ADEQ

A R K A N S A S
Department of Environmental Quality

August 22, 2016

Administrator Gina McCarthy
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Comments on the Draft Guidance on Progress Tracking Metrics, Long-Term Strategies, Reasonable Progress Goals and Other requirements for Regional Haze State Implementation Plans for the Second Implementation Period

Administrator McCarthy:

The Arkansas Department of Environmental Quality (ADEQ) Office of Air Quality appreciates the opportunity to provide comments regarding the "Draft Guidance on Progress Tracking Metrics, Long-Term Strategies, Reasonable Progress Goals and Other requirements for Regional Haze State Implementation Plans for the Second Implementation Period" (Proposed Guidance), which was released on June 30, 2016. These substantive comments are provided in addition to the comments filed by ADEQ regarding the "Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule."

Sincerely,

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Arkansas Department of Environmental Quality

cc: Mark Hansen, EPA Region 6
Becky Keogh, ADEQ Director

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I. Introduction

In 1977, Congress amended the Clean Air Act (CAA) to include the national goal of preventing any future and remedying any existing impairment of visibility at mandatory Class I Federal areas ("Class I areas"). Nationally, there are 156 Class I areas. There are two Class I areas in Arkansas: the Upper Buffalo Wilderness and the Caney Creek Wilderness areas.

In 1980, EPA promulgated regulations to address visibility impairment in Class I areas, including, but not limited to, impairment that is "reasonably attributable" to a single source or small group of sources. Visibility Protection for Class I Areas, 45 Fed. Reg. 80,084 (Dec. 2, 1980). This program, which is entitled "reasonably attributable visibility impairment" or simply "RAVI," did not wholly address the Congressional mandate to address visibility problems caused by pollutants that "emanate from a variety of sources." Regional Haze Regulations, 64 Fed. Reg. 35,714 (July 1, 1999). As a result of the limited scope covered by RAVI, EPA promulgated the "Regional Haze Regulations; Final Rule" (Regional Haze Rule) "to revise the existing visibility regulations in order to integrate provisions addressing regional haze impairment" and establish a "comprehensive visibility protection program for Class I areas." *Id.* The goal of the Regional Haze Rule was to eliminate man-made visibility impairment in Class I areas by 2064. *Id.* at 35,732.

EPA is currently proposing significant revisions to the 1999 Regional Haze Rule and the RAVI programs that purport to clarify certain misunderstandings during the first planning period. To accompany the revisions in the Proposed Rule, EPA proposed "Draft Guidance on Progress Tracking Metrics, Long-Term Strategies, Reasonable Progress Goals and Other requirements for Regional Haze State Implementation Plans for the Second Implementation

Period" ("Proposed Guidance"). ADEQ submits the following comments on the Proposed Guidance.

II. EPA should consider promulgating supplementary guidance prior to the beginning of the second planning period to take into account new information acquired and court decisions entered into during the intervening period between the finalization of the Proposed Guidance and the second planning period.

While ADEQ appreciates early and detailed guidance for the second planning period and beyond, much of the Proposed Guidance is based on a novel interpretation of regulations that have not yet been finalized or subject to legal scrutiny. In addition, there is a significant period of time between the proposal of this guidance and the proposed due date in 2021 for SIPs for the second planning period. The intervening period will provide a substantial amount of time for new data to accumulate and legal issues to develop in the implementation of these untested methods.

ADEQ suggests that these inevitable uncertainties should be addressed by planning ahead to release revised guidance closer to the beginning of the second planning period to take into account the substantial amount of knowledge that states will gain as they attempt to implement these guidelines. In addition, EPA can use this opportunity to revise its guidance to be consistent with future court decisions that may affect the underlying regulations upon which the Proposed Guidance is based.

III. The CAA requires an independent analysis using the reasonable progress factors to determine the amount of progress that is considered reasonable in a given planning period.

The Proposed Guidance is inconsistent with the requirements of 42 U.S.C.A. § 7491, which sets forth the statutory requirements for the Regional Haze program. Specifically, 42 U.S.C.A. § 7491(g) includes certain factors ("reasonable progress factors") that must be taken into account when determining reasonable progress. EPA's omission of an independent determination of how much progress is considered reasonable based on reasonable progress factors is inconsistent with that statute.

The CAA sets forth a specific limitation on the stringency of specific measures in the regional haze program: the amount of progress that is considered reasonable. 42 U.S.C.A. § 7491(b)(2) only requires specific measures in a SIP that are *"necessary to make reasonable progress* toward meeting the national goal." (emphasis added). 42 U.S.C.A. § 7491(b)(2)(B) also requires a long-term strategy (LTS) "for making reasonable progress toward meeting the national goal." the statute is clear that the amount of progress that is considered "reasonable" determines what measures may be included in a long-term strategy.

42 U.S.C.A. § 7491(g)(1) then defines reasonable progress in the following manner: "in determining reasonable progress, there shall be taken into consideration the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements[.]" 42 U.S.C.A. § 7491. Based on a plain reading of the statute, the amount of progress that is reasonable must be determined using the four reasonable progress factors in 42 U.S.C.A. § 7491(g)(1) first so that it is clear what controls are "necessary to make reasonable progress toward meeting the national goal." *Id.*

In order to be comply with federal law, EPA cannot require "emission limits, schedules of compliance, and other measures," unless those controls are "necessary to make reasonable progress." The steps outlined in the Proposed Guidance are inconsistent with a plain reading of the statute because they require stringent controls in a LTS *prior* to determining the amount of progress that is reasonable, and therefore what controls are necessary to achieve this amount of progress. Instead, EPA incorporates the reasonable progress factors directly into the LTS analysis. Under the Proposed Guidance, the reasonable progress goals for future planning periods are simply set based on the expected outcome of the controls in the LTS.

42 U.S.C.A. § 7491 is clear that the only measures required are those that are necessary to achieve reasonable progress. By eliminating the step in which EPA determines what amount of progress is "reasonable," EPA effectively ignores the only statutory constraint on the stringency of controls required. The Proposed Guidance must be consistent with the statute that enables EPA to promulgate its Regional Haze regulations. As a result of this requirement, EPA must revise the Proposed Guidance to allow the amount of reasonable progress to be directly determined by the factors in 42 U.S.C.A. § 7491 in an analysis independent of the LTS. Specifically, EPA must revise the Proposed Guidance to explicitly consider an analysis of (1) what amount of progress is "reasonable progress" and (2) what measures are necessary to achieve that amount of progress.

IV. EPA's reliance on the approach taken in the Texas-Oklahoma FIP is misplaced given the uncertain legal validity of the methods used by EPA in that FIP.

The approach outlined in the Proposed Guidance relies heavily on the EPA's action in the "Approval and Promulgation of Implementation Plans; Texas and Oklahoma; Regional Haze State Implementation Plans; Interstate Visibility Transport State Implementation Plan to Address

Pollution Affecting Visibility and Regional Haze; Federal Implementation Plan for Regional Haze, 81 FR 296-01, ("Texas-Oklahoma FIP"), which was recently subject to an adverse decision that has cast doubt upon the validity of the approach EPA took in the action on that FIP. *Texas v. United States Envtl. Prot. Agency*, No. 16-60118, 2016 WL 3878180, at *1 (5th Cir. July 15, 2016). It is inappropriate that such a decision be cited as an example of the Proposed Guidance's approach given the Fifth Circuit Court of Appeal's stay of the Texas-Oklahoma FIP.

Specifically, the Proposed Guidance references EPA's actions on the Texas-Oklahoma FIP as an example of the "analytical rigor that we believe is required under this approach and the resources needed to complete it."[1] However, the Fifth Circuit Court of Appeals has cast substantial doubt upon the methodology outlined in that FIP by staying its effect pending the outcome of litigation. The Fifth Circuit held that the parties challenging the Texas-Oklahoma FIP had a likelihood of success on the merits of showing EPA acted arbitrarily and capriciously in requiring a source-specific reasonable progress determination. As result of this decision, EPA's reliance on the methodologies in the Fifth Circuit is misplaced. While the Proposed Guidance assumes finalization of the recent proposed changes to the Regional Haze Rule, EPA should not finalize the guidance in a manner inconsistent with a court decision by the Fifth Circuit Court of Appeals. ADEQ requests that EPA remove its references to the Texas-Oklahoma FIP and reconsider its reliance upon the methods exemplified by that FIP.

V. The definition of the smoke management program in the Proposed Guidance is inconsistent with EPA's current guidance on smoke management and exceptional events.

The Proposed Guidance defines "[s]moke management program" (SMP) as "[a] framework to minimize the impact of smoke from prescribed agricultural and/or wildland

[1] Proposed Guidance at p.16.

management burning operations that includes enforceable restrictions on prescribed fire", and describes six features of a "smoke management program" including, among others, "authorization to burn" and "surveillance and enforcement".[2] Within this definition, "authorization to burn means that a government authority restricts where, when and/or by whom a prescribed fire may be conducted."

This definition of a SMP is restrictive and unprecedented in that the current EPA guidance on smoke management and exceptional events evaluations allows such programs to be voluntary and contemplates that the use of best smoke management practices (a less restrictive approach to minimizing the potential impacts of prescribed burns) may be considered as an alternative to a compulsory SMP that restricts prescribed fires. The Proposed Guidance includes the very first definition of a SMP. However, the Proposed Rule does not contain a definition of a SMP. This is inappropriate because the Proposed Guidance is not subject to any form of legal review and is not enforceable. Any such definition of SMP should be in a properly proposed rulemaking subject to legal review.

VI. The Proposed Guidance should be revised to explicitly allow use of the methodology outlined in the 2007 Reasonable Progress Guidance for the second planning period and beyond.

Given the inconsistency of the Proposed Guidance with the Regional Haze program's enabling statute and the uncertainty surrounding the legal validity of the approach, EPA should revise the Proposed Guidance to allow states to rely on its "Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program" ("2007 Guidance") for the second planning period and beyond as an alternative to the Proposed Guidance. The Proposed Guidance presently

[2] Proposed Guidance at p. ix.

revokes the 2007 Guidance. However, ADEQ requests that the 2007 Guidance continue to remain applicable as an alternative to the Proposed Guidance.

Inclusion of this alternative approach would have multiple benefits. First, the states are already familiar with the methodology in the 2007 Guidance through SIP development activities during the first planning period. Second, the methodology has been subject to extensive legal scrutiny, and it is consistent with 42 U.S.C.A. § 7491. Third, this methodology allows states greater flexibility in achieving the goals of the Regional Haze Program. Fourth, states will have more certainty regarding the necessary level of stringency for controls required. Fifth, this approach would also provide greater consistency in measuring progress among the different planning periods.

VII. ADEQ challenges EPA's reinterpretation of the role of the relationship among the RPG, the uniform rate of progress (URP), and the LTS and the resulting abundance of redundant metrics.

On page 18 of the Proposed Guidance, EPA elaborates on the new relationship among the LTS, the RPGs, and the URP. More specifically, EPA clarifies that in future planning periods the RPGs will be viewed as "unenforceable analytical tools used to draw comparisons to the URP and to allow for comparisons to actual visibility conditions in progress reports and future SIP revisions." In addition, EPA has similarly rendered the URP irrelevant in setting controls, which becomes especially true for states that fall below the URP, by stating the following: "States are not required to set RPGs that meet or exceed the URP, nor does meeting or exceeding the URP create a safe harbor that exempts states from the requirements of the Regional Haze Rule."[3] In addition, the stated goal of the 1999 Regional Haze Rule no longer has a function beyond use as

[3] Proposed Guidance at p.18.

a metric. Similar to the Proposed Rule, the Proposed Guidance explains that "[a]ttaining natural visibility conditions by the end of 2064 is not an enforceable requirement of the regional haze program."[4] States are required to consider these metrics (1) in five year progress reports; (2) SIP revisions every ten years; and (3) as part of an FLM's certification of RAVI, which could occur multiple times in a given planning period.

The sole additional obligation incurred as a result of falling above the URP, is an added analytical requirement that "the state must demonstrate that there are no additional reduction measures that would be reasonable to include in the URP."[5] Given the significant stringency of the screening process and emissions controls required under the Proposed Guidance, the added analytical requirement may not be necessary to achieve the goals of the program.

As a result of the increasing number of elements of the regional haze program that are being relegated to ineffectual metrics, ADEQ questions whether to require such rigorous and frequent analysis is necessary even though it may not have any tangible effect on the actual measures selected by a state or approve by EPA. While ADEQ is cognizant that many of these elements are required by the Proposed Rule, ADEQ requests that EPA look for methods of reducing the resource-intensive nature of analytical requirements that exist merely for reference to streamline the process outlined in the Proposed Guidance.

VIII. The methodology outlined in the Proposed Guidance will result in more stringent controls than are necessary to achieve reasonable progress in a given planning period.

In the Proposed Guidance, EPA describes a process for the selection of specific measures to accomplish the goal of the regional haze program. Although the guidance does not establish bright-line tests for any of the steps, it does make repeated "recommendations" or "examples"

[4] Proposed Guidance at p.7.
[5] Proposed Guidance at p.18.

for states to consider without elaborating on when deviations will be considered acceptable. Although not overtly binding, there are no assurances given to states that deviation from these examples and recommendations will be considered approvable by EPA. As a whole, the process established in the Proposed Guidance will inevitably lead to more stringent controls than necessary for reasonable progress in the first period and require significantly more and earlier progress in future planning periods. ADEQ offers the following specific comments on the sections outlined in the Proposed Guidance in the order in which they are presented.

IX. The Proposed Guidance may not adequately distinguish between carbon associated with anthropogenic prescribed burns and natural wildfires.

Chapter 5 of the Proposed Guidance details a procedure for determining both "most impaired days" and "least impaired days" (now referred to as "clearest days") through evaluation and analysis of Interagency Monitoring of Protected Visual Environments ("IMPROVE") monitoring data. It appears that this procedure has the potential to mask the contribution of anthropogenic emissions associated with prescribed burning and agricultural burning by assuming that all "Total Carbon" is associated with fire.[6] This metric does not distinguish between contributions to "Total Carbon" by wildfire; prescribed burns, agricultural burns, etc. If "Black Carbon" (associated primarily with diesel combustion), is also a fraction of "Total Carbon" then emissions from mobile and stationary source diesel engines would also be misattributed to "fire impact". The Proposed Guidance seems to acknowledge this issue of misattribution but states without providing evidence that "[w]e believe these overestimates, if present, are not frequent or severe enough to make the recommended approach problematic for

[6] Proposed Guidance at P. 33, Fn. 38

SIP development."[7] This assertion is unfounded and problematic in that the misattribution of anthropogenic emissions to the natural emissions fraction of "Total Carbon" is essentially ignored.

In addition, the approach in the Proposed Guidance has the effect of decreasing the slope of the URP through the calculation of anthropogenic visibility impairment. Specifically, the method for determining anthropogenic visibility impairment is calculated by subtracting natural impairment from total impairment. This calculation results in a lower value for anthropogenic visibility impairment than would have occurred in the analogous metric during the first planning period. As a result, each individual source's deciview impact will constitute a greater percentage of the anthropogenic impairment than would have been the case in the first planning period. This has the effect of expanding the universe of possible sources impacted by regional haze regulations by increasing the likelihood that they will exceed the screening threshold for visibility impacts.

X. The screening approach set forth in the Proposed Guidance is designed to ensure the largest possible pool of sources are analyzed, and EPA should allow states greater flexibility in screening sources.

EPA sets forth a number of recommend thresholds in the screening process, which are designed to ensure the largest possible number of sources are analyzed without regard to whether visibility improvement is needed for any amount of progress. In the process for screening sources, EPA explains that "states could consider all Class I areas for which the state contributes at least one percent to anthropogenic light extinction from all U.S. sources on any day within the 20 percent most impaired days." (emphasis added) One percent is a minimal contribution that

[7] Proposed Guidance at p. 38, Fn. 4.

ensures that a very large pool of sources will make it through the screening process to the source and emission control measures analysis.

Similarly, EPA recommends that screening threshold that would account for 80% of the aggregate anthropogenic light extinction impacts. A threshold that does not account for this percentage of impacts would be required to be "reassessed for reasonableness." This effectively creates a requirement for states ensure that they implement, or least evaluate controls, on sources that account for 80% of total visibility impacts in a single planning period regardless of whether addressing that amount of sources would result in reasonable progress. These screening methods are likely to result in substantially more controls than would otherwise be necessary to achieve more progress than is required by the URP. Rather than warning that deviations must be "reassessed for reasonableness," EPA should afford states greater flexibility in determining how to screen sources subject only to the requirement that the ultimate measures in the long-term strategy measures produce a reasonable amount of progress.

XI. EPA should allow states to take into account grid reliability considerations during both the screening and long-term strategy steps of the analysis when analyzing energy impacts.

In both the screening step and the long-term strategy four factor analysis step, EPA addresses how the energy impacts factor should be considered. During the screening step, EPA states that energy impacts should be taken into consideration through the cost of compliance factor rather than through an independent analysis. ADEQ disagrees and requests that states be explicitly permitted to include energy reliability under the energy impacts analysis at the screening stage. Cost impacts do not adequately address the potential impacts to a state's grid reliability. Coal-fired electric generating units (EGUs), which will be heavily scrutinized during the second planning period, are the primary source of many states' baseload generating capacity.

As such, states should be permitted to analyze the effect of controlling sources with such a critical effect on grid reliability.

XII. EPA should acknowledge that controls must go into effect during a particular planning period when taking into account the time necessary for compliance.

EPA should revise the Proposed Guidance to allow states to screen out controls that go into effect after the period of time covered by the planning period. In *Texas v. United States Envtl. Prot. Agency*, the Fifth Circuit held that "[p]etitioners also have a strong likelihood of success in establishing that EPA exceeded its statutory authority by imposing emissions controls that go into effect years after the period of time covered by the current round of implementation plans." No. 16-60118, 2016 WL 3878180, at *15 (5th Cir. July 15, 2016). While the Fifth Circuit has not yet ruled on the merits, such a common sense and plain reading of the statute should be acknowledged explicitly in the Proposed Guidance.

XIII. EPA should allow states to use a cost/deciview metric in determining the cost of compliance.

EPA should allow states to use a cost/deciview metric in place of a cost/ton metric. Such an approach is appropriate because the cost of compliance is a factor required to be considered "in determining reasonable progress." 42 U.S.C.A. § 7491(g). The "progress" referenced in the statute is the improvement in visibility in Class I areas as measured in deciviews. A cost/ton metric does not address the amount progress in terms of visibility. Instead, it simply measures the amount of the underlying pollutant that may contribute to visibility impairment. Not every molecule emitted from a source will contributed to visibility impairment and, as a result, a cost/deciview metric more directly and precisely measures reasonable progress.

XIV. Conclusion

The Proposed Guidance sets forth a detailed and explanation of the EPA's intended implementation of the Proposed Rule. However, EPA should revise the guidance prior to the initiation of the second planning period to ensure legal consistency with future court decisions and other developments in the implementation of the Proposed Guidance. In addition, EPA should revise the Proposed Guidance so that it will be consistent with the Fifth Circuit's recent decision in *Texas v. EPA* and enabling statute. Furthermore, EPA should explicitly allow states to rely upon the 2007 Guidance as an alternative to the Proposed Guidance. The Proposed Guidance effectively requires stringent controls on the largest possible groups of sources without regard for the progress being made based on the numerous metrics required by the Regional Haze Program.