WESTAR
Western States Air Resources Council

July 17, 2024

Michael S. Regan, Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Submitted electronically to Docket ID No. EPA-HQ-OAR-2023-0262-0001, Protection of Visibility: Amendments to Requirements for State Plans Rule

Dear Administrator Regan:

We are writing on behalf of the members of the Western States Air Resources Council (WESTAR) regarding the U.S. Environmental Protection Agency's (EPA's) nonregulatory docket for comment on potential Regional Haze rule revisions that could affect State Implementation Plans (SIPs) for the third planning period of Regional Haze. WESTAR is a regional, non-partisan, non-profit association of state air pollution control agencies in the western United States. The Western Regional Air Partnership (WRAP), which is a part of WESTAR, serves as the Regional Planning Organization (RPO) for implementing the Regional Haze Rule (RHR) in the western United States.

WESTAR/WRAP has a history of working collaboratively with states, locals, EPA, Federal land managers, Tribes, and other partners to identify opportunities to improve air quality management in western states, with Regional Haze being a key issue. Since the beginning of the Regional Haze program, WESTAR/WRAP has consistently provided suggestions to EPA for the implementation of the RHR, contributing to ongoing changes in regional haze planning. We value the opportunity to offer additional ideas for EPA's consideration. However, it is crucial for EPA to collaborate with the WESTAR/WRAP member agencies to ensure these ideas form a program that meets the needs of both states and EPA.

In EPA's outreach materials included in the RHR revisions early engagement public webinar, EPA posed topical prompts on which EPA is soliciting feedback. Topics included reasonable progress, four-factor analysis, the long-term strategy, and future SIP obligations. These topics represent foundational elements of the program. WESTAR/WRAP member agencies considered these prompts, along with work completed as part of the Western Visibility Protection Planning Initiative, to form a new approach to implementing the RHR.

Based on the questions EPA is asking in the nonregulatory docket, it seems that EPA plans to revise the RHR significantly. Given this, WESTAR recommends a delay of three years for the 3rd planning period SIP deadline. This delay would allow EPA to comprehensively review comments and ideas put forth in the docket, consult with state, local and Tribal air agencies as well as federal land management agencies, revise the regional haze regulations and guidance, and give states time to work on their plans for the 3rd round using the new rules and guidance.

The proposed approach is outlined below. While the specifics of this approach are still being developed, WESTAR/WRAP urges EPA to collaborate further with us to ensure the goal of simplifying this rule is achieved.

Regional Haze in the West

Implementing the Regional Haze program in the western United States presents unique challenges compared to other parts of the country. The following overarching considerations are important to note:

- Of the 156 national parks and wilderness areas protected under the program, 118 are in the West. These Class I areas are as diverse as their states, encompassing a wide range of landscapes, sizes, and locations.
- Western Class I areas are managed by the US Forest Service (USFS), the National Park Service (NPS), and the US Fish and Wildlife Service (USFWS). These federal agencies have distinct missions and land management plans, which influences Regional Haze planning and implementation. For example, a remote wilderness area managed by the USFS typically restricts motorized travel and many other sources of anthropogenic air emissions. In contrast, a national park could see upwards of 4 million cars annually and have visitor amenities (lodging, transportation, and infrastructure) that are a significant source of air pollution.
- Since 1990, wildfires in the western U.S. have significantly increased in both frequency and intensity. The total area affected by wildfires has also grown dramatically, along with the length of the fire season. This rise in wildfire activity heavily influences what may be considered natural conditions in western Class I areas, which has important implications for the glidepath in each Class I area.
- Many Class I areas in the West are making progress towards natural conditions in accordance with the current RHR. States, Federal Land Managers, and EPA should focus efforts on results-based solutions to those areas where visibility is not improving on schedule. Many of these areas of concern are significantly influenced by sources regulated federally, international sources, sources in the Class I area, or non-anthropogenic sources of emissions that may increase due to environmental factors. There is a significant challenge in reducing and addressing these categories of emissions that will require focus from state and federal agencies in partnership.

Given these reasons and others that WESTAR will discuss in this letter, we provide comments to EPA regarding ways the RHR can be revised to better address the concerns of the western states.

Reasonable Progress and Long-Term Strategy

Over the past 20 years, the success of air quality regulations and programs in improving visibility has been evident and deserves recognition. Tougher health-based standards have accelerated visibility improvements, perhaps beyond initial expectations when the RHR was first implemented. Many Class I areas are ahead of schedule in achieving natural conditions, while others have visibility glideslopes in the single deciview range, indicating that visibility in those areas is already quite good. Recognizing and coupling these advancements with the need to simplify the planning process, EPA should consider less burdensome planning requirements for Class I areas that are making progress.

The current rule requires agencies to include "emission reductions due to ongoing air pollution control programs" outside the Regional Haze program as part of the state's long-term strategy (LTS) for addressing visibility. However, emissions reductions from these programs are often viewed as

supplementary and secondary to establishing source control measures via a four-factor analysis as part of the RHR. These ongoing emissions reduction programs should be the primary consideration in establishing a Class I area's Reasonable Progress Goals (RPGs) and be included in the LTS. If a Class I area is making progress with these measures alone, no additional requirements should be necessary. This means that states would not need to go through a source selection process to identify sources for further evaluation. An agency's Regional Haze SIP should simply identify these measures and commit to no backsliding.

Current regulations and guidance establish the Uniform Rate of Progress (URP) to measure visibility toward Natural Conditions. Many aspects of this construct should be reexamined and simplified, such as the definition of Natural Conditions, the calculation of the Most Impaired Days (MIDs) metric, and the use of deciviews to measure visibility. There is significant uncertainty and instability in the calculation of natural conditions and MIDs due to environmental variability. The use of deciviews is overly complicated for the lay person. Despite these deficiencies, WESTAR supports maintaining a threshold for tracking progress so states can monitor the effectiveness of their LTS. If we continue to use the current form of the URP, EPA should require that Class I areas with RPGs below the URP and monitoring data showing improvement on the MIDs submit a plan somewhat similar to a NAAQS maintenance plan for the planning period. This plan would describe how visibility will be maintained, considering projected growth, over the planning period. A state's LTS would identify all federally enforceable pollution control programs relied on for progress. The URP should be a bright line of safe harbor. If the monitoring data shows that all Class I areas in the state are on or below the URP glidepath, the SIP does not require revision.

For large western states with multiple Class I areas, some Class I areas may be making progress while others are not. Therefore, a state SIP may require a different level of analysis for Class I areas not making progress. For Class I areas that are not making progress (e.g., projected to be above the URP), more analysis is required to understand why the area is projected to be above the glidepath, including a closer look at what sources impact the Class I area. Based on the analysis, the state may revise the state SIP to add control measures that are projected to improve visibility in the Class I area.

Selecting sources near Class I areas that are not making progress

A Weighted Emissions Potential/Area of Influence (WEP/AOI) analysis could be used to rank sources based on their influence on a Class I area not making sufficient progress. Sources on the rank point list that have already been evaluated for Regional Haze controls or that have installed controls for compliance with health-based standards (RACM, RACT, BACM, BACT, or LAER) may be considered well-controlled for the purposes of the RHR each planning period. States would need to document these sources to show that they are well controlled in accordance with the relevant NAAQS or other programs. In the case of sources that are not reasonably controlled, a four-factor analysis would be appropriate.

It is important to recognize that some sources, although they may affect Class I areas, cannot be further controlled. However, not selecting a source for four-factor analysis in a specific planning period does not mean its current control measures are unnecessary for making reasonable progress. These non-regional haze control measures should be identified in the LTS. However, specific permit conditions should not be included in state RHR SIPs as part of the LTS. Doing so complicates the process of revising permit

conditions as it also requires a SIP revision, thus increasing the state's efforts in revising the SIP and EPA's review and decision-making burden.

Sources within the AOI that are not already well-controlled should be the focus for looking at potential control measures via a four-factor analysis. If the sources in the AOI are not well-controlled but are outside the jurisdiction of the state, such as mobile sources, sources on Tribal land, or sources within another state, then the state would not be required to conduct any additional control measure analysis. The state would consult with the neighboring Tribe or state in the instance of sources under non-EPA control. In the case of sources under EPA jurisdiction, the state would document this in the SIP.

States may also evaluate smaller sources that, in aggregate, contribute to visibility impairment (typically referred to as area sources). These sources may include oil and gas sector sources, fugitive dust from agricultural activities, mining, and unpaved roads. EPA should clarify in rule how states should evaluate reasonable progress for area sources using the statutory four-factor analysis.

Evaluating source controls

WESTAR recommends that EPA not establish a minimum cost threshold for evaluating controls using the four-factor analysis. There are two reasons why a national cost threshold would be counterproductive. First, when sources know the cost threshold before they conduct a four-factor analysis, they may inflate the cost of controls to exceed the threshold. States that set cost thresholds in the first and second implementation periods saw this happen firsthand. Second, the other three factors should have some weight in determining whether a control is cost-effective. A control that costs $5,000/ton may be considered reasonable under one scenario but not in another due to the limitations of the other factors.

EPA has amassed many policy and regulatory memos and guidance that assist states in selecting RACT/RACM and BACT/BACM controls. For example, EPA issues Control Technique Guidelines and Alternative Control Technique documents to assist air agencies in determining VOC RACT and their respective cost-effectiveness. EPA could assist states, local, and Tribal air agencies (SLTs) by providing something similar for identifying reasonable progress controls, especially for area source emissions. Evaluating cost-effective controls for reasonable progress should align with other CAA programs (again, RACT/RACM and/or BACT/BACM). These programs do not have defined cost thresholds and involve balancing additional considerations. Though the thresholds may be less stringent for a visibility standard versus a health-based standard.

EPA could require states to perform their initial cost analysis using consistent parameters such as standardized discount rates, control life, retrofit factor, etc. If a source can document why a higher discount rate, shorter control life, or higher retrofit factor is appropriate for their facility, the state could calculate a second $/ton value using the unique circumstances. In Round 2, EPA recommended using the Cost Control Manual; however, this manual needs to be updated. Having explicit parameters in the rule helps states identify cost-effective controls and still retain their ability to set a cost-effective threshold they deem reasonable.

Lastly, any future rule revision should acknowledge that while a four-factor analysis for reasonable progress sources is mandated by statute, it does not necessarily require implementing the most advanced and effective control technologies nor does it require additional four-factor analyses on sources that are already well controlled.

The role of the URP and Natural Conditions

While simplifying the RHR in the way we propose relies on using the glidepath as a bright line test with Natural Conditions as the goal, it is important to recognize the limitations of the glidepath and Natural Conditions. The URP line is derived by connecting a starting point of measured visibility conditions to a calculated endpoint of natural conditions. Two issues make the URP difficult to use in the Regional Haze program. First, the Natural Conditions endpoint is considered absolute when it represents a calculation of a potential point in time. The calculation did not adequately anticipate changes to the natural environment and increases in wildland fire and is not likely to represent a realistic goal in all Class I areas. In the case of Hawaii, the Natural Conditions endpoint is set too low for Class I areas that have always experienced volcanic activity. The Natural Conditions calculation method should be updated. The second issue with the URP is the confusion it causes because of how it is treated in the RHR. While EPA has stated that the URP is not a bright line and does not represent safe harbor for those Class I areas where visibility falls below the line, the current rule muddies the issue. On the one hand, the rule dictates that reasonable progress be determined based on the four statutory factors. On the other hand, the rule states that "If a State in which a mandatory Class I Federal area is located establishes a reasonable progress goal for the most impaired days that provides for a slower rate of improvement in visibility than the uniform rate of progress calculated under paragraph (f)(1)(vi) of this section, the State must demonstrate, based on the analysis required by paragraph (f)(2)(i) of this section, that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the State that may reasonably be anticipated to contribute to visibility impairment in the Class I area that would be reasonable to include in the long-term strategy." In this case, the URP is clearly a bright line test.

Within these recommendations, the glidepath or URP would be used to determine what planning requirements a state would need to meet for each Class I area for the current planning period. This would necessitate a thorough, collaborative evaluation of the glidepath and the Natural Conditions endpoint that dictates its slope at the beginning of each planning period. EPA, states, and FLMs should work together to account for these changes to Natural Conditions. An adjustment to Natural Conditions should be reevaluated to account for prescribed fire and international transport accurately. States could opt to use this adjustment based on their individual situation.

In addition to periodic evaluation and revision of Natural Conditions, we propose that the unit used to measure visibility be revised to make it more understandable to the public and elected officials. Deciviews are not an intuitive metric to communicate visibility because the measurement decreases to show an increase in visual range and does so on a log scale. Converting the goal to visual range would make public communication easier. If visual range is not an option, then using light extinction would be reasonable.

Monitoring and modeling recommendations

Determining the planning requirements for each Class I area would require a comprehensive evaluation of the Class I area's monitoring data to show that the Class I area is on track to achieve natural conditions. In the second implementation period, EPA revised the method used to track visibility progress to remove the influence of wildfires and dust storms and focus on the anthropogenic portion of visibility impairment. The method identified the 20% Most Impaired Days (MID), so states could track visibility progress on the days with the highest anthropogenic impairment. However, in the West, the metric did not perform well

as there were still MIDs impacted by natural events, specifically wildfire, because smoke can be transported over long distances and from many different wildfires. EPA should reevaluate the visibility metric to ensure the monitoring data accurately reflects the days most affected by anthropogenic sources. This is especially important since states rely on monitoring data to track progress toward improving visibility in Class I areas.

Although not required by rule, States have typically relied on photochemical grid modeling (PGM) to project visibility improvement and establish RPGs. Modeling is used to project the Class I area's visibility at the end of the planning period, considering the suite of current and on-the-way, on-the-books regulations and control measures. Although modeling is commonly used to project future visibility progress, it has significant drawbacks. It is expensive, model performance is an issue, and, in the case of Alaska and Hawaii, it is either unavailable or highly inaccurate. In Alaska, much of the data needed for modeling isn't available, which has been a barrier to Alaska's use of modeling. In Hawaii, SO_2 emissions from volcanic activity distort monitoring and modeling, making it difficult to accurately reflect anthropogenic emissions. Adjustments to the model to account for volcanic emissions are insufficient to filter out their impact, and the visibility metric used to remove natural episodic events does not work for volcanic emissions. Consequently, Hawaii's glidepath analysis does not effectively establish planning goals. Therefore, Hawaii should be exempted from basing planning requirements on the glidepath, and instead should rely solely on four-factor analyses for its Regional Haze plan.

WESTAR recommends that EPA consult with the states to explore the potential use of other technical tools/analyses for establishing RPGs. Alternatively, the requirement to establish the RPGs in deciviews should be removed from the rule. If no suitable alternatives are found, WESTAR recommends that EPA conduct PGM modeling for the entire country, including Alaska and Hawaii, and include source apportionment modeling for each state's sources.

Summary

WESTAR recommends that within the RHR, EPA allow states that are making reasonable progress to improve visibility in Class I areas to not submit revisions to the LTS or to suspend certain requirements when visibility measure goals are met. This would be similar to language that is found in the ozone SIP requirements. Reasonable progress would be determined by comparing current monitoring data with the glidepath. The state would document all planned on-the-books emissions reductions from state and federally controlled sources to demonstrate that there will be no backsliding during the current planning period. For states that opt to use modeling for part of their planning process, Class I areas that are making reasonable progress due to future on-the-books controls, would not be required to complete additional source selection or four factor analyses.

States which have Class I areas that are not making reasonable progress based on current monitoring compared to the glidepath would need to perform further analysis and planning for those areas. While the additional planning would include four-factor analyses for sources that are impacting visibility in the Class I area, states should not be required to select and reevaluate a source for controls if that source is already well controlled due to compliance with previous Regional Haze planning or NAAQS standards, or other state/federal requirements.

WESTAR recommends that, in both cases above, the RHR should require a state's long-term strategy to rely first on controls for health-based standards or other programs already on-the-books. Additional

progress beyond already planned emissions reductions towards the visibility goal could then be evaluated using the four statutory factors.

Lastly, WESTAR recommends that using the Uniform Rate of Progress as a bright line for determining the level of planning required for each state should necessitate a periodic reevaluation of Natural Conditions to account for environmental changes and other factors. The Natural Conditions goal should account for all nonanthropogenic emissions, including those from wildfire and biogenic sources that contribute to visibility impairment. It is also important for some states to retain the option to adjust Natural Conditions based on emissions from international sources and prescribed fires.

Thank you for considering our recommendations for revising the RHR. We look forward to continued collaboration so that the revisions make the rule more durable, more effective, and less burdensome for states, EPA, and FLMs. If you have questions or need further information, please contact WESTAR's executive director, Mary Uhl (maryuhl@westar.org).

Sincerely,

Kathy Taylor, President