SUMMARY: The Environmental Protection Agency (EPA) is taking final action on portions of six submissions from the state of Wyoming that are intended to demonstrate that the State Implementation Plan (SIP) meets certain interstate transport requirements of the Clean Air Act (Act or CAA). These submissions address the 2006 and 2012 fine particulate matter (PM2.5) National Ambient Air Quality Standards (NAAQS), 2008 ozone NAAQS, 2008 lead (Pb) NAAQS, 2010 sulfur dioxide (SO2) NAAQS, and 2010 nitrogen dioxide (NO2) NAAQS. The interstate transport requirements under the CAA consist of four elements (or prongs): Significant contribution to nonattainment (prong 1) and interference with maintenance (prong 2) of the NAAQS in other states; and interference with measures required to prevent significant deterioration of air quality (prong 3) or to protect visibility (prong 4). Specifically, the EPA is approving Wyoming’s submissions for interstate transport prongs 1 and 2 for the 2008 Pb and 2010 NOx NAAQS, and approving prong 1 and disapproving prong 2 for the 2008 ozone NAAQS. The EPA is also approving interstate transport prong 4 for the 2008 Pb and 2010 SO2 NAAQS, and disapproving prong 4 for the 2006 PM2.5, 2008 ozone, 2010 NO2 and 2012 PM2.5 NAAQS.

DATES: This final rule is effective on March 6, 2017.

ADDRESSES: The EPA has established a docket for this action under Docket Identification Number EPA–R08–OAR–2016–0521. All documents in the docket are listed on the http://www.regulations.gov index. Although listed in the index, some information may not be publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically through http://www.regulations.gov or in hard copy at the Air Program, Environmental Protection Agency, Region 8, 1595 Wynkoop Street, Denver, Colorado 80202–1129.

FOR FURTHER INFORMATION CONTACT: Contact the individual listed in the "FURTHER INFORMATION CONTACT" section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding federal holidays. For further information contact: Adam Clark, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P–AR, 1595 Wynkoop Street, Denver, Colorado 80202–1129, (303) 312–7104, clark.adam@epa.gov.

I. Background

On November 18, 2016, the EPA proposed action on six submittals from Wyoming intended to address the interstate transport requirements of CAA section 110(a)(2)(D)(i) for the 2008 Pb, 2008 ozone, 2010 NOx, 2010 SO2, and 2006 and 2012 PM2.5 NAAQS. 81 FR 81712. In that action, the EPA proposed to approve CAA section 110(a)(2)(D)(i) prongs 1, 2 and 4 for the 2008 Pb NAAQS, prong 1 for the 2008 ozone NAAQS, prongs 1 and 2 for NOx, and prong 4 for the 2010 SO2 NAAQS, and proposed to disapprove prong 4 for the 2006 PM2.5, 2008 ozone, 2010 NOx and 2012 PM2.5, NAAQS, and prong 2 for the 2008 ozone NAAQS. An explanation of the CAA requirements, a detailed analysis of the State’s submittals, and the EPA’s rationale for all proposed actions were provided in the notice of proposed rulemaking, and will not generally be restated here.

The public comment period for this proposed rule ended on December 19, 2016. The EPA received seven comments on the proposal, which will be addressed in the “Response to Comments” section, below. All of the comments relate to the EPA’s proposed action with respect to prongs 1 and 2 of CAA section 110(a)(2)(D)(i) for the 2008 ozone NAAQS. We had proposed to approve the portion of the Wyoming SIP submittal pertaining to the CAA requirement that the State prohibit any emissions activity within the State from emitting air pollutants which will significantly contribute to nonattainment (prong 1) of the 2008 ozone NAAQS in other states and proposed to disapprove the portion of the Wyoming SIP submittal pertaining to the requirement that the state prohibit any emissions activity within the state interfering with maintenance (prong 2) of the 2008 ozone NAAQS in other states. In proposing to take this action, we noted two deficiencies in Wyoming’s submittal: (1) Wyoming limited its
technical analysis to a discussion on general wind patterns relative to areas designated nonattainment in certain states that are geographically closest to Wyoming, and did not consider whether emission activity in the State specifically contributed to such areas on days with measured exceedances of the NAAQS or in other areas not designated nonattainment and (2) Wyoming did not give the “interfere with maintenance” clause of CAA section 110(a)(2)(D)(i)(I) independent significance because its analysis did not attempt to evaluate the potential impact of Wyoming’s emissions on ozone in areas that may have issues maintaining air quality.

In addition, the EPA cited at proposal certain technical information and a related analysis the agency conducted in order to facilitate efforts to address interstate transport requirements for the 2008 ozone NAAQS, which was also used to support the recently finalized Cross-State Air Pollution Rule Update for the 2008 ozone NAAQS (CSAPR Update). In particular, the EPA cited to air quality modeling which (1) identified locations in the U.S. where the EPA anticipates nonattainment or maintenance issues in 2017 for the 2008 ozone NAAQS (these are identified as nonattainment and maintenance receptors), and (2) quantified the projected contributions from emissions from upwind states to downwind ozone concentrations at the nonattainment and maintenance receptors in 2017. The notice also proposed to apply an air quality modeling threshold of one percent of the NAAQS, equivalent to 0.75 ppb with respect to the 2008 ozone NAAQS, to determine whether a state was “linked” to an identified downwind air quality problem in another state such that the upwind state may significantly contribute to nonattainment or interfere with maintenance of the NAAQS in the downwind state.

The modeling data showed that emissions from Wyoming contribute above the one percent threshold to one identified maintenance receptor in the Denver, Colorado area. Accordingly, as the Wyoming Department of Environmental Quality (WDEQ) did not provide technical analysis sufficient to support the State’s conclusion that emissions originating in Wyoming do not interfere with maintenance of the 2008 ozone NAAQS in any other state, the EPA proposed to disapprove the Wyoming SIP as to prong 2 of CAA section 110(a)(2)(D)(i)(I). The proposal also noted that, despite the deficiencies in Wyoming’s SIP submission as to prong 1, the modeling data confirmed the State’s conclusion that it does not significantly contribute to nonattainment of the 2008 ozone NAAQS in any other state. Accordingly, the EPA proposed to approve Wyoming’s SIP as meeting the prong 1 requirements of CAA section 110(a)(2)(D)(i)(I) for the 2008 ozone NAAQS.

II. Response to Comments

Comment: Several commenters asserted that the State should be given more time to review the CSAPR Update modeling analysis before the EPA takes final action on Wyoming’s SIP submittal addressing the prong 1 and 2 requirements as to the 2008 ozone NAAQS. WDEQ submitted a comment letter on November 23, 2016, requesting a 90-day extension to the 30-day comment period that the State asserted was necessary “to devote significant time and energy reviewing the EPA’s basis for the approval and disapproval of the State Plans named in the Proposed Rule.” The State noted that the EPA had taken over two years and nine months to review Wyoming’s February 6, 2014 submittal, and that it was therefore reasonable to allow 120 days for the State to review the EPA’s proposed action and to provide additional information in support of its original SIP submission. The EPA responded to WDEQ with a December 6, 2016 letter informing the State that we would not extend the comment period for the proposed rule.2

Commenter Utility Air Regulatory Group (UARG) asserted that the EPA’s refusal to extend the comment period is unreasonable. UARG stated that the EPA did not dispute that the State needed additional time, but rather denied the extension request on grounds that opposing counsel in a proposed consent decree motion with the district court to modify the negotiated deadline. See Sierra Club v. McCarthy, Case No. 3:15–cv–04328–JD. (N.D. Cal), Joint Motion to Enter Partial Consent Decree (Oct. 15, 2015) (Document 57). UARG asserted that, because the consent decree was still proposed and therefore had not been entered by the court, the EPA could have taken action to modify the proposed consent decree or filed a motion with the district court to modify the deadline. The commenter asserted that the EPA should have either taken one of these actions, or disputed WDEQ’s statement that it needed additional time.

Several commenters asserted that Wyoming should be given an opportunity to review the recently-finalized CSAPR Update modeling to determine whether it is accurate or appropriate for Wyoming or the West overall. Commenter WEST Associates requested that the EPA allow Wyoming to re-examine and resubmit the prong 2 portion of the State’s February 6, 2014 submittal before moving forward with a final action.

Response: The EPA disagrees with the commenters that the State has not had sufficient time to review the modeling analysis associated with the CSAPR Update Rulemaking. The EPA has provided several opportunities for states to review its modeling information relative to the 2008 ozone NAAQS.3 This preliminary modeling showed that in 2018 Wyoming would contribute to a maintenance receptor above the one percent screening threshold used in the original CSAPR rulemaking. The EPA subsequently issued updated modeling in an August 4, 2015 Notice of Data Availability (NODA), which included a docket with substantial technical information on how the modeling was conducted, notably an Air Quality Modeling Technical Support Document.4 The updated air quality modeling also identified linkages between Wyoming and nonattainment and maintenance receptors in the Denver, Colorado area, and Wyoming submitted comments on the docket for the NODA. The modeling released in the NODA was used to support the proposed CSAPR Update, and the EPA provided additional, robust explanation and technical support for the modeling in that proposal (80 FR 75706, December 23, 2015) and again in the final rule (81 FR 74504, October 26, 2016), which once more demonstrated a linkage between Wyoming and a maintenance receptor in the Denver, Colorado area, as described in the EPA’s

2 EPA’s December 6, 2016 letter is available in the docket for this action.
proposed action on Wyoming’s SIP submission. Moreover, the EPA proposed a similar action with respect to Utah’s SIP submission addressing interstate transport with respect to the 2008 ozone NAAQS based on several deficiencies in that state’s SIP and citing to the air quality modeling conducted to support the CSAPR Update, which demonstrated that Utah was also linked to nonattainment and maintenance receptors in Denver. May 10, 2016, 81 FR 28807. WDEQ reviewed and commented on the EPA’s proposed disapproval action on Utah’s interstate transport SIP submission in a June 9, 2016 comment letter submitted to the EPA. In that letter, WDEQ discussed the impact that the EPA’s application of the one percent screening threshold to states linked to the Denver receptors would have on the state of Wyoming. Accordingly, Wyoming had several opportunities (including time since January 2015) to review and comment on the EPA’s modeling conducted over the last two years and, as necessary, to supplement its submission with additional technical analysis addressing the linkages repeatedly identified in the EPA’s analysis. Finally, although the commenters focus on concerns relative to an opportunity to review the applicability of the EPA’s air quality modeling, they do not address the clear deficiency in Wyoming’s SIP identified in the EPA’s proposed disapproval as to the prong 2 requirements. As explained at proposal, in remanding the Clean Air Interstate Rule (CAIR) to the EPA in North Carolina v. EPA, the D.C. Circuit explained that the regulating authority must give the “interfere with maintenance” clause of section 110(a)(2)(D)(i)(I) “independent significance” by evaluating the impact of upwind state emissions on downwind areas that are at risk of future nonattainment, considering historic variability, even if they currently measure clean data. Wyoming’s SIP submission did not give the “interfere with maintenance” clause of section 110(a)(2)(D)(i)(I) independent significance because its analysis did not evaluate the potential impact of Wyoming emissions on areas that may have issues maintaining that air quality, even if they are currently measuring clean data. Thus, even absent the EPA’s modeling, the SIP submission was deficient as to addressing the requirements of prong 2 with respect to the 2008 ozone NAAQS. Finally, the EPA notes that finalization of this action in no way precludes the state of Wyoming from subsequently submitting a SIP or SIP revision to address the deficiencies identified here.

Comment: Commenters WEST Associates and Basin Electric Power Cooperative (BEPC) stated that the EPA should wait for the litigation on the EPA’s Federal Implementation Plan (FIP) for NOx-related portions of the Wyoming Regional Haze SIP/FIP to be resolved before taking final action on prong 2 of Wyoming’s February 6, 2014 submittal. The commenters asserted that it is counterproductive to engage in a prong 2 analysis for ozone while the EPA’s Regional Haze NOX FIP is still under appeal before the United States Court of Appeals for the 10th Circuit. Commenters noted that the representatives for the Laramie River Station are currently participating in good faith negotiations with the EPA aimed at reaching an agreement on the Regional Haze NOX controls for the source.

Response: The EPA disagrees that it would be appropriate to wait until resolution of the legal challenges to the EPA’s January 30, 2014 partial approval and partial disapproval of Wyoming’s Regional Haze SIP and the EPA’s concurrent partial approval of a FIP (79 FR 5032) before acting on Wyoming’s prong 2 SIP submission. The Regional Haze and interstate transport planning requirements address different air quality concerns and are addressed under different statutory provisions and timeframes. The Regional Haze requirements concern visibility in Class I areas, whereas the interstate transport requirements are concerned with attainment and maintenance of the NAAQS, which are designed to address public health and welfare. Thus, while actions taken to address one set of requirements may assist with meeting the other set of requirements, neither Wyoming nor the commenters have explained how implementation of either the disputed SIP or FIP requirements for Regional Haze would necessarily address the 110(a)(2)(D)(i)(I) interstate transport requirements. Moreover, Wyoming’s prong 2 SIP was submitted on February 6, 2014 and was deemed complete by operation of law on August 15, 2016. Accordingly, CAA section 110(k)(2) requires the EPA to have taken final action to approve or disapprove a state’s SIP within one year thereafter. As the EPA’s action on this submission is already belated, the EPA does not find it appropriate to further delay action on the State’s interstate transport SIP until there is resolution of litigation for an unrelated SIP requirement. Delaying action on the State’s interstate transport SIP would only further delay potential emission reductions that may be necessary to address maintenance of the NAAQS in Denver, and thereby further delay the public health benefits that would accrue from such emission reductions. To the extent Wyoming believes that the NOX emission reductions that would be achieved through the State’s implementation of the Regional Haze requirements will assist in meeting the State’s interstate transport requirements, once the ongoing dispute is resolved, Wyoming may submit a revised SIP submission making an appropriate demonstration at that time.

Comment: Commenter WDEQ disagrees with the EPA’s basis for disapproving the State’s SIP submission as to the prong 2 requirements for the 2008 ozone NAAQS, and believes its February 6, 2014 submittal contains the necessary information to meet these requirements. WDEQ asserted that it had relied upon the EPA’s most recent guidance at the time that directly addressed the prong 1 and 2 requirements. WDEQ noted that the EPA’s September 2013 infrastructure SIP guidance did not address the prongs 1 and 2 requirements, and therefore relied on prior guidance documents issued in 2006 and 2007 regarding reliance on the EPA’s prior interstate transport rulemaking, CAIR, for purposes of developing interstate transport SIPs. WDEQ noted that these guidance documents state that a negative declaration from states not covered by CAIR certifying that the state meets prongs 1 and 2 is adequate to satisfy the requirements of CAA section 110(a)(2)(D)(i). WDEQ added that the guidance documents made no indication that the EPA expected states to consider contributions on days where downwind states measured an exceedance, neither in nonattainment nor maintenance areas. WDEQ contends that the EPA’s proposed finding that WDEQ’s analyses for prongs 1 and 2 are deficient because “transported

5 The Air Quality Modeling Technical Support Document (AQM TSD) for each of these actions in the docket for this rulemaking.
6 WDEQ’s comment letter on the EPA’s May 10, 2016 proposed action on the Utah submittal can be found on www.regulations.gov in the docket for that action, EPA-R08-OAR-2016-0107.
7 531 F.3d 896, 910–11 (D.C. Cir. 2008) [holding that the EPA must give “independent significance” to each prong of CAA section 110(a)(2)(D)(i)(I)].
8 “Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM2.5 NAAQS,” August 15, 2006, and “Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 1997 8-hour Ozone and PM2.5 National Ambient Air Quality Standards,” October 2, 2007.
emissions may cause an area to measure exceedances of the standard even if that area is not formally designated nonattainment by the EPA” is unreasonable because such a showing was not stated as a requirement for approval. WDEQ also noted that the EPA previously approved Wyoming’s ozone infrastructure plan which used the same methodology and approach used by the State in its February 6, 2014 submittal.

WDEQ asserted that the EPA’s proposed prong 2 disapproval indicates a radical change from its prior approach for determining adequacy of such plans. WDEQ asserted that the EPA has made statements indicating that the Agency has not evaluated the applicability of a transport rule in the western states, and that the EPA does not have an understanding of the nature of interstate ozone transport in the West. WDEQ suggested that the EPA should conduct interstate transport modeling and analysis specific to western states and then use the outcome of such analysis in the development and evaluation of future plans, but not plans previously submitted.

Commenter Western Energy Alliance stated that the EPA’s proposed action runs contrary to long-standing agency practice of accepting a “weight of evidence” approach to evaluating interstate transport in downwind states, and contends that is inappropriate for the EPA to hold the WDEQ analysis to standards that did not exist when the SIP was developed.

Response: For the reasons described at proposal and in this final action, the EPA disagrees that Wyoming’s SIP submission contains adequate provisions to address the prong 2 requirements with respect to the 2008 ozone NAAQS. In particular, the State did not give the “interfere with maintenance” clause of CAA section 110(a)(2)(D)(i)(I) independent significance, because its analysis did not attempt to evaluate the potential impact of Wyoming emissions on areas that may have issues maintaining that air quality, even if they currently measure clean data. As we noted at proposal, the EPA’s most recent technical information demonstrates that emissions from Wyoming will impact air quality in other states relative to the 2008 ozone NAAQS.

The EPA disagrees that it needed to issue guidance for states to be aware of the requirement to evaluate areas that might be at risk of violating the standard, regardless of whether those areas are otherwise designated nonattainment. The court in North Carolina was specifically concerned with areas not designated nonattainment when it rejected the view that “a state can never ‘interfere with maintenance’ unless the EPA determines that at one point it ‘contribute[d] significantly to nonattainment.’” 531 F.3d at 910. The court pointed out that areas barely attaining the standard due in part to emissions from upwind sources would have “no recourse” pursuant to such an interpretation. Id. Accordingly, and as described in the proposal, the court explained that the regulatory authority must give “independent significance” to the maintenance prong of CAA section 110(a)(2)(D)(i)(I) by separately identifying such downwind areas for purposes of defining states’ obligations pursuant to the good neighbor provision. Thus, the court’s decision in North Carolina gave Wyoming sufficient notice, without further guidance from the EPA, that it needed to consider the potential impact of its emissions on areas that may have issues maintaining the standard. In addition, as noted at proposal, the EPA has stated in many actions before Wyoming made their submission that the obligation to address impacts on downwind air quality is independent of formal designations. Exceedances can happen in any area, Wyoming’s SIP submission did not attempt to evaluate such areas and was thus deficient as to the prong 2 requirements. In so finding, the EPA is not engaged in a “radical departure” from its prior approach to evaluating SIPs, but merely measuring Wyoming’s SIP against the statutory requirements, as interpreted by the court in North Carolina.10

10The EPA notes that, in approving the state’s SIP to address the requirements of section 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS, the EPA supplemented the State’s technical analysis in order to ensure that that independent analysis was given to the prong 2 requirements. See 73 FR 26023, May 8, 2008.

11See, e.g., Clean Air Interstate Rule, 70 FR 25162, 25265 (May 12, 2005) (“As to impacts, CAA section 110(a)(2)(D)(i) refers only to prevention of ‘nonattainment’ in other States, not to prevention of nonattainment in designated nonattainment areas or any similar formulation requiring that designations must first have been withdrawn. ‘As to impacts, CAA section 110(a)(2)(D)(i) refers only to prevention of ‘nonattainment’ in other States, not to prevention of nonattainment in designated nonattainment areas or any similar formulation requiring that designations must first have been withdrawn.’”); Cross-State Air Pollution Rule, 76 FR 48208, 48211 (Aug. 8, 2011) (evaluating nonattainment and maintenance concerns based on modeled projections; Brief for Respondents U.S. Environmental Protection Agency at 23–24, EME Homer City Generation, L.P. v. EPA, Case No. 11–1309 (D.C. Cir. Jan. 16, 2015), ECF No. 1532516 (defending the EME Homer City Generation Rule which used a ‘two-stage’ approach to evaluating the level of emissions in the States. Under the law, States will devise implementation plans to meet that target. Nothing in the law dictates additional guidance from EPA at this point.”).

While the EPA appreciates the helpful role guidance can provide to states, whether the EPA chooses to issue guidance or not does not relieve either states of the obligation to submit SIPs that address CAA section 110(a)(2)(D)(i)(I) by the statutory deadline or the EPA of the obligation to review SIPs consistent with those statutory requirements. States bear the primary responsibility to demonstrate that their plans contain adequate provisions to address the statutory interstate transport provisions, specifically to demonstrate that the plan properly prohibits emissions that will significantly contribute to nonattainment or interfere with maintenance of the NAAQS in downwind states. Furthermore, in EPA v. EME Homer City Generation, L.P., the Supreme Court clearly held that “nothing in the statute places the EPA under an obligation to provide specific metrics to States before they undertake to fulfill their good neighbor obligations.” 134 S. Ct. 1584, 1601 (2014). While the EPA has taken a different approach in some prior rulemakings by providing states with an opportunity to submit a SIP after they quantify the states’ emission reduction obligations (e.g., the NOX SIP Call and CAIR 12), the CAA does not require such an approach. As discussed earlier, the EPA did provide information to assist states with developing or supplementing their SIP submittals for the 2008 ozone NAAQS, including the January 22, 2015 memorandum providing preliminary modeling information regarding potential downwind air quality problems and levels of upwind state contributions and the August 4, 2015 NODA providing unnecessary for the EPA to issue formal guidance to alert states to its interpretation of CAA section 110(a)(2)(D)(i)(I) requirements.

12For information on the NOX SIP call see 63 FR 57356 (October 26, 1998). For information on CAIR (the Clean Air Interstate Rule) see 70 FR 25162 (May 12, 2005).
updated modeling. All of these documents consistently indicated that the EPA’s technical analysis showed that Wyoming emissions contribute to downwind air quality problems with respect to the 2006 ozone NAAQS; yet Wyoming did not revise or supplement its SIP submittal with additional data showing the State had satisfied its statutory obligation.\(^\text{13}\)

Moreover, it is inappropriate to rely on older EPA guidance to demonstrate compliance with the prong 2 requirements for the 2008 ozone NAAQS as those guidance documents do not address this specific NAAQS. Both the 2006 and 2007 guidance documents WDEQ claims to have relied on are inapplicable to the State’s obligation to address the prong 2 requirements for the 2008 ozone NAAQS. First, WDEQ concedes that both guidance documents were aimed at the addressing the prongs 1 and 2 requirements for the 1997 ozone and fine particulate matter (PM\(_{2.5}\)) NAAQS, not the 2008 ozone NAAQS at issue here. The guidance documents recommended relying on the analysis conducted to support the CAIR rulemaking, that rulemaking also only addressed the 1997 standards, and not the more stringent 2008 ozone NAAQS. The guidance documents in no way suggested that states could rely on the analysis from CAIR to address the prong 1 and 2 requirements for any other NAAQS. Moreover, even were the CAIR analysis in some way relevant to the consideration of the 2008 ozone NAAQS by the EPA they did not evaluate the impact of emissions from western states, including Wyoming, on air quality in the course of that rulemaking.\(^\text{14}\)

Accordingly, there would be no basis on which either Wyoming or the EPA could conclude that the CAIR analysis supports a conclusion that Wyoming does not contribute significantly to nonattainment or interfere with maintenance either for the NAAQS explicitly addressed by CAIR or for any other NAAQS.\(^\text{15}\)

More importantly, in *North Carolina v. EPA*, the D.C. Circuit held that CAIR was “fundamentally flawed,” 531 F.3d 896, 929 (D.C. Cir. 2008), in part because CAIR did not satisfy the statutory requirement to “achieve something measurable towards the goal of prohibiting sources ‘within the State’ from contributing to nonattainment or interfering with maintenance in ‘any other State.’ ” Id. at 908. The D.C. Circuit held in *EME Homer City Generation, L.P. v. EPA*, “when our decision in North Carolina deemed CAIR to be an invalid effort to implement the requirements of the good neighbor provision, that ruling meant that the initial approval of the CAIR SIPS was in error at the time it was approved.” 531 F.3d 818, 133 (2015). States therefore did not need formal guidance to understand that it was no longer appropriate to rely on CAIR for purposes of satisfying the state’s interstate transport obligations with respect to the 2008 ozone NAAQS, particularly when Wyoming submitted its SIP revision, six years after the *North Carolina* decision issued. Nonetheless, in a subsequent guidance document issued addressing the prong 1 and 2 requirements for the 2006 PM\(_{2.5}\) NAAQS, the EPA clearly stated that states should no longer rely on CAIR as a means of addressing the interstate transport requirements because the rule had been remanded by the court in *North Carolina*.\(^\text{16}\)

Although WDEQ questions how it could have developed an approvable SIP without explicit guidance from the EPA and before the EPA had conducted air quality modeling evaluating downwind air quality and contributions, as explained earlier, states bear the primary responsibility for demonstrating that their plans contain adequate provisions to address the statutory interstate transport provisions whether or not the EPA issues such guidance or conducts such modeling. The commenters are correct to note that, in separate interstate transport actions, the EPA has reviewed and finalized action on interstate transport SIPs in states where air quality modeling was not available or where the total weight of evidence for finalizing action on the state’s SIP was not solely based on air quality modeling.\(^\text{17}\) As evidenced by these actions, consideration of monitoring data and wind patterns, properly used, can be relevant to evaluating potential interstate transport impacts, but such consideration does not absolve a state from evaluating its downwind impact regardless of formal area designations and considering the requirements of both prongs of the good neighbor provision. A state can and should submit all of the technical information it considers relevant to evaluate its contribution to downwind air quality, including anticipated changes in the emissions from sources within the state and any additional factors specific to the state that influence its emissions and air pollution which may transport to other states. As we noted above and as found by the Supreme Court in *EME Homer City Generation, L.P.*, the lack of guidance does not relieve either the states of the obligation to submit SIPS that address CAA section 110(a)(2)(D)(i)(I) nor the EPA of the obligation to review such SIPS consistent with the statutory requirements of the good neighbor provision. Though Wyoming submitted potentially impacted states, monitored ambient concentrations in the state and the potentially impacted states, and air quality modeling.” Id. p. 4.

\(^{13}\) The EPA does not agree that its statements explaining the EPA’s intent to work with western states are an indication that the EPA does not have an understanding of interstate transport in the West. The EPA’s statement that the EPA and the states should have a “common understanding of interstate ozone transport in each part of the country” was intended to indicate the Agency’s desire to work with the states to develop appropriate solutions to interstate transport problems, not an indication that the EPA lacks an understanding of interstate transport in the West. As explained further below, the EPA believes the modeling provides a reliable projection of the nature of interstate transport in western states.

\(^{14}\) See AQM TSD for CAIR final rule, at 3. WDEQ’s citation to CSAPR is also unavailing. CSAPR also addressed only the 1997 ozone NAAQS, not the more stringent 2008 ozone NAAQS and interstate transport as to any of these standards in western states, including Wyoming. 76 FR 48229 (describing modeling of states in the central and eastern U.S.). Accordingly, it would also be inappropriate for Wyoming to conclude that, because the state was not included in CSAPR, it does not significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS.

\(^{15}\) Additionally, the 2006 guidance to which WDEQ points explicitly noted that any negative declaration indicating a state was not covered by CAIR should also be supported by a technical demonstration. See 2006 SIP Guidance, p. 5.

\(^{16}\) Memo from William T. Harnett to Regional Air Division Directors, Regions I–X, “Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle (PM\(_{2.5}\)) National Ambient Air Quality Standards (NAAQS)” (Sept. 25, 2006), p. 3. Notably, this guidance document explicitly stated as to the prong 2 requirements, “This provision requires evaluation of impacts on areas of other states that are meeting the 2006 24-hour PM\(_{2.5}\) NAAQS, not merely areas formerly designated nonattainment that are subject to a maintenance SIP. Therefore, the state’s submission must explain whether or not emissions from the state have an influence on air quality in those states.” Id. p. 3–4. The EPA continued by providing specific factors a state could consider: “A state’s submission for this requirement should provide the technical information which the state deems appropriate to support its conclusions. Suitable information might include, but is not limited to, information concerning emissions in the state, meteorological conditions in the state and the
a technical analysis that considers certain factors which align with the EPA's actions on prior SIP submissions, the EPA could not conclude based on this analysis that the State is not interfering with maintenance of the NAAQS in other states, particularly in light of air quality modeling demonstrating that emissions from Wyoming impact air quality in Denver, Colorado. The basis for this conclusion was explained in the proposal for this final action.

Comment: Commenter WDEQ stated that the EPA is applying new criteria retroactively. WDEQ asserted that the EPA had not established any technical requirements for demonstrating impacts on nearby states at the time of Wyoming's February 6, 2014 submission, but then retroactively applied “a technical analysis developed almost three years after Wyoming’s submittal to evaluate Wyoming’s plan.” The State submitted a timeline to argue that the EPA’s proposed action is out of sequence with appropriate rulemakings. Commenter WDEQ noted that it had commented on the EPA’s August 4, 2015 NODA, “stating that it understood the rule applied only to eastern states and would provide additional comments when the EPA proposed additional SIP requirements for western states.” Wyoming asserted that the EPA did not provide a response to this comment. Finally, WDEQ stated that the EPA failed to indicate that a revision to submitted plans might be required, as it had done in its October 2, 2007 guidance document.

Response: As discussed previously, the EPA’s primary basis for disapproving Wyoming’s prong 2 SIP submission as to the 2008 ozone NAAQS is based on the State not giving the “interfere with maintenance” clause of CAA section 110(a)(2)(D)(i)(I) independent significance as required by North Carolina, a decision which was issued six years before Wyoming submitted the SIP at issue here. The EPA also has technical information demonstrating that emissions from Wyoming impact a downwind maintenance receptor in Denver, Colorado, but even absent this information, the State did not provide an adequate technical analysis meeting the basic statutory requirements outlined by the D.C. Circuit and supporting its conclusion.

Wyoming is correct to note that the EPA stated the CSAPR Update does not apply to Wyoming, and the final CSAPR Update does not impose any potential basis obligations on the state of Wyoming or sources within the State. However, in the context of that rulemaking, the EPA developed technical information relevant to western states, including Wyoming, while in this final action on the Wyoming SIP the EPA is adopting an approach to analyzing that data as it applies to Wyoming. While the modeling cited in this action was conducted after Wyoming submitted its SIP addressing the requirements of CAA section 110(a)(2)(D)(i)(I) for the 2008 ozone NAAQS, it would not be appropriate for the EPA to ignore modeling data indicating that the emissions from the State would impact air quality in other states. Rather, the EPA must evaluate each SIP submission based on the information available and consistent with the Act as we and courts interpret it at the time of our action, not at the time of the state’s submittal. Wyoming was aware that the EPA had data indicating a potential impact as early as January 2015, but did not submit additional information to supplement or revise its SIP submission addressing CAA section 110(a)(2)(D)(i)(I) requirements for the 2008 ozone NAAQS. 18 Wyoming also had an opportunity to review the modeling information in the context of the EPA’s proposed action on the SIP submission, and could comment on the appropriateness of using the modeling for this purpose, and how the EPA should interpret the modeling results as they apply to Wyoming, which both Wyoming and a number of other commenters have done. The EPA addresses those specific comments regarding the EPA’s technical analysis below.

Comment: Commenter WDEQ stated that the EPA’s use of CSAPR Update modeling as a tool is not appropriate for interstate transport in the West, citing its June 9, 2016 comment letter opposing the EPA’s proposed action for Utah. Commenters UARG, WEST Associates, and BEPC also referenced or attached comment letters submitted on the CSAPR Update proposal. 19

Response: Commenters should identify with reasonable specificity any objections or issues with the proposed action rather than only referring or attaching comments made in other contexts. It is not appropriate to cite to or attach comments made on separate rulemaking actions without identifying which portions of such comments are relevant to the present proposed action. Accordingly, the EPA is not here responding to comments made on separate rulemaking actions.

Comment: Commenter Western Energy Alliance stated that the CSAPR Update modeling results are flawed because the model has not been adapted to the unique concerns of western states. The commenter stated that “the CSAPR model fails to account for the topography, altitude, and climate of the western United States. Climate factors characteristic of the West include stratospheric intrusions, a long and severe wildfire season, abundant sunshine, and lack of summertime precipitation, all of which the CSAPR model fails to adequately consider.” The commenter asserted that the EPA did not provide evidence explaining why the modeling results need not consider these factors. Finally, the commenter stated that the EPA inappropriately put the onus on the State to provide evidence to support or deny the EPA’s decisions on the appropriateness of the CSAPR modeling, while the burden should rest on the EPA to justify the reversal of its long-standing policy about the CSAPR modeling deficiencies in the West.

Commenter WEST Associates stated that the EPA had noted in the CSAPR Update proposal that the modeling for that rule was conducted specifically for Eastern states. The commenter also referenced language from the CSAPR Update and the Wyoming proposal in which the EPA stated that there may be geographically specific factors to consider in evaluating ozone transport in the West affecting modeling and modeling results. Citing 81 FR 81715, November 18, 2016, the commenter suggested that these factors could include broad expanses of public land, high altitude settings, international transport and elevated background ozone concentrations that can comprise a significant portion of ambient concentrations, especially on high ozone days in the Western United States.

Response: The commenters do not provide evidence or technical bases for their claims about the inadequacies of the modeling for projecting air quality and contributions in the West. As described in the CSAPR Update Final Air Quality Modeling Technical...
Support Document (2016 AQM TSD), the CSAPR modeling was performed for a nationwide domain that accounted for the differences in emissions (including actual wild fires), meteorology, and topography in various regions across the U.S. The precipitation and other meteorological factors used in the EPA’s modeling were found to correspond closely to measured data. The 2016 AQM TSD includes an evaluation of 2011 base year model performance for 8-hour daily maximum concentrations on a regional and statewide basis as well as for individual monitoring sites. For example, the performance evaluation results for Wyoming indicate that the model tends to under predict measured 8-hour daily maximum ozone concentrations by 10.3 percent, on average, during the period May through September, which is the season the EPA used for analyzing 2017 model-predicted interstate contributions. For the Douglas County maintenance receptor in Colorado, the 2011 modeling under predicts measured 8-hour daily maximum ozone concentrations by 7.5 percent, on average for the May through September time period. As described more fully in the 2016 AQM TSD, the EPA’s use of the Comprehensive Air Quality Model with Extensions (CAMx) source apportionment modeling for the CSAPR Update is appropriate and the Agency finds its use sufficient for the purposes of assessing and identifying downwind air quality problems and contributions from upwind states in both the eastern and the western U.S. The emissions modeling TSD for the CSAPR Update final rule “Preparation of Emissions for the version 6.3, 2011 Emissions Modeling Platform” describes how fire emissions were developed and modeled using a consistent approach for the contiguous United States. As described earlier, the most updated modeling continues to indicate that emissions from Wyoming will interfere with maintenance of the 2008 ozone NAAQS at one receptor in the Denver, Colorado area (i.e., Douglas County).

The EPA does not find the information provided by the commenters to indicate flaws in the modeling conducted by the EPA. Rather, the commenters point to factors which the CSAPR Update modeling specifically took into account. As described in the CAMx model User’s Guide, “CAMx is an Eulerian photochemical dispersion model that allows for integrated “one-atmosphere” assessments of tropospheric air pollution (ozone, particulates, air toxics, and mercury) over spatial scales ranging from neighborhoods to continents. It is designed to unify all of the technical features required of “state-of-the-science” air quality models into a single open-source system that is computationally efficient, flexible, and publicly available.” For these reasons, the EPA disagrees with these comments and finds the use of the CSAPR Update modeling to evaluate Wyoming’s contributions to interstate transport is reasonable and supported.

The EPA did acknowledge in the CSAPR Update final rule that “for western states, there may be geographically specific factors to consider in evaluating interstate ozone pollution transport,” and that “given the near-term 2017 analysis and implementation of the CSAPR Update FIPs, the EPA focused its rulemaking on eastern states where the CSAPR method for assessing collective contribution has proven effective.” 81 FR 74523, October 26, 2016. However, these statements were not an indication that the EPA believed the modeling of air quality in the West was flawed. Rather, the EPA was suggesting that additional factors may be relevant in determining whether an upwind state that was projected to impact air quality in a downwind state should be determined to significantly contribute to nonattainment or interfere with maintenance of the NAAQS in that state. The EPA’s recent action approving Arizona’s interstate transport SIP, discussed in more detail at proposal, demonstrates some of the geographically specific factors that the EPA was referring to with these statements. See Proposed Rule, 81 FR 15202, March 22, 2016; Final Rule, 81 FR 31513, May 19, 2016.

Comment: Commenter Western Energy Alliance stated that it is unclear whether the CSAPR Update modeling accounted for background ozone, which can contribute up to 60 ppb in the western U.S. Commenters West Associates and BEPC also note that approximately half of the ozone measured at the Denver monitor is from background ozone. These commenters suggest that this presents “nearly identical” facts to the grounds used to propose approval of Nevada’s interstate transport SIP for the 2008 ozone NAAQS. 81 FR 87859, December 6, 2016.

Response: The commenters do not explain how the EPA’s modeling has allegedly failed to account for background ozone. This modeling includes emissions from biogenic sources which are a major component of natural background ozone that is particularly relevant to summertime high ozone concentrations. The modeling also includes emissions from large portions of Canada and Mexico that are adjacent to the U.S. within the modeling domain. Background ozone due to transport from more distant international sources was accounted for by the use of global air quality modeling to provide ozone and precursor concentrations along the boundary of the modeling domain.

20 See also Notice of Availability of the Environmental Protection Agency’s Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard (NAAQS), 82 FR 1740 (January 6, 2017): “While the 1 percent screening threshold has been traditionally applied to evaluate upwind state linkages in eastern states where such collective contribution was identified, the EPA noted in the CSAPR Update that, as to western states, there may be geographically specific factors to consider in determining whether the 1 percent screening threshold is appropriate. For certain receptors, where the collective contribution of emissions from one or more upwind states may not be a considerable portion of the ozone concentration at the downwind receptor, the EPA and states have considered, and could continue to consider, other factors to evaluate those states’ planning obligation pursuant to the Good Neighbor provision. However, where the collective contribution of emissions from one or more upwind states is responsible for a considerable portion of the downwind air quality problem, the CSAPR framework treats a contribution from an individual state at or above 1 percent of the NAAQS as significant, and this reasoning applies regardless of where the receptor is geographically located.”
have not explained how they believe the EPA must consider background ozone levels in evaluating interstate transport in the West, nor cited any specific provision of the statute that specifically requires such consideration. While the EPA does not view the obligation under the good neighbor provision as a requirement for upwind states to bear all of the burden for resolving downwind air quality problems, the CAA requires that upwind states (as well as the downwind states themselves) take reasonable steps to control emissions impacting downwind air quality even in areas affected by high levels of background concentrations of ozone. Were the EPA to absolve upwind states of the responsibility to make such reasonable reductions simply because of such background ozone concentrations, the area’s citizens would suffer the health and environmental consequences of such inaction.

Moreover, the EPA does not agree that, because background ozone contributes to the projected design values at the Denver monitor, the factual circumstances are “nearly identical” to the circumstances supporting the proposed approval of the Nevada SIP. In fact, the circumstances here are substantially different than the facts considered in the Nevada SIP approval. The EPA proposed to approve Nevada’s SIP submission because, among other factors, it determined that the cumulative contribution from upwind states to the downwind receptors to which Nevada was linked (all of which were located in California) was low relative to the cumulative contribution to air quality problems similarly identified elsewhere in the country and because Nevada was the only state contributing above the one percent threshold to those receptors. 81 FR 87860, Dec. 6, 2016. Because the EPA determined that emissions that result in transported ozone from upwind states have limited impacts on the projected air quality problems at the California receptors, the EPA proposed to determine that the sites should not be treated as receptors for purposes of determining interstate transport obligations. Id. This is in contrast to the air quality problem identified at the Denver receptor wherein the EPA determined that a significant portion of the ozone concentration was attributable to the collective contribution from anthropogenic emissions in multiple states, three of which contribute at or above the one percent screening threshold. 81 FR 81714 through 81715, December 6, 2016. The Denver receptor is comparable to receptors the EPA has addressed in the East in rulemakings such as the CSAPR Update wherein the EPA determined that downwind air quality problems resulted in part from the contributions of multiple upwind states that, although individually relatively small, collectively contribute a large portion of the ozone concentration at downwind receptors. See 81 FR 74518–19.

Moreover, consistent with the EPA’s approach to background concentrations in this action, the EPA disagreed with Nevada’s contention that background concentrations should necessarily excuse an upwind state from reducing emissions where such emissions reductions may nonetheless improve downwind air quality. 81 FR 87860. The EPA noted that even areas with high background ozone may still have a relatively large amount of ozone from the collective contribution of upwind U.S. emissions. Id. Therefore, regardless of the level of background ozone, emissions reductions from upwind states may be an important component of solving the local nonattainment problem.

Comment: Commenter WDEQ stated that the EPA’s decisions on interstate transport SIPs do not follow a consistent approach, and that the EPA is applying a piecemeal decision-making approach rather than a systematic analysis. WDEQ also asserted that the EPA is making arbitrary decisions as to what constitutes “significant” or “insignificant” contribution levels. WDEQ asserted that the EPA is not applying the one percent threshold as a screening threshold, as stated in the proposal. Referring to the EPA’s October 19, 2016 final action on the Utah interstate transport SIP (81 FR 71991), WDEQ argued that the EPA gave no consideration to information submitted by Utah in its analysis beyond the one percent contribution. WDEQ further stated that the EPA approved the Colorado interstate transport submittal which otherwise “did not provide a detailed analysis supporting its conclusion, including any quantification of the distance to other nonattainment areas or the amount of ozone emission reductions within the state and over what timeframe,” solely because it was modeled below the one percent contribution threshold. 80 FR 72939, November 23, 2015. WDEQ also asserted that the Colorado approval is counter to the EPA actions disapproving plans from western states on the basis that they did not provide enough technical analysis.

WDEQ further asserted that the approval of the Arizona interstate transport SIP for 2008 ozone was inconsistent with the proposed action on Wyoming, because the EPA based its Arizona action on a weight of evidence analysis and a determination that Arizona’s contribution was “negligible” although it was over the one percent threshold. The State also asked the EPA to explain why it determined the cumulative contribution percentages for Arizona were negligible, and at what percentage such contributions became negligible.

Response: The EPA disagrees that it has taken an inconsistent approach to reviewing states’ interstate transport SIPs with respect to the 2008 ozone NAAQS. Where the EPA has determined that a state’s SIP has not addressed all of the statutory requirements or provided a technical analysis to justify its conclusion regarding the state’s impact on downwind air quality problems, the EPA has identified those deficiencies in acting upon the state’s SIP submission. Where the EPA had analysis available that nonetheless supported the state’s conclusion despite these deficiencies in the state’s SIP submission, the EPA has proposed to approve the state’s SIP submission, as it did with Colorado. However, where the EPA does not have its own analysis to support a state’s conclusion, it does not have a basis to nonetheless approve the state’s otherwise deficient SIP submission, as in Utah for prong 2. Accordingly, the EPA is in this rule finalizing approval as to Wyoming’s otherwise deficient prong 1 demonstration because the EPA has an independent analysis that supports the conclusion that the state does not significantly contribute to nonattainment downwind. However, the EPA cannot approve Wyoming’s deficient prong 2 demonstration because it has no independent basis on which it can conclude that the state does not interfere with maintenance of the 2008 ozone NAAQS downwind.

The EPA furthermore disagrees that it is not using the one percent contribution threshold as a screening threshold. States are not determined to significantly contribute to nonattainment or interfere with maintenance downwind merely because impacts from the state exceed the one percent threshold. As noted in the proposal for this final action, the one

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26 The EPA’s analysis showed, for example, that upwind states collectively contributed in the range of 9.7% to 12.6% to the total ozone concentrations for receptors in Denton County, Harris County, and Tarrant County, Texas. This range is similar to the collective contribution at the Douglas County receptor in Colorado. See document EPA–808–OAR–2016–0521–0002, “Final CSAPR Update: Ozone Design Values & Contributions All Sites,” in the docket for this action.
percent threshold identifies a state as “linked,” prompting further inquiry into whether the contributions are significant and whether there are cost-effective controls that can be employed to reduce emissions. In the case of Colorado, as it was determined that state was not linked to any downwind nonattainment or maintenance receptors, further inquiry was unnecessary in spite of deficiencies identified with the Colorado transport analysis. In the case of states like Wyoming and Utah, the linkage to Denver area receptors indicated that each state’s emissions require further evaluation, taking into account both air quality and cost considerations, to determine what, if any, emissions reductions might be necessary to address the states’ emission reduction obligation pursuant to 110(a)(2)(D)(i)(I). As Wyoming’s SIP submission does not adequately evaluate whether additional emissions reductions are necessary or achievable, the EPA could not conclude that the State’s SIP submission had demonstrated that the state prohibits emissions that interfere with maintenance of the NAAQS downwind.

With regard to the EPA’s action on the Arizona submittal, the EPA found that the maximum total contribution from anthropogenic emissions in all states to either of the two California receptors to which Arizona contributed above the one percent threshold was 4.4 percent of the total ozone concentration at that receptor, and that only one state contributed above the one percent threshold. 81 FR 15203, March 22, 2016. Thus, the EPA determined that, unlike receptors identified in prior rulemakings, the air quality problems at the California receptors could not be attributed to the collective contribution of numerous upwind states. Given this information, the EPA determined that interstate transport to the California receptors is negligible overall, meaning that all states together (including Arizona) do not contribute significantly to the ozone problems at these receptors. Because the EPA determined that emissions that result in transported ozone from upwind states have limited impacts on the projected air quality problems at the California receptors, the EPA determined that the sites should not be treated as receptors for purposes of determining interstate transport obligations. Id. As stated in the proposal for this final action, EPA found that the contribution to ozone concentrations from all states upwind of the Douglas County, Colorado maintenance receptor is about 9.7 percent, and that three upwind states made contributions greater than one percent to the receptor. 81 FR 81715, November 18, 2016. The EPA has not defined a specific level which delineates between “negligible” and “significant” collective contribution, but has rather looked at each of these cases individually and reached conclusions based on our review of the information specific to each case. In the case of the Douglas County, Colorado receptor, the contributions from upwind states are comparable to receptors the EPA has addressed in the East in rulemakings such as the CSAPR Update wherein the EPA determined that downwind air quality problems resulted in part from the relatively small individual contributions of upwind states that collectively contribute a large portion of the ozone concentration at downwind receptors. See 81 FR 74518 through 74519.27 Thus, the EPA has identified no basis on which it can distinguish the Douglas County, Colorado receptor from those receptors addressed in the East—nor have the commenters presented any such basis for the EPA to make a distinction when upwind states contribute more than twice as much to downwind nonattainment than was present at the California receptors addressed in the EPA action.

Comment: Commenter WDEQ stated that the EPA’s analysis does not consider new emissions information or reductions since the most recent modeling. The State asserted that because the EPA conducted the CSAPR Update modeling using an emissions inventory from a 2011 base year, the analysis fails to account for any emissions reductions in Wyoming between 2011 and when the updated modeling was conducted. WDEQ specifically pointed to the following ozone emissions reduction measures in the State: Participation in the EPA’s Ozone Advance Program; emissions reductions in the Upper Green River Basin (UGRB), a marginal nonattainment area which was determined by the EPA to have timely attained the 2008 Ozone NAAQS on May 4, 2016 (81 FR 26697); reductions in NOx emissions from 2011 and 2014 of 34 percent for Title V facilities and 76 percent for non-Title V facilities that are not oil and gas reductions facilities.

27 The EPA’s analysis showed, for example, that upwind states collectively contributed in the range of 9.7% to 12.6% to the total ozone concentrations for receptors in Denton County, Harris County, and Tarrant County, Texas. This range is similar to the collective contributions at the Douglas County receptor in Colorado. See document EPA–OAR–2016–0521–0002, “Final CSAPR Update Ozone Design Values & Contributions All Sites,” in the docket for this action.

The State “believes a more accurate assessment of Wyoming’s contribution to the receptor in Colorado could be made using more recent emission inventory data available from the Division,” and asked that the EPA use more recent data to conduct modeling for Wyoming. The State asserted that it had made several attempts to provide the EPA with additional information, citing its November 23, 2016 letter requesting an extension to the comment period as an example, and claimed that the EPA has told Wyoming it will not consider any additional information beyond the February 6, 2014 submission. Response: The EPA disagrees that the CSAPR Update modeling failed to account for any emissions reductions in Wyoming between 2011 and 2016, despite the use of a 2011 base year. As shown in the supporting documentation for the CSAPR Update Rule, significant emissions reductions for multiple pollutants, including NOx, were accounted for in the modeling analysis.28 At the EPA’s request, on September 13, 2016 and September 14, 2016, the State submitted to the EPA an emissions inventory and an inventory summary that compared 2011 to 2014 Wyoming NOx and VOC emissions.29 The State also included two graphs describing Wyoming NOx and VOC emission reductions in certain sectors in its December 19, 2016 comment letter on the proposal for this final action. EPA staff compiled this information to the emissions reductions anticipated from base case year 2011 to projected future year 2017 in the CSAPR Update Modeling, and found that NOx and VOC emissions reductions included in the CSAPR Update modeling were greater than the NOx and VOC reductions in Wyoming emissions from 2011 to 2014, per the State’s inventory.30 The EPA does not dispute that NOx emission reductions have taken place in Wyoming between 2011 and 2014, as the inventory and the December 19, 2016 comment letter graphs indicate substantial reductions have occurred in certain sectors. However, the inventory...
taken on its own did not lead the EPA to the conclusion that the NO\textsubscript{x} reductions during this time were sufficient to show that Wyoming does not interfere with maintenance of the 2008 ozone NAAQS. In other words, the information was inconclusive, and so did not alter the EPA’s decision to propose disapproval for prong 2. The EPA has reached the same conclusion regarding the comment letter graphs, and is therefore finalizing disapproval as to the prong 2 requirements.

The EPA also disagrees that the State made several attempts to provide EPA with additional information. The State submitted the aforementioned September 13, 2016 inventory, which the EPA reviewed. The State also submitted the June 9, 2016 comment letter on the Utah proposal as discussed previously, and the November 23, 2016 letter requesting an extension to the comment period. The EPA has reviewed and addressed all of these documents. Finally, the EPA is unaware that any staff told Wyoming that we will not consider any additional information beyond the February 6, 2014 submission. The EPA has continuously encouraged the State to submit additional technical information that might better inform our analysis, as discussed in detail earlier.

Comment: Commenter WDEQ asked whether the EPA’s CSAPR Update modeling considered the impact ozone sources in the Colorado portion of the Front Range Urban Corridor, which extends from Pueblo, Colorado to Cheyenne, Wyoming, may have on attainment in Wyoming. The State then asserted that, because 98 percent of the population in this corridor resides in Colorado, and because the population in the Colorado portion of the corridor is much larger and denser than the population of the state of Wyoming, the mobile source and urban emissions emanating from Colorado are far more likely to contribute to Wyoming than the other way around.

Commenter Western Energy Alliance stated that Colorado’s ozone nonattainment is affected by the northern Front Range’s climate, geography, and local emissions sources, and not by Wyoming emissions. The commenter supported Wyoming’s assessment that the year-round westerly prevailing wind direction makes it reasonable to infer that Cheyenne is not a driving cause of ozone nonattainment in Colorado’s Front Range.

Commenter Western Energy Alliance also asserted that Wyoming is not contributing to ozone nonattainment in the Uintah Basin or in the Salt Lake Valley in Utah.

Response: In the CSAPR Update modeling, the EPA modeled contributions from all 48 contiguous states, including Colorado, to receptors in Wyoming. As the EPA did not project any nonattainment or maintenance receptors in the state of Wyoming for 2017, the EPA has determined that no state contributes significantly to nonattainment or interferes with maintenance of the 2008 ozone NAAQS in Wyoming. The EPA approved prongs 1 and 2 of Colorado’s 2008 ozone interstate transport SIP on February 16, 2016. 81 FR 7706. The EPA did not receive any comments requesting that either portion of the Colorado SIP submission be disapproved.

The EPA agrees that Colorado emissions contribute more to ozone pollution in the Denver area than emissions from any other state. Indeed, the CSAPR Update modeling projected that Colorado would contribute 34.6% percent of the ozone at the Douglas County, Colorado maintenance receptor in 2017, compared to 9.7 percent of the emissions from all other states and tribes combined, with Wyoming projected to contribute 1.5 percent of the ozone. Although there are intrastate contributions to maintenance receptors in Denver, Colorado, those contributions do not relieve upwind states, like Wyoming, from controlling their within state emissions that significantly contribute to a downwind state’s nonattainment or interfere with maintenance of the NAAQS in other states.

Thus, while CAA section 110(a)(2)(D)(i)(I) does not hold upwind areas solely responsible for attainment and maintenance of the NAAQS in downwind states, the statute requires upwind states to address their fair share of downwind air quality problems. As noted, the EPA finds that Wyoming contributions to the Douglas County, Colorado maintenance receptor are such that the State’s emissions require further evaluation of potential emission reduction obligations pursuant to 110(a)(2)(D)(i)(I).

Regarding Wyoming’s contribution to ozone issues in Utah, the EPA has not found that Wyoming emissions contribute significantly to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in Utah.

Comment: Commenter WDEQ asserted that “EPA has not yet worked with western states or western regional planning organizations on region-appropriate analysis for interstate transport.” The State listed examples in which the EPA committed to working with western states to address interstate transport.

Commenter WDEQ requested that the EPA honor the commitment made in the Utah Final Rulemaking to “assisting the states in conducting or reviewing air quality modeling and other relevant technical information for the purposes of determining compliance with CAA section 110(a)(2)(D)(i)(I).” 81 FR 71996, October 19, 2016. Specifically, the State requested that the EPA commit to work with WDEQ to conduct the necessary modeling and analysis for developing a SIP revision in the event that the EPA finalizes the proposed disapproval.

Response: Prior to the State’s February 2014 SIP submission, the EPA held a meeting in Denver, Colorado on April 17, 2013 (and held a conference call) with western states to discuss next steps to address transport of air pollution across state boundaries. Subsequent to the release of the January 2015 memo and the August 2015 NODA with air quality modeling results, the EPA notes that it also hosted, a workshop and conference calls with states. Moreover, while we appreciate the importance of working with states in the SIP development process, states have the primary responsibility for developing SIPs to address the requirements of CAA section 110(a)(2)(D)(i)(I). As noted earlier, in EPA v. EME Homer City Generation, L.P., the Supreme Court clearly held that “nothing in the statute places the EPA under an obligation to provide specific metrics to States before they undertake to fulfill their good neighbor obligations.” 134 S. Ct. at 1601.

However, EPA remains committed to working with the State on reviewing technical information for the purposes of determining compliance with the requirements of 110(a)(2)(D)(i)(I).

Comment: Commenter Western Energy Alliance stated that “EPA has failed to provide sufficient evidence that it reviewed and considered state exceptional events packages that may provide mitigating circumstances for NAAQS violations based on events such as wildfires or stratospheric intrusions of ozone.”

Response: In order for emissions to be excluded on the basis of an exceptional event per CAA 319(b), all exceptional event criteria applicable to the activity must be met. No exceptional event demonstrations relevant to the Douglas County, Colorado monitor were submitted to the EPA for evaluation, so no evidence was available with regard to the impact of exceptional event demonstrations on the existing monitor in the design value period considered. To the extent that the EPA approves an
exceptional events demonstration for this area in the future, the EPA can consider the impacts that action or other new information would have on the modeling results either in reviewing a subsequent SIP submission from Wyoming, which the State may submit at any time, or in evaluating whether any emissions reductions are necessary to address downwind air quality in addressing the Agency’s FIP obligation triggered by this disapproval.

Comment: Commenter Sierra Club stated that the EPA should disapprove Wisconsin’s prong 1 submission for the 2008 ozone NAAQS. The commenter asserted that the Douglas County, Colorado maintenance receptor (to which Wyoming was modeled to contribute above one percent) should instead be a nonattainment receptor, but it is not because the modeling under-predicts the receptor’s 2017 ozone design value. The commenter agreed that the EPA’s basis for a maintenance categorization as “bad math.” The commenter based this assertion on a weight of evidence approach using ambient air monitoring data collected at the receptor. The commenter stated that such a weight of evidence approach was appropriate to determine this receptor should be nonattainment, and noted that the EPA had used a weight of evidence approach in its action on Arizona’s transport SIP. The CSAPR Update modeling projected that the Douglas County, Colorado receptor would have a 2017 average design value of 75.5 ppb, with a maximum design value of 77.6 ppb. The commenter first asserted that the 75.5 ppb level should indicate nonattainment rather than maintenance because the design value exceeds the 75.0 level of the NAAQS, referring to EPA’s basis for a maintenance categorization as “bad math.” The commenter then stated that the Douglas County, Colorado receptor will indeed be nonattainment for the 2015–2017 period. The commenter included the 4th highest daily maximum values, on which the 2008 ozone NAAQS is based, for the years 2010 through 2016, which the EPA has replicated (with edits) in Table 1, below.

<table>
<thead>
<tr>
<th>Year</th>
<th>4th Max (ppb)</th>
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<tbody>
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<td>2016</td>
<td>78</td>
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<td>2015</td>
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<td>2010</td>
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The commenter stated that the 2015–2017 monitored design value at the Douglas County, Colorado receptor could only attain the NAAQS if the receptor recorded a 4th daily maximum value of 66 ppb in 2017, a value well below the smallest value since 2010. The commenter asserted that the previous 7 years of monitoring data provide a weight of evidence analysis demonstrating that this receptor will be nonattainment for the 2015–2017 design value period. The commenter also asserted that it is unsurprising that the CSAPR Update modeling analysis under-predicts the 2017 design values because it included 2009 monitoring data which was impacted by the Great Recession, during which time ozone levels decreased. The commenter therefore recommended that the EPA disapprove Wisconsin’s February 6, 2014 prong 1 submittal for the 2008 ozone NAAQS.

Response: First, the EPA does not agree that because the receptor is projected to have an average design value of 75.5, that the EPA should label this receptor a nonattainment receptor. As explained in the 2016 AQM TSD, “In determining compliance with the NAAQS, ozone design values are truncated to integer values. For example, a design value of 75.9 ppb is truncated to 75 ppb which is attainment. In this manner, design values at or above 76.0 ppb are considered to be violations of the NAAQS.” This method is consistent with the method to compliance with the 2008 ozone NAAQS. Therefore a design value of 75.5 is not considered a violation of the standard.

The EPA agrees that its recent monitoring data at the Douglas County, Colorado monitor suggest that the site faces a risk of not attaining the NAAQS in 2017. However, that risk is uncertain as the future monitored 2017 design value is unknown at this time. In light of this uncertainty and the statute’s silence on how nonattainment and maintenance should be identified under the good neighbor provision, the EPA has developed a reasonable approach to identify downwind nonattainment and maintenance receptors. When evaluating air quality modeling for purposes of interstate transport, the EPA has routinely identified nonattainment receptors as those with monitors that are both projected to be unable to attain in an appropriate future year and that are measuring nonattainment based on current data—i.e., if the projected average design value in the future year does not exceed the standard, the EPA does not identify that receptor as a nonattainment receptor, but rather as a maintenance receptor. See 81 FR 74517 (CSAPR Update); 80 FR 75723 through 75724 (Proposed CSAPR Update); 76 FR 48227 through 48228 (CSAPR); 70 FR 25243–33 (CAIR); see also North Carolina, 531 F.3d at 913–914 (affirming as reasonable EPA’s approach to defining nonattainment in CAIR). Given the EPA’s modeling does not project that the Douglas County, Colorado receptor will be in nonattainment in 2017, even though it may currently be measuring nonattainment, it would be inconsistent with the EPA’s past practice to identify that receptor as a nonattainment receptor.

Moreover, the EPA does not agree that it should identify a nonattainment receptor based on the formula proposed by the commenter because the data cited by the commenter does not conclusively prove that this monitor will be in nonattainment based on 2017 data. First, the commenter notes that it would be possible for the 2017 design value to be sufficiently low such that the 3-year average is attaining the NAAQS. Second, the CAA provides that should 2017 data yield a fourth highest 8-hour concentration of 75.9 ppb or below, the state can petition EPA for additional time to demonstrate attainment of the NAAQS. See CAA section 181(a)(5).

That said, the EPA agrees that the receptor may have problems maintaining the standard in 2017 and has therefore identified this site as a maintenance receptor. As a result of this finding, the EPA and the State of Wyoming will need to evaluate what

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31 For details about the Douglas County, Colorado receptor, see the proposal for this final rulemaking at 81 FR 81715.
32 See 40 CFR part 50, Appendix P—Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone: Section 2.1: “Computing 8-hour averages. Hourly average concentrations shall be reported in parts per million (ppm) to the third decimal place, with additional digits to the right of the third decimal place truncated.”
33 See 2016 AQM TSD at pg. 11.
34 See 40 CFR part 50, Appendix P—Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone: Section 2.1: “Computing 8-hour averages. Hourly average concentrations shall be reported in parts per million (ppm) to the third decimal place, with additional digits to the right of the third decimal place truncated.”
Thus, EPA continues to believe that including ambient data from 2009 is appropriate for projecting future year ozone concentrations as part of the final rule.

Comment: Commenter Sierra Club asserted that the EPA’s analysis of Oregon’s February 6, 2014 submittal ignores wintertime ozone levels. The commenter asserted that the EPA relies on the CSAPR Update analysis for its wintertime ozone transport analysis, and that the CSAPR Update analysis throws out wintertime ozone data.\textsuperscript{35} The commenter stated that it is inappropriate for the EPA to exclude the wintertime ozone data because the EPA has elsewhere acknowledged that wintertime ozone is an important issue in Oregon and neighboring states. To support this point, the commenter cited the EPA’s revision to the 2008 ozone NAAQS, which states that “Elevated levels of winter-time O3 have also been measured in some western states where precursor emissions can interact with sunlight off the snow cover under very shallow, stable boundary layer conditions.” 80 FR 65416, October 26, 2015. The commenter also cited the ozone NAAQS revision to show that the ozone seasons for both Colorado and Utah are year-round, and that the EPA must therefore include an evaluation of wintertime ozone before it can approve any ozone transport provisions for Oregon. 80 FR 65419 through 65420, October 26, 2015.

Response: As stated in the CSAPR Update Final, “Ozone levels are generally higher during the summer months.” 81 FR 74513, October 26, 2016. The 2016 AQM TSD states that “High winter ozone concentrations that have been observed in certain parts of the Western U.S. are believed to result from the combination of strong wintertime inversions, large NOX and VOC emissions from nearby oil and gas operations, increased UV intensity due to reflection off of snow surfaces and potentially still uncharacterized sources of free radicals.” 2016 AQM TSD at 14. Thus, high wintertime ozone episodes are due to a build-up of local emissions combined with local stagnation meteorological conditions rather than interstate transport. The EPA therefore disagrees that it must evaluate wintertime ozone before approving Oregon’s SIP as to the prong 1 requirements of section 110(a)(2)(D)(i)(I).

III. Final Action

The EPA is approving CAA section 110(a)(2)D(i)(I) prongs 1, 2 and 4 for the 2008 Pb NAAQS, prong 1 for the 2008 ozone NAAQS, prong 1 and 2 for the 2010 NO\textsubscript{2} NAAQS, and prong 4 for the 2010 SO\textsubscript{2} NAAQS, as shown in Table 2, below. The EPA is disapproving prong 4 for the 2006 PM\textsubscript{2.5}, 2008 ozone, 2010 NO\textsubscript{2} and 2012 PM\textsubscript{2.5} NAAQS, and prong 2 for the 2008 ozone NAAQS, as shown in Table 3.

Disapproval of prong 2 for the 2008 ozone NAAQS will establish a 2-year deadline, under CAA section 110(c), for the EPA to promulgate a FIP, unless the EPA approves a SIP that meets these requirements. As stated at proposal, the prong 4 disapprovals do not have additional practical consequences for the State or the EPA because the FIP already in place will satisfy the prong 4 requirements for these NAAQS. The EPA will work with Wyoming to provide assistance as necessary to help Wyoming develop an approvable SIP submission and the EPA is committed to taking prompt action on a SIP submitted by the State. Disapproval does not start a mandatory sanctions clock for Wyoming pursuant to CAA section 179 because this action does not pertain to a part D plan for nonattainment areas required under CAA section 110(a)(2)(I) or a SIP call pursuant to CAA section 110(k)(5).

\begin{table}[h]
\begin{center}
\begin{tabular}{|l|l|}
\hline
\textbf{STATE TRANSPORT PRONGS THAT THE EPA IS APPROVING} & \\
\hline
\textbf{Approval} & \\
\hline
February 6, 2014 submittal—2008 Ozone NAAQS: (D)(i)(I) prong 1. & \\
October 12, 2011 submittal—2008 Pb NAAQS: (D)(i)(I) prongs 1 and 2, (D)(i)(II) prong 4. & \\
January 24, 2014 submittal—2010 NO\textsubscript{2} NAAQS: (D)(i)(I) prongs 1 and 2. & \\
March 6, 2015 submittal—2010 SO\textsubscript{2} NAAQS: (D)(i)(II) prong 4. & \\
\hline
\end{tabular}
\end{center}
\caption{List of Wyoming Interstate Transport Prongs That the EPA Is Approving}
\end{table}

\begin{table}[h]
\begin{center}
\begin{tabular}{|l|l|}
\hline
\textbf{STATE TRANSPORT PRONGS THAT THE EPA IS DISAPPROVING} & \\
\hline
\textbf{Disapproval} & \\
\hline
August 19, 2011 submittal—2006 PM\textsubscript{2.5} NAAQS: (D)(i)(II) prong 4. & \\
February 6, 2014 submittal—2008 Ozone NAAQS: (D)(i)(I) prong 2, (D)(i)(II) prong 4. & \\
\hline
\end{tabular}
\end{center}
\caption{List of Wyoming Interstate Transport Prongs That the EPA Is Disapproving}
\end{table}

\textsuperscript{35} Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM\textsubscript{2.5}.
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 actions, provided that they meet the criteria of the CAA. Accordingly, this action merely approves some state law provisions as meeting federal requirements and disapproves other state law because it does not meet federal requirements; this action 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, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
• Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
• Is not 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 Clean Air Act; 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 does not 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 April 4, 2017. 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 CAA section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Authority: 42 U.S.C. 7401 et seq.


Debra H. Thomas,
Acting Regional Administrator, Region 8.

40 CFR part 52 is amended to read as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

§ 52.2620 Identification of plan.

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§ 52.2620 Identification of plan.

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Subpart ZZ—Wyoming

§ 52.2620 Identification of plan.

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are listed on the http://www.regulations.gov index. Although listed in the index, some information may not be publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically through http://www.regulations.gov or in hard copy at the Air Program, Environmental Protection Agency (EPA), Region 8, 1595 Wynkoop Street, Denver, Colorado, 80202–1129. The EPA requests that you contact the individual listed in the FOR FURTHER INFORMATION CONTACT section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding federal holidays.

FOR FURTHER INFORMATION CONTACT:
Adam Clark, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P–AR, 1595 Wynkoop Street, Denver, Colorado, 80202–1129, (303) 312–7104, clark.adam@epa.gov.

II. Response to Comments

Comment: Commenter Sierra Club stated that the EPA should disapprove Utah’s prong 1 submission for the 2008 ozone NAAQS. The commenter asserted that all three of the Denver area maintenance receptors to which Utah’s projected contribution exceeded one percent of the NAAQS 1 should instead be nonattainment receptors, but are not because the CSAPR Update modeling under-predicts the receptors’ 2017 ozone design values. The commenter based this assertion on a weight of evidence approach using ambient air monitoring data collected at these receptors. The commenter stated that such a weight of evidence approach was appropriate to determine this receptor should be nonattainment, and noted that the EPA had used a weight of evidence approach in its action on Arizona’s transport SIP. The CSAPR Update modeling projected that the Douglas County, Colorado receptor (monitor site ID 80350004) would have a 2017 average design value of 75.5 ppb, with a maximum design value of 77.6 ppb, and that one Jefferson County, Colorado receptor (monitor site ID 80590006) would have a 2017 average design value of 75.7 ppb, with a maximum design value of 78.2 ppb.2

The commenter first asserted that both average design values should indicate nonattainment rather than maintenance, referring to the EPA’s basis for the maintenance categorizations as “bad math.” The commenter then stated that all three maintenance receptors will indeed be nonattainment for the 2015–2017 period. The commenter included the 4th highest daily maximum values, on which the 2008 ozone NAAQS is

1 For details about these receptors, see EPA’s final rulemaking disapproving prong 2 of Utah’s 2008 ozone submittals, at 81 FR 71992, October 19, 2016.