UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Ref: 8P-AR

Nancy Vehr, Director
Air Quality Division
Wyoming Department of Environmental Quality
200 West 17th Street
Cheyenne, Wyoming 82002

RE: EPA Region 8 Comments on Wyoming's 2015 Ozone NAAQS Infrastructure State Implementation Plan (I-SIP)

Dear Ms. Vehr:

Thank you for the opportunity to provide comments on the state of Wyoming's draft 2015 Ozone Infrastructure State Implementation Plan (SIP) submission, for which there is a public hearing scheduled for November 1, 2018. Our enclosed comments are preliminary. We will reach a final conclusion on the 2015 Ozone Infrastructure SIP after the state provides a formal submittal and we conduct our own notice and comment rulemaking.

We acknowledge all the hard work the Air Quality Division has undertaken to develop the draft Infrastructure SIP. We also want to provide any assistance needed and look forward to working with you to resolve any outstanding matters. If you have any questions, please contact me at 303-312-6936, or your staff may contact Adam Clark, of my staff, at 303-312-7104.

Sincerely,

11/1/2018

X Monica Mathews-Morales

Signed by: MONICA MATHEWS-MORALES
Monica Mathews-Morales
Director, Air Program
Office of Partnerships and Regulatory Assistance

Enclosure

ENCLOSURE

Comments related to the Wyoming Infrastructure SIP

(1) On page 5, EPA recommends the state update the paragraph for "Chapter 2, Section 6, Ambient Standards for Ozone." EPA published a final rulemaking on September 20, 2018 (83 FR 47564), and we recommend the state add this citation update on line (b) where the language currently states "EPA pending approval."

(2) On page 6, EPA recommends the state update the paragraph for "Chapter 6, Section 4, Prevention of Significant Deterioration," line (a) to read "The most recent state regulatory SIP documents submitted to EPA March 27, 2017." EPA also recommends the state insert "EPA final Federal Register September 20, 2018; 83 FR 47564" on the following line. EPA recommends the state add these same updates on pages 15 and 16 for Prevention of Significant Deterioration (PSD) under elements (J) and (K).

Comments related to Attachment B, Interstate Transport

(1) We recommend the state revise the title of Attachment B from "Interstate Transport To Satisfy The Requirements Of Clean Air Act 110(a)(2)(D)(i)(I) For The 8-hour Ozone NAAQS Promulgated In March 2008" to "Interstate Transport To Satisfy The Requirements Of Clean Air Act 110(a)(2)(D)(i)(I) For The 8-hour Ozone NAAQS Promulgated In October 2015."

(2) On pages 3-4 of Attachment B to Wyoming's draft SIP, the draft SIP indicates that it has identified Denver as the only nonattainment area potentially affected by emissions from Wyoming, and further states that it has identified no maintenance receptors downwind of Wyoming at risk of exceeding the 2015 ozone NAAQS. Moreover, footnote 12 suggests that Wyoming has identified maintenance receptors only as those areas that have previously been designated nonattainment that were later redesignated to attainment. It appears that Wyoming has therefore identified downwind nonattainment and maintenance receptors on the basis of formal area designations. However, an area may experience a problem attaining and maintaining the NAAQS regardless of area designation, e.g., an area might experience a nonattainment or maintenance problem even if it is designated attainment. Furthermore, the D.C. Circuit held, in *North Carolina v. EPA*, that the reference to "maintenance" in section 110(a)(2)(D)(i)(I) applies to any area that may find itself "struggling to meet the NAAQS" despite current attainment. 531 F.3d at 910-911 (rejecting the reading of the statute that "a state can never 'interfere with maintenance' unless EPA determines that at one point it 'contribute[d] significantly to nonattainment'"). The EPA also notes that on page 6 of Attachment B, Wyoming cites the downwind receptors identified in the EPA's modeling analysis, but it is unclear whether the draft SIP is relying on these for its step 1 analysis. We recommend that Wyoming focus its step 1 analysis on the receptors identified in the EPA's modeling, rather than only those areas formally designated nonattainment or maintenance.

(3) On page 4 of Attachment B to Wyoming's draft SIP, the draft SIP states that "Colorado continues to evaluate local methods of control and further analysis of in-state controls is

necessary before requiring controls on sources outside of the state." The EPA notes that, under the timing provided in the Clean Air Act, transport SIPs from upwind states are due before attainment SIPs are due in downwind states. Therefore, the EPA recommends that Wyoming strike this sentence. To the extent Wyoming has identified on-the-way measures in Colorado that it believes will improve air quality at the relevant receptors by 2023, and that were not accounted for in the EPA's modeling, the state could further explain whether, and why, it believes those reductions would resolve the downwind air quality problems.

(4) On page 5 of Attachment B to Wyoming's draft SIP, in the first paragraph in section B, the draft SIP points to the EPA's October 27, 2017 transport memo as the source for contribution modeling outputs for 2023. However, the reference should be the EPA's March 27, 2018 memo. Wyoming may simply want to delete this paragraph since the reference to the March memo is given in the following paragraph. The EPA suggests the following edits to the first two paragraphs in section B:

> ~~On October 27, 2017, the EPA issued a memo and provided supplemental information to states for developing, supplementing, or resubmitting interstate transport I SIPs for the 2008 8-hour ozone NAAQS.16 The supplemental information included contribution modeling outputs for monitors in the United States for the analytic year of 2023. The EPA conducted nationwide photochemical modeling for 2023 to identify any potential nonattainment or maintenance receptors for the 2008 ozone NAAQS.~~
>
> The EPA ~~then~~ issued a Notice of Data Availability (NODA) on January 6, 2017, for the 2015 ozone NAAQS,~~ again~~ to help states develop "good neighbor" state implementation plans~~, this time~~ for the 2015 ozone air quality standards. The transport assessment for the 2015 ozone NAAQS again used 2011 as the base year for emissions and modeled for future year base-case emissions for 2023. In the modeling for the 2015 ozone NAAQS, the EPA revised the 2011 emission inventories to include updates to mobile source and electric generating unit (EGU) emissions, the inclusion of fire emissions in Canada and Mexico, and updated estimates of anthropogenic emissions for Mexico. The transport assessment in the NODA gave the design values and contributions for all states, including states in the West. On March 27, 2018, the EPA provided a memorandum to states that updated the January 2017 contribution modeling. Following step 1 of the CSAPR four-step interstate transport framework, the March 27 update identified potential nonattainment and maintenance receptors for the 2015 NAAQS by following the approach for previous NAAQS.

(5) On pages 6-7 in Attachment B to Wyoming's draft SIP, the draft SIP states that contributions from Wyoming to the Colorado receptors are not significant when considering the total emission contributions from all upwind states and the contributions from within the state of Colorado. Specifically, the draft SIP references EPA's approval of Arizona's transport SIP for the 2008 ozone NAAQS, which concluded "that a 4.4% and 2.5% cumulative ozone contribution from all upwind states is negligible, particularly when compared to the relatively large contributions from upwind states in the East or in certain other areas of the West." According to EPA's contributions analyses for the 2015 ozone NAAQS, total emissions

contributions from all upwind states to the 5 receptors located in Colorado identified in the Wyoming submission range from 8.4% to 9.8%, which are above the levels approved for Arizona's SIP. In addition, the cumulative ozone contribution for Arizona was calculated as a percentage of the projected average design value at each downwind receptor (in California to which Arizona was linked). If Wyoming elects to follow the Arizona example, the EPA recommends that Wyoming calculate cumulative ozone contributions to the Colorado receptors in a manner consistent with the approach used for Arizona. EPA also recommends that Wyoming provide further explanation as to why Wyoming's impacts are "negligible" or how EPA should consider these impacts within a weight of evidence analysis.

(6) On pages 6-7 of Attachment B to Wyoming's draft SIP, the draft SIP explains that the 2023 maximum design value for the Douglas County receptor is projected to have a maximum design value of 71.3 ppb in the EPA's modeling. However, the table provided earlier on page 6 reflecting the design values from the EPA's modeling indicates this receptor will have a maximum design value of 73.2 ppb. The EPA notes that the 73.2 ppb value accurately reflects the maximum design value in the EPA's modeling, and recommends the state revise the text to match the table.

(7) On pages 7-8 of Attachment B to Wyoming's draft SIP, the state discusses the potential use of the Significant Impact Level (SIL) of 1 ppb, as used in the PSD program, as an alternative to the 1% threshold traditionally used in "step 2" of interstate transport analyses. We note that SILs are used as a screening tool when determining whether construction of a new major stationary source or major modification will cause or contribute to a violation of the NAAQS, which is a different analysis than an interstate transport analysis. The EPA released a memorandum on August 31, 2018 entitled *Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards.* The memorandum suggests that, depending on the particular facts and circumstances, it may be reasonable and appropriate for states to use a contribution threshold equivalent to 1 ppb to identify states that are "linked" to downwind air quality problems with respect to the 2015 ozone NAAQS. If Wyoming wishes to use a 1 ppb threshold in its SIP development, EPA recommends the state review the August 31, 2018 memorandum and revise its rationale for the use of this threshold and accompanying analysis accordingly. The EPA also recommends the state identify those downwind receptors to which the state is linked at this threshold. (The state has suggested on page 8 that Wyoming would only be linked to two downwind receptors in the EPA's analysis if a 1ppb threshold were used. The EPA notes that states have traditionally been considered "linked" to a downwind receptor when the state's impact is *at or above* the applicable threshold.)

(8) On page 8 of Attachment B to Wyoming's draft SIP, the draft SIP explains that certain 2025 modeling indicates that there will be no downwind nonattainment outside of California by the year 2025. However, 2025 is not connected to an applicable attainment date for 2015 ozone NAAQS nonattainment areas consistent with the D.C. Circuit's decision in *North Carolina v. EPA*, holding that compliance with the good neighbor provision should consider downwind attainment dates. 531 F.3d 896, 910-12 (2008). For this reason, the EPA recommends that Wyoming note that the 2025 modeling is not connected to an applicable attainment date, but is used for consideration as an additional data point in its weight of evidence. In addition, EPA

completed the referenced 2025 ozone modeling to support the 2015 ozone NAAQS rulemaking. The 2025 modeling did not contain more recent emissions and modeling updates than were included in the 2023 modeling documented in the March 2018 memo referenced above.

(9) On page 8 of Attachment B to Wyoming's draft SIP, Wyoming states that it is worth addressing the impact of non-U.S. and non-anthropogenic emissions on downwind receptors, which constitute over 50% of the NAAQS at each Denver nonattainment and maintenance receptor, and Wyoming concludes that the magnitude of these emissions in addition to in-state emissions from Colorado make it is unnecessary for Wyoming to consider emission reductions at step 3. However, we note that EPA's contribution analysis for the 2015 ozone NAAQS calculated that the contributions from upwind U.S. anthropogenic emissions at Colorado receptors to which Wyoming contributes at or above 1 ppb is in the range of 8.4 to 9.8 percent of the total 2023 ozone design values. Therefore, the EPA recommends that Wyoming provide further explanation for its conclusion that emission reductions from upwind states do not need to be evaluated in light of the impacts of non-anthropogenic emissions.

(10) We recommend the analysis in the draft SIP be revised to demonstrate that it is not linked in step 2 by better highlighting any differences that may exist between the emissions inventory used in the 2023 EPA air quality modeling and Wyoming's outlook for its 2023 emissions. For example, a side-by-side sector comparison, noting any changes scheduled, but not included in the 2023 emission inventory, could be useful in Wyoming's weight of evidence analysis. As a further example, Wyoming may be aware of recently announced or solidified EGU emissions reductions that EPA was not aware of and did not capture in our engineering analysis and 2023 emissions projections. We recommend the state include in its analysis the respective EGU outlooks, document any control or requirement changes, and document assurance that those reductions have occurred or will occur.