6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2021-0963; FRL-12589-01-R5]

Air Plan Approval; Indiana; Regional Haze Plan for the Second Implementation Period

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the Indiana regional haze state implementation plan (SIP) revision submitted by the Indiana Department of Environmental Management (IDEM or Indiana) on December 29, 2021, as satisfying applicable requirements under the Clean Air Act (CAA) and EPA's Regional Haze Rule (RHR) for the program's second implementation period. EPA proposes to find that IDEM's SIP submission addresses the requirement that States must periodically revise their long-term strategies for making reasonable progress towards the national goal of preventing any future, and remedying any existing, anthropogenic impairment of visibility, including regional haze, in mandatory Class I Federal areas, and also addresses other applicable requirements for the second implementation period of the regional haze program. EPA is taking this action pursuant to sections 110 and 169A of the CAA.

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-R05-OAR-2021-0963 at *https://www.regulations.gov* or via email to *langman.michael@epa.gov*. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from the docket. EPA may publish any comment received to its public docket. Do not submit to EPA's docket at *https://www.regulations.gov* any information you consider to be confidential business information (CBI), Proprietary Business Information (PBI), 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, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets*.

FOR FURTHER INFORMATION CONTACT: Charles Hatten, Air and Radiation Division (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-6031, *hatten.charles@epa.gov*. The EPA Region 5 office

is open from 8:30 a.m. to 4:30 p.m., Monday through Friday.

SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, we mean EPA.

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I. What Action is EPA Proposing?

On December 29, 2021, IDEM submitted a SIP revision to address regional haze requirements for the second implementation period. IDEM submitted this SIP revision to satisfy the requirements pursuant to CAA sections 169A and 169B and 40 CFR 51.308(f) related to the regional haze program. EPA proposes to find that Indiana's regional haze SIP submission for the second implementation period meets the applicable statutory and

regulatory requirements and thus proposes to approve Indiana's submission into its SIP.

II. Background and Requirements for Regional Haze Plans

A detailed history and background of the regional haze program is provided in multiple prior EPA proposal actions.[1] For additional background on the 2017 RHR revisions, please refer to Section III. Overview of Visibility Protection Statutory Authority, Regulation, and Implementation of "Protection of Visibility: Amendments to Requirements for State Plans" of the 2017 RHR.[2] The following is an abbreviated history and background of the regional haze program and 2017 RHR as it applies to the current action.

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] CAA 169A. The CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." CAA 169A(a)(1).

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[1] *See* 90 FR 13516 (March 24, 2025).
[2] *See* 82 FR 3078 (January 10, 2017, located at *https://www.federalregister.gov/documents/2017/01/10/2017-00268/protection-of-visibility-amendments-to-requirements-for-State-plans#h-16).*
[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. 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.

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

To address regional haze visibility impairment, the 1999 RHR established an iterative planning process that requires both States in which Class I areas are located and States "the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility" in a Class I area to periodically submit SIP revisions to address such impairment. CAA 169A(b)(2);[5] *see also* 40 CFR 51.308(b), (f) (establishing submission dates for iterative regional haze SIP revisions); (64

[4] There are several ways to measure the amount of visibility impairment, i.e., haze. One such measurement is the deciview, which is the principal metric used by the RHR. Under many circumstances, a change in one deciview will be perceived by the human eye to be the same on both clear and hazy days. The deciview is unitless. It is proportional to the logarithm of the atmospheric extinction of light, which is the perceived dimming of light due to its being scattered and absorbed as it passes through the atmosphere. Atmospheric light extinction (b^{ext}) is a metric used to for expressing visibility and is measured in inverse megameters (Mm-1). The formula for the deciview is 10 ln (b^{ext})/10 Mm-1). 40 CFR 51.301.

FR 35714 at 35768, July 1, 1999).

On January 10, 2017 (82 FR 3078), EPA promulgated revisions to the RHR, that apply for the second and subsequent implementation periods. 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).

B. Roles of Agencies in Addressing Regional Haze

Because the air pollutants and pollution affecting visibility in Class I areas can be transported over long distances, successful implementation of the regional haze program requires long-term, regional coordination among multiple jurisdictions and agencies that have responsibility for Class I areas and the emissions that impact visibility in those areas. 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),[6] which include representation from State and Tribal governments, EPA, and FLMs, were developed in the lead-up to the first implementation period to address regional haze. RPOs evaluate technical information to better understand how emissions from State and Tribal lands impact Class I areas across the country, pursue the development of regional strategies to reduce emissions of particulate matter and other pollutants leading to regional haze, and help States

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

meet the consultation requirements of the RHR.

The Lake Michigan Air Directors Consortium (LADCO) is an RPO that includes the States of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. LADCO's work is a collaborative effort of State governments, Tribal governments, and various Federal agencies established to initiate and coordinate activities associated with the management of regional haze, visibility, and other air quality issues in the Midwest. Along with the six LADCO States, participants in LADCO's Regional Haze Technical Workgroup include EPA, the U.S. National Park Service (NPS), the U.S. Fish and Wildlife Service (FWS), and the U.S. Forest Service (USFS).

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

Under the CAA and EPA's regulations, all 50 States, the District of Columbia, and the U.S. Virgin Islands are required to submit regional haze SIPs satisfying the applicable requirements for the second implementation period of the regional haze program by July 31, 2021. Each State's SIP must contain a long-term strategy for making reasonable progress toward meeting the national goal of remedying any existing and preventing any future anthropogenic visibility impairment in Class I areas. CAA 169A(b)(2)(B). To this end, 40 CFR 51.308(f) lays out the process by which States determine what constitutes their long-term strategies, with the order of the requirements in 40 CFR 51.308(f)(1) through (3) generally

mirroring the order of the steps in the reasonable progress analysis[7] and (f)(4) through (6) containing additional, related requirements. Broadly speaking, a State first must identify the Class I areas within the State and determine the Class I areas outside the State in which visibility may be affected by emissions from the State. These are the Class I areas that must be addressed in the State's long-term strategy. *See* 40 CFR 51.308(f), (f)(2). For each Class I area within its borders, a State must then calculate the baseline (five-year average period of 2000-2004), current, and natural visibility conditions (*i.e.*, visibility conditions without anthropogenic visibility impairment) for that area, as well as the visibility improvement made to date and the "uniform rate of progress" (URP). The URP is the linear rate of progress needed to attain natural visibility conditions, assuming a starting point of baseline visibility conditions in 2004 and ending with natural conditions in 2064. This linear interpolation is used as a tracking metric to help States assess the amount of progress they are making towards the national visibility goal over time in each Class I area. *See* 40 CFR 51.308(f)(1). Each State having a Class I area and/or emissions that may affect visibility in a Class I area must then develop a long-term strategy that includes the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress in

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

such areas. A reasonable progress determination is based on applying the four factors in CAA section 169A(g)(1) to sources of visibility-impairing pollutants that the State has selected to assess for controls for the second implementation period. Additionally, as further explained below, the RHR at 40 CFR 51.308(f)(2)(iv) separately provides five "additional factors"[8] 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 long-term strategy. After a State has developed its long-term strategy, it then establishes RPGs for each Class I area within its borders by modeling the visibility impacts of all reasonable progress controls at the end of the second implementation period, *i.e.*, in 2028, as well as the impacts of other requirements of the CAA. The RPGs include reasonable progress controls not only for sources in the State in which the Class I area is located, but also for sources in other States that contribute to visibility impairment in that area. The RPGs are then compared to the baseline visibility conditions and the URP to ensure that progress is being made towards the statutory goal of preventing any future and remedying any existing anthropogenic visibility impairment in Class I areas. 40 CFR

[8] The five "additional factors" for consideration in section 40 CFR 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.

51.308(f)(2)-(3). There are additional requirements in the rule, including FLM consultation, that apply to all visibility protection SIPs and SIP revisions. *See e.g.*, 40 CFR 51.308(i).

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

Once a State has selected the set of sources, the next step is to determine the emissions reduction measures for those sources that are necessary to make reasonable progress for the second implementation period.[9] 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." CAA 169A(g)(1). EPA has explained that the

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

four-factor analysis is an assessment of potential emission reduction measures (i.e., control options) for sources; "use of the terms 'compliance' and 'subject to such requirements' in section 169A(g)(1) strongly indicates that Congress intended the relevant determination to be the requirements with which sources would have to comply to satisfy the CAA's reasonable progress mandate." 82 FR 3078 at 3091, January 10, 2017. Thus, for each source it has selected for four-factor analysis,[10] a State must consider a "meaningful set" of technically feasible control options for reducing emissions of visibility impairing pollutants. *Id.* at 3088.

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.[11] 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."

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[10] "Each source" or "particular source" is used here as shorthand. While a source-specific analysis is one way of applying the four factors, neither the statute nor the RHR requires states to evaluate individual sources. Rather, states have "the flexibility to conduct four-factor analyses for specific sources, groups of sources or even entire source categories, depending on state policy preferences and the specific circumstances of each state." 82 FR 3078 at 3088, January 10, 2017.

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

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 towards the national visibility goal must be included in a State's long-term strategy and in its SIP.[12] If the outcome of a four-factor analysis is that an emissions reduction measure is necessary to make reasonable progress towards remedying existing or preventing future anthropogenic visibility impairment, that measure must be included in the SIP.

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 is a technically complex exercise, and 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

[12] 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. For example, states with smoke management programs may choose to submit their smoke management plans to EPA for inclusion in their SIPs but are not required to do so. *See, e.g.*, 82 FR 3078 at 3108-09, January 10, 2017, (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).

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.

Additionally, the RHR at 40 CFR 51.308(f)(2)(iv) separately provides five "additional factors"[13] that States must consider in developing their long-term strategies: (1) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment; (2) measures to reduce the impacts of construction activities; (3) source retirement and replacement schedules; (4) basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs; and (5) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy.

Because the air pollution that causes regional haze crosses State boundaries, 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. 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

[13] The five "additional factors" for consideration in 40 CFR 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.

I area, it must include those measures in its SIP. 40 CFR 51.308(f)(2)(ii)(A). Additionally, the RHR requires that States that contribute to visibility impairment at the same Class I area consider the emission reduction measures the other contributing States have identified as being necessary to make reasonable progress for their own sources. 40 CFR 51.308(f)(2)(ii)(B). If a State has been asked to consider or adopt certain emission reduction measures, but ultimately determines those measures are not necessary to make reasonable progress, that State must document in its SIP the actions taken to resolve the disagreement. 40 CFR 51.308(f)(2)(ii)(C). Under all circumstances, a State must document in its SIP submission all substantive consultations with other contributing States. 40 CFR 51.308(f)(2)(ii)(C).

A. 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." 82 FR 3078 at 3091, January 10, 2017.

For the second implementation period, the RPGs are set for 2028. RPGs are not enforceable targets, 40 CFR 51.308(f)(3)(iii). While States are not legally obligated to achieve the visibility conditions described in their RPGs, 40 CFR 51.308(f)(3)(i) requires that "[t]he long-term strategy and the RPGs 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."

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

B. Monitoring Strategy and Other SIP Requirements

The provisions of 40 CFR 51.308(f)(6) require States to have certain strategies and elements in place for assessing and reporting on visibility. Individual requirements under this section 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. Compliance with the monitoring strategy requirement may be met through a State's participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring network, which is used to measure visibility impairment caused by air pollution at the 156 Class I areas covered by the visibility program. 40 CFR 51.308(f)(6), (f)(6)(i), (f)(6)(iv).

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, as well as a statewide inventory documenting such emissions. 40 CFR 51.308(f)(6)(ii), (iii), (v). All States' SIPs must also provide for any other elements, including reporting, recordkeeping, and other measures, that are necessary for States to assess and report on visibility. 40 CFR 51.308(f)(6)(vi).

C. Requirements for Periodic Reports Describing Progress Towards the RPGs

The provisions of 40 CFR 51.308(f)(5) require a State's regional haze SIP revision to address the requirements of

paragraphs 40 CFR 51.308(g)(1) through (5) so that the plan revision due in 2021 will serve also as a progress report addressing the period since submission of the progress report for the first implementation period. The regional haze progress report requirement is designed to inform the public and EPA about a State's implementation of its existing long-term strategy and whether such implementation is in fact resulting in the expected visibility improvement. *See* 81 FR 26942, 26950, May 4, 2016, (82 FR 3078 at 3119, January 10, 2017). To this end, every State's SIP revision for the second implementation period is required to assess changes in visibility conditions and describe the status of implementation of all measures included in the State's long-term strategy, including Best Available Retrofit Technology (BART) and reasonable progress emission reduction measures from the first implementation period, and the resulting emissions reductions. 40 CFR 51.308(g)(1) and (2).

D. Requirements for State and Federal Land Manager 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." 40 CFR 51.308(i)(2). 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. 40 CFR 51.308(i)(3). Finally, a SIP revision must provide procedures for continuing consultation between the State and FLMs regarding the State's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas. 40 CFR 51.308(i)(4).

IV. EPA's Evaluation of Indiana's Regional Haze Submission for the Second Implementation Period

A. Background on Indiana's First Implementation Period SIP Submission

Indiana submitted its regional haze SIP to EPA for the first implementation period, 2007 – 2018, on January 14, 2011, and supplemented it on March 10, 2011. The requirements for regional haze SIPs for the first implementation period are contained in 40 CFR 51.308(d) and (e). See 40 CFR 51.308(b).

On May 29, 2012, EPA finalized a limited approval of

Indiana's 2011 SIP submission as satisfying the requirements for BART in 40 CFR 51.308(e) for non-electric generating units (EGUs) and for PM from EGUs. EPA also approved the submission's BART limits for the Alcoa Warrick facility, its identification of Class I areas that the State's emissions affect, its demonstration that the State had consulted with other States in establishing RPGs, and identification of emissions reductions needed in Indiana to meet those goals. 77 FR 34218, June 11, 2012. On May 30, 2012, EPA issued a limited disapproval of Indiana's 2011 SIP submission because of deficiencies arising from the remand of the Clean Air Interstate Rule (CAIR). In the same rulemaking, EPA promulgated a Federal Implementation Plan (FIP) to replace Indiana's reliance on CAIR with the Cross-State Air Pollution Rule (CSAPR). 77 FR 33642, June 7, 2012.

Pursuant to 40 CFR 51.308(g), Indiana was also responsible for submitting a five-year progress report as a SIP revision for the first implementation period, which it did on March 30, 2016. EPA approved this five-year progress report as a revision to the Indiana SIP at 40 CFR 52.770(e) on January 23, 2018 (83 FR 4847, February 2, 2018).

On November 27, 2017, Indiana submitted a revision to its 2011 Regional Haze SIP submission to change reliance on CAIR to reliance on CSAPR, which EPA approved on August 28, 2019, converting EPA's limited approval/limited disapproval to a full approval and withdrawing the FIP provisions that addressed the limited disapproval. 84 FR 46889, September 6, 2019.

B. Indiana's Second Implementation Period SIP Submission and EPA's Evaluation

In accordance with CAA sections 169A and the RHR at 40 CFR 51.308(f), Indiana submitted a SIP revision on December 29, 2021, to address its regional haze obligations for the second implementation period, which runs through 2028. Indiana provided a draft of its regional haze SIP to the FLMs for consultation on May 18, 2021. Indiana then provided a public comment period before submitting its SIP revision to EPA.[14]

The following sections describe Indiana's SIP submission, including Indiana's assessment of progress made since the first implementation period, in reducing emissions of visibility impairing pollutants, and the visibility improvement progress at nearby Class I areas. These sections also contain EPA's evaluation of Indiana's submission against the requirements of the CAA and the RHR for the second implementation period of the regional haze program.

C. Identification of Class I Areas

The provisions of section 169A(b)(2) of the CAA require 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

[14] Indiana included the comments in appendices W, X, Ya, Yb, and Z, and provided responses in appendices P, Q, R, S, T, U, and V of its 2021 Regional Haze SIP submission.

at 40 CFR 51.308(f), which provides that each State's plan "must address regional haze in each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State that may be affected by emissions from within the State," and (f)(2), which requires each State's plan to include a long-term strategy that addresses regional haze in such Class I areas.

Indiana has no Class I areas within its borders that are among the 156 mandatory Class I Federal areas where EPA deemed visibility to be an important value. *See* 40 CFR part 81, subpart D. Thus, IDEM only considered out-of-state mandatory Class I Federal areas.

Indiana is a member of LADCO and participated in its regional approach for developing a strategy for making reasonable progress towards the national visibility goal in the northern Midwest Class I areas. IDEM reviewed technical analyses conducted by LADCO to determine which Class I areas outside the State are affected by Indiana emission sources. For the second regional haze implementation period, to determine LADCO member State contributions to impaired visibility in all Class I areas, LADCO used the Comprehensive Air Quality Model with extensions applying Particulate Matter Source Apportionment Tool. LADCO tagged emissions from individual States and several multi-state regions as well as individual point sources and inventory source groups to apportion emissions to States and regions. This included 27 tagged source categories, nine of

which were source categories or individual sources in Indiana: (1) Indiana non-point sources, (2) Rockport EGUs, (3) Gibson EGUs, (4) all other Indiana EGUs, (5) Indiana cement manufacturing facilities, (6) Indiana iron and steel facilities, (7) Indiana plastics and resin manufacturing facilities, (8) Indiana aluminum production facilities, and (9) all other Indiana point sources. LADCO assessed relative visibility impacts in 2028 by projecting representative emissions inventories and known emission controls from 2016.[15] A group of RPOs, States, and EPA established 2016 as the base year for a national air quality modeling platform for future ozone, $PM_{2.5}$, and regional haze SIP development because of fairly typical ozone conditions and wildfire conditions.[16] LADCO relied upon EPA's inventory estimates for 2016 and 2028 for most emission sectors as described in EPA's September 19, 2019, "Availability of Modeling Data and Associated Technical Support Document for the EPA's Updated 2028 Visibility Air Quality Modeling," (EPA's Updated 2028 Visibility Air Quality Modeling).[17] For EGUs, LADCO used forecasts from the Eastern Regional Technical Advisory

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[15] *See* section 24 and appendix L of Indiana's 2021 SIP submittal for details of the analysis and source-apportioned visibility contributions at Class I areas within the LADCO region for regional haze second planning period that are documented in LADCO's "Modeling and Analysis for Demonstrating Reasonable Progress for the Regional Haze Rule 2018 – 2028 Planning Period: Technical Support Document," June 17, 2021.

[16] *See* "Base Year Selection Workgroup Final Report," produced by the Inventory Collaborative Base Year Selection Workgroup, April 5, 2017. https://www.wrapair2.org/pdf/2017-12-12_Base_Year_Selection_Report_V1.1.pdf.

[17] EPA, Office of Air Quality Planning and Standards, "Availability of Modeling Data and Associate Technical Support Document for EPA's Updated 2028 Visibility Air Quality Modeling," September 19, 2019. https://www.epa.gov/sites/default/files/2019-10/documents/updated_2028_regional_haze_modeling-tsd-2019_0.pdf.

Committee (ERTAC) based on continuous emissions monitoring data from 2016 instead of the Integrated Planning Model used in EPA's 2016 modeling platform. LADCO also incorporated state-reported changes to EGUs received through September 2020 to estimate 2028 EGU emissions, which was considered by LADCO to be the best available information on EGU forecasts for the Midwest and Eastern U.S. available at the time.

Based on LADCO's source apportionment modeling results for 2028, IDEM identified 17 out-of-state Class I areas where Indiana's contribution to the total light extinction was 1.5 percent or greater. IDEM also included three additional Class I areas below the 1.5 percent threshold: Boundary Waters Canoe Area Wilderness (Minnesota) and Voyageurs National Park (Minnesota) since they are part of the LADCO region, as well as Caney Creek (Arkansas) based on a request for inter-state consultation from Arkansas. IDEM found that the 1.5 percent threshold provided adequate geographic coverage of potential visibility impacts from Indiana on surrounding Class I areas and that the modeling of those areas would be representative of Class I areas further from the State. These Class I areas, along with Indiana's 2028 projected contributions to the total light extinction, are: Mammoth Cave National Park in Kentucky (11.2 percent); Sipsey Wilderness Area in Alabama (5.90 percent); Dolly Sods and Otter Creek Wilderness Areas in West Virginia (5.56 percent); Great Smoky Mountains National Park and Joyce-Kilmer-Slickrock Wilderness Area in Tennessee (5.29

percent); Shenandoah National Park in Virginia (5.14 percent); Cohutta Wilderness Area in Georgia (4.83 percent); Mingo Wilderness Area in Missouri (4.16 percent); Seney Wilderness Area in Michigan (4.01 percent); James River Face Wilderness Area in Virginia (3.75 percent); Linville Gorge Wilderness Area in North Carolina (2.84 percent); Lye Brook Wilderness Area in Vermont (2.33 percent); Brigantine Wilderness Area in New Jersey (2.30 percent); Shining Rock Wilderness Area in North Carolina (2.17 percent); Upper Buffalo Wilderness Area in Arkansas (2.02 percent); Hercules-Glades Wilderness Area in Missouri (2.01 percent); Swanquarter National Wildlife Refuge in North Carolina (1.85 percent); Isle Royale National Park in Michigan (1.85 percent); Caney Creek Wilderness Area in Arkansas (1.10 percent); Boundary Waters Canoe Area Wilderness in Minnesota (0.74 percent); and Voyageurs National Park in Minnesota (0.49 percent).[18] At each of these Class I areas, EPA notes that the visibility conditions in LADCO's modeling as well as EPA's Updated 2028 Visibility Air Quality Modeling are projected to be below their respective glidepaths in 2028 as depicted in Section 23 of Indiana's 2021 Regional Haze SIP submission. Visibility conditions at the Class I areas most impacted by Indiana are projected to be below their respective glidepaths in 2028 at Mammoth Cave National Park by 2.16 deciviews (dv), Sipsey Wilderness Area by 2.44 dv, Dolly Sods and Otter Creek

[18] The list of Class I areas impacted by Indiana, including the 2028 projections for total light extinction and Indiana's contribution, is found in Table 23-1 of Indiana's 2021 Regional Haze SIP submittal.

Wilderness Areas by 4.33 dv, Great Smoky Mountains National Park and Joyce-Kilmer-Slickrock Wilderness Area by 5.43 dv, and Shenandoah National Park by 4.98 dv. IDEM addressed each of these Class I areas as well as requests from their host RPOs and States in Indiana's 2021 Regional Haze SIP Sections 22-25 and appendix AA.

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

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

Indiana has no mandatory Class I areas within its borders to which the requirements of the visibility protection program apply in 40 CFR part 81, subpart D, and therefore, 40 CFR 51.308(f)(1) and its requirements do not apply.

E. Long-Term Strategy for Regional Haze

Each State having a Class I area within its borders or emissions that may affect visibility in a Class I area must develop a long-term strategy for making reasonable progress towards the national visibility goal. CAA 169A(b)(2)(B). After considering the four statutory factors, all measures that are determined to be necessary to make reasonable progress must be in the long-term strategy. In developing its long-term strategies, 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 four-factor analysis) for the second implementation period and how the four factors were taken into consideration in selecting the emission reduction measures for inclusion in the long-term strategy. 40 CFR 51.308(f)(2)(iii).

1. Selection of Sources for Analysis

States may rely on technical information developed by the RPOs of which they are members to select sources for four-factor analysis and to conduct that analysis, as well as to satisfy the documentation requirements under 40 CFR 51.308(f). 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.

In developing a process for selecting sources for possible additional control measures during the second planning period, IDEM considered NO_X, SO_2, and NH_3 emissions as precursors to the formation of ammonium sulfate, ammonium nitrate, and organic carbon that can impair visibility. Of these precursors, LADCO's June 17, 2021, Technical Support Document "Modeling and Analysis for Demonstrating Reasonable Progress for the Regional Haze Rule 2018 – 2028 Planning Period," (LADCO's 2021 TSD)[19] provided an analysis of the IMPROVE monitoring data. The analysis demonstrated that NO_X and SO_2 emissions lead to the formation of the particulate species of nitrate and sulfate that currently contribute more to visibility impairment in the LADCO Class I Areas than $PM_{2.5}$, NH_3, and VOC. The LADCO Class I Areas consist of Boundary Waters Canoe Area Wilderness and Voyageurs National Park in Minnesota, as well as Isle Royale National Park and Seney Wilderness Area in Michigan. For this reason, Indiana chose to focus on potential reductions in emissions of NO_X and SO_2, which Indiana found would be a reasonable approach for the second implementation period as noted in the "Guidance on Regional Haze State Implementation Plans for the Second Implementation Period," EPA Office of Air Quality Planning and Standards, Research Triangle Park, August 20, 2019 ("2019 Guidance") at page 12.[20]

In selecting sources for a potential four-factor analysis,

[19] LADCO's 2021 TSD is contained in appendix L of Indiana's 2021 Regional Haze SIP submittal.

[20] https://www.epa.gov/visibility/guidance-regional-haze-state-implementation-plans-second-implementation-period

IDEM followed the methodology in LADCO's October 14, 2020, technical memorandum "Description of the Sources and Methods Used to Support Q/d Analysis for the 2nd Regional Haze Planning Period"[21] and section 5 of the LADCO's 2021 TSD. IDEM generated a list of sources based on total process-level emissions (Q) divided by distance (d) to the nearest Class I area, where Q/d was used as a surrogate quantitative metric of visibility impact in lieu of air quality modeling results. For Q, total emissions refer to the sum of NO_X and SO_2, and IDEM chose to use data from the National Emissions Inventory, EPA's Emissions Inventory System[22] for 2016 – 2018, and Clean Air Markets Program Data (CAMPD)[23] for 2018 to represent the most current operations at the time as a reflection of decreasing emissions overall. For Q/d, the distance to the closest Class I area for all selected sources was Mammoth Cave. IDEM chose a Q/d threshold of five to capture a variety of higher emitting sources that were representative of 85 percent of SO_2 and 77 percent of NO_X emissions from Indiana sources and to screen out sources with either lower emissions or located at farther distances from the Class I areas with lower visibility impacts.[24] This process

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[21] LADCO's October 14, 2020, technical memorandum "Description of the Sources and Methods Used to Support Q/d Analysis for the 2nd Regional Haze Planning Period" is included in appendix M of Indiana's 2021 Regional Haze SIP submittal.

[22] EPA's 2016 – 2018 Emissions Inventory System data is included in appendix O of Indiana's 2021 Regional Haze SIP submittal. EPA's Emissions Inventory System data is publicly available at *https://www.epa.gov/air-emissions-inventories/emissions-inventory-system-eis-gateway*.

[23] The 2018 CAMPD information is included in appendix E of Indiana's 2021 Regional Haze SIP submittal. CAMPD information is publicly available at *https://campd.epa.gov/*.

[24] Based on 2018 emissions. *See* Indiana's 2021 Regional Haze SIP submission, Table 7-1 and appendix N. The 2018 Indiana Emissions Summary Data from sources reporting under Indiana Administrative Code Title 326, Article 2,

identified 20 sources for a possible four-factor analysis: 11 power generating stations and nine non-EGUs (such as steel mills, cement kilns, a plastics manufacturer, an aluminum smelter, and electric services operations).

IDEM's source selection approach identified the following 36 EGUs units at the 11 power generating stations: Indiana Michigan Power Company, dba American Electric Power – Rockport Plant (AEP - Rockport), Boilers MB1 and MB2; Duke Energy, Inc. – Gibson Generating Station (Duke - Gibson), Units 1, 2, 3, 4, and 5; AES Indiana – Petersburg Generating Station (AES - Petersburg), Units 1, 2, 3, and 4; Indiana-Kentucky Electric Corporation (IKEC) and Ohio Valley Electric Corporation – Clifty Creek Station (IKEC - Clifty Creek), Units 1, 2, 3, 4, 5, and 6; Duke Energy Indiana, LLC – Cayuga Generating Station (Duke - Cayuga), Units 1 and 2; Southern Indiana Gas and Electric Company (SIGECO) – A.B. Brown Generating Station (SIGECO - A.B. Brown), Units 1 and 2; Alcoa Power Generating, Inc. – Warrick Power Plant (Alcoa – Warrick Power Plant), Unit 4; SIGECO - F.B. Culley Generating Station (SIGECO – F.B. Culley), Units 2 and 3; Hoosier Energy REC, Inc. – Merom Generating Station (Hoosier Energy - Merom), Units 1SG1, 2SG1; Northern Indiana Public Service Company, LLC (NIPSCO) – R.M. Schahfer Generating Station (NIPSCO – R.M. Schahfer), Units 14, 15, 16A, 16B, 17, and 18; and Duke Energy Indiana, LLC – R. Gallagher Generating Station (Duke – Gallagher), Units 2 and 4.

Rule 6 is included in the docket and is publicly available at *https://www.in.gov/idem/airquality/reporting/emissions-summary-data/*.

The nine non-EGU facilities are: Warrick Newco LLC (Alcoa - Warrick Operations); Cleveland-Cliffs Steel, LLC – Burns Harbor, LLC (Burns Harbor); Lehigh Cement Company, LLC – Mitchell Plant, Lawrence County (Lehigh Cement – Mitchell Plant); Cokenergy LLC; Cleveland-Cliffs Steel, LLC – Indiana Harbor East (Indiana Harbor East); Lone Star Industries, Inc. dba Buzzi Unicem USA – Greencastle Plant (Lone Star Industries - Greencastle); United States Steel Corporation – Gary Works (U.S. Steel – Gary Works); Cleveland-Cliffs Steel, LLC – Indiana Harbor West (Indiana Harbor West); and SABIC Innovative Plastics – Mt. Vernon LLC.[25]

During the FLM consultation process, NPS and USFS provided IDEM with their lists of sources for potential four-factor analyses based on Q/d; however, none of the additional sources identified by NPS or USFS met IDEM's threshold of Q/d greater than five.[26] NPS later agreed that the units IDEM identified represented a reasonable group of sources for potential four-factor analyses. The FLM consultation on source selection is further discussed in Section 2.2 of EPA's April 22, 2025 Technical Support Document (TSD) for this proposed rulemaking,

[25] Since the time that IDEM evaluated these sources, some facilities have changed names. ArcelorMittal USA LLC – Indiana Harbor East is now Cleveland-Cliffs Steel, LLC – Indiana Harbor East. ArcelorMittal USA LLC - Indiana Harbor West is now Cleveland-Cliffs Steel, LLC - Indiana Harbor West. Arcelor Mittal – Burns Harbor, LLC is now Cleveland-Cliffs Steel, LLC - Burns Harbor. Alcoa Warrick Operations LLC is now Warrick Newco LLC. Lehigh Cement Company LLC – Mitchell Plant is now Heidelberg Materials US Cement LLC – Mitchell Plant.

[26] The lists of sources suggested for a four-factor analysis by NPS and USFS appear in appendix N of Indiana's 2021 Regional Haze SIP submittal. Comments from NPS are provided in appendix W of Indiana's 2021 Regional Haze SIP submission.

which is included in the docket.

IDEM further refined the list of selected sources by considering whether units would continue to operate or whether they had existing effective controls such that a full four-factor analysis would likely result in a conclusion that no further controls are necessary. Applying these criteria, IDEM determined a full four-factor analysis was not necessary for the 36 EGUs identified. IDEM selected the remaining nine non-EGU facilities for a four-factor analysis as described below. Of the emission units that met Indiana's Q/d source selection criteria, eight EGUs and one non-EGU facility are no longer operating: Duke – Gallagher Units 2 and 4 ; NIPSCO – R.M. Schahfer Units 14 and 15 ; AES - Petersburg Unit 1 (2021) and Unit 2 ; SIGECO – A.B. Brown Units 1 and 2 , and Lehigh Cement – Mitchell Kilns 1, 2, and 3.

For the units that are no longer operating, permitting changes,[27] Unit Exemption forms,[28] and verification from the regional transmission organization[29] are included in the docket.[30]

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[27] The following permits are available in the docket and on IDEM's website: Duke – Gallagher Units 2 and 4, title V permit 043-44081-00004, https://permits.air.idem.in.gov/44081f.pdf; NIPSCO – R.M. Schahfer Units 14 and 15, title V permit 073-45762-00008, *https://permits.air.idem.in.gov/45762f.pdf;* AES – Petersburg Unit 1, title V permit 125-44230-00002, *https://permits.air.idem.in.gov/44230f.pdf* and Unit 2 title V permit 125-46357-00002, *https://permits.air.idem.in.gov/46357f.pdf;* SIGECO – A.B. Brown Units 1 and 2, title V permit 129-47510-00010, *https://permits.air.idem.in.gov/47510f.pdf;* and Lehigh Cement – Mitchell, Kilns 1, 2, and 3, title V permit 093-47798-00002, *https://permits.air.idem.in.gov/47798f.pdf*

[28] The EGUs no longer operating have been certified by the source owner or operator under the provisions for Unit Exemptions in the Acid Rain Program and/or CSAPR NO_X and SO_2 Trading Programs.. *See* 40 CFR 72.8, 40 CFR 97.405, 40 CFR 97.505, 40 CFR 97.605, CFR 97.705, 40 CFR 97.805. Copies of Unit Exemption forms for each of these units are included in the docket.

[29] The list of generators from the Midwest Independent System Operator (MISO) regional transmission organization is available in the docket.

[30] Publicly available information that EPA considered in addition to the

Any major stationary source upon restart is subject to permitting as a new source and must comply with requirements pertaining to Federal New Source Review and Prevention of Significant Deterioration requirements as well as Indiana Administrative Code (IAC), Title 326, Article 2.[31]

For the remaining EGUs continuing to operate, IDEM examined the facilities for existing effective controls in determining that a full four-factor analysis would likely result in the conclusion that no further controls are necessary for reasonable progress in the second implementation period as described in Section 2 of EPA's April 22, 2025, TSD.

Citing to the flexibility allowed under the RHR, Indiana plans to reexamine the EGUs in the third planning period because the State has found that the landscape for the EGU sector has changed dramatically since the last planning period and is continuing to change in the second implementation period. In addition, IDEM states, "fuel costs have upended the order in which resources are dispatched by [MISO] to meet the region's power generation needs and maintain adequate power grid management in the future. Coal fired units that were previously dispatched first are now dispatched last. This change in economic driven dispatching is expected to result in less reliance on the remaining coal fired EGUs and accelerated

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information provided in Indiana's 2021 Regional Haze SIP submission and referenced by citations in the notice of proposed rulemaking is included in the docket, designated by files names preceded by "Indiana."

[31] Indiana Administrative Code is publicly available at *https://iar.iga.in.gov/code/2026/326*.

retirement. As such, Indiana believes that conducting four-factor analyses for EGUs during the next planning period would result in a better use of resources because much of what the State would require based on four-factor analyses conducted for the EGUs would become moot as the EGU sector remains in flux as sources continue to shutdown units, convert to natural gas, and rely more on renewable energy." See responses 2 and 3, appendix V of Indiana's 2021 Regional Haze SIP submission.

EPA has provided clarification regarding when it is appropriate to forgo a four-factor analysis for sources with existing effective control measures. As explained in the 2019 Guidance, Section 3(f), "A source may already have effective controls in place as a result of a previous regional haze SIP or to meet another CAA requirement." Section 3(f) goes on to provide "examples, which are intended to illustrate (in a non-exhaustive fashion) scenarios in which EPA believes it may be reasonable for a State not to select a particular source for further analysis."

As discussed below, IDEM provided information to demonstrate that the EGUs have existing effective control measures as described in the examples in the 2019 Regional Haze Guidance, Section 3(f).[32] In addition to IDEM's analysis of emissions from 2007 to 2019, EPA also considered limits contained in existing permits[33] and 2018 to 2023 CAMPD

[32] See also Table 8.3 and appendix F of Indiana's 2021 Regional Haze SIP submission.

[33] IDEM's Air Quality Permits are publicly available at *https://www.in.gov/ai/appfiles/idem-caats/*.

information showing that each unit has consistently implemented their existing measures and have achieved, using those measures, a reasonably consistent emission rate. With emission limits in the title V permits, provisions in Federal consent decrees, historical data showing relatively consistent or declining NO_X and SO_2 annual emissions and emission rates, as well as 2028 projections, the overall emissions are not expected to increase in the future. As such, IDEM determined that the existing control measures are not necessary to prevent future emission increases and thus not necessary to make reasonable progress in the second implementation period and that pursuing additional emission reductions through the addition of new emission control equipment or emissions limitations is not reasonable as a cost-effective method. Section 2.4 of EPA's April 22, 2025, TSD provides a detailed summary of IDEM's assessment of the EGUs continuing to operate.

After addressing the EGUs as described above and in EPA's April 22, 2025 TSD, Indiana provided site-specific four-factor analyses for the remaining nine non-EGU facilities identified by IDEM's Q/d source selection threshold: Alcoa - Warrick Operations; Burns Harbor; Lehigh Cement - Mitchell; Cokenergy LLC; Indiana Harbor East; Lone Star Industries - Greencastle; U.S. Steel – Gary Works; Indiana Harbor West; and SABIC Innovative Plastics – Mt. Vernon LLC. The background and four-factor analysis for each of the nine units is described below.

2. Emission Measures Necessary to make Reasonable Progress

The provisions of 40 CFR 51.308(f)(2)(i) require States to evaluate and determine the emission reduction measures that are necessary to make reasonable progress by applying the four statutory factors to sources in a control analysis. The emission reduction measures that are necessary to make reasonable progress must be included in the long-term strategy. 40 CFR 51.308(f)(2).

IDEM's evaluation of each of the nine non-EGU facilities identified through its Q/d source selection process is described in Section 2.5 and 3 of EPA's April 22, 2025 TSD. Each of the four-factor analyses provided for these facilities considered all four statutory factors and appropriately followed the methods in the EPA Air Pollution Control Cost Manual.[34]

In addition to the four-factor analyses and evaluations provided by IDEM, EPA also considered limits contained in existing permits and information from Indiana's Emissions Summary Data[35] showing that each unit has consistently implemented their existing measures and have achieved, using those measures, reasonably consistent emission rates. With limits in the title V permits, provisions in Federal consent decrees, historical data showing relatively consistent or declining NO_X and SO_2 annual emissions, and emission rates as well as 2028 projections of overall emissions not expected to increase in the future, IDEM determined that the existing

[34] See the EPA's Air Pollution Control Cost Manual available at https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution.
[35] Indiana's Emissions Summary Data for 2008 – 2022 is available in the docket and at *https://www.in.gov/idem/airquality/reporting/emissions-summary-data/*.

emission control measures for each of the non-EGUs are not necessary to prevent future emission increase in the second implementation period and thus not necessary for reasonable progress. As such, IDEM determined that additional control measures are not necessary to make reasonable progress in the second implementation period and that pursuing additional emission reductions through the addition of new emission control equipment or emissions limitations is not cost effective.

3. Indiana's Long-Term Strategy

Each State's long-term strategy must include the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress. 40 CFR 51.308(f)(2). After considering information regarding existing effective controls, analyses under the four statutory factors in 40 CFR 51.308(f)(2)(i), and the five additional factors in 40 CFR 51.308(f)(2)(iv) in addition to other requirements in 40 CFR 51.308(f)(2)(ii) described below, Indiana developed the State's long-term strategy for the second implementation planning period. The measures below represent reductions beyond those planned in the first implementation planning period, as well as emission reductions due to ongoing air pollution control programs, including those that were factored into LADCO's 2028 modeling. The following measures are already permanent and federally enforceable.

On-the-books controls in the second implementation period include:

- Tier 2 Motor Vehicle Emissions and Gasoline Standards Rule (40 CFR 80, 85, and 86)
- Tier 3 Motor Vehicle Emission and Fuel Standards (40 CFR 79, 80, 85, 86, 600, 1036, 1037, 1039, 1042, 1048, 1054, 1065, 1066)
- Tier 4 Non-road Engines and Diesel Fuel Rule (40 CFR 9, 69, 80 86, 89, 94, 1039, 1048, 1051, 1065, 1068)
- Heavy-Duty Diesel Engine and Highway Diesel Fuel Rule (40 CFR 69, 80, 86)
- Data Requirements Rule for the 2010 SO_2 NAAQS (40 CFR 51, Subpart BB)
- Mercury and Air Toxics Standards (MATS) (40 CFR 63, subpart UUUUU)
- Boiler Maximum Achievable Control Technology (MACT) (40 CFR 63, Subpart DDDDD

On-the-way controls that reflect additional emission reductions expected by 2028 include:

- Revised CSAPR Update (40 CFR 97, subpart GGGGG)

4. EPA's Evaluation of Indiana's Compliance with 40 CFR 51.308(f)(2)(i)

EPA proposes to find that Indiana has satisfied the requirements of 40 CFR 51.308(f)(2)(i) related to evaluating sources and determining the emission reduction measures that are necessary to make reasonable progress by considering the four statutory factors. Indiana's selection of sources and evaluation of control measures was reasonable and consistent

with the requirements of 40 CFR 51.308(f)(2)(i). Considering the four statutory factors, the projected 2028 visibility conditions for Class I areas influenced by emissions from Indiana sources all being below the URP in 2028, the historical emissions data, the emissions reductions, and the current control technologies, EPA also finds Indiana reasonably concluded that no additional measures are necessary to make reasonable progress in the second planning period. As detailed further below, EPA proposes to approve Indiana's long-term strategy under 40 CFR 51.308(f)(2).

In line with recent proposals from EPA,[36] it is the Agency's policy that, where visibility conditions for a Class I area impacted by a State are below the URP and the State has considered the four statutory factors, the State will have presumptively demonstrated reasonable progress for the second planning period for that area. In developing the regulations required by CAA section 169A(b), EPA established the concept of the URP for each Class I area. As discussed above, for each Class I area, there is a regulatory requirement to compare the projected visibility impairment (represented by the reasonable progress goal, or "RPG") at the end of each planning period to the URP (*e.g.,* in 2028 for the second planning period).[37]

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[36] 90 FR 16478; 16483-16484, April 18, 2025.

[37] We note that RPGs are a regulatory construct that we developed to address statutory mandate in section 169B(e)(1), which required our regulations to include "criteria for measuring 'reasonable progress' toward the national goal." Under 40 CFR 51.308(f)(3)(ii), RPGs measure the progress that is projected to be achieved by the control measures a state has determined are necessary to make reasonable progress. Consistent with the 1999 RHR, the RPGs are unenforceable, though they create a benchmark that allows for analytical comparisons to the URP and mid-implementation-period course

EPA's new policy is that so long as the Class I areas impacted by a State are below the URP in 2028 and the State considers the four factors, the State will have presumptively demonstrated it has already made reasonable progress for the second planning period for that area. Indeed, we believe this policy also recognizes the considerable improvements in visibility impairment that have been made by a wide variety of State and federal programs in recent decades.

Applying this new policy in our evaluation of Indiana's SIP and as further detailed in the paragraphs that follow, EPA agrees with Indiana's determination that, for the second planning period, no additional measures are necessary to achieve reasonable progress towards natural visibility at Class I areas impacted by emissions from Indiana sources.

The SIP submittal included evaluations for 20 emissions sources, including consideration of the four statutory factors for nine non-EGU facilities and consideration of existing measures at a further 11 power generating stations. Based on these evaluations and analyses, the State determined that no additional measures were necessary for reasonable progress. In reaching this determination, Indiana also considered the emissions reductions and visibility improvements that have already occurred in the second planning period in nearby Class I areas.

For Indiana's source selection methodology, IDEM targeted

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corrections if necessary. 82 FR at 3091-3092.

the sources with the highest potential to impair visibility at mandatory Class I areas. IDEM included a thorough description of its source selection methodology. Starting with LADCO's Q/d methodology and focusing on SO_2 and NO_X as the predominant species contributing to visibility impairment in the LADCO Class I areas, IDEM queried data for all sources reporting to the National Emissions Inventory, EPA's Emissions Inventory System for 2016 – 2018, and CAMPD[38] for 2018 to represent the most current operations at the time. IDEM appropriately chose a Q/d threshold of 5 to capture a variety of higher emitting sources and to screen out sources with either lower emissions or located at farther distances from the Class I areas. As noted in section IV.E.1, above, this process identified 20 sources for a possible four-factor analysis. Overall, the sources selected by IDEM for potential four-factor analysis accounted for 81 percent of the total emissions for SO_2 and NO_X for all sources reporting under Indiana's Emission Reporting Rule at Title 326, Article 2, Rule 6 of the Indiana Administrative Code (326 IAC 2-6) in 2018, including 85 percent of SO_2 and 77 percent of NO_X.

In determining which facilities to evaluate through a four-factor analysis, IDEM refined the list of sources selected using its Q/d threshold by providing adequate justification for no further analysis where sources had existing effective controls. For EGUs that are now no longer operating, IDEM provided information on emissions from 2009 to 2019 and results of source

[38] The 2018 CAMPD information that IDEM relied upon is included in appendix E of Indiana's 2021 Regional Haze SIP submittal.

apportionment modeling to demonstrate statewide emission reductions and projections for SO_2 and NO_X. Compared to the 2018 inventories used in IDEM's source selection process,[39] the emissions reductions from the sources no longer operating represent decreases of SO_2 by over 7,000 tons per year (tpy) and NO_X by over 9,000 tpy from all the sources IDEM selected with Q/d greater than five. These include: Duke – Gallagher Units 2 and 4 (1,149 ton SO_2 and 535 tons NO_X); NIPSCO – R.M. Schahfer Units 14 and 15 (375 tons SO_2 and 2,429 tons NO_X); AES - Petersburg Unit 1 and 2 (1,412 tons SO_2 and 2,773 tons NO_X); SIGECO – A.B. Brown Units 1 and 2 (3,527 tons SO_2 and 2,112 tons NO_X); and Lehigh Cement – Mitchell Kilns 1, 2, and 3 (700 tons SO_2 and 1,800 tons NO_X).

For the selected EGUs continuing to operate, IDEM appropriately examined the facilities for existing effective controls, trends in SO_2 and NO_X emissions, and LADCO's 2028 projected emissions in determining that a four-factor analysis would not likely result in the conclusion that further controls are necessary for reasonable progress. In evaluating IDEM's reasoning, EPA also considered trends in annual emissions and emission rates from 2018 – 2023 CAMPD, emission limits in current title V permits, and the fact that the projected 2028 visibility conditions for Class I areas influenced by emissions

[39] 2018 CAMPD and 2018 Indiana Emissions Inventory Summary Data are available in the docket and at *https://campd.epa.gov/*; *https://www.in.gov/idem/airquality/reporting/emissions-summary-data/*.

from Indiana sources are below the URP in 2028. The EGUs continuing to operate include: AEP - Rockport Boiler MB1 and MB2; Duke - Gibson Units 1, 2, 3, 4, 5; AES - Petersburg Units 3, 4; IKEC - Clifty Creek Units 1, 2, 3, 4, 5, 6; Duke - Cayuga Units 1, 2; Alcoa – Warrick Power Plant Unit 4; SIGECO – F.B. Culley Units 2, 3; Hoosier Energy - Merom Units 1SG1, 2SG1; and NIPSCO – R.M. Schahfer Units 16A, 16B, 17, 18. As summarized below, IDEM adequately documented that these EGUs are effectively controlled for SO_2 and NO_X for the second implementation period in determining that a full four-factor analysis would likely result in the conclusion that no further controls are necessary for reasonable progress.

- AEP - Rockport Boiler MB1 and MB2: The SO_2 and NO_X emission limits and plant-wide tonnage caps are in a Federal consent decree,[40] SO_2 emission rates are below the 0.2 pounds per million British thermal units (lbs/MMBtu) for coal-fired EGUs in MATS, and NO_X emission rates are below the 0.08 lbs/MMBtu level for units with selective catalytic reduction (SCR) under the Federal "Good Neighbor Plan".[41]
- Duke - Gibson Units 1, 2, 3, 4, and 5: The SO_2 emission rates

[40] Fifth Joint Modification To Consent Decree with the United States District Court for the Southern District of Ohio in the lawsuit entitled *United States, et al. v. American Electric Power Service Corp., et al.,* Civil Action Nos. 99-1182 (EAS) and 99-1250 (EAS), (AEP Consent Decree). The AEP Consent Decree is available in the docket and at *https://www.epa.gov/sites/default/files/documents/americanelectricpower-cd_1.pdf*. See also 84 FR 26705, June 7, 2019.

[41] Federal "Good Neighbor Plan" for the 2015 Ozone National Ambient Air Quality Standards," Final Rule, 88 FR 36654, June 5, 2023. On October 29, 2024, EPA issued a final rule to administratively stay the effectiveness of the Good Neighbor Plan's requirements for all sources covered by that rule as promulgated where an administrative stay was not already in place, including Indiana. 89 FR 87960, November 6, 2024.

for all units are below the MATS, NO_X emission rates are below the 0.08 lbs/MMBtu level for units with SCR under the Good Neighbor Plan, and the flue gas desulfurization (FGD) and SCR systems achieve high control efficiencies.

- AES - Petersburg Units 3 and 4: The FGD systems achieve high percentages of SO_2 control efficiency, actual SO_2 emission rates for both units are below the MATS, and SO_2 and NO_X emission caps and limits are in place under a 2020 Federal consent decree.
- IKEC - Clifty Creek Units 1, 2, 3, 4, 5, and 6: The FGD systems achieve 98 percent control efficiency, the SCR and OFA systems achieve 70-90 percent control efficiency on an annual basis, SO_2 limits are contained Indiana's SIP at 40 CFR 52.770(d), actual SO_2 emission rates for all six units are below MATS, and NO_X emissions are progressively constrained on an annual basis under the Revised CSAPR Update Rule. While NPS provided an estimate for cost effectiveness of the addition of SCR to Unit 6 at $6,100/ton of NO_X removed, IDEM determined that additional emission reductions through the addition of new emission control equipment would not be cost-effective.
- Duke - Cayuga Units 1 and 2: The SO_2 emission rates are below the MATS, and the FGD and SCR systems achieve control efficiencies near 90 percent or more.
- Alcoa – Warrick Power Plant: Unit 4 is subject to BART emission limitations from the first implementation period on a

pollutant specific basis and is currently operating controls to meet those BART emission limits, SO_2 and NO_X controls are in place, and actual SO_2 emission rates are below MATS.

- SIGECO – F.B. Culley Units 2 and 3: Federally enforceable SO_2 and NO_X emission limits and conditions regarding operation of the FGD and SCR control systems are contained in the Federal consent decree and in Indiana's SIP at 52.770(c)(190), SO_2 emission rates are below the MATS, and the FGD system achieves a control efficiency of 99 percent.
- Hoosier Energy - Merom Units 1SG1 and 2SG1: The FGD and SCR control systems achieve greater than 90 percent control efficiency, SO_2 emission rates are below MATS, and NO_X emission rates are below the 0.08 lbs/MMBtu level for units with SCR under the Good Neighbor Plan.
- NIPSCO – R.M. Schahfer: Units 16A and 16B are natural gas turbines emitting less than 1 tpy SO2 and 17 tpy NO_X. For Units 17 and 18, FGD systems achieve 99 percent control efficiency, SO_2 emission rates are below MATS, and NO_X emission rates are below 0.199 lbs/MMBtu for units with low NO_x burners (LNB) under the Good Neighbor Plan.

In addition to demonstrating that these EGUs are effectively controlled for the second implementation period, Indiana's analysis of emissions from 2007 to 2019 and projected emissions from 2028 projections, in addition to the CAMPD information from 2018 to 2023 that EPA considered along with control measures in Federal consent decrees and title V permits,

showed each unit had consistently implemented their existing measures, had demonstrated declining trends in total annual emissions at each facility, and emissions were not projected to increase through 2028. Additionally, the projected 2028 visibility conditions for Class I areas influenced by emissions from Indiana sources are below the URP in 2028.[42] As such, IDEM adequately demonstrated that additional measures for these units are not necessary to make reasonable progress during the second implementation period.

Indiana's long-term strategy included Federal on-the-books and on-the-way controls. Indiana did not rely on additional measures as part of the long-term strategy to make reasonable progress in the second planning period for the units that IDEM identified through its Q/d source selection process. For the units no longer operating, emission reductions have already taken place during the second implementation period. For the EGUs continuing to operate, IDEM sufficiently demonstrated that existing effective controls are in place as described in the 2019 Guidance, section 3(f) in determining that a full four-factor analysis would likely result in the conclusion that no further controls are necessary for reasonable progress. IDEM's analysis of emissions from 2007 to 2019 and 2028 projections, CAMPD information from 2018 to 2023, limits contained in existing permits and Federal consent decrees, and the fact that projected 2028 visibility conditions for Class I areas

[42] See Indiana's 2021 Regional Haze SIP submission, Table 23-1 and appendix L.

influenced by emissions from Indiana sources are below the URP in 2028 support IDEM's determination that additional measures at these EGUs are not necessary to make reasonable progress for the second implementation period.

For the nine non-EGU facilities, Indiana provided a thorough analysis of existing measures or a full four-factor analysis that appropriately followed the methods in the EPA Air Pollution Control Cost Manual.[43] IDEM documented the range of cost effectiveness for control options considered technically feasible in the four-factor analyses.

Table 1. Estimated Cost Effectiveness of Control Options Evaluated

Facility	Unit	Control Option	Cost Effectiveness
Alcoa - Warrick Operations	Potlines 2 through 6	FGD	$16,800 per ton of SO_2
	Anode Baking Ring Furnace and A-446 Dry Alumina Scrubbers	FGD	$45,000 per ton of SO2
Burns Harbor	Battery Nos. 1 and 2	Spray Dryer Absorber (SDA)	$5,300 - $6,300 per ton of SO_2
	Clean Coke Oven Gas Export Line and Flare	Desulfurization	$4,000 per ton of SO_2
	Power Station Boilers Nos. 7 through 12	SDA	$16,100 to 42,000 per ton of SO_2
		Dry Sorbent Injection (DSI)	$8,800 to $16,700 per ton of SO_2
Indiana Harbor East	80" Hot Strip Mill Walking Beam Furnaces Nos. 5 and 6	Ultra-low NO_x Burners (ULNB)	$6,900 to $9,100 per ton of NO_x
	Sinter Plant Windbox	SDA	$28,900 per ton of SO_2
		DSI	$38,200 per ton of SO_2
Lone Star Industries – Greencastle		DSI	$10,035 per ton to remove 47 tons of SO_2 per year
		Selective Non-Catalytic	$1,679 per ton to remove 685 tons of

[43] *See* EPA Air Pollution Control Cost Manual, available at *https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution*.

		Reduction	NO_X per year
U.S. Steel – Gary Works	84" Hot Strip Mill Reheat Furnaces	LNB	$14,142/ton to reduce 211 tons of NO_X
	Waste Heat Boiler Nos. 1 and 2	LNB	$6,130 and $6,344 per ton to reduce 58 and 56 tons of NO_X per year, respectively
SABIC Innovative Plastics – Mt. Vernon LLC	Co-generation Unit	SCR	$25,691 per ton to remove 101 tons of NO_X per year
	Phosgene Carbonyl Sulfide Vent Oxidizer and Flare	Wet Packed Tower Absorber	$12,449 per ton to remove 542 tons of SO_2 per year

For the other units evaluated at the non-EGU facilities, the analyses thoroughly demonstrated that no reasonable set of SO_2 or NO_X control measures were identified beyond what is currently installed and operated as described in Section 3 of EPA's April 22, 2025 TSD.

The emission reductions that have already occurred during the second implementation period at Duke – Gallagher, NIPSCO – R.M. Schahfer, AES – Petersburg, SIGECO – A.B. Brown, and Lehigh Cement – Mitchell represent permanent reductions in SO_2 and NO_X from Indiana sources that have reduced visibility impairment at impacted Class I areas. These decreases in emissions represent over 7,000 tpy SO_2 and over 9,000 tpy NO_X from all the sources IDEM selected with Q/d greater than five based on 2018 emissions. With a relatively small potential for additional emission reductions identified in the four-factor analyses compared to emission reductions that have already taken place, IDEM provided a reasoned basis for its conclusions that pursuing additional emission reductions through the addition of new emission control measures or emissions limitations is not cost-effective for the second implementation period. The trends in

NO_X and SO_2 emissions noted in IDEM's progress report discussed below and its analysis of emissions from 2007 to 2019 and 2028 projections, along with the 2018 to 2023 emissions data considered by EPA demonstrate how Indiana's long-term strategy will continue to make significant emissions reductions during the second implementation period. Indiana's SIP revision shows that these measures will achieve substantial SO_2 and NO_X emission reductions beyond those included in its first implementation period. The reductions in emissions that have already occurred during the second implementation period, along with on-the-books and on-the-way control measures, contribute to Indiana's emission reductions and the associated visibility improvements at the affected Class I areas for the second implementation planning period.

EPA proposes to find that Indiana has satisfied the requirements of 40 CFR 51.308(f)(2)(i) related to evaluating sources and determining the emission reduction measures that are necessary to make reasonable progress by applying the four statutory factors to sources in a control analysis. Indiana's SIP submission reasonably applied the Q/d source selection process in relying on the closest Class I area and the emissions of SO_2 and NO_X. IDEM examined a reasonable set of sources, including sources identified by FLMs. In addition, IDEM adequately explained its decision to focus on the two pollutants — SO_2 and NO_X — that currently drive visibility impairment within the LADCO region. EPA proposes to find that Indiana adequately

supported its conclusions for its top-impacting sources in determining that no additional controls are necessary for reasonable progress in the second implementation period. EPA is basing this proposed finding on the State's examination of its largest operating EGU and non-EGU sources, particularly the State's consideration of the four statutory factors, the projected 2028 visibility conditions for Class I areas influenced by emissions from Indiana sources all being below the URP in 2028, the historical emissions data, the emission reductions that have already taken place during the second implementation period, and the current control technologies.

5. Consultation with States

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. The provisions of 40 CFR 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. The provisions of 40 CFR 51.308(f)(2)(ii)(C) speak to what happens if States cannot agree on what measures are necessary to make reasonable progress. States may 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.

Although Indiana has no mandatory Class I Federal areas within its borders, Indiana has previously been shown to have sources with emissions that impact visibility at downwind Class I Federal areas. Indiana consulted with other States to develop a coordinated emission management approach to its regional haze SIP and to address Indiana's impact on nearby Class I areas. IDEM participated in the LADCO and inter-RPO processes which developed the technical information needed for such coordinated strategies.

Indiana participated in the LADCO Regional Haze Technical Workgroup meetings with other LADCO States, FLMs, and EPA Region 5. Indiana also consulted with other States and Tribes, receiving and responding to letters[44] from Arkansas, Missouri, Metro 4/SESARM/VISTAS,[45] MANE-VU,[46] Arkansas, Missouri. IDEM replied with emissions analysis and modeling results to demonstrate Indiana is meeting the State's regional haze obligations to the surrounding States with Class I areas and

[44] See Section 3.4, 23, and appendix K and AA of Indiana's 2021 Regional Haze SIP submittal.
[45] Metro 4/SESARM/VISTAS refers to the Southeastern States Air Resources Managers, Inc. (SESARM) and the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) as the RPO for Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennesse, Virginia, West Virginia, the Eastern Band of Cherokee Indians, and Knox County, Tennessee (representing the 17 Southeastern local air agencies).
[46] The Mid-Atlantic/Northeast Visibility Union (MANE-VU) is the RPO for the Northeastern and Mid-Atlantic states and Tribal governments, which include Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Penobscot Indian Nation, Rhode Island, St. Regis Mohawk Tribe, and Vermont.

that no further analysis is necessary for the sources identified by the States and RPOs. IDEM did not receive any replies disagreeing with their responses. Section 4 of EPA's April 22, 2025 TSD provides a detailed summary of Indiana's consultation with States.

EPA proposes to find that Indiana has satisfied the consultation requirements of 40 CFR 51.308(f)(2)(ii). Indiana has met the requirements of 40 CFR 51.308(f)(2)(ii)(A) and (B) with its participation in the LADCO consultation process plus its individual consultation meetings with contributing States. There were no disagreements with another State; therefore, 40 CFR 51.308(f)(2)(ii)(C) does not apply to Indiana.

The requirements of 40 CFR 51.308(f)(2)(iii) provide that a State must document the technical basis for its decision making to determine the emission reductions measures that 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." Indiana adequately documented the technical basis, including the modeling, monitoring, engineering, costs, and emissions information that was relied on in determining the emission reduction measures that are necessary to make reasonable progress.

For modeling, IDEM documented the modeling done by LADCO to determine visibility projections and contributions to impairment at the Class I areas. Indiana included justification for the 2016 base year selection and the 2028 emission projections based on ERTAC forecasts and state-reported changes.

For monitoring, IDEM described how ambient air quality monitoring data were analyzed to produce a conceptual understanding of the air quality problems contributing to haze as well as to project visibility conditions in 2028 through LADCO's modeling and EPA's Updated 2028 Visibility Air Quality Modeling. IDEM noted that LADCO relied upon the IMPROVE monitoring data to track the chemical composition of $PM_{2.5}$ in haze at Class I areas in the LADCO region, which included ammonium nitrate, ammonium sulfate, elemental carbon, organic carbon, sea salt, and inorganic soil. IDEM also documented IMPROVE monitoring data for several Class I areas from the 2000-2004, 2009 – 2013, 2014 – 2018 monitored baselines along with graphs depicting their respective glidepaths and monitored visibility for the 20 percent most impaired days on an annual basis over the same time period.

For emissions information, IDEM provided data for 2007 through 2019, the most recent data years available at the time, from various sources for each unit screened in using Indiana's Q/d source selection threshold. Emissions data were obtained from EPA's Emissions Inventory System, CAMPD, and the National Emissions Inventory (NEI). Additionally, EPA considered 2011 -

2022 information from Indiana's Emissions Summary Data and 2018 – 2022 emissions from CAMPD. Data from 2016 for annual emissions of NO_X, SO_2, $PM_{2.5}$, and NH_3 that was used in LADCO's modeling relied upon the 2016 inventory developed by the National Emissions Inventory Collaborative described above as well as forecasts from ERTAC with state-reported changes to EGUs through 2020. The pollutants inventoried by Indiana for the photochemical modeling included NO_X, SO_2, VOCs, $PM_{2.5}$, and PM_{10} data collected through Indiana's emissions reporting rules. Since ammonia emissions are not reported to Indiana, modeled estimates were provided by LADCO.

For engineering and costs, Indiana provided site-specific four-factor analyses that evaluated potential engineering designs and costs for various NO_X and SO_2 emission control systems for the nine non-EGU facilities as previously mentioned.

EPA proposes to find that such documentation of the technical basis of the long-term strategy, including the modeling, monitoring, engineering, costs, and emissions information discussed above, satisfies the requirements of 40 CFR 51.308(f)(2)(iii).

The provisions of 40 CFR 51.308(f)(2)(iii) require 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. As previously mentioned above, IDEM participated in the development of technical analyses, including emission inventory information, by LADCO and its member States, and is relying in part on those analyses to satisfy the emission inventory requirements. Emissions for the 2016 base year and the 2028 projected year used in LADCO's modeling address elements of 40 CFR 51.308(f)(6)(v) of the Regional Haze Rule, which requires that States provide recent and future year emissions inventories of pollutants anticipated to contribute to visibility impairment in any Class I areas. Indiana's 2021 Regional Haze SIP revision for the second implementation period also included 2017 NEI emission data, which corresponds to the year of the most recent triennial NEI at the time of Indiana's 2021 Regional Haze SIP submission, as required under 40 CFR 51.308(f)(2)(iii) of the Regional Haze Rule. Based on IDEM's consideration and analysis of the 2017 emission data in its SIP submission, EPA proposes to find that Indiana has satisfied the emissions information requirement in 40 CFR 51.308(f)(2)(iii).

6. Five Additional Factors

In addition to the four statutory factors, States must also consider the five additional factors listed in 40 CFR 51.308(f)(2)(iv) in developing their long-term strategies. EPA proposes to find that Indiana adequately considered those factors in developing this submission.

As required by 40 CFR 51.308(f)(2)(iv)(A), Indiana considered emission reductions due to ongoing air pollution

control programs. IDEM documented significant emission reductions based on current emission control strategies at its sources that have reduced visibility impairment at all surrounding Class I areas. IDEM noted ongoing Federal emission control programs that have reduced and will continue to reduce visibility-impairing pollutants from Indiana point sources, as well as on-road and non-road mobile sources, in the second implementation period. For point sources, these programs included Federal provisions for title V permitting actions; Boiler MACT; Mercury and Air Toxics Standards for power plants; Data Requirements Rule for the 2010 SO2 NAAQS; and Revised CSAPR Update. For on-road mobile sources, Indiana cited to Federal regulations for the Tier 2 Motor Vehicle Emissions and Gasoline Standards Rule, Tier 3 Motor Vehicle Emission and Fuel Standards, and Heavy-Duty Diesel Engine and Highway Diesel Fuel Rule. For non-road mobile sources, IDEM cited to Federal regulations for the Tier 4 Nonroad Engines and Diesel Fuel Rule.

As required by 40 CFR 51.308(f)(2)(iv)(B), Indiana's consideration of measures to mitigate the impacts of construction activities in its SIP submission referred to the State's title V permit program as well as LADCO's inclusion of building construction, road construction, agricultural dust, and road dust in the modeling, which identified contributions to visibility impairment for consideration by the States.

Pursuant to 40 CFR 51.308(f)(2)(iv)(C), Indiana's SIP submission addressed schedules for source retirements and

replacements.

In considering smoke management for prescribed burns as required in 40 CFR 51.308(f)(2)(iv)(D), Indiana's Open Burning Rule at 326 IAC 4-1 addresses open burning, including prescribed burns used for agricultural and wildland vegetation management purposes. Under 326 IAC 4-1-3, burning of vegetation for agricultural maintenance purposes is exempt from the open burning rules on agricultural land, farms, orchards, nursery, tree farms, cemeteries, and drainage ditches. Burning of natural growth for the purpose of land management, such as wildlife habitat maintenance, forestry purposes, natural area management, and ecosystem management generally requires IDEM approval. The exceptions are for burning conducted on properties owned by the Indiana Department of Natural Resources, municipal or county governments, the US Department of Interior, the US Department of Agriculture, or USFS. Indiana's rules provide that such prescribed burns are not allowed during unfavorable meteorological conditions, including high winds, temperature inversions, air stagnation, or when a pollution alert or ozone action day has been declared. To ensure smoke from such activities is accounted for in the visibility projections, IDEM noted that LADCO's modeling included a sector for wild and prescribed fires.

As required by 40 CFR 51.308(f)(2)(iv)(E), Indiana considered the anticipated net effect on visibility improvements due to projected changes in emissions from point, area, and

mobile sources during the second implementation period addressed by the long-term strategy. The visibility improvement expected during the second implementation period was estimated using LADCO's 2016 base year and 2028 future year inventory components to simulate 2016 and 2028 air quality. As described above, for EGUs, projected changes for 2028 emissions in LADCO's modeling platform were based on ERTAC forecasts and state-reported changes. For most other emission sectors, LADCO relied upon EPA's 2016 and 2028 inventory estimates for projected changes in sectors such as agriculture, on-road and non-road mobile, rail, commercial marine, point and nonpoint oil and gas, residential wood combustion, wild and prescribed fires, and Mexico and Canada anthropogenic emissions. The projected changes in EPA's 2016 and 2028 inventory estimates take into account Federal on-the-books controls such as those listed in Indiana's long-term strategy, above.

IDEM also demonstrated that visibility conditions in the LADCO Class I Areas have shown continued improvement relative to baseline conditions. As depicted in LADCO's 2021 TSD, 2016 visibility impairment conditions at the LADCO Class I Areas on the 20 percent most impaired days as well as the 20 percent clearest days were below their respective glidepaths. By the end of the second implementation period in 2028, both LADCO's projections and EPA's Updated 2028 Visibility Air Quality Modeling show 2028 visibility conditions will remain below the URP glidepaths for the LADCO Class I Areas.

After weighing the four-factor analyses and the five additional required factors, Indiana determined that the existing emission controls for the sources identified above IDEM's Q/d threshold are effective for the second implementation period and that additional measures are not necessary to meet second implementation period regional haze SIP requirements. IDEM's process for selecting sources for four-factor analyses represented 81 percent of the total SO_2 and NO_X emissions for all sources reporting under 326 IAC 2-6, including 85 percent of SO_2 and 77 percent of NO_X. IDEM provided an analytical means for refining the list of sources selected by evaluating EGUs and non-EGUs for demonstration of existing effective controls or four-factor analysis. For the add-on controls evaluated for the units selected for four-factor analyses, Indiana determined that the controls evaluated were not cost effective to achieve emission reductions during the second implementation period. IDEM reflected upon the steady and significant improvement in visibility at each of the Class I areas impacted by sources in Indiana and noted that LADCO's modeling shows continued improvement with 2028 projections below their URP glidepaths in 2028. As discussed under the progress report elements below, from 2007 to 2019, SO_2 emissions from all Indiana EGUs decreased by 210,180 tons or 81 percent while NO_X emissions decreased by 46,360 tons or 50 percent. The decreasing trend continues with the permanent emission reductions that have already occurred during the second implementation period, representing over 7,000

tpy of SO_2 and over 9,000 tpy of NO_X from all the sources identified by IDEM's Q/d selection process based on 2018 emissions.

Given all these factors, Indiana demonstrated that Federal on-the-books and on-the-way controls are sufficient to make reasonable progress in the second implementation period. EPA proposes to find that Indiana reasonably considered and satisfied the requirements for each of the five additional factors in 40 CFR 51.308(f)(2)(iv) in developing its long-term strategy.

F. RPGs

The provisions of 40 CFR 51.308(f)(3) contain the requirements pertaining to RPGs for each Class I area. Under 40 CFR 51.308(f)(3)(i), a State, in which a mandatory Class I area is located, is required to establish RPGs—one each for the most impaired and clearest days--reflecting the visibility conditions that will be achieved at the end of the implementation period as a result of the emission limitations, compliance schedules and other measures required under paragraph (f)(2) to be in States' long-term strategies, as well as implementation of other CAA requirements. The long-term strategies as reflected by the RPGs must provide for an improvement in visibility on the most impaired days relative to the baseline period and ensure no degradation on the clearest days relative to the baseline period. The provisions of 40 CFR 51.308(f)(3)(ii) apply in circumstances in which a Class I area's RPG for the most

impaired days represents a slower rate of visibility improvement than the uniform rate of progress calculated under 40 CFR 51.308(f)(1)(vi). Under 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 long-term strategy. The provisions of 40 CFR 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. Because Indiana has no Class I areas within its borders to which the requirements of the visibility protection program apply in 40 CFR part 81, subpart D, Indiana is subject only to 40 CFR 51.308(f)(3)(ii)(B), but not 40 CFR 51.308(f)(3)(i) or (f)(3)(ii)(A).

Under 40 CFR 51.308(f)(3)(ii)(B), a State that contains sources that are reasonably anticipated to contribute to visibility impairment in a Class I area in another State for which a demonstration by the other State is required under 40 CFR 51.308(f)(3)(ii)(B) must demonstrate that there are no additional emission reduction measures that would be reasonable to include in its long-term strategy. Section 23 of Indiana's

SIP submission shows that at the Class I areas impacted by emissions from Indiana, the 2028 projected visibility impairment is not above the adjusted URP glidepaths for the 20 percent most impaired days and ensures no degradation on the 20 percent clearest days. Therefore, EPA proposes that the demonstration requirement under 40 CFR 51.308(f)(3)(ii)(B) as it pertains to these areas is not triggered.

EPA proposes to determine that Indiana has satisfied the applicable requirements of 40 CFR 51.308(f)(3) relating to RPGs.

G. Monitoring Strategy and Other Implementation Plan Requirements

The requirements of 40 CFR 51.308(f)(6) specify 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.

As noted above, Indiana does not have any mandatory Class I Federal areas located within its borders to which the requirements of the visibility protection program apply in 40 CFR part 81, subpart D. Therefore, 40 CFR 51.308(f)(6)(i), (ii), and (iv) do not apply.

The provisions of 40 CFR 51.308(f)(6)(iii) require States with no Class I areas to include procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at Class I areas in other States. States with Class I areas must establish a monitoring program and report data to EPA that is representative of visibility at the Class I Federal areas. The IMPROVE network meets this requirement. Indiana stated that, as a participant in LADCO, it reviewed information about the chemical composition of baseline monitoring data at Class I Federal areas in the LADCO region to understand the sources of haze causing pollutants. IDEM does not operate any monitoring sites under the Federal IMPROVE program and, therefore, does not require approval of its monitoring network under the Regional Haze Rule. IDEM relies upon participation in the IMPROVE network as part of the State's monitoring strategy for regional haze to review progress and trends in visibility at Class I areas that may be affected by emissions from Indiana, for comprehensive periodic revisions of this implementation plan, and for periodic reports describing progress towards the RPGs for those areas.

The provisions of 40 CFR 51.308(f)(6)(v) require 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. In appendix O of its SIP

submission, Indiana provided statewide emission inventories for 2016 – 2018 in EPA's Emissions Inventory System, as the most recent years available at the time of the State's SIP submission. EPA's Emissions Inventory System is used to develop the NEI, which provides for, among other things, a triennial state-wide inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment. Indiana's SIP submission at Section 5.13 and 5.15 also provided a summary of SO_2, NO_X, $PM_{2.5}$, VOCs, and NH_3 emissions for 2016 that LADCO used in developing Q/d metrics and the 2016 base year emissions inventory to project emissions to year 2028. Additionally, as described in further detail under the progress report elements, IDEM provided more recent data through 2019 from CAMPD to depict trends in EGU emissions, which demonstrated an 81 percent decrease in SO_2 emissions and a 50 percent decrease in NO_X emissions from 2007 to 2019.

The provisions of 40 CFR 51.308(f)(6)(v) also require States to include estimates of future projected emissions and include a commitment to update the inventory periodically. For future projected emissions, Indiana relied on the LADCO modeling and analysis, which estimated 2028 projected emissions of SO_2 and NO_X for specific facilities and emission groups in the LADCO States to provide an assessment of expected future year air quality based on 2016 emissions as well as ERTAC and State forecasts. In addition, Indiana annually updates its Emissions Summary Data for pollutants anticipated to cause or contribute

to visibility impairment in Class I areas to support future regional haze progress reports and SIP revisions.

EPA proposes to find that Indiana has met the requirements of 40 CFR 51.308(f)(6) as described above, including through its continued participation in LADCO, its own statewide Emissions Summary Data, and its emissions reporting to EPA's Emissions Inventory System.

H. Requirements for Periodic Reports Describing Progress Towards the RPGs

The provisions of 40 CFR 51.308(f)(5) require that periodic comprehensive revisions of States' regional haze plans also address the progress report requirements of 40 CFR 51.308(g)(1) through (5). The purpose of these requirements is to evaluate progress towards the applicable RPGs for each Class I area within the State and each Class I area outside the State that may be affected by emissions from within that State. The provisions of 40 CFR 51.308(g)(1) and (2) apply to all States and require a description of the status of implementation of all measures included in a State's first implementation period regional haze plan and a summary of the emission reductions achieved through implementation of those measures. The provisions of 40 CFR 51.308(g)(3) apply only to States with Class I areas within their borders and requires such States to assess current visibility conditions, changes in visibility relative to baseline (2000-2004) visibility conditions, and changes in visibility conditions relative to the period

addressed in the first implementation period progress report. The provisions of 51.308(g)(4) apply to all States and requires an analysis tracking changes in emissions of pollutants contributing to visibility impairment from all sources and sectors since the period addressed by the first implementation period progress report. This provision further specifies the year or years through which the analysis must extend depending on the type of source and the platform through which its emission information is reported. Finally, 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 implementation period progress report, including whether such changes were anticipated and whether they have limited or impeded expected progress towards reducing emissions and improving visibility.

Indiana's previous progress report, which was a 5-year progress report submitted as a SIP revision for the first implementation period on March 30, 2016,[47] included NO_X and SO_2 emission inventories from CAMPD for 2005, 2009, 2013 for EGUs, Indiana's Emissions Summary Data from 2005 - 2014 for contributing sources, as well as inventories from 2005 and 2011 with 2018 projections for the sources categories of point, mobile, non-road, EGU, and area sources. Based on Indiana's Emissions Summary Data covering the period 2010 to 2014 for

[47] Indiana's March 30, 2016 Five-Year Progress Report is available in the docket for EPA-R05-OAR-2016-0211.

contributing sources, Indiana's 2016 5-year progress report showed a decrease in SO_2 emissions by 28 percent and a decrease in NO_X emissions by 12 percent. Over the longer period from 2005 to 2014, IDEM documented a decrease in SO_2 emissions by 64 percent and NO_X emissions by 42 percent. See 82 FR 57694, December 7, 2017, and 83 FR 4847, February 2, 2018.

For the second implementation period SIP submission, the 2019 Guidance recommends the progress report cover the first full year that was not incorporated into the previous progress report through a year that is as close as possible to the submission date of the SIP. 2019 Guidance at 55. Indiana's 2021 progress report covered the measures and emissions reductions achieved from 2007 through 2019 in Indiana's Emissions Summary Data, from 2016 – 2018 in EPA's Emissions Inventory System for 2016 – 2018, and from 2007 - 2019 in CAMPD.

To address the progress report elements of 51.308(g)(1), Indiana described the status of implementation of all measures in the long-term strategy under its first implementation period regional haze plan. These measures included several Federal measures, including CAIR and its successor CSAPR, to which Indiana attributed the majority of reductions in visibility-impairing emissions from the largest point-source sector, EGUs, during the first implementation period. Federal measures for point sources also included BART, MATS, Boiler MACT, and the Data Requirements Rule for the 2010 SO_2 NAAQS. Additional on-the-books control measures that generated further emission

reductions addressed mobile sources, such as Federal on-road provisions under the Tier 2 Motor Vehicle Emissions and Gasoline Standards Rule, Tier 3 Motor Vehicle Emissions and Fuel Standards, and Heavy-Duty Diesel Engine and Highway Diesel Fuel Rule. Non-road Federal measures for mobile sources included the Tier 4 Non-road Engines and Diesel Fuel Rule.

As required by 40 CFR 51.308(g)(2), Indiana provided a summary of the emission reductions achieved through the measures outlined above from the first implementation period. As a result of these measures, Indiana's Emissions Summary Data from 2007 to 2019 from across all emission categories for all contributing sources, discussed more fully below, show that Indiana's SO_2 emissions decreased by 90 percent from 836,260 to 82,677 tons, and NO_X emissions decreased by 65 percent from 271,556 to 94,002 tons. The most significant emissions reductions from Indiana's SIP strategies resulted from CAIR and CSAPR, MATS, and the Data Requirements Rule for the 2010 SO_2 NAAQS. CAMPD information shows that the EGU sector experienced an 82 percent reduction in SO_2 from 263,766 tons in 2014 to 47,834 tons in 2019, and a 50 percent reduction in NO_X from 95,284 tons in 2014 to 47,219 tons in 2019. Over the longer period from 2007 to 2019, the EGUs reporting to CAMPD achieved a 93 percent decrease in SO_2 from 655,139 to 47,834 tons as well as a 72 percent decrease in NO_X from 168,916 to 47,219 tons. EPA proposes to find that Indiana has met the requirements of 40 CFR 51.308(g)(1) and (2) because its SIP submission describes the

measures included in the long-term strategy from the first implementation period, as well as the status of their implementation and the emission reductions achieved through such implementation.

The provisions of 40 CFR 51.308(g)(3) do not apply because Indiana has no mandatory Class I Federal areas within its borders as described above.

To address 40 CFR 51.308(g)(4), Indiana documented the change in emissions of SO_2 and NO_X from all sources and activities in the State. Graph 26-1 and appendix E of Indiana's SIP submission documents changes in emissions of each of these pollutants for biogenics, fires, non-point, non-road, on-road, and point source categories for each year from 2007 through 2019, the most recent data year available at the time for category level emissions in Indiana's Emissions Summary Data. Indiana's tracking showed an overall decline in emission reductions from 2007 to 2019, with a 90 percent reduction in SO_2 and 65 percent reduction in NO_X. IDEM also provided data in appendix E of its SIP submission, as noted earlier, with respect to EGUs that report to CAMPD from 2007 to 2019, the most recent year available at the time, tracking the change in emissions and chronicling the decrease in SO_2 by 93 percent from 655,139 to 47,834 tons as well as the decrease in NO_X by 72 percent from 168,916 to 47,219 tons. EPA proposes to find that Indiana has satisfied the requirements of 40 CFR 51.308(g)(4) by tracking the change in emissions of SO_2 and NO_X from all contributing

sources since the first progress report.

To address 40 CFR 51.308(g)(5), Indiana documented significant changes in anthropogenic emissions since the first implementation period plan, within and outside of the State through LADCO and the interstate consultation process, as an indicator of whether they were anticipated and whether they limited or impeded progress in improving visibility. Within the State, Indiana compared emissions from all contributing sources in the State for each year from 2007 to 2019 to identify changes in anthropogenic emissions, finding that overall emissions significantly decreased for NO_X and SO_2. As previously mentioned, these changes were anticipated and attributed to CSAPR as it replaced CAIR, MATS, and the Data Requirements Rule for the 2010 SO_2 NAAQS. With the significant decreases in anthropogenic emissions of SO_2 and NO_X across all source categories, Indiana did not find any changes in anthropogenic emissions within or outside the State that occurred from 2007 to 2019 that would limit or impede progress in reducing pollutant emissions and improving visibility. Indiana noted that further improvements in visibility are anticipated with the emission reductions to be realized from the Revised CSAPR Update along with the emission reductions occuring during the second implementation period as mentioned previously. The emissions trend data in Indiana's SIP submission support an assessment that anthropogenic haze-causing pollutant emissions in Indiana have decreased during the reporting period and that changes in

emissions have not limited or impeded progress in reducing pollutant emissions and improving visibility. EPA proposes to find that Indiana has met the requirements of 40 CFR 51.308(g)(5).

In section 28.1 of its SIP submission, Indiana committed to submit a 5-year progress report for the second implementation period to evaluate progress towards the reasonable progress goal for each mandatory Class I Federal area located within and outside the State that may be affected by emissions from within the State as required by 40 CFR 51.308(g). Indiana also committed to revising its regional haze SIP and submitting it to EPA on schedule as required by 40 CFR 51.308(f).

I. Requirements for State and Federal Land Manager Coordination

CAA section 169A(d) 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, 40 CFR 51.308(i)(2)'s FLM consultation provision requires a State to provide FLMs with an opportunity for consultation that is early enough in the State's policy analyses of its emission reduction obligation so that information and recommendations provided by the FLMs' can meaningfully inform the State's decisions on its long-term strategy. If the consultation has taken place at least 120 days before a public hearing or public comment period, the opportunity for consultation will be deemed early enough. Regardless, the opportunity for consultation must

be provided at least 60 days before a public hearing or public comment period at the State level. The requirements of 40 CFR 51.308(i)(2) also provide 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. In 40 CFR 51.308(i)(3), States, in developing their implementation plans, are required to include a description of how they addressed FLMs' comments.

In developing its SIP submission, IDEM participated with the FLMs in an early consultation process regarding source selection as well as a formal consultation process on a full draft regional haze SIP. Additionally, through LADCO, IDEM consulted directly and indirectly with the FLMs through emails, webinars, and conference calls early in the SIP planning and development process.[48] On June 16, 2020, IDEM began the early consultation process on the State's source selection process and selection of sources for four-factor analyses. On May 18, 2021, Indiana initiated a formal consultation process with the FLMs, providing a full draft of its Regional Haze SIP and offering an opportunity for consultation in person. IDEM initiated the early consultation process more than 120 days before the first public comment period on Indiana's plan and began the formal consultation process at least 60 days prior to the first public

[48] IDEM documented the FLM consultation process in Section 3.3 and appendix K and N of its SIP submission.

comment period on Indiana's plan, as required by 40 CFR 51.308(i)(2). IDEM's response to the FLMs' comments from are included as appendix U of Indiana's SIP submission as required by 40 CFR 51.308(i)(3). Section 2.2 of EPA's April 22, 2025 TSD provides more information on the FLM consultation.

On September 28, 2021, Indiana announced the opportunity for public comment and public hearing regarding the State's proposed SIP submission for the second implementation period on IDEM's website for public notices and for regional haze.[49] The public notice included the FLMs' comments in the proposed SIP submission. An in-person and virtual public hearing was held on October 28, 2021.[50] The public comment period ended November 15, 2021. Following the public comment period, Indiana submitted its SIP revision to EPA on December 29, 2021.

IDEM considered input from the FLMs and the public that were provided during the FLM consultation period and public notice period when finalizing this SIP revision.

As required by 40 CFR 51.308(i)(4), Indiana committed to continue consultation with States and FLMs on the development and review of any future plan revisions and progress reports, as well as other programs having the potential to contribute to visibility impairment in the mandatory Class I areas. Given

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[49] IDEM's website for public notices is https://www.in.gov/idem/public-notices/ and https://www.in.gov/idem/sips/regional-haze/ for regional haze.

[50] IDEM documented the verbal comments received during the public hearing in the transcript contained in appendix Z of its SIP submission. IDEM also included the written public comments along with an index in appendix Ya and Yb of its SIP submission. In addition, IDEM summarized the comments and included IDEM's responses in appendix V.

IDEM's actions recounted above and in EPA's April 22, 2025, TSD, EPA proposes to find that Indiana has satisfied the requirements of 40 CFR 51.308(i) to consult with the FLMs on its regional haze SIP for the second implementation period.

V. Proposed Action

EPA proposes to approve Indiana's December 29, 2021, SIP submission as satisfying the regional haze requirements for the second implementation period contained in 40 CFR 51.308(f).

VI. Statutory and Executive Order Reviews

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

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities 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).

List of Subjects in 40 CFR Part 52

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

Dated: June 6, 2025.

Anne Vogel,
Regional Administrator, Region 5.

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