6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2019-0140; EPA-HQ-OAR-2021-0663; FRL-9782-02-R8]

Air Plan Approval; Colorado; Addressing Remanded Portions of the Previously Approved Infrastructure Requirements for the 2015 Ozone National Ambient Air Quality Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On January 5, 2021, the United States Court of Appeals for the Tenth Circuit granted the Environmental Protection Agency's (EPA) motion for a voluntary remand without vacatur of two parts of an EPA 2020 final rule approving Colorado's infrastructure state implementation plan (SIP) submission for the 2015 8-hour ozone national ambient air quality standards (NAAQS) (2020 final rule). In this document, EPA is taking final action to approve those two remanded parts of the 2020 final rule. First, EPA is finalizing our conclusion that Colorado's infrastructure SIP submission meets the State's good neighbor obligations under Clean Air Act (CAA) section 110(a)(2)(D)(i)(I). Lastly, EPA is also finalizing our conclusion that Colorado's infrastructure SIP submission provided "necessary assurances" of the State's authority to regulate agricultural sources under CAA section 110(a)(2)(E)(i). EPA is taking this action pursuant to the CAA.

DATES: This rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: EPA has established two dockets for this action. The regional docket, Docket ID No. EPA-R08-OAR-2019-0140 contains information specific to Colorado, including this final rule document, and the notice of proposed rulemaking. Docket ID No. EPA-HQ-OAR-2021-0663 contains additional modeling files, emissions inventory files, technical support documents, and other relevant supporting documentation regarding interstate transport of emissions for the

2015 8-hour ozone NAAQS which were used to support EPA's proposed approval. All documents in the docket are listed on the www.regulations.gov website. Although listed in the docket, some information may not be publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available through www.regulations.gov, or please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section for additional availability information.

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SUPPLEMENTARY INFORMATION: Throughout this document "we," "us," and "our" means EPA.

I. Background

On May 6, 2022 (88 FR 27050), EPA published a document in the *Federal Register* proposing approval of the two remanded parts of EPA's 2020 final rule.[1] EPA's May 2022 proposed approval addressed (1) the adequacy of Colorado's infrastructure submission for the 2015 8-hour ozone NAAQS under the CAA's "good neighbor provision,"[2] which generally requires SIPs to contain adequate provisions to prohibit in-state emissions from significantly contributing to nonattainment or interfering with the maintenance in another state, and (2) the adequacy of Colorado's infrastructure submission for the 2015 8-hour ozone NAAQS under CAA section 110(a)(2)(E)(i), particularly with respect to Colorado's authority to regulate

[1] 2020 final rule. Approval and Promulgation of State Implementation Plan Revisions; Infrastructure Requirements for the 2015 Ozone National Ambient Air Quality Standards; Colorado and North Dakota, 85 FR 20169 (April 10, 2020).
[2] 42 U.S.C. 7410(a)(2)(D)(i)(I).

agricultural sources.[3] The rationale for EPA's proposed action is included in the May 6, 2022 proposal and will not be repeated here.

II. Response to Comments

EPA received comments on the proposed rule from an individual citizen and the Center for Biological Diversity (the Center). We summarize and respond to the comments below.

Individual Citizen

Comment: The commenter initially states that "concerns regarding the 2015 Ozone NAAQS infrastructure requirements highlight potential problems regarding both the 'Good Neighbor Provision' CAA section 110(a)(2)(D)(i)(I), as well as the adequate implementation of [the] SIP regarding CAA section 110(a)(2)(E)(i)." The commenter believes that EPA's use of the 4-step interstate transport framework is an effective method to address the previously mentioned concerns, but that there needs to be adequate implementation and "more stringent regulations reinforced regarding step 3 and step 4, of the 4-step interstate transport framework." The commenter recommends two "strategies" in order to make the 4-step framework more stringent. For Step 3, the commenter suggests re-evaluating Prevention of Significant Deterioration (PSD) regulations, with a focus on "improving standards" related to Best Available Control Technology (BACT). Regarding Step 4, the commenter recommends that EPA adopt measures to reduce carbon via a cap-and-trade system.

Response: These comments are not relevant to the action EPA proposed. In the proposed rule, EPA applied the well-established 4-step framework for assessing interstate ozone transport to determine whether Colorado's infrastructure SIP meets the requirements of CAA section 110(a)(2)(D)(i)(I). We invited comment on our conclusions with respect to Colorado's infrastructure SIP, but did not invite comment on the integrity and process of the 4-step framework itself.[4] Further, we determined that Colorado's emissions do not contribute at or

[3] 42 U.S.C. 7410(a)(2)(E)(i).
[4] 87 FR 27054.

above the threshold of 1 percent of the 2015 8-hour ozone NAAQS (0.70 parts per billion (ppb)) to any downwind nonattainment or maintenance receptor at Step 2 of the 4-step interstate transport framework, and thus did not reach the steps of the 4-step framework discussed in this comment, i.e., analysis of potential emissions controls at Step 3 or permanent and federally enforceable control strategies to achieve emissions reductions at Step 4.[5,6] Thus, the commenter's recommended strategies for Steps 3 and 4 are not relevant to EPA's determination that Colorado does not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state, and that therefore Colorado's infrastructure SIP submission satisfies CAA section 110(a)(2)(D)(i)(I).

Additionally, the commenter states that "concerns regarding the 2015 Ozone NAAQS infrastructure requirements highlight potential problems regarding both the 'Good Neighbor Provision' CAA section 110(a)(2)(D)(i)(I), as well as the adequate implementation of SIP regarding CAA section 110(a)(2)(E)(i)," but the commenter does not explain what these concerns or potential problems are. Without knowing the specific concerns to which the commenter is referring, EPA cannot respond to this part of the comment.

The Center for Biological Diversity

Comment: The Center asserts that EPA should have used an analytic year of 2020 instead of 2023 and that EPA made a "post hoc justification" for using a 2023 analytic year. The Center states that EPA is incorrect that most areas downwind of Colorado have an attainment date of August 3, 2024, which is the attainment date for 2015 ozone moderate nonattainment areas. The Center asserts that EPA has delayed "bumping up" downwind areas (or determining that these areas have failed to attain the 2015 ozone NAAQS by the attainment date) and that these areas should be designated moderate instead of marginal. The Center also states that Congress' intent

[5] 87 FR at 27056-58.

[6] EPA's determination not to further evaluate Colorado's contributions at Steps 3 or 4 of the interstate transport framework was additionally supported by the analysis provided in the Uinta Basin technical support document (TSD) of this action at proposal, evaluating Colorado's emissions contributions in the Uinta Basin during wintertime inversion episodes that produce high ozone conditions.

under the CAA is for EPA to act on SIPs before the marginal attainment date.[7] The Center claims that EPA is not justified in doing an analysis based on acting on Colorado's SIP submission after the marginal attainment date and also claims that using a 2023 analytic year is inconsistent with recent EPA actions related to designations. Additionally, the Center asserts that using an analytic year of 2020 would "allow" EPA to use monitored data in determining downwind nonattainment and maintenance monitors. The Center suggests that if EPA were to use a 2020 analytic year, the Agency would determine that Colorado needs to reduce the State's emissions, and that such a conclusion would benefit several downwind areas such as Amador County, California; Dallas-Fort Worth, Texas; Houston, Texas; the Northern Wasatch Front, Utah; Phoenix, Arizona; San Antonio, Texas; the Uinta Basin, and others.

Response: The Center supports its preferred analytic year of 2020 by arguing that if EPA had used an analytic year of 2020, we would have concluded that Colorado has good neighbor obligations that, if met, would benefit downwind areas including Amador County, California; Dallas-Fort Worth, Texas; Houston, Texas; Northern Wasatch Front, Utah; Phoenix, Arizona; San Antonio, Texas; and Uinta Basin, Utah. We do not agree that the Center's assertions regarding Colorado's transport linkages in 2020 are correct. However, it is not necessary to evaluate the technical basis for these claims because the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) previously rejected a similar argument regarding sole reliance on conditions that are wholly in the past to assess good neighbor obligations and upheld EPA's reasonable interpretation of the good neighbor provision as forward-looking.[8] In that case, Delaware argued that EPA should have used data from the year SIP submissions for the 2008 ozone NAAQS were due (2011) instead of the future analytic year that EPA used (2017) on the theory that EPA would have concluded in that circumstance that upwind states had good

[7] In accordance with CAA section 181(a)(1), an area designated as nonattainment for a revised ozone NAAQS must be classified, at the time of designation, as marginal, moderate, serious, severe or extreme, depending on the severity of the ozone air quality problem in that nonattainment area. Each classification threshold has an associated attainment date, as well as other NAAQS implementation-related provisions.
[8] See *Wisconsin v. EPA*, 938 F.3d 303 (D.C. Cir. 2019).

neighbor obligations with respect to Delaware.[9] The court held that Delaware's argument could not "be reconciled with the text of the Good Neighbor Provision, which prohibits upwind States from emitting in amounts 'which will' contribute to downwind nonattainment." The court concluded that "[g]iven the use of the future tense, it would be anomalous for EPA to subject upwind States to good neighbor obligations in 2017 by considering which downwind States were once in nonattainment in 2011."[10] Likewise, in the present circumstance, it would be anomalous for EPA now in 2022 to consider upwind states' obligations under the good neighbor provision based solely on data from years that have already passed.

For more than two decades, EPA has taken a forward-looking approach in evaluating good neighbor obligations; using an analytic year that is wholly in the past, as the Center urges, would be inconsistent with the Agency's past practice.[11] Furthermore, even prior to *Wisconsin*, the D.C. Circuit upheld EPA's interpretation of "will" in CAA section 110(a)(2)(D)(i)(I) as being both future-tense and conveying a sense of certainty.[12] EPA's use of forward-looking projections in assessing good neighbor obligations here continues to give meaning to both senses of the term.[13] EPA's rationale for the selection of 2023 as the appropriate future analytic year for assessing whether Colorado has any good neighbor obligations for the 2015 ozone NAAQS was presented in the proposed rule in section II.A.2 and was not a "post hoc" justification as the Center asserts. Further, 2023 continues to be the key analytic year that EPA is using in multiple other actions to address other states' good neighbor obligations under the 2015 ozone NAAQS.[14]

Despite the Center's argument to the contrary, using a forward-looking analysis to inform EPA's evaluation of good neighbor SIP submissions pursuant to the requirements of CAA

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[9] Id. at 322.
[10] Id. at 369.
[11] See 63 FR 57356, 57375, 57377, 57386 (October 27, 1998) (NO_X SIP Call); 70 FR 25162, 25241 (May 12, 2005) (Clean Air Interstate Rule (CAIR); 76 FR 48208, 48211 (August 8, 2011) (Cross-State Air Pollution Rule (CSAPR); 81 FR 74505, 74526 (October 26, 2016) (CSAPR Update); 86 FR 23054, 23074 (April 30, 2021) (Revised CSAPR Update).
[12] *North Carolina v. EPA*, 531 F.3d 896, 914 (July 11, 2008).
[13] See 86 FR at 23074.
[14] *See, e.g.,* 87 FR 20036, 20042 (April 6, 2022) (proposing good neighbor federal implementation plans (FIPs) for 26 states using a 2023 analytic year).

section 110(a)(2)(D)(i)(I) is not incompatible with EPA using existing record information to revise certain designations under CAA section 107(d)(1) on remand. When EPA revised some initial area designations for the 2015 ozone NAAQS on remand after *Clean Wisconsin v. EPA*,[15] EPA found it appropriate in that specific circumstance to use data available to the agency at the time of the initial designations in revising the boundaries of some nonattainment areas to avoid introducing inconsistencies within and across nonattainment areas, some of which were unaffected by the court's remand.[16] The overall goal of the Agency's analytical approach to the action revising initial area designations—to avoid introducing inconsistencies across areas—is entirely consonant with EPA's approach to addressing good neighbor obligations using a consistent analytic year for the entire country, which, at the time of this action, is 2023.

Part of the Center's argument appears to be a suggestion for an alternative approach to identifying receptors at Step 1 of the 4-step framework for the purpose of assessing whether a state has obligations under CAA section 110(a)(2)(D)(i)(I). The Center suggests that if EPA were to use an analytic year of 2020, then EPA would identify downwind air quality issues using only measured values from 2020. But this ignores that EPA's methodology for identifying receptors already gives consideration to recent measured values, including in 2020, while also using forward-looking modeling projections. Using only measured values to identify receptors would introduce several problems into EPA's methodology.

EPA explained how the Agency identifies nonattainment and maintenance receptors at Step 1 of the 4-step framework for the 2015 ozone NAAQS in the proposed rule in section II.A.3 and provided more detail in our "Air Quality Modeling Technical Support Document: 2015 Ozone National Ambient Air Quality Standards Transport SIP Proposed Actions."[17] EPA's

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[15] 964 F.3d 1145 (D.C. Cir. 2020).

[16] 86 FR 67864, 67868-67869 (November 30, 2021); see also EPA, Responses to Significant Comments Received on EPA's Revised Response to State and Tribal Recommendations for the 2015 Ozone National Ambient Air Quality Standards (NAAQS) Addressing El Paso County, Texas and Weld County, Colorado at 43-44 (November 2021), available in Docket No. EPA-HQ-OAR-2017-0548 (responding to commenters arguing EPA should be using the most current information available to the Agency in revising designations).

[17] Available in Docket No. EPA-HQ-OAR-2021-0663 (hereinafter "Air Quality Modeling TSD").

approach gives independent consideration to both the "contribute significantly to nonattainment" and the "interfere with maintenance" prongs of CAA section 110(a)(2)(D)(i)(I), consistent with the D.C. Circuit's direction in *North Carolina v. EPA*.[18]

- Monitoring sites with future year average design values that exceed the NAAQS and that are currently measuring nonattainment are considered nonattainment receptors.[19]
- Monitoring sites with projected average design values or maximum design values that exceed the NAAQS are projected to be maintenance receptors.[20]

EPA's methodology for defining maintenance and nonattainment receptors uses projected air quality modeling to capture variability such that monitors that may be attaining based on current data may still be deemed a "maintenance receptor." Under the Center's idea of using only actual monitoring data, it is unclear how EPA would distinguish between those monitors which should be maintenance receptors and those which are not receptors at all. Additionally, if EPA were to use only recorded monitoring data for 2020 in order to define receptors and not use modeling, there would be no way to measure upwind state contributions to downwind receptors at Step 2 of the 4-step framework. EPA's analysis uses modeling in order to obtain information for both components of the key questions at Steps 1 and 2—indicating where there are anticipated air quality problems and which states are contributing to those problems. Moreover, as discussed above, using only past measured data to identify receptors would not align with the forward-looking nature of the good neighbor provision.

In response to the comment arguing that using a 2020 analytic year would "allow" EPA to use actual monitor data, EPA points out that, in fact, the identification of receptors at Step 1 of the 4-step framework already considers measured ozone design values from 2020, as explained in section 3.1 of the Air Quality Modeling TSD. In other words, while EPA uses a future analytic year to define good neighbor obligations, our assessment of likely air quality conditions in that

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[18] 531 F.3d 896, 910-11 (D.C. Cir. 2008).
[19] 87 FR 27054; Air Quality Modeling TSD at 9.
[20] Id.

future year is informed by, among other things, recent and historical ambient air quality monitoring data.

EPA acknowledges that, at the time the Agency originally acted on Colorado's infrastructure SIP in the 2020 final rule, good neighbor obligations for the 2015 ozone NAAQS should have been met no later than the marginal attainment date of August 3, 2021.[21] But, as explained above, the D.C. Circuit has agreed that it is reasonable for EPA to look to a future year in evaluating transport obligations, even if the Agency would have been able to evaluate an earlier year had they acted sooner. Indeed, in EPA's Revised CSAPR Update rule, on remand from the D.C. Circuit's decision in *Wisconsin*, EPA did not continue to assess obligations based on a 2017 analytic year (as had been used in the 2016 CSAPR Update) but instead used 2021, associated with the serious area attainment date for the 2008 ozone NAAQS.[22] Similarly, here, EPA's choice of a 2023 analytic year is based on the fact that 2023 air quality will impact whether areas attain by the relevant moderate attainment date of August 3, 2024.

The Center's contention that EPA should not look to the moderate area attainment date because EPA has not yet finalized the Agency's action making those areas downwind of Colorado moderate is incorrect. EPA has issued a proposed finding, and signed a final finding, that a number of marginal areas failed to attain by the 2021 attainment date, and per the statute, now that EPA has finalized this determination, these areas will be reclassified to moderate by operation of law on the effective date of the final rule (30 days after publication in the *Federal Register*).[23] However, the timing of that action does not affect when the moderate attainment date would be. EPA is not permitted under the statute to adjust the attainment dates for areas under a given classification; that is, no matter when EPA finalizes the determination that an area failed to

[21] See *Wisconsin*, 938 F.3d at 313, 319; *Maryland v. EPA*, 958 F.3d 1185, 1203-04 (D.C. Cir. 2020); see also CAA section 181(a); 40 CFR 51.1303; 83 FR 25776 (June 4, 2018, effective August 3, 2018).
[22] See 86 FR 23054, 23057 n.16 (April 30, 2021) (noting that 2020 was also not appropriate to use since that year too was wholly in the past).
[23] Proposed Rule, Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Areas Classified as Marginal for the 2015 Ozone National Ambient Air Quality Standards, 87 FR 21842 (April 13, 2022). Final Rule signed on September 15, 2022.

attain by its attainment date and reclassifies that area, the attainment date remains fixed, based on the number of years from the area's initial designation.[24] To illustrate this point, the attainment date for moderate areas that were designated on August 3, 2018 under the 2015 ozone NAAQS is August 3, 2024, regardless of when EPA finalizes the action that will reclassify areas to moderate. August 3, 2024 is also the attainment date for any area that was initially designated moderate under the 2015 ozone NAAQS on August 3, 2018. Thus, based on *Wisconsin* and *Maryland*, good neighbor obligations for the 2015 ozone NAAQS should be met "as expeditiously as practicable but not later than" the next applicable attainment date. For this NAAQS, the next attainment date is the moderate attainment date of August 3, 2024.[25]

For all of these reasons, EPA rejects the Center's contention that we should have used a 2020 analytic year to evaluate Colorado's good neighbor obligations in this action and maintains that selecting 2023 as the analytic year is appropriate.

Comment: As part of their comment that EPA must disapprove Colorado's infrastructure SIP submission under CAA section 110(a)(2)(D)(i)(I), the Center criticizes EPA's modeling for failing to properly account for emissions related to EPA's withdrawal of California Clean Car Rules Waiver. The Center states that the "repeal of [the withdrawal of] California's waiver to have more stringent emissions limits for on-road mobile sources has not yet been finalized" and points to EPA's normal practice of including only emissions changes resulting from final regulatory actions in our modeling. The Center says that since the repeal of the withdrawal of California's waiver has not been finalized, EPA's emissions inventory should be based on the on-road mobile sources from states like California and Colorado as if they are not complying with their respective state's clean car rule requirements, such as the zero emissions vehicle (ZEV) requirements and low-emissions vehicle (LEV) requirements. The Center believes it is

[24] See CAA section 181(a)(1); 40 CFR 51.1303; 83 FR 25776 (June 4, 2018, effective August 3, 2018).
[25] The San Antonio, Texas nonattainment area has a different moderate attainment date.

arbitrary for EPA to base their emissions inventories on these states having emissions limits for on-road mobile sources which are not permitted without a preemption waiver.

Response: The Center is correct that it is the Agency's general practice to include only emissions reductions from finalized legal and regulatory requirements in our ozone transport modeling. EPA's 2023 modeling using the 2016v2 platform reflects an updated assessment of the emissions inventory nationwide based on changes in federal and state rules and other relevant changes in the emissions inventory.

We disagree with the Center that the Agency did not appropriately consider emissions changes related to the repeal of the CAA waiver for California's Advanced Clean Car program in our emissions inventory and subsequent interstate transport modeling. EPA finalized the decision to withdraw a 2013 CAA waiver previously provided to California for the State's greenhouse gas (GHG) and ZEV programs under section 209 of the CAA on September 27, 2019.[26] However, EPA then reconsidered that decision and finalized a repeal of the withdrawal of the CAA waiver of preemption for California's GHG and ZEV sale mandate on March 14, 2022.[27] Whether it was appropriate to include these emissions changes in our 2023 modeling at the time we conducted the modeling is effectively moot, since EPA did in fact repeal the withdrawal of the waiver by March of this year.

EPA's projected emissions for the updated 2023 modeling used in this action use, in relevant part, mobile source emissions inventories provided by the California Air Resources Board (specifically, EMFAC2017), which incorporate emissions reductions from California's GHG emissions standards and ZEV sale mandate, while for the remaining states the inventories are based on MOVES3.[28] MOVES3 reflects the impacts of the Tier 3 Motor Vehicle Emission and Fuel Standards rule which harmonized the California LEV and federal requirements for low

[26] 84 FR 51310.
[27] 87 FR 14332.
[28] EPA, Latest Version of MOter Vehicle Emission Simulator (MOVES), available at https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves (last visited September 19, 2022).

emissions vehicles.[29] ZEV populations in the modeling were based on actual registration data for the modeling base year and were grown to future years according to Annual Energy Outlook forecasts.[30] Thus, EPA's updated 2023 modeling appropriately included emissions changes regarding California's GHG and ZEV sale mandate waiver, as well as LEV emissions standards nationwide by virtue of EPA's inclusion of the Tier 3 program in our modeling. Additionally, the September 27, 2019 rulemaking did not affect California's low emissions vehicle III (LEV III emission standards.)

Overall, while the Center is correct that it is the Agency's general practice to include only emissions reductions from final rules in our modeling, there is no merit to the remainder of this comment, because EPA has in fact repealed the withdrawal of the waiver as to California's GHG and ZEV rules and thus they were appropriately incorporated into the modeling.

Comment: The Center further asserts that EPA wrongly ignored receptor values above the level of the NAAQS. The Center points to Step 2 of the 4-step interstate transport framework, as described in the proposed rule for this action,[31] where the contribution metric is defined as the average impact from each state to each receptor on the days with the highest ozone concentrations at the receptor based on the 2023 modeling. The Center states that by using this protocol, "EPA is ignoring impacts from upwind states on days with high ozone concentrations, including concentrations above the level of the NAAQS, but which aren't necessarily the highest ozone concentration. This is ignoring an important aspect of the problem; that is days above the level of the NAAQS but still not the highest days." The Center states that EPA criticized Colorado for using the same calculations when the State submitted its designations recommendations for the 2015 ozone NAAQS, "not because those areas violated the NAAQS

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[29] 81 FR 23414, at 23450. As indicated in the Final Rule for Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards, "The Tier 3 program is identical to LEV III in most major respects for light-duty vehicles (and heavy-duty vehicles…)".

[30] See Technical Support Document (TSD) Preparation of Emissions Inventories for the 2016v2 North American Emissions Modeling Platform, section 4.3.2, in particular Table 4-43. Dated: February 2022. (2016v2 TSD). Included under Docket ID No. EPA-HQ-OAR-2021-0663.

[31] 87 FR 27055.

but rather because they contributed to violations."[32] The Center concludes that there is no difference between intra-state contribution and inter-state contribution and that it is arbitrary for EPA to ignore the above-the-NAAQS level days because failure to address them means downwind areas will continue to struggle to reach attainment.

Response: Through the development and implementation of the CSAPR rulemakings as well as prior regional rulemakings pursuant to the interstate transport provision, EPA, working in partnership with states, developed the 4-step interstate transport framework to evaluate states' obligations to eliminate interstate transport emissions under the good neighbor provision for the ozone NAAQS. This includes Step 2 of the 4-step framework which identifies states that impact air quality problem (nonattainment or maintenance) receptors in downwind states sufficiently such that the states are considered "linked" and therefore warrant further review and analysis of their air quality impacts. As the Center notes in their comment, EPA evaluated Colorado's contribution (as we did every other state's) based on the average relative downwind impact calculated over multiple days. The number of days used in calculating the average contribution metric has historically been determined in a manner that is generally consistent with EPA's recommendations for projecting future year ozone design values.[33] Our ozone attainment demonstration modeling guidance at the time CSAPR was originally promulgated recommended using all model-predicted days above the NAAQS to calculate future year design values.[34] In 2014, EPA issued draft revised guidance that changed the recommended number of days to the top-10 model predicted days.[35] For the CSAPR Update, promulgated in 2016, EPA transitioned to calculating design values based on this draft revised approach. The revised modeling guidance

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[33] The Center's comment is only relevant to EPA's summertime ozone analysis since the Agency's wintertime ozone analysis for the Uinta Basin does not use model predicted design values.

[34] EPA, "Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze," 2007, available at https://www.epa.gov/sites/default/files/2020-10/documents/final-03-pm-rh-guidance.pdf.

[35] EPA, "Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze," 2014, available at https://www.epa.gov/sites/default/files/2020-10/documents/draft-o3-pm-rh-modeling_guidance-2014.pdf.

was finalized in 2018.[36] Since that time EPA has consistently calculated both the ozone design values and the contributions based on the top-10 day approach. As this guidance is finalized, we will continue to base our average contribution metric in accordance with the top-10 day approach. Thus, EPA disagrees with the Center's claim that EPA's current modeling approach for identifying contributing upwind states is arbitrary and contrary to law or that the Agency must disapprove Colorado's good neighbor SIP revision for the 2015 ozone NAAQS. Further, the Center has not supplied any information establishing that, had EPA used a larger set of days with high ozone concentrations at identified out of state nonattainment or maintenance receptors to calculate contribution values at Step 2, Colorado's contribution would then be found to exceed the 1 percent of NAAQS threshold at any of these receptors.

Additionally, EPA disagrees with the Center's statement that EPA "criticized" Colorado for using the same calculations when the State submitted its designations recommendations for the 2015 ozone NAAQS. The Center refers to page 28 of EPA's final designation technical support document (designation TSD)[37] supporting Colorado's designations for the 2015 ozone NAAQS, and we believe the Center is referring to EPA's assessment of the Denver nonattainment area's meteorology.

As an initial matter, the technical analysis and process for designations falls under a separate set of guidance and policies than the modeling guidance that EPA follows for purposes of interstate transport.[38] Thus, we do not agree that EPA's designation TSD methodology should be considered relevant or even analogous to EPA's Step 2 analysis in this action. Nonetheless, during the process of designating nonattainment areas, the evaluation of meteorological data helps to assess the fate and transport of emissions contributing to ozone concentrations and to

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[36] EPA, "Modeling Guidance for Demonstrating Air Quality Goals for Ozone, PM2.5 and Regional Haze," 2018, available at https://www.epa.gov/sites/default/files/2020-10/documents/o3-pm-rh-modeling_guidance-2018.pdf.
[37] EPA, "Colorado: Denver Metro/North Front Range Nonattainment Area Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (TSD)." Docket No. EPA-R08-OAR-2019-0140.
[38] See EPA, "EPA Guidance on the Area Designations for the 2015 Ozone NAAQS," available at https://www.epa.gov/ozone-designations/ozone-designations-guidance-and-data#A.

identify areas potentially contributing to the monitored violations. During a designation review for a new NAAQS, the results of meteorological data analysis may inform the determination of nonattainment area boundaries. At the time of the 2015 ozone NAAQS designations, to determine how meteorological conditions, including, but not limited to, weather, transport patterns, and stagnation conditions, could affect the fate and transport of ozone and precursor emissions from sources in the area, EPA evaluated 2014-2016 HYSPLIT (Hybrid Single-Particle Lagrangian Integrated Trajectory) trajectories at 100, 500, and 1000 meters above ground level that illustrate the three-dimensional paths traveled by air parcels to a violating monitor. In EPA's 2015 ozone NAAQS designation TSD for Colorado, the Agency provided figures of the 24-hour HYSPLIT back trajectories for each exceedance day for the violating monitors in 2013-2015, while the State of Colorado focused on the four highest exceedance days in each of those three years in its own designation TSD. EPA concluded that even though EPA's total number of trajectories differ from those conducted by the State of Colorado, the geographic distribution of trajectory hours was the same between the two analyses.[39] EPA did not criticize Colorado's methodology per se in the designations TSD but simply identified a difference in approach while noting that it produced the same result. However, this was in the context of EPA's comparison of HYSPLIT back trajectory data for purposes of evaluating the designation of a nonattainment area, which is entirely separate from the use of photochemical grid modeling projections for purposes of assessing contribution at Step 2 of the 4-step interstate transport framework. Therefore, the Center's statement not only misinterprets the content and purpose of EPA's 2015 ozone NAAQS designation TSD for Colorado, but also mischaracterizes its significance to this action.[40]

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[39] EPA, "Colorado: Denver Metro/North Front Range Nonattainment Area Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (TSD)." Docket No. EPA-R08-OAR-2019-0140.

[40] The Center also fails to recognize that focusing on the top-10 days of ozone concentrations, as EPA does for purposes of evaluating contribution at Step 2, can sometimes utilize days that are *lower* than the level of the NAAQS if not all 10 days used for these calculations exceed the NAAQS. The Center's assumption that using only the top-10 days necessarily excludes other days that exceed the NAAQS is not correct. As EPA explained in our

Comment: The Center claims that "EPA's failure to analyze Colorado's contribution to wintertime ozone levels is arbitrary and capricious" and therefore the Agency must disapprove the State's good neighbor SIP. The Center states that wintertime ozone is an issue in basins in the Western United States where oil and gas extraction occurs, not just in the Uinta Basin area. The Center asserts that EPA arbitrarily treated the Uinta Basin as unique. The Center points to the Upper Green River Basin area in Wyoming, which was designated as nonattainment for the 2008 ozone NAAQS due to wintertime ozone.[41]

Additionally, the Center notes that some areas, though not designated as nonattainment for wintertime ozone, will have a difficult time coming into attainment without addressing wintertime ozone. The Center cites the Denver Metro/North Front Range (DMNFR) nonattainment area as an example and provides March 2021 monitor values at various Colorado monitors in support. The Center further states that the DMNFR monitor values cannot be explained by stratospheric intrusion or wildfire. While the Center notes that they do not expect EPA to analyze Colorado's "interstate" contribution to Colorado, the Center states that DMNFR values demonstrate that EPA is wrong to claim that the Uinta Basin's wintertime ozone problem is unique. The Center asserts that EPA must "do an analysis, using the same methodology as summertime ozone, for other Western areas with significant oil and gas production and winter weather to determine if Colorado is significantly contributing to them." Additionally, the Center claims that "while EPA uses a 1% threshold for determining if there is significant contribution to summertime ozone, EPA appears to be using a 50% or more, that is upwind states would have to be the main cause, threshold for significant contribution for wintertime ozone." The Center also insists that "EPA must do an analysis to determine which states contribute more than 1% to wintertime ozone in the Uinta Basin, the Denver Metro/North Front Range, and other areas with

2018 modeling guidance, using the top-10 highest days yields an analytically robust result, can be applied even as NAAQS are revised, and yields better estimates than the previous guidance approach. See "Modeling Guidance for Demonstrating Air Quality Goals for Ozone, $PM_{2.5}$ and Regional Haze," 2018 at 105.

[41] 77 FR 30088 (May 21, 2012).

areas with wintertime ozone problems and then come up with emission reduction requirements for those upwind contributors." Finally, the Center states that EPA previously redefined the ozone season for Colorado and many other Western States to be year-round and that the Agency "is acting like the ozone season for Colorado and other Western States is only the summertime but EPA cannot undo its previous rulemaking to create year round ozone seasons via the preamble to this proposed rule."

Response: EPA agrees with the Center that the occurrence of high levels of ozone in the wintertime, in the presence of snow cover and emissions from oil and gas operations, is not limited to the Unita Basin. EPA used the word "unique" in two separate instances in the proposed rule and in the accompanying Uinta Basin Technical Support Document,[42] but did not mean to suggest that the Uinta Basin is unique in experiencing wintertime ozone events. Instead, in both the proposal and the Uinta Basin TSD, EPA referred to the Uinta Basin's unique topography.[43] Also, in the proposal, EPA referred to the unique analytical challenges in assessing whether there is interstate transport of ozone and its precursors from Colorado during wintertime episodes in Utah.[44]

However, we do not agree that we did not conduct an analysis of the potential for transport of ozone under these circumstances. We performed a separate analysis for the Uinta Basin because, as explained in the Uinta Basin TSD, we acknowledged that the modeling we would otherwise use is not reliable for projecting high ozone levels associated with wintertime inversions in that area. Additionally, the Uinta Basin is the only wintertime ozone area that is currently designated as nonattainment or maintenance for the 2015 ozone NAAQS and is the only area with high wintertime ozone that is immediately adjacent to the Colorado border. As explained in the Uinta Basin TSD, high ozone levels during the winter in the Uinta Basin area

[42] EPA, Technical Support Document (TSD) Ozone Transport Analysis: Colorado and the Uinta Basin Nonattainment Area, April 2022 (Uinta Basin TSD).
[43] 87 FR at 27057; Uinta Basin TSD at 5.
[44] 87 FR at 27057.

are associated with stagnant meteorological conditions that result in the build-up of local ozone precursor emissions and snow cover which enhances the reflectivity of solar radiation which, in turn, accelerates photochemical reactions of the trapped precursors to form locally high ozone concentrations. Because of the stagnant conditions, transport of precursor emissions from outside the immediate area are likely to be minimal, at most. In any case, the Center has not provided any information to support its notion that Colorado significantly contributes to nonattainment or interferes with maintenance in the Uinta Basin, much less in other areas farther from Colorado experiencing high wintertime ozone levels.

The Center cites the Upper Green River Basin area as another area that periodically experiences wintertime ozone. EPA designated this area as nonattainment for the 2008 ozone NAAQS for wintertime ozone.[45] We are aware that one of the monitors in this nonattainment area is violating the 2015 ozone NAAQS according to the 2021 design value; however, as discussed below, we do not believe emissions from Colorado contribute to this design value.[46]

The Upper Green River Basin is located in western Wyoming, about half-way between the southern and northern borders of the State. The southernmost border of the nonattainment area is at least 80 miles from the closest Colorado border. In EPA's technical support document that supported the Agency's designation for the Upper Green River Basin 2008 ozone NAAQS nonattainment area, we stated that "ozone exceedances almost always occur when winds are low indicating that there is little to no transport of ozone or precursors from distant sources outside the proposed nonattainment area."[47] The Agency also indicated that the wind field trajectory analyses led to the conclusion that regional transport for the area is insignificant, and local-scale precursor emissions transport is the dominant means of precursor transport during high ozone

[45] 77 FR 30088 (May 21, 2012). Then, on May 4, 2016 (86 FR 26697), EPA published a determination that the Upper Green River Basin Area attained the 2008 ozone NAAQS based on 2012 to 2014 ambient air quality data.
[46] Monitor 560350099 in Sublette, Wyoming is measuring 74 ppb according to EPA's current quality-assured monitor design value data. https://www.epa.gov/air-trends/air-quality-design-values#dvtool.
[47] EPA, Wyoming Area Designations for the 2008 Ozone National Ambient Air Quality Standards TSD at 46-48, located in Docket No. EPA-R08-OAR-2019-0140.

periods.[48] Additionally, during a high fidelity trajectory analysis conducted by Wyoming in support of its recommendation for the southern boundary of the Upper Green River Basin nonattainment area, emissions from sources south of the nonattainment boundary were consistently transported east and out of the region without entering the area with violating monitors.[49] Furthermore, multiple research studies have found that wintertime ozone is a local phenomenon that is not affected by long range transport.[50] Based on this information, EPA finds that it is reasonable to conclude that Colorado does not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS (or the 2008 ozone NAAQS) in the Upper Green River Basin area. Additionally, as we stated previously, the Center has not provided any information to support their notion that Colorado significantly contributes to nonattainment or interferes with maintenance during wintertime ozone events in the Upper Green River Basin, or any other western area experiencing wintertime ozone events.

As the Center acknowledges, their comments about the DMNFR nonattainment area are not relevant to this rulemaking because the issue EPA is addressing under CAA section 110(a)(2)(D)(i)(I) is whether Colorado contributes significantly to nonattainment or interferes with maintenance in other states, not Colorado's own nonattainment and maintenance problems.

EPA disagrees with the Center's assertion that EPA should conduct the same analysis for wintertime ozone transport as the Agency does for summertime ozone transport. As EPA explained in our proposed approval and the Uinta Basin TSD, there are no reliable models that accurately predict wintertime ozone levels and contributions.[51] In addition, currently available emissions inventories are not sufficiently refined to accurately estimate emissions from oil and

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[48] Id.
[49] Id.
[50] See generally Oltmans, Samuel et al., "O3, CH4, CO2, CO, NO2 and NMHC aircraft measurements in the Uinta Basin oil and gas region under low and high ozone conditions in winter 2012 and 2013," Elementa: Science of the Anthropocene, 4, 000132, (2016).; ENVIRON, "Final Report: 2014 Uinta Basin Winter Ozone Study," February 2015, available at https://documents.deq.utah.gov/air-quality/planning/air-quality-policy/DAQ-2015-021002.pdf (last visited September 19, 2022) ("ENVIRON Final Report").
[51] 87 FR at 27057; Uinta Basin TSD at 8 ("Current state-of-the-science national scale modeling tools and inventories are not designed to characterize these conditions in a manner that would provide confidence in quantifying interstate contributions.") and Figure 3 (showing how the model "understate measured data by an extremely large amount" for wintertime ozone).

gas production during transient wintertime events. Therefore, in this action, EPA relied on other methods of analysis as opposed to computer-based modeling when reviewing wintertime ozone areas.[52]

The Center is incorrect to claim that the Agency appears to be using 50 percent or more of the NAAQS as a threshold for significant contribution for wintertime ozone for the Uinta Basin. EPA has reviewed our proposal and the Uinta Basin TSD for this action and cannot find what the commenter is referencing, nor has commenter provided a citation. The Center seems to think EPA is using a higher contribution threshold for wintertime ozone than we do for a Step 2 analysis for summertime ozone. This is incorrect. For summertime ozone, EPA is able to use current state-of-the science photochemical modeling for Step 1 and Step 2 and this allows us to set and use a contribution threshold of 1 percent for the purpose of evaluating a state's contribution to nonattainment or maintenance of the 2015 8-hour ozone NAAQS (i.e. 0.70 ppb) at downwind receptors. As explained previously, since our current photochemical modeling does not fully capture wintertime ozone events, we cannot rely on modeling to assess a state's contribution in wintertime ozone areas. However, knowing that the Uinta Basin has nonattainment monitors, EPA performed an extensive analysis, as documented in the Uinta Basin TSD for this action. The results of the in-depth analysis conducted in the Uinta Basin TSD support EPA's conclusion that interstate transport of air pollution from Colorado does not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in the Utah portion of the Uinta Basin.

In regard to the Center's argument about year-round ozone, the Center does not provide a cite where EPA "redefined the ozone season" so we are unable to address that assertion specifically. With respect to the Center's statement that "EPA is acting like the ozone season for Colorado and other Western States is only the summertime," EPA disagrees. By the Center's

[52] See "Utah: Northern Wasatch Front, Southern Wasatch Front, and Uinta Basin Final Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (TSD)" and the Uinta Basin TSD specific for this action.

own admission, EPA designated the Upper Green River Basin area in Wyoming as nonattainment for the 2008 ozone NAAQS based on wintertime ozone. Additionally, in the Uinta Basin TSD for this very action, EPA provided an in-depth analysis on whether Colorado significantly contributed interstate transport air pollution to a 2015 ozone nonattainment area for wintertime ozone, the Uinta Basin. Thus, EPA acknowledges that ozone nonattainment can be a wintertime problem and thoroughly addressed whether emissions from Colorado significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in those areas in the proposed rule, the Uinta Basin TSD for this action, and in this final action.

In summary, EPA disagrees with the Center's claims that EPA failed to properly analyze Colorado's contribution to wintertime ozone nonattainment and maintenance of the 2015 ozone NAAQS and that we must disapprove the State's good neighbor SIP provisions for the 2015 ozone NAAQS.

Comment: The Center challenges the emissions inventory on which EPA's 2023 modeling is based, asserting that EPA ignored increased emissions from the construction and operation of the Uinta Basin Railway in our emissions inventory platform and modeling. The Center notes that the U.S. Surface Transportation Board (STB) recently approved the construction and operation of the Uinta Basin Railway, "a planned 88-mile long railway that would transport crude oil from Myton and Leland Bench, Utah to Kyune, Utah." According to the Center, by approving a cheaper means of transporting crude oil to the Gulf Coast than the trucking industry, the oil railway is intended to quadruple oil production in the Uinta Basin from roughly 90,000 barrels per day to 350,000 barrels per day. The Center indicates that in order to meet that increased oil demand, up to 3,330 new wells would need to be drilled in the Uinta Basin over the next 15 years, also increasing the number of trucking miles to support the oil fields. The Center also points to a Uinta Basin Railway final environmental impact statement (EIS) conducted by STB that estimates that after 15 years, and under a high oil production

scenario,[53] the annual emissions associated with oil and gas development, including trucking, for carbon monoxide (CO), nitrogen oxides (NO_X), and volatile organic compounds (VOC) would be 4,454 tons per year (tpy), 3,146 tpy, and 5,558 tpy, respectively. The Center believes these emissions are underestimated. The Center further cites EIS estimates of annual emissions associated with rail operations along the 88-mile long rail line, excluding downline emissions in Utah and Colorado, for CO, NO_X, and VOCs of 405 tpy, 1,056 tpy, and 40 tpy, respectively. The Center also includes a table of estimated downline emissions of criteria pollutants from the increase in trains traveling in Colorado per day, and states that NO_X and VOC emissions along downline segments (excluding emissions in attainment areas) would total 5,771.05 tpy and 205.33 tpy, respectively, and CO emissions would total 2,076.41 tpy. The Center concludes that "EPA must revise its analysis to consider these increased emissions caused by the U.S. Government's final approval of the Uinta Basin Railway." The Center states that the approval by the STB "is a final action by the federal government itself" and "EPA cannot justify ignoring it based on a claim that EPA does not consider future actions which are not final actions."

Response: The STB, which provided the notice of approval as well as the EIS to which the Center refers to in their comment, is an independent federal agency that is charged with the economic regulation of various modes of transportation, primarily freight rail. The STB's Office of Environmental Assessment (OEA) prepared an EIS pursuant to the National Environmental Policy Act (NEPA). The NEPA process is intended to assist the STB and the public in identifying and assessing the potential environmental consequences of a proposed action before a decision on a proposed action. In a December 21, 2021 document the STB authorized

[53] For the EIS, the STB created two potential scenarios for future oil development in the Uinta Basin, a low oil production scenario and a high oil production scenario. These scenarios corresponded to estimated ranges of rail traffic. Under the low oil production scenario, total oil production in the Uinta Basin would increase by an average of 130,000 barrels per day compared to historical production levels. Under the high oil production scenario, total oil production in the Uinta Basin would increase by an average of 350,000 barrels per day. In the EIS, STB's Office of Environmental Analysis (OEA) notes that some of the assumptions made here are conservative and therefore may overstate the total future oil production in the Basin and the potential impacts. Surface Transportation Board, Final Environmental Impact Statement, August 6, 2021 (Final EIS), at 3.15-4.

construction and operation of the proposed rail line and, among three build alternatives, specifically authorized the Whitmore Park Alternative because it would avoid and minimize major environmental impacts. EPA is aware of the STB's EIS and final decision; in fact, as part of the comment process for the EIS, EPA filed comments on September 2, 2021, recommending certain changes to an air emissions dispersion model that the OEA ran as part of the environmental review process.[54]

The Center's comments suggest that since the STB issued a final EIS and authorized the Railway construction and operation, then the emissions predicted in the EIS (and particularly the high oil production scenario) should be considered final as well and should have been incorporated into EPA's modeling for purposes of assessing Colorado's contribution to nonattainment and interference with maintenance for the 2015 ozone NAAQS in other states.

Our 2016v2 modeling of 2023 did not include projected increases in emissions from the Uinta Basin Railway project or from the associated projected increase in emissions of ozone precursor emissions from expanded oil and gas operations that are associated with the Uinta Basin Railway. However, we disagree with the Center that this potential increase in emissions would change our analysis for Colorado for several reasons.

First, any potential increase in emissions in Utah associated with the Railway is not relevant to assessing *Colorado's* good neighbor obligations. The Center does not explain how projected emissions increases due to the construction and operation of the Uinta Basin Railway as a whole are relevant to whether emissions from Colorado contribute significantly to nonattainment or interfere with maintenance for the 2015 ozone NAAQS in other states. The selected Whitmore Park Alternative extends approximately 88 miles from terminus points in the Uinta Basin from around Myton, Utah, and Leland Bench, Utah, to an existing rail line near

[54] EPA expressed concern that OEA's use of a "flagpole height" (i.e., the height above the ground for which the model predicts the concentration of a pollutant) for one of the modeling scenarios described in the final EIS might under-predict air pollutant concentrations for that modeling scenario. In response to EPA's letter, OEA reran the model scenario without using a flagpole height and found the new results to be identical to the results reported in the final EIS.

Kyune, Utah. The EIS does not specify if the possible new well drilling and trucking could occur from wells outside the State of Utah as well as inside the State. However, the final EIS indicated that OEA assumed that future oil and gas development, including well drilling and operation along with construction and operation of related facilities, such as pipelines, would occur throughout the Uinta Basin in the fields shown in Figure 3.15-1 of the EIS.[55] None of these fields within the cumulative impacts analysis study area - which extends approximately 18 miles into the Yampa Intrastate Air Quality Control Region in Colorado - are located within Colorado.[56]

We also note that in the EIS, OEA identified 27 reasonably foreseeable future actions within the area of the cumulative impacts study that could have cumulative impacts in addition to estimated additional exploration and drilling of oil wells. We again note that none of these activities were estimated to take place within Colorado.[57]

Therefore, while we do not know for certain where or in which state drilling would occur, estimations indicate that most, if not all, of the expanded production and exploration (and its associated foreseeable future actions) would occur within Utah. It is not possible to determine with much certainty what emissions may be released in Colorado based on the information supplied by the Center or in the EIS, or when, or in what quantity these emissions would occur.

Further, the STB approval for construction and operation of the Railway does not in itself equate to approval of any new oil and gas development or drilling in the small portion of the Uinta Basin area located in Colorado. We do not know how many of the high oil production scenario's estimated 3,330 wells will be drilled and operating and by what year (e.g., the total amount of wells is not expected until after 15 years), nor do we know what controls or limits they will be operating under. We also do not know if wells in the Uinta Basin will be operating at the high oil production scenario (3,330 wells), the low oil production scenario (1,245 wells), or some other production level. Thus, the emissions associated with increased well development

[55] Final EIS, Section 3.15.4.
[56] Final EIS, Section 3.25-3, Figure 3.15-1.
[57] Final EIS, Section 3.15-2.

because of the Uinta Basin Railway—to the extent any such development may occur in the small portion of the Uinta Basin that is located in Colorado—are too speculative to assume they would impact our analysis of potential ozone transport from Colorado.

The Center points to the downline segment analysis of railroad emissions that extended to Denver, Colorado.[58] The EIS states that the total NO_X and VOC emissions at any particular downline location/segment will vary depending on total train traffic, local background concentrations, and local topographic and meteorological conditions.[59] Further, the EIS states "that increases in concentrations measured at air quality monitoring sites, if any, are expected to be negligible" and that "[t]he increased downline rail traffic associated with the proposed rail line would not lead to a violation of the NAAQS for counties that are in attainment, and would not increase the severity of conditions in counties that are not in attainment."[60] Nonetheless, assuming there may be some increase in railroad emissions in Colorado associated with the Uinta Basin Railway project, these emissions increases are too small when viewed in comparison with the total amount of ozone-precursor emissions from Colorado to reasonably be expected to alter the results of our modeling at Step 1 and Step 2. Even an increase in NO_X emissions of 5,771.06 tpy and in VOC emissions of 205.33 tpy would be a very small change in the total statewide emissions of these pollutants from Colorado, which are projected in 2023 to be 145,621 tpy NO_X and 555,631 tpy VOC.[61] Considering that our current 2023 modeling indicates that the largest impact Colorado makes at any downwind receptor is only 0.20 ppb in 2023 (Denton County,

[58] See Final EIS, Section 3.7.
[59] Final EIS at 3.7-17.
[60] Id.
[61] Annual State and County Summaries of Emissions Used in Air Quality Modeling, US Inventory State SCC 2016v2 20 aug2021, Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone National Ambient Air Quality Standard, Docket Id. EPA-HQ-OAR-2021-0668-0100_attachment_3.

Texas, Site ID 481210034), this very small change in statewide emissions cannot reasonably be anticipated to change our modeling results.[62,63]

The estimations of emissions included in the information provided by the Center and in the EIS are largely influenced by what eventual production levels will occur in the Uinta Basin following the completion of the Uinta Basin Railway project. The production rates and resulting changes to emissions in the Uinta Basin and any downline emissions stemming from the project can be influenced by a multitude of factors, including how long it takes to complete the project, as well as various market condition factors such as general domestic and global economic conditions, commodity pricing, and the strategic and capital investment decisions of oil producers and their customers.[64] In OEA's analysis in the EIS, conservative assumptions were generally made when evaluating air quality impacts (i.e., modeling air quality impacts using a production value of 5,750 wells, well above the estimated 3,330 wells under the high oil production scenario).[65, 66] However, without increased certainty on when this project will be completed (and how that relates to air quality conditions at that time), how quickly production in the Uinta Basin will change as a result of the construction, or how much production will change, it is not appropriate nor is it feasible, at this time, for EPA to consider the inclusion or consideration of any changes in emissions as a result of the Uinta Basin Railway project in this action. Additionally, there are other factors that could counterbalance any projected increase in

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[62] In addition, as evident from our analysis in the Uinta Basin TSD, these downline railroad emissions in Colorado would only be relevant to assessing transport into the Uinta Basin to the extent those emissions are occurring within the Colorado portion of the Uinta Basin itself. This is because our analysis in the TSD shows that emissions from outside the Uinta Basin do not transport into the Basin during wintertime inversion conditions. The emissions from trains passing through the Colorado portion of the Uinta Basin during a wintertime inversion episode would be only a very small fraction of the total railroad emissions increase projected in Colorado in the EIS, as presented in the table on page 8 of the Center's comments. Such a small emission increase would not be enough to change our conclusion in the Uinta Basin TSD that emissions from Colorado do not significantly contribute to the ozone issues in the Utah portion of the Uinta Basin.

[63] Design values and contributions at individual monitoring sites nationwide are provided in the file "2016v2_DVs_state_contributions.xlsx," which is included in Docket No. EPA-HQ-OAR-2021-0663.

[64] Final EIS, Section 3.15-3.

[65] Final EIS, Section 3.15-32.

[66] Based on Bureau of Land Management (BLM), "Bureau of Land Management Monument Butte Oil and Gas Development Project Environmental Impact Statement," 2016. Final Environmental Impact Statement for Newfield Exploration Corporation Monument Butte Oil and Gas Development Project in Uintah and Duchesne Counties, Utah.

emissions in Colorado once the Uinta Basin Railway is in operation, including possible emissions reductions that might occur from avoided crude oil truck trips into or through Colorado. This degree of uncertainty makes it too difficult for EPA to determine what the actual impacts may be from this project at this time, though we recognize the potential need to assess the air quality impacts of this project in the future (particularly as related to an increase in emissions from Utah); however, EPA is confident that the emissions change *in Colorado* that could result from this project would not be sufficient to change our conclusions in this action.

In summary, EPA disagrees with the Center's comments that EPA's current modeling and analysis fails to appropriately consider predicted direct or indirect emissions from the construction and operation of the Uinta Basin Railway. Based on our review of the available information, any potential increase in emissions in Colorado from this project are too small and too speculative to reasonably be anticipated to change the results either of our 2023 modeling analysis at Steps 1 and 2, or our assessment of the potential for transport from Colorado within the Uinta Basin.

Comment: The Center asserts that EPA must disapprove Colorado's infrastructure SIP submission under CAA section 110(a)(2)(E) (adequate resources and authority) because the State of Colorado lacks adequate legal authority to regulate emissions from agriculture sources. The Center quotes Colorado Revised Statutes (C.R.S.) 25-7-109(8)(a) and argues that the provision prohibits Colorado from regulating agriculture sources other than those that are major sources. The Center states that Colorado cannot apply RACT or protect visibility or air quality related values for Class I areas from agriculture facilities.

Furthermore, the Center asserts that EPA must also disapprove the SIP under CAA section 110(a)(2)(D) (interstate transport prong 4) and 110(a)(2)(J) (consultation with government officials, public notification, and PSD and visibility protection) because agriculture emissions can cause visibility impartment. Additionally, the Center argues that EPA must disapprove the SIP submission under section 110(a)(2)(A) (emissions limits and other control

measures) because, according to the Center, Colorado cannot assure that it will maintain the NAAQS because the State lacks the legal authority to regulate emissions from agriculture and pesticides.

The Center asserts that on remand, EPA wasted the Tenth Circuit's and the Center's time because, according to the Center, EPA says the same thing on remand that they said before remand. The Center acknowledges a letter from Colorado but argues that Colorado's statement that it regulates agricultural sources through minor source permitting is not true because Colorado has never issued a minor source air permit for a farm or concentrated animal feeding operations (CAFO) and that EPA has not provided evidence to the contrary. The Center further argues that C.R.S. 25-7-109(8)(a) does not mention minor source permitting as an exception and that minor sources are not title V, PSD, or non-attainment new source review (NSR) sources. Furthermore, the Center points out that there are no New Source Performance Standards for CAFOs.

The Center further asserts that fugitive emissions are not included in determining if most sources are major. The Center states that pesticides are a major contributor to ozone formation and animal waste is a major contributor to visibility impairment and interference with air quality related values. The Center argues that Colorado cannot regulate fugitive emissions based on the plain language of C.R.S. 25-7-109(8)(a).

The Center also challenges EPA's interpretation of C.R.S. 25-7-109(8)(a) that if it is necessary to regulate agricultural sources beyond those that are major sources in order to attain or maintain the NAAQS, then the State has authority to do so. The Center states that Part C, Part D, and title V do not say that states must independently attain and maintain the NAAQS. The Center concludes by saying that Colorado has failed to attain the ozone NAAQS five times and that EPA cannot promise to address the State's lack of authority to regulate non-major agriculture sources tomorrow, during review of the State's nonattainment SIP, when it is required to address the issue today.

Response: EPA disagrees with this comment. First, EPA did not waste the Tenth Circuit's or the Center's time, nor did EPA say the exact same thing on remand as EPA said before remand, as the Center contends. Rather, when EPA sought voluntary remand, the Agency specifically said that "EPA intends to review its analysis of the State Authority Element and may provide additional explanation of its reading of Colorado's agriculture provision."[67] On remand, EPA has done exactly that— because of concerns raised about the State's authority, EPA reevaluated C.R.S. 25-7-109(8)(a) ("agriculture provision") and verified our reading of that provision with Colorado. By letter, Colorado explained the State's authority under the agriculture provision, which confirmed EPA's earlier interpretation of the provision. By verifying our interpretation with Colorado, EPA received adequate necessary assurances from the State concerning Colorado's legal authority, as required by CAA section 110(a)(2)(E)(i).

Second, the Center's interpretation of the agriculture provision is wrong. A plain reading of the provision, supported by Colorado's letter, demonstrates that Colorado does have authority to:

- Apply reasonably available control technology (RACT) to agricultural facilities;
- Regulate agricultural facility emissions to protect visibility;
- Regulate agricultural, horticultural, or floricultural production sources, even if they are not major sources; and
- Regulate minor sources like pesticides, farms, CAFOs, and fugitive emissions *if required by Part C, Part D, or title V of the CAA*.[68]

Part C, Part D, and title V of the CAA do not prescribe specific measures that states must adopt. Rather, "the CAA supplies the goals and basic requirements of state implementation plans, but the states have broad authority to determine the methods and particular control strategies they

[67] *Center for Biological Diversity* v. *EPA,* No. 20–9560 (Tenth Cir.), EPA's Motion for Voluntary Remand at 10.
[68] C.R.S. 25-7-109(8)(a).

will use to achieve the statutory requirements."[69] Part C requires that states submit to EPA SIP submissions that contain "emission limitations and such other measures as may be necessary . . . to prevent significant deterioration of air quality in each region (or portion thereof) designated . . . as attainment or unclassifiable;"[70] and SIP submissions that contain "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national [visibility] goal."[71] Further, Part D of the CAA requires that SIPs "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in this area as may be obtained through the adoption, at a minimum of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards;"[72] "additional measures, if any, as may be necessary to ensure [] maintenance" of the NAAQS once a nonattainment area has been redesignated to attainment;[73] "[RACT] corrections" for areas deemed Marginal nonattainment [74] and further SIP revisions for areas deemed Moderate, Serious, Severe, and Extreme nonattainment.[75] While some of the SIP requirements apply only to major sources, other provisions require states to evaluate additional area sources of emissions.[76]

Thus, if Colorado needs to regulate agricultural sources (regardless of size) in order to attain and maintain the NAAQS or to protect visibility as required by federal law in the CAA, Colorado has the authority under state law to include such measures in its SIP submissions under Part C and Part D of the CAA. Further, EPA separately evaluates the sufficiency of each of these

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[69] *BCCA Appeal Group v. EPA*, 355 F.3d 817, 822 (5th Cir. 2003) (citing *Union Elec. Co. v. EPA*, 427 U.S. 246, 266 (1976)).
[70] 42 U.S.C. 7471.
[71] 42 U.S.C. 7491(b)(2).
[72] 42 U.S.C. 7502(c)(1); see also 7511a(2)(A) (requiring RACT corrections for marginal areas).
[73] 42 U.S.C. 7505(a).
[74] 42 U.S.C. 7511a(a)(2).
[75] 42 U.S.C. 7511a(b), (c), (d), and (e).
[76] Compare, e.g., 42 U.S.C. 7502(c)(5) with 7502(c)(6). See also 40 CFR 51.308(f)(2)(i)(instructing the states to "consider evaluating major and minor stationary sources or groups of sources, mobile sources, and area sources" as part of their long term strategies for addressing visibility impairment).

submissions under the relevant statutory and regulatory provisions.[77] If EPA deems such SIP submissions inadequate to prevent significant deterioration, protect visibility, or attain and maintain the NAAQS, Colorado may be required by Part C or Part D of the CAA to regulate agricultural sources (regardless of size) and is not prohibited by C.R.S. 25-7-109(8)(a) from doing so. EPA interprets C.R.S. 25-7-109(8)(a) to authorize such regulation if required for these purposes, and the State has confirmed this reading of state law. Moreover, each time the State develops a SIP submission and EPA proposes action on a SIP submission, the Center has an opportunity to comment on the SIP submission during both the state and federal public comment periods.[78] Those are the appropriate opportunities for the Center to make their arguments regarding the need for better regulation of agricultural sources. For example, to the extent that the Center advocates for control of pesticide emissions as VOC precursors to ozone formation in a given nonattainment area, a proper place for such advocacy is during the State's development of a nonattainment SIP submission and EPA's evaluation of it. Here, in the context of EPA's evaluation of Colorado's infrastructure SIP submission, the question is whether Colorado has provided necessary assurances of the State's authority to do so in order to implement its SIP.

Third, the Center takes issue with part of Colorado's letter, asserting that Colorado states that it regulates agricultural sources through minor source permitting, and asserting that Colorado has never issued a minor source air permit for a farm or CAFO and that EPA has not provided evidence to the contrary. The Center misconstrues the letter. Colorado does not state that the State regulates all agricultural sources through minor source permitting; rather, Colorado states that it regulates "agricultural sources that are subject to [a New Source Performance

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[77] See, e.g., 42 U.S.C. 7410(k)(3); 7502(d). See also Letter to Deb Thomas, Regional Administrator (Acting) and Deputy Regional Administrator, U.S. Environmental Protection Agency, Region 8, from Garrison Kaufman, Director, Air Pollution Control Division, July 29, 2021 ([T]he DMFR ozone area is a nonattainment area and, therefore, the AQCC has the authority to regulate emissions from agricultural production to the extent that such regulations are required by Part D of the federal Clean Air Act due to the DMNFR ozone area's nonattainment status."); 84 FR 36516, 36518 (July 29, 2019) (explaining that Colorado's infrastructure SIP submission met the "basic infrastructure requirements" of CAA section 110(a)(2)(A) but that whether the State's measures meet the requirements of CAA part D is a separate determination that EPA would make in an action reviewing the measures under part D.).

[78] See, e.g., 84 FR 34083 (July 17, 2019) (proposing to Colorado's visibility progress report for the first regional haze implementation period); 86 FR 11129 (February 24, 2021).

Standard (NSPS)]" through the minor source permitting program, the PSD and NSR permitting programs, and the title V permitting program.[79] Additionally, in reviewing Colorado's infrastructure SIP submission under CAA section 110(a)(2)(E)(i), the question is not whether Colorado has regulated or does regulate agricultural sources; the question is whether Colorado has the authority to do so if necessary.[80]

The fact that the agriculture provision does not specifically mention minor source permitting does not mean that Colorado lacks the authority to regulate minor agricultural sources. Like all states, Colorado is required to include in its SIP a minor source NSR program governed by Parts C and D of the CAA.[81] Colorado's minor source NSR program is contained in Colorado's "Regulation 3."[82] Colorado may amend Regulation 3 as necessary to assure NAAQS are achieved as required by Parts C and D of the CAA. Thus, Colorado has authority to regulate minor agricultural sources as necessary under Parts C and D of the CAA.

Fourth, with respect to the Center's assertion that there is no NSPS for CAFOs, that does not mean that Colorado cannot regulate CAFO emissions under the CAA. As explained above, Colorado could include measures in its nonattainment and visibility SIP submissions designed to reduce emissions from CAFOs. The agriculture provision does not bar the State from doing so if necessary, under the CAA.

Finally, the Center raises issues that are outside the scope of this rulemaking. EPA sought, and the Tenth Circuit granted, remand of only two portions of EPA's approval of Colorado's infrastructure SIP submission for the 2015 ozone standards—EPA's conclusions under CAA section 110(a)(2)(D)(i)(I) and (E)(i) with respect to the agriculture provision. EPA

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[79] Letter to Deb Thomas, Regional Administrator (Acting) and Deputy Regional Administrator, U.S. Environmental Protection Agency, Region 8, from Garrison Kaufman, Director, Air Pollution Control Division, July 29, 2021.
[80] 42 U.S.C. 7410(a)(2)(E)(i); 40 CFR 51.230-231; Stephen D. Page, EPA Office of Air Quality Planning and Standards, Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2), 41 (2013).
[81] See 42 U.S.C. 7410(a)(2)(C) (requiring SIPs to contain a program for "regulation of the modification and construction of any stationary source within areas covered by the plan as necessary to assure that [NAAQS] are achieved, including a permit program as required by parts C and D of this subchapter"); 40 CFR 51.160 (requirements for permit programs in SIPs generally) (both implicitly including minor sources).
[82] C.R.S. 25-7-114 to 25-7-114.7.

proposed action on these two portions only and stated that the Agency was not reopening for comment any other portions of the 2020 final rule.[83] Accordingly, the Center's assertion that EPA has not acted on a petition to promulgate an NSPS for CAFOs is outside the scope of this action. Similarly, the Center's assertions that EPA must disapprove Colorado's infrastructure SIP under CAA section 110(a)(2)(A), 110(a)(2)(D)(i)(II) (prong 4), and 110(a)(2)(J) are also outside the scope of this action.[84]

EPA notes that "Congress has left to the Administrator's sound discretion determination of what assurances are 'necessary'" under CAA section 110(a)(2)(E)(i).[85] For the foregoing reasons, and for the reasons stated in our proposal, we conclude that Colorado's infrastructure SIP submission, supported by Colorado's letter regarding the agriculture provision, provides the necessary assurances of the State's authority to carry out Colorado's SIP for the 2015 ozone NAAQS as required by CAA section 110(a)(2)(E)(i).

III. Final Action

EPA is confirming our approval that the good neighbor portion of Colorado's infrastructure SIP satisfies the interstate transport provision of the CAA, section 110(a)(2)(D)(i)(I), for the 2015 ozone NAAQS, and that the State has provided the necessary assurances of the State's authority to regulate all agricultural sources as may be required by the CAA under section 110(a)(2)(E)(i).

IV. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act 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

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[83] 87 FR 27054.
[84] See 85 FR 20165, 20171 (April 10, 2020) (explaining EPA's basis for approving Colorado's infrastructure SIP submission under CAA section 110(a)(2)(D)(i)(II) (prong 4) and 110(a)(2)(J)); 85 FR 36518 (explaining EPA's basis for proposing to approve Colorado's infrastructure SIP submission under CAA section 110(a)(2)(A)).
[85] *NRDC v. EPA*, 478 F.2d 875, 884 (1st Cir. 1973); *see also BCCA*, 355 F.3d at 844-847.

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 Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- 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, described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- 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; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

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).

The Congressional Review Act, 5 U.S.C. 801 *et seq*., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Greenhouse gases, Incorporation by reference, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: October 2, 2022

KC Becker,
Regional Administrator,
Region 8.

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