted catalysts represents BACT for sulfur-burning, non-single absorption column SAPs in accordance with the RBLC. Current restrictions in the SIP impose a 750 lbs/hour SO_2 limit on a 24-hour block average. Thus, EPA proposes to find FDEP's determination reasonable that Mosaic-South Pierce's SAPs 10 and 11 have effective SO_2 control measures, and that an FFA would likely result in the conclusion that no further SO_2 emissions controls these measures are necessary for reasonable progress.

EPA proposes to find that FDEP's determination that Nutrien's SAPs E and F have existing effective controls for SO_2 is reasonable. Nutrien's SAPs E and F currently use dual absorption process with cesium catalyst. Current restrictions in the SIP impose SO_2 emission limits at 2.6 lbs/ton, three-hour rolling average; 2.3 lbs/ton, 365-day rolling average, which applies during periods of shutdown and startup; and 840 lbs/hour on a 24-hour block averaging period. The facility elected to complete upgrades on SAP E and SAP F, which included changing out and augmenting the converter catalyst in the SAPs to meet the limits. EPA proposes to find that the State adequately demonstrates that Nutrien's SAPs E and F are effectively controlled, and that an FFA would likely result in the conclusion that no further SO_2 emissions controls are necessary for reasonable.

EPA proposes to find that FDEP's determination that TECO-Big Bend has existing effective controls for SO_2 for Unit 4 is reasonable. TECO-Big Bend's SO_2 emissions are limited by the MATS limit of 0.20 lb/MMBtu which FDEP is proposing to incorporate into the SIP. Regarding FGD control efficiencies at Unit 4 at TECO-Big Bend, EPA evaluated data from 2017–2023 for Unit 4 and calculated that the existing FGD system routinely achieves 92.2–97.1 percent yearly average SO_2 removal efficiencies during periods when coal is one of the fuel sources consumed, with a seven-year average (2017–2023) SO_2 removal efficiency of 95.8

percent.[102] As mentioned above, Unit 3 at TECO-Big Bend was permanently retired from electric generation service on April 26, 2023, and therefore, Florida's demonstration of existing, effective controls is no longer relevant and no further action is required by EPA.[103] Therefore, EPA proposes to find FDEP's determination that TECO-Big Bend Unit 4 is effectively controlled is reasonable, and that an FFA would likely result in the conclusion that no further SO_2 emissions controls (including FGD upgrades) are necessary.

Lastly, EPA proposes to find that FDEP's determination that Seminole has existing effective controls for SO_2 for steam electric generators Nos. 1 and 2 is reasonable. The MATS SO_2 limit of 0.20 lb/MMBtu applies to the Seminole facility, and Florida identified this emission limit for incorporation into the SIP. Regarding FGD control efficiencies at Unit Nos. 1 and 2 at Seminole during periods when coal is one of the fuel sources consumed, EPA evaluated data from 2017–2023 and calculated that the existing FGD systems routinely achieve 96.5–97.3 percent yearly average SO_2 removal efficiencies, with a seven-year average (2017–2023) SO_2 removal efficiency of 96.8 percent.[104] Therefore, EPA proposes to find FDEP determination reasonable that Seminole Unit Nos. 1 and 2 are effectively controlled, and that an FFA would likely result in the conclusion that no further SO_2 emissions controls (including FGD upgrades) are necessary.

c. Documentation of Technical Basis: With respect to 40 CFR 51.308(f)(2)(iii), EPA proposes to find that Florida adequately documented cost, engineering, emissions, modeling, and monitoring information to determine the measures that are necessary to make reasonable progress for the following reasons. With regard to emissions information, as required by the RHR, the State included the required years of the most recent triennial emissions inventory (2017) and the most recent annual SO_2 emissions data for specific sources (2019) available at the time of the development of the 2021 Plan. FDEP provided actual emissions inventory data for

[102] *See* Florida EGU scrubber efficiency data file that is included in the docket for this proposed action.
[103] The Retired Unit Exemption Form for TECO Big Bend Unit 3 is included in the docket for this rulemaking.
[104] *See* Florida EGU scrubber efficiency data file that is included in the docket for this proposed action.

2011, 2014, and 2017, and emissions projections for 2028 in its Haze Plan. Specifically, table 4-1 provides a 2011 emissions inventory for Florida which includes the visibility impairing pollutants and carbon monoxide. Emissions from the 2014 and 2017 NEIs are provided in tables 13-11, 13-12, and 13-13 for $PM_{2.5}$, NOx, and SO_2, respectively. For all Florida facilities with emissions of either SO_2 or NOx greater than 100 tpy in 2017, table 7-28 (SO_2) includes actual emissions for 2017, 2018, and 2019, and 2028 (remodeled) projected emissions. With regard to cost and engineering information, the State provided the underlying cost calculations associated with the cost summaries in section 7.8 of the Haze Plan for Foley, JEA Northside, and WestRock-Fernandina, and the proposed FFAs in appendix G provide engineering analyses evaluating potential new control measures. With regard to monitoring data, the State provided IMPROVE data for the modeling base period plus baseline, current (2014–2018), and natural conditions for all VISTAS Class I areas with more detailed data provided for the Florida Class I areas. With regard to modeling information, the State documented the modeling input and outputs and assumptions in the Haze Plan and the results of the modeling related to RPGs and PSAT source impacts at Class I areas.

d. Assessment of Five Additional Factors in 40 CFR 51.308(f)(2)(iv):

EPA proposes to find that Florida has satisfied the requirements of 40 CFR 51.308(f)(2)(iv) because FDEP considered each of the five additional factors, discussed the measures the State has in place to address each factor (or discussed why such measures are not needed), and where relevant, explained how each factor informed FDEP's and VISTAS' technical analyses for the second planning period.

With respect to 40 CFR 51.308(f)(2)(iv)(A), EPA proposes to find that FDEP adequately addressed the requirement to assess emission reductions due to ongoing air pollution control programs, including measures to address RAVI, through the State's emissions inventory work for the base year of 2011 as projected out to 2028.

With respect to 40 CFR 51.308(f)(2)(iv)(B), EPA proposes to find that Florida adequately

addressed this requirement to evaluate measures to mitigate the impacts of construction activities by describing a state regulation that addresses control of fugitive airborne dust and considering the minor impact fine soils have on visibility.

With respect to 40 CFR 51.308(f)(2)(iv)(C), EPA proposes to find that Florida adequately addressed source retirement and replacement schedules by summarizing existing and planned source retirements in section 8.2.2 in the 2021 Plan.

With respect to 40 CFR 51.308(f)(2)(iv)(D), EPA proposes to find that Florida adequately addressed the requirement to consider the State's basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs. The State describes its SMP to mitigate $PM_{2.5}$ emissions associated with prescribed burning and highlights its burn authorization program, operated by Florida's Forest Service, that considers the potential impact of smoke at sensitive receptors.

With respect to 40 CFR 51.308(f)(2)(iv)(E), EPA proposes to find that Florida assessed the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the second planning period in development of the 2028 RPGs for the Florida Class I areas. FDEP also identifies control measures included in the VISTAS 2028 emissions inventory and source retirements and replacements. FDEP used the 2011 base year emissions inventory to project emissions from various source sectors to 2028, the end of the second planning period. FDEP, through VISTAS, completed CAMx modeling to estimate visibility impairment in 2028 based on projected 2028 emissions from the 2011 base year inventory and using IMPROVE monitoring data for 2009–2013. As mentioned previously, atmospheric ammonium sulfate is the largest contributor to visibility impairment in Class I areas in the Southeast. VISTAS emission sensitivity modeling determined that the most effective way to reduce ammonium sulfate is to reduce SO_2 emissions from EGUs and non-utility industrial point sources.

e. Interstate Consultation: Based on the consultation documentation described in section

III.C.2.e of this document and section I.F. of the TSD to this proposed rulemaking, EPA proposes to find that Florida has met the requirements under 40 CFR 51.308(f)(2)(ii) to consult with those states with Class I areas that Florida emissions impact for visibility and to consult with those states whose sources are impacting Florida's Class I areas.[105] Additionally, Florida appropriately responded to and documented requests from MANE-VU to address upwind emissions from sources in VISTAS states. Lastly, FDEP completed the requested emissions control analyses for the five facilities and provided the State's analyses and conclusions of these analyses in section 7.6 and 7.8 of the 2021 Plan and 2024 Supplement.

EPA also proposes to find that FDEP appropriately consulted with other states, namely Kentucky, Georgia, and Alabama regarding specific sources that are reasonably anticipated to contribute to visibility impairment at Class I areas in Florida in accordance with 40 CFR 51.308(f)(2)(ii). EPA proposes to conclude that Florida appropriately documented its interstate consultations regarding Florida sources reasonably anticipated to contribute to visibility impairment at Class I areas outside of the State and sources in other states reasonably anticipated to contribute to visibility impairment at Florida's Class I areas.[106]

D. RPGs

1. RHR Requirement: Section 51.308(f)(3) contains the requirements pertaining to RPGs for each Class I area. 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 planning period as a result of the emission limitations, compliance schedules and other measures required under paragraph (f)(2) to be in states' LTS, as well as implementation of other CAA requirements. The LTS, as reflected by the

[105] Specifically, EPA proposes to find that FDEP appropriately responded to and documented requests from Georgia to complete FFAs or existing, effective control demonstrations for the SO_2 emissions from Foley, JEA Northside, Nutrien, Seminole, and WestRock-Fernandina in Florida.

[106] EPA is proposing action on Florida's source selection and control analyses in this rulemaking on the State's Haze Plan. Thus, EPA is not proposing action regarding the adequacy of other states' responses to Florida's requests for consultation pursuant to 40 CFR 51.308(f)(2)(ii) in this proposed action.

RPGs, must provide for an improvement in visibility on the most impaired days relative to the baseline period and ensure no degradation on the clearest days relative to the baseline period. Section 51.308(f)(3)(ii) applies in circumstances in which a Class I area's RPG for the most impaired days represents a slower rate of visibility improvement than the URP calculated under 40 CFR 51.308(f)(1)(vi). Under 40 CFR 51.308(f)(3)(ii)(A), if the state in which a mandatory Class I area is located establishes an RPG for the most impaired days that provides for a slower rate of visibility improvement than the URP, the state must demonstrate that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the state that would be reasonable to include in its LTS. 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.

2. State Assessment: Florida identified the 2028 RPGs for each of its Class I areas in deciviews. Florida's RPGs are listed in table 3.

Table 3: Florida Class I Areas' 2028 RPGs and URP in Deciviews (dv)

Class I Area	2028 RPG Clearest 20%	2028 RPG Most Impaired 20%	2028 URP
Chassahowitzka	12.54	16.79	18.36
St. Marks	11.59	16.43	18.26
Everglades	9.88	13.95	15.06

Florida's 2028 RPGs on the 20 percent most impaired days are below the URP for all Florida Class I areas. The 2028 RPGs on the 20 percent clearest days showed no degradation since the 2000-2004 baseline period.

3. EPA Evaluation: EPA proposes to determine that Florida has satisfied the applicable requirements of 40 CFR 51.308(f)(3) relating to RPGs. Florida provided 2028 RPGs for the most impaired and clearest days for the three Class I areas in the State subject to the RHR. Specifically, the State established 2028 RPGs expressed in deciviews that reflect the visibility

conditions that are projected to be achieved by the end of the second planning period as a result of implementation of the LTS and other CAA requirements. Florida's 2028 RPGs show an improvement in visibility for the 20 percent most impaired days since the baseline period (2000–2004) and show no degradation in visibility for the 20 percent clearest days since the baseline period. The RPGs in the Haze Plan provide for a faster rate of visibility improvement than the URP, and thus, 40 CFR 51.308(f)(3)(ii)(A) does not apply to Florida. Additionally, 40 CFR 51.308(f)(3)(ii)(B), does not apply to Florida because the Class I areas impacted by emissions from Florida's sources are below their respective URPs.

E. Monitoring Strategy and Other Regional Haze Plan Requirements

1. RHR Requirement: 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 IMPROVE network.

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

Section 51.308(f)(6)(ii) requires SIPs to provide for procedures by which monitoring data and other information are used in determining the contribution of emissions from within the state to regional haze visibility impairment at mandatory Class I areas both within and outside the state. Section 51.308(f)(6)(iii) does not apply to Florida, as 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. 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. Under 40 CFR 51.308(f)(4), if EPA or the FLM of an affected Class I area has advised a State that additional monitoring is needed to assess RAVI, the State must include in its SIP revision for the second planning period an appropriate strategy for evaluating such impairment.

2. State Assessment:

a. Section 51.308(f)(6)(i): Florida relies on the IMPROVE monitoring network to meet the monitoring strategy requirements and contends that the existing IMPROVE monitors for the State's Class I areas are adequate and no additional monitoring sites or equipment are needed to assess whether RPGs for all mandatory Class I areas within the State are being achieved.

b. Section 51.308(f)(6)(ii): Florida states that data produced by the IMPROVE monitoring network will be used for preparing the five-year progress reports and the 10-year comprehensive SIP revisions, each of which rely on analysis of the preceding five years of IMPROVE monitor data.

c. Section 51.308(f)(6)(iii): This provision applies to states with no mandatory Class I areas, and therefore, does not apply to Florida.

d. Section 51.308(f)(6)(iv): With respect to 40 CFR 51.308(f)(6)(iv), NPS manages and oversees the IMPROVE monitoring network and reviews, verifies, and validates IMPROVE data before its submission to EPA's Air Quality System. Florida believes the existing IMPROVE monitors for the State's Class I areas are sufficient for the purposes of this Haze Plan. Florida believes that participation of the state organizations, including FDEP, in the IMPROVE Steering Committee adequately represents the needs of the State.

e. Section 51.308(f)(6)(v): FDEP provided a statewide, baseline emissions inventory of pollutants for the year 2011 in table 4-1 of the 2021 Plan which includes the following

pollutants: carbon monoxide, NH_3, NOx, PM_{10},[107] $PM_{2.5}$, SO_2, and VOC. The 2011 base year modeling platform was the best platform available at the time the modeling work began in late 2017. Emissions and modeling work should begin three years before haze plans are due because of the significant amount of time required to complete the work one year in advance of preparing the haze plans. FDEP, through VISTAS, discussed the selection of modeling platforms with EPA and reliance on the 2011 base year.

In addition, FDEP provided in tables 13-11, 13-12, 13-13 of the 2021 Plan statewide emissions data for 2014 (NEI), 2017 (NEI), and 2018 emissions projections developed in the first planning period for $PM_{2.5}$, NOx, and SO_2, respectively, by source category in support of the progress report elements of its plan. Also, in table 7-1 of the 2021 Plan, FDEP includes both the 2011 actual and 2028 projected emissions for the criteria air pollutants, including SO_2, NOx, PM_{10}, and $PM_{2.5}$ for all VISTAS states including Florida. FDEP commits to periodically update its statewide emissions inventories under 40 CFR 51.308(f)(6)(v).

f. Section 51.308(f)(6)(vi): There are no elements, including reporting, recordkeeping, or other measures, necessary to address and report on visibility for Florida's Class I areas or Class I areas outside the State that are affected by sources in Florida.

g. Section 51.308(f)(4): With respect to 40 CFR 51.308(f)(4), the State did not include a strategy for evaluating RAVI for any Class I areas because no Federal agency requested additional monitoring to assess RAVI.

3. EPA Evaluation: EPA proposes to find that Florida has satisfied the applicable requirements of 40 CFR 51.308(f)(4) and (6) related to RAVI, visibility monitoring, and emissions inventories.

With respect to 40 CFR 51.308(f)(4), EPA proposes to find that this requirement does not apply to Florida at this time because neither EPA nor the FLMs requested additional monitoring to assess RAVI.

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[107] PM_{10} is particulate matter of greater than or equal to 10 micrometers (μm) in diameter.

EPA proposes to find that Florida satisfied 40 CFR 51.308(f)(6), which is generally met by the State's continued participation in the IMPROVE monitoring network and the VISTAS RPO, for the following reasons.

With respect to 40 CFR 51.308(f)(6)(i), EPA proposes to find that the existing IMPROVE monitors relied upon for the State's three Class I areas are adequate, and thus, additional monitoring sites or equipment are not needed to assess whether RPGs for all Class I areas within the State are being achieved.

With respect to 40 CFR 51.308(f)(6)(ii), Florida has procedures by which monitoring data from the IMPROVE will be used to for preparing the five-year progress reports and the 10-year comprehensive SIP revisions.

With respect to 40 CFR 51.308(f)(6)(iii), this provision is applicable for states with no Class I areas and does not apply to Florida.

With respect to 40 CFR 51.308(f)(6)(iv), EPA proposes to find that Florida's participation in the IMPROVE Steering Committee and the IMPROVE monitoring network addresses this requirement.

With respect to 40 CFR 51.308(f)(6)(v), EPA proposes to find that Florida's continued participation in VISTAS' efforts for projecting future emissions and continued compliance with the requirements of the AERR to periodically update emissions inventories satisfies the requirement to provide for an emissions inventory for the most recent year for which data are available. EPA proposes to find that Florida adequately documented that no further elements are necessary at this time for the State to assess and report on visibility pursuant to 40 CFR 51.308(f)(6)(vi).

F. Requirements for Periodic Reports Describing Progress Toward the RPGs

1. RHR Requirement: Section 51.308(f)(5) requires that periodic comprehensive revisions of states' regional haze plans address the progress report requirements of 40 CFR 51.308(g)(1) through (5). The purpose of these requirements is to evaluate progress toward 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 planning 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 planning 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 planning 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, 40 CFR 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 planning period progress report, including whether such changes were anticipated and whether they have limited or impeded expected progress toward reducing emissions and improving visibility.

2. State Assessment: With respect to the progress report elements pursuant to 40 CFR 51.308(f)(5), FDEP addressed these elements in section 13 of the 2021 Plan for the period 2014 to 2019.

Regarding 40 CFR 51.308(g)(1) and (2), FDEP describes the status of the implementation of the measures of the LTS from the first planning period in section 13.2 of the 2021 Plan and provides a summary of the emission reductions achieved by implementing those measures as such data is available in section 13.3 of the 2021 Plan. With respect to 40 CFR 51.308(g)(1), section 13.1.1 of the 2021 Plan lists key emissions control measures relied upon for Florida's

first regional haze plan submitted March 19, 2010 ("2010 Haze Plan").[108] Section 13.3.2 identifies key measures that contributed to emission reductions during the first planning period but were not a part of the LTS for the first period (*e.g.*, 2010 SO_2 NAAQS).

With respect to 40 CFR 51.308(g)(2), Florida continued to focus on SO_2 emissions reductions because the State determined that ammonium sulfate was the most important contributor to visibility impairment and fine particle mass on the 20 percent best and 20 percent worst days in the first planning period. Florida reported on emission reductions achieved by Federal and state measures relied upon to project the 2018 RPGs for the first period haze plan, including 2007 Heavy-Duty Highway Rule, Tier 2 Vehicle and Gasoline Sulfur Program, and the North Carolina Clean Smokestacks Act. In addition, the State provided emission reductions for sources evaluated for controls in the first period haze plan as follows. Table 13-4 of the 2021 Plan lists the 15 facilities that had units for which a reasonable progress determination was made and the current status. All facilities that were required to implement reasonable progress controls or measures have met their compliance dates. During the 2014 – 2019 period, SO_2 emissions from the units listed in table 13-4 decreased by 60,752 tpy.

Table 13-5 lists the 12 sources for which a BART control determination was made. Sources that were exempt from BART analysis or shut down prior to submission of the first regional haze SIP are not listed. All BART controls have been implemented as of December 31, 2018. During the 2014 – 2019 period, SO_2 emissions from these units decreased by 43,416 tons per year, NOx emissions decreased by 10,073 tpy, and PM emissions decreased by 1,742 tpy.

Regarding 40 CFR 51.308(g)(3), FDEP calculated for Florida's three Class I areas: the current visibility conditions (2014–2018); the difference between current visibility conditions compared to the baseline; and the change in visibility impairment for the most and least impaired days over the past five years.[109] FDEP concluded that IMPROVE monitoring data for 2014–

[108] The 2010 Haze Plan was amended twice. *See* 78 FR 53250 (August 29, 2013).
[109] *See* table 13-6 (20 percent most impaired days) and table 13-7 (20 percent clearest days) of the 2021 Plan.

2018 show that all Florida Class I areas are well below the 2018 RPGs for the 20 percent most impaired days and there is no degradation on the 20 percent clearest days, which is illustrated in figures 13-4 through 13-9 of the 2021 Plan.[110]

Regarding 40 CFR 51.308(g)(4), in section 13.5 of the 2021 Plan, FDEP provided emissions trends from 2014 through 2019 for SO_2 and NOx which reflect the emissions reductions from the measures in the first planning period LTS. In summary, from 2014 to 2019, statewide EGU emissions of SO_2 and NOx have reduced (in percent) by 82.77 and 48.31, respectively. Statewide EGU SO_2 emissions decreased from 99,074 tpy in 2014 to 17,075 tpy in 2019 as shown in table 13-14 of the 2021 Plan. Statewide EGU NOx emissions decreased from 442,412 tpy in 2014 to 228,673 tpy in 2019. Additionally, in table 13-13, FDEP provides statewide SO_2 emissions information for Florida from the 2014 NEI and 2017 NEI inventories. Again, total statewide SO_2 emissions are shown to have decreased 47.53 percent from 164,468 tpy in 2014 to 78,173 tpy in 2017.

Regarding 40 CFR 51.308(g)(5), FDEP reviewed anthropogenic SO_2, and NOx emissions trends based on emissions information included in the 2014 and 2017 NEIs for the VISTAS states and all of the RPOs. The data show a decline in $PM_{2.5}$, NOx, and SO_2 emissions from 2014 through 2017 NEI and these emissions are lower than the 2018 VISTAS RPG in most cases as shown in table 13-11, 13-12, and 13-13 of the 2021 Plan. Florida concluded that there does not appear to be any significant change in anthropogenic emissions within Florida that would limit or impede progress in reducing pollutant emissions or improving visibility.

Section II of the TSD to this proposed rulemaking provides a more detailed summary of the State's assessment of how Florida addressed requirements for periodic reports describing progress toward the RPGs for the State's Class I areas pursuant to 40 CFR 51.308(f)(5).

3. EPA Evaluation: EPA proposes to find that FDEP has met the requirements of 40 CFR 51.308(g)(1) and (2) because its SIP submission describes the measures included in the

[110] 'Model Projection' = RPG and 'Observation' = IMPROVE data in figures 13-4 through 13-9 of the 2021 Plan.

LTS from the first planning period, as well as the status of their implementation and the emission reductions achieved through such implementation. EPA proposes to find that FDEP met the requirements of 40 CFR 51.308(g)(3) because the State reported on the visibility conditions and changes at Florida's Class I areas. EPA proposes to find that FDEP met the requirements of 40 CFR 51.308(g)(4) by providing an adequate analysis tracking the changes in emissions since the first period progress report using available emissions data since 2013 and appropriately included the 2017 NEI data, which is the most recent triennial emissions inventory submission from Florida prior to submission of the Haze Plan and included the annual 2019 emissions data. Regarding 40 CFR 51.308(g)(5), FDEP believes that there does not appear to be any significant change in anthropogenic emissions within Florida that have occurred since the period addressed in the most recent plan that would limit or impede progress in reducing pollutant emissions or improving visibility. For these reasons, EPA is proposing to find that Florida has met the requirements of 40 CFR 51.308(f)(5).

G. Requirements for State and FLM Coordination

1. CAA/RHR Requirement: Section 169A(d) of the Act requires states to consult with FLMs before holding the public hearing on a proposed regional haze SIP, and to include a summary of the FLMs' conclusions and recommendations in the notice to the public. In addition, § 51.308(i)(2)'s FLM consultation provision requires a state to provide FLMs with an opportunity for consultation that is early enough in the state's policy analyses of its emission reduction obligation so that information and recommendations provided by the FLMs' can meaningfully inform the state's decisions on its LTS. 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 60 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 FLMs 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 FLMs' comments. Section 51.308(i)(4) requires that the regional haze SIP revision provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program.

2. State Assessment:

a. General: As required by CAA section 169A(d), Florida consulted with the FLMs prior to opening both State public comment periods[111] and included summaries of the conclusions and recommendations of the FLMs in section 10.4.1 with copies of the FLMs' comments in appendices H-4 and H-5 of the proposed plan dated June 9, 2021, and in the public participation section of the proposed supplement dated January 19, 2024.

With respect to 40 CFR 51.308(i)(2) FDEP offered the opportunity to consult on the May 18, 2021, draft Florida Haze Plan to the three FLM agencies. Additionally, FDEP shared with the FLMs the June 9, 2021, Prehearing Florida Haze Plan.[112] A summary of this consultation process is discussed and documented in section 10.4.1 of the 2021 Plan with supporting information in appendix H and appendix F. Regarding FLM consultation related to the 2024 Supplement development, FDEP offered the opportunity to consult on the 2024 Supplement to the three FLM agencies on June 8, 2023. The 2024 Supplement was issued for State public notice and comment on January 19, 2024, with a public hearing scheduled February 27, 2024, and a close of comment period February 19, 2024; however, FDEP received a request for an extension of the comment period and granted the request by extending the comment period to March 8, 2024. The public hearing, which was rescheduled for March 20, 2024, was cancelled because FDEP did not receive any requests for a hearing. A summary of this consultation process is discussed and documented in the public participation section of the 2024 Supplement.

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[111] FDEP provided draft plans to the FLMs on April 2, 2021, and June 8, 2023.

[112] The June 9, 2021, Prehearing Florida Haze Plan was issued for a State public notice and had a comment period that closed on July 9, 2021. The public hearing was held on July 15, 2021.

To address 40 CFR 51.308(i)(3), FDEP provided responses to NPS comments in section 10.4.1 of the 2021 Plan and in the public participation section of the 2024 Supplement.

With respect to 40 CFR 51.308(i)(4), Florida has established ongoing consultation procedures with the FLMs, which includes offering the FLMs an opportunity for consultation upon request and to comply with consultations requirements in accordance with 40 CFR 51.308(i)(3) for progress reports and plan revisions.

b. State Responses to FLM Comments: To address 40 CFR 51.308(i)(3), Florida provided responses to comments received from NPS in section 10.4.1 of the 2021 Plan, which are summarized in brief below. In the 2021 Plan, NPS comments received are located in appendices H-4 and H-5. Appendix H-4 contains documentation of a May 18, 2021, consultation call that NPS held with the FDEP. Representatives from FWS and USFS also attended. NPS requested clarification on why the Miami-Dade Water and Sewer Department facility was not selected for analysis. FDEP clarified that recent actual emissions are significantly lower due to the facility's use of lower sulfur content fuel, which the facility is expected to continue to use. Additionally, FDEP stated that the AoI analysis likely overpredicted this facility's impact at Everglades since this is a small source located very near the Class I area.[113]

Additionally, the 2021 Plan states that NPS made recommendations to update the interest rates in the FFA cost analyses. NPS also noted that the Florida Everglades have not observed increases in nitrate concentrations on the 20 percent most impaired days and that it is the least impaired NPS Class I areas in the VISTAS region, thus the VISTAS-wide methodologies used to select sources and pollutants for reasonable progress analyses were of no concern.

FDEP also addresses NPS comments in the public participation section of the 2024 Supplement. NPS acknowledges FDEP's inclusion of the Mosaic-South Pierce facility in the supplement and recommends that FDEP include the facility's emission history and consider the

[113] *See* section 7.6.3 of the 2021 Plan.

additional information for Mosaic-South Pierce that NPS provided concerning the evaluation of an Idaho facility with similar SAPs. In response, FDEP states that it determined that the use of post-process scrubbers for the dual adsorption process sulfuric acid plant at Mosaic-South Pierce was not considered to be cost-effective for the facility and that SO_2 emission reductions were achieved through an SO_2 emission limit in permit 1050055-037-AC, which was approved into Florida's SIP on August 4, 2023 (88 FR 51702).

3. EPA Evaluation: EPA proposes to find that Florida addressed all FLM consultation requirements in the CAA and RHR. With respect to CAA 169A(d), Florida consulted with the FLMs prior to the State's public comment periods[114] and included a summary of the conclusions and recommendations of the FLMs in the proposed plans issued for public review.[115]

FDEP fully addressed the requirement for FLM consultation under 40 CFR 51.308(i)(2) because FDEP offered the draft Florida Haze Plan on April 2, 2021, prior to the start of FDEP's public comment period which opened on June 9, 2021, and closed on July 9, 2021. Additionally, FDEP offered the FLMs a review of the draft 2024 Supplement on June 8, 2023, prior to the start of the comment period on January 19, 2024.[116] EPA proposes to find that Florida has met its requirements under 40 CFR 51.308(i)(2) to consult with the FLMs on its Haze Plan for the second planning period.

EPA proposes to find that Florida satisfied 40 CFR 51.308(i)(3) by providing responses to the FLM comments in section 10.4.1 of the 2021 Plan.

EPA proposes to find that Florida satisfied 40 CFR 51.308(i)(4) by establishing in its 2021 Plan continuing consultation procedures as summarized above.

V. Incorporation by Reference

In this document, EPA is proposing to include in a final EPA rule regulatory text that

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[114] The consultation did not occur in person as stated in the CAA due to the convenience and efficiency of using e-mail, phone calls, and video meetings.

[115] A description of Florida's response to FLM comments can be found in section 10.4, and under the public participation section of the Haze Plan.

[116] *See* the public participation section of the 2024 Supplement for details.

includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, and as discussed above in this preamble, EPA is proposing to incorporate by reference into Florida's SIP the following conditions from the listed FDEP Air Construction Permits: Conditions 7 and 28 in Subsection A of Section 3 of the Duke Crystal River Citrus Co. Combined Cycle Permit No. 0170004-047-AC (State-effective December 16, 2014); Condition 1 of Section 3 of the Duke Crystal River Permit No. 0170004-059-AC (State-effective October 30, 2020); Conditions 8, 9, 11, 12, 13, 14 , 15, 16, 18, 20, 21, 22, 23, 24 and 25 of Subsection A of Section 3 and Conditions 2, 3, 4, 5, 6, 7, 8 and 9 of Subsection B of Section 3 of the Georgia-Pacific Foley Mill Permit No. 1230001-121-AC (State-effective October 20, 2023); Conditions 9, 14(a), 31(a) of Section III of the JEA Northside Units 1 and 2 Permit No. 0310045-003-AC (State-effective July 14, 1999), and Condition 2 of Subsection A of Section 3 of Permit No. 0310045-059-AC (State-effective February 16, 2023); Conditions 2, 5, and 6 of Section 3 of the JEA Northside Unit 3 Permit Nos. 0310045-057-AC (State-effective June 17, 2021), and Condition 2 of Subsection A of Section 3 of Permit No. 0310045-062-AC (State-effective August 24, 2023); Condition 3 of Subsection A of Section 3 of the Seminole Generating Station Permit No. 1070025-037-AC (State-effective April 14, 2021); Conditions 12 and 13 of Subsection C of Section 3 of the TECO-Big Bend Permit No. 0570039-129-AC (State-effective August 11, 2020); and Conditions 2, 3, and 4 of Subsection A of Section 3 of the WestRock-Fernandina Beach Mill Permit No. 0890003-072-AC (State-effective June 24, 2021) and Condition 5 of Subsection A of Section 3 of Permit No. 0890003-074-AC (State-effective December 16, 2021). EPA has made, and will continue to make, the SIP available through www.regulations.gov and at the EPA Region 4 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VI. Proposed Action

EPA is proposing to approve Florida's October 8, 2021, June 14, 2024, and October 28, 2024, SIP submissions, as satisfying the regional haze requirements for the second planning

period contained in 40 CFR 51.308(f). Thus, EPA is proposing to incorporate by reference into Florida's SIP the permit conditions identified in section V above.

VII. Statutory and Executive Order Reviews

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

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 14094 (88 FR 21879, April 11, 2023);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not 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 CAA.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, Feb. 16, 1994) directs Federal agencies to identify and address "disproportionately high and adverse human health or environmental effects" of their actions on communities with environmental justice (EJ) concerns to the greatest extent practicable and permitted by law. Executive Order 14096 (Revitalizing Our Nation's Commitment to Environmental Justice for All, 88 FR 25251, April 26, 2023) builds on and supplements EO 12898 and defines EJ as, among other things, the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, or Tribal affiliation, or disability in agency decision-making and other Federal activities that affect human health and the environment.

FDEP did not evaluate EJ considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. EPA did not perform an EJ analysis and did not consider EJ in this proposed action. Due to the nature of the action being proposed here, this proposed action is expected to have a neutral to positive impact on the air quality of the affected area. Consideration of EJ is not required as part of this proposed action, and there is no information in the record inconsistent with the stated goal of Executive Order 12898/14096 of achieving EJ for communities with EJ concerns.

List of Subjects in 40 CFR Part 52

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

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

Dated: December 19, 2024.

Jeaneanne Gettle,
Acting Regional Administrator,
Region 4.

[FR Doc. 2024-30751 Filed: 12/26/2024 8:45 am; Publication Date: 12/27/2024]