Air Plan Approval; Maine and New Hampshire; 2015 Ozone NAAQS Interstate Transport Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Clean Air Act (CAA) requires each State Implementation Plan (SIP) to contain adequate provisions prohibiting emissions that will have certain adverse air quality effects in other states. The States of Maine and New Hampshire each made submissions to the Environmental Protection Agency (EPA) to address these requirements for the 2015 ozone National Ambient Air Quality Standards (NAAQS). EPA is proposing to approve the submissions for each state as meeting the requirement that each SIP contain adequate provisions to prohibit emissions that will significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state.

DATES: Written comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R01-OAR-2021-0250 at https://www.regulations.gov, or via email to simcox.alison@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the
official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “FOR FURTHER INFORMATION CONTACT” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets. Publicly available docket materials are available at https://www.regulations.gov or at the U.S. Environmental Protection Agency, EPA Region 1 Regional Office, Air and Radiation Division, 5 Post Office Square – Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the FOR FURTHER INFORMATION CONTACT section to schedule your inspection. The Regional Office’s official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding legal holidays and facility closures due to COVID-19.

FOR FURTHER INFORMATION CONTACT: Alison C. Simcox, Air Quality Branch, U.S. Environmental Protection Agency, EPA Region 1, 5 Post Office Square - Suite 100, (Mail code 05-2), Boston, MA 02109 - 3912, tel. (617) 918-1684, email simcox.alison@epa.gov.

SUPPLEMENTARY INFORMATION:

Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA.

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VI. Statutory and Executive Order Reviews
I. Background

On October 1, 2015, EPA promulgated a revision to the ozone NAAQS (2015 ozone NAAQS), lowering the level of both the primary and secondary standards to 0.070 parts per million (ppm).¹ Section 110(a)(1) of the CAA requires states to submit, within 3 years after promulgation of a new or revised standard, SIP submissions meeting the applicable requirements of section 110(a)(2).² One of these applicable requirements is found in section 110(a)(2)(D)(i)(I), otherwise known as the good neighbor provision, which generally requires SIPs to contain adequate provisions to prohibit in-state emissions activities from having certain adverse air quality effects on other states due to interstate transport of pollution. There are four so-called “prongs” within CAA section 110(a)(2)(D)(i); section 110(a)(2)(D)(i)(I) contains prongs 1 and 2. Under prongs 1 and 2 of the good neighbor provision, a SIP for a new or revised NAAQS must contain adequate provisions prohibiting any source or other type of emissions activity within the state from emitting air pollutants in amounts that will significantly contribute to nonattainment of the NAAQS in another state (prong 1) or interfere with maintenance of the NAAQS in another state (prong 2). EPA and states must give independent significance to prong 1 and prong 2 when evaluating downwind air quality problems under CAA section 110(a)(2)(D)(i)(I).³

We note that EPA has addressed the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I) with respect to prior ozone NAAQS in several regional regulatory actions, including the Cross-State Air Pollution Rule (CSAPR), which addressed interstate transport with respect to the 1997 ozone NAAQS as well as the 1997 and 2006 fine particulate matter

¹ National Ambient Air Quality Standards for Ozone, Final Rule, 80 FR 65292 (October 26, 2015). Although the level of the standard is specified in the units of ppm, ozone concentrations are also described in parts per billion (ppb). For example, 0.070 ppm is equivalent to 70 ppb.
² SIP revisions that are intended to meet the applicable requirements of section 110(a)(1) and (2) of the CAA are often referred to as infrastructure SIPs and the applicable elements under section 110(a)(2) are referred to as infrastructure requirements.
standards, the Cross-State Air Pollution Rule Update (CSAPR Update), and, most recently, the Revised CSAPR Update for the 2008 ozone NAAQS.

Through the development and implementation of CSAPR and other regional rulemakings pursuant to the good neighbor provision, EPA, working in partnership with states, developed the following four-step interstate transport framework to address the requirements of the good neighbor provision for the ozone NAAQS: (1) identify downwind air quality problems; (2) identify upwind states that impact those downwind air quality problems sufficiently such that they are considered “linked” and therefore warrant further review and analysis; (3) identify the emissions reductions necessary (if any), considering air-quality and cost factors, to prevent linked upwind states identified in step 2 from contributing significantly to nonattainment or interfering with maintenance of the NAAQS at the locations of the downwind air quality problems; and (4) adopt permanent and enforceable measures needed to achieve those emissions reductions.

EPA has released several documents containing information relevant to evaluating interstate transport with respect to the 2015 ozone NAAQS. First, on January 6, 2017, EPA published a notice of data availability (NODA) with preliminary interstate ozone transport modeling with projected ozone design values (DVs) for 2023 using a 2011 base year platform, on which we requested public comment. In the NODA, EPA used the year 2023 as the analytic

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4 See 76 FR 48208 (August 8, 2011).
5 Wisconsin v. EPA remanded the CSAPR Update to the extent it failed to require upwind states to eliminate their significant contribution by the next applicable attainment date by which downwind states must come into compliance with the NAAQS, as established under CAA section 181(a). Wisconsin v. EPA, 938 F.3d 303, 313 (D.C. Cir. 2019).
6 The Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQs (86 FR 23054 (April 30, 2021)) was signed by the EPA Administrator on March 15, 2021, and responded to the remand of the CSAPR Update (81 FR 74504 October 26, 2016)) and the vacatur of a separate rule, the CSAPR Close-Out (83 FR 65878 (December 21, 2018)) by the D.C. Circuit. Wisconsin v. EPA, 938 F.3d 303 (D.C. Cir. 2019); New York v. EPA, 781 F. App’x. 4 (D.C. Cir. 2019).
7 In addition to the CSAPR rulemakings, other regional rulemakings addressing ozone transport include the NOx SIP Call, 63 FR 57356 (October 27, 1998), and the Clean Air Interstate Rule (CAIR), 70 FR 25162 (May 12, 2005).
8 See 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 1733 (January 6, 2017).
year for this preliminary modeling because that year aligns with the expected attainment year for
Moderate ozone nonattainment areas for the 2015 ozone NAAQS. On October 27, 2017, we
released a memorandum (2017 memorandum) containing updated modeling data for 2023, which
incorporated changes made in response to comments on the NODA, and noted that the modeling
may be useful for states developing SIPs to address good neighbor obligations for the 2008
ozone NAAQS. On March 27, 2018, we issued a memorandum (March 2018 memorandum)
noting that the same 2023 modeling data released in the 2017 memorandum could also be useful
for identifying potential downwind air quality problems with respect to the 2015 ozone NAAQS
at step 1 of the four-step interstate transport framework. The March 2018 memorandum also
included the then newly available contribution modeling results to assist states in evaluating their
impact on potential downwind air quality problems for the 2015 ozone NAAQS under step 2 of
the interstate transport framework. EPA subsequently issued two more memoranda in August and
October 2018, providing additional information to states developing good neighbor SIP
submissions for the 2015 ozone NAAQS concerning, respectively, potential contribution
thresholds that may be appropriate to apply in step 2 of the framework, and considerations for
identifying downwind areas that may have problems maintaining the standard at step 1 of the
framework.

On October 30, 2020, in the Notice of Proposed Rulemaking for the Revised CSAPR
Update, EPA released and accepted public comment on updated 2023 modeling that used a 2016

9 82 FR 1733, 1735 (January 6, 2017).
10 See Information on the Interstate Transport State Implementation Plan Submissions for the 2008 Ozone National
Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I), October 27, 2017, available in the
docket for this action or at https://www.epa.gov/interstate-air-pollution-transport/interstate-air-pollution-transport-
memos-and-notices.
11 See Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport
State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards, August 31,
2018 (“August 2018 memorandum”), and Considerations for Identifying Maintenance Receptors for Use in Clean
Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone
National Ambient Air Quality Standards, October 19, 2018, available in the docket for this action or at
https://www.epa.gov/airmarkets/memo-and-supplemental-information-regarding-interstate-transport-sips-2015-
ozone-naaqs.
emissions platform developed under EPA/Multi-Jurisdictional Organization (MJO)/state collaborative project as the primary source for the base year and future year emissions data.\textsuperscript{12} On March 15, 2021, EPA signed the final Revised CSAPR Update using the same modeling released at proposal.\textsuperscript{13} Although Maine and New Hampshire relied on the modeling included in the March 2018 memo to develop their SIP submissions as EPA had suggested, EPA now proposes to primarily rely on the updated and newly available 2016 base year modeling in evaluating these submissions. By using the updated modeling results, EPA is using the most current and technically appropriate information as the primary basis for this proposed rulemaking. EPA’s independent analysis, which also evaluated historical monitoring data, recent DVs, and emissions trends, found that such information provides additional support and further substantiates the results of the 2016 base year modeling as the basis for this proposed rulemaking. Section III of this notice and the Air Quality Modeling technical support document (TSD) included in the docket for this proposal contain additional detail on this modeling.\textsuperscript{14}

In the CSAPR, CSAPR Update, and the Revised CSAPR Update, EPA used a threshold of one percent of the NAAQS to determine whether a given upwind state was “linked” at step 2 of the interstate transport framework and would, therefore, contribute to downwind nonattainment and maintenance sites identified in step 1. If a state’s impact did not equal or exceed the one percent threshold, the upwind state was not “linked” to a downwind air quality problem, and EPA, therefore, concluded the state would not significantly contribute to nonattainment or interfere with maintenance of the NAAQS in the downwind states. However, if

\textsuperscript{12} See \textit{85 FR 68964}, 68981. The results of this modeling are included in a spreadsheet in the docket for this action. The underlying modeling files are available for public review in the docket for the Revised CSAPR Update (EPA-HQ-OAR-2020-0272).

\textsuperscript{13} See \textit{86 FR 23054} at 23075, 23164 (April 30, 2021).

\textsuperscript{14} See “Air Quality Modeling Technical Support Document for the Revised Cross-State Air Pollution Rule Update,” \textit{86 FR 23054} (April 30, 2021), available in the docket for this action. This TSD was originally developed to support EPA’s action in the Revised CSAPR Update, as relating to outstanding good neighbor obligations under the 2008 ozone NAAQS. While developed in this separate context, the data and modeling outputs, including interpolated design values for 2021, may be evaluated with respect to the 2015 ozone NAAQS and used in support of this proposal.
a state’s impact equaled or exceeded the one percent threshold, the state’s emissions were further evaluated in step 3, considering both air quality and cost considerations, to determine what, if any, emissions might be deemed “significant” and, thus, must be eliminated under the good neighbor provision. EPA is proposing to rely on the one percent threshold for the purpose of evaluating Maine and New Hampshire’s contributions to nonattainment or maintenance of the 2015 ozone NAAQS in downwind areas.

Several D.C. Circuit court decisions address the issue of the relevant analytic year for the purposes of evaluating ozone transport air-quality problems. On September 13, 2019, the D.C. Circuit issued a decision in *Wisconsin v. EPA*, remanding the CSAPR Update to the extent that it failed to require upwind states to eliminate their significant contribution by the next applicable attainment date by which downwind states must come into compliance with the NAAQS, as established under CAA section 181(a). 938 F.3d 303, 313.

On May 19, 2020, the D.C. Circuit issued a decision in *Maryland v. EPA* that cited the *Wisconsin* decision in holding that EPA must assess the impact of interstate transport on air quality at the next downwind attainment date, including Marginal area attainment dates, in evaluating the basis for EPA’s denial of a petition under CAA section 126(b). *Maryland v. EPA*, 958 F.3d 1185, 1203-04 (D.C. Cir. 2020). The court noted that “section 126(b) incorporates the Good Neighbor Provision,” and, therefore, “EPA must find a violation [of section 126] if an upwind source will significantly contribute to downwind nonattainment at the *next downwind attainment deadline*. Therefore, the agency must evaluate downwind air quality at that deadline, not at some later date.” *Id.* at 1204 (emphasis added). EPA interprets the court’s holding in *Maryland* as requiring the Agency, under the good neighbor provision, to assess downwind air quality by the next applicable attainment date, including a Marginal area attainment date under
CAA section 181 for ozone nonattainment.\textsuperscript{15} The Marginal area attainment date for the 2015 ozone NAAQS is August 3, 2021.\textsuperscript{16} Historically, EPA has considered the full ozone season prior to the attainment as supplying an appropriate analytic year for assessing good neighbor obligations. While this would be 2020 for an August 2021 attainment date (which falls within the 2021 ozone season running from May 1 to September 30), in this circumstance, when the 2020 ozone season is wholly in the past, it is appropriate to focus on 2021 to address good neighbor obligations to the extent possible by the 2021 attainment date. EPA does not believe it would be appropriate to select an analytical year that is wholly in the past, because the agency interprets the good neighbor provision as forward looking. See 86 FR 23054 at 23074; see also Wisconsin, 938 F.3d at 322. Consequently, in this proposal EPA will use the analytical year of 2021 to evaluate Maine and New Hampshire’s good neighbor obligations with respect to the 2015 ozone NAAQS.

II. Maine Submission

On February 6, 2020, Maine submitted a SIP revision addressing the CAA section 110(a)(2)(D)(i)(I) interstate transport requirements for the 2015 ozone NAAQS.

Maine relied on the results of EPA’s modeling for the 2015 ozone NAAQS contained in the March 2018 memorandum to identify downwind nonattainment and maintenance receptors that may be impacted by emissions from sources in Maine in the year 2023. These results indicate Maine’s greatest impact on any potential downwind nonattainment or maintenance receptor would be 0.01 ppb in Suffolk County, New York (monitoring site 361030002). Maine compared

\textsuperscript{15} We note that the court in Maryland did not have occasion to evaluate circumstances in which EPA may determine that an upwind linkage to a downwind air quality problem exists at steps 1 and 2 of the interstate transport framework by a particular attainment date, but for reasons of impossibility or profound uncertainty the Agency is unable to mandate upwind pollution controls by that date. See Wisconsin, 938 F.3d at 320. The D.C. Circuit noted in Wisconsin that upon a sufficient showing, these circumstances may warrant flexibility in effectuating the purpose of the good neighbor provision. Such circumstances are not at issue in the present proposal.

\textsuperscript{16} CAA section 181(a); 40 CFR 51.1303; Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards, 83 FR 25776 (June 4, 2018, effective Aug. 3, 2018).
this value to a screening threshold of 0.70 ppb, representing one percent of the 2015 ozone NAAQS. Because Maine’s impacts to receptors in downwind states are projected to be less than 0.70 ppb in 2023, Maine concluded that emissions from sources within the state will not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state.

III. New Hampshire Submission

On September 5, 2018, New Hampshire submitted a SIP revision addressing the CAA section 110(a)(2)(D)(i)(I) interstate transport requirements for the 2015 ozone NAAQS. This “good neighbor SIP” was included as an enclosure in the state’s infrastructure SIP for the same NAAQS.

New Hampshire relied on the results of EPA’s modeling for the 2015 ozone NAAQS contained in the March 2018 memorandum to identify downwind nonattainment and maintenance receptors that may be impacted by emissions from sources in New Hampshire in the year 2023. These results indicate New Hampshire’s greatest impact on any potential downwind nonattainment or maintenance receptor would be 0.06 ppb in Queens County, New York (monitoring site 360810124). New Hampshire compared this value to a screening threshold of 0.70 ppb, representing one percent of the 2015 ozone NAAQS. Because New Hampshire’s impacts to receptors in downwind states are projected to be less than 0.70 ppb in 2023, New Hampshire concluded that emissions from sources within the state will not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state.

17 New Hampshire incorrectly stated in its September 2018 good neighbor SIP submission that the state’s highest projected contribution for 2023 to any downwind nonattainment or maintenance receptor is 6 ppb; the modeled value should be 0.06 ppb as correctly shown in Table 1 of the submission. New Hampshire also incorrectly stated in their submission that 7 ppb, rather than 0.70 ppb, is 1% of the NAAQS.
New Hampshire’s September 2018 good neighbor SIP submission also lists New Hampshire’s regulations for controlling emissions of ozone precursors as well as its regional emissions-control strategies. These include Env-A 619, Prevention of Significant Deterioration (PSD), and Env-A 618, Nonattainment New Source Review (NNSR) (82 FR 24057; May 25, 2017); and Env-A 2300, Mitigation of Regional Haze (77 FR 50602; August 22, 2012).

IV. EPA Evaluation of the States’ submittals

Maine and New Hampshire’s SIP submissions both rely on analysis of the year 2023 to show that each state does not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state. However, given the holdings in Wisconsin and Maryland, analysis of that year is no longer sufficient where the next attainment date for the 2015 ozone NAAQS is in 2021. Nonetheless, the analysis EPA conducted for the 2021 analytical year corroborates the conclusion reached in each state’s submission.

As stated in Section I of this notice, in consideration of the holdings in Wisconsin and Maryland, EPA’s analysis relies on 2021 as the relevant attainment year for evaluating a State’s good neighbor obligations with respect to the 2015 ozone NAAQS using the four-step interstate transport framework. In step 1, we identify locations where the Agency expects there to be nonattainment or maintenance receptors for the 2015 8-hour ozone NAAQS in the 2021 analytic future year. Where EPA’s analysis shows that an area or site does not fall under the definition of a nonattainment or maintenance receptor in 2021, that site is excluded from further analysis.

18 We recognize that Maine, New Hampshire, and other states may have been influenced by EPA’s 2018 guidance memos (issued prior to the Wisconsin and Maryland decisions) in making good neighbor submissions that relied on EPA’s modeling of 2023. When there are intervening changes in relevant law or legal interpretation of CAA requirements, states are generally free to withdraw, supplement, and/or re-submit their SIP submissions with new analysis (in compliance with CAA procedures for SIP submissions). While neither Maine nor New Hampshire has done this, as explained in this section, the independent analysis EPA has conducted at its discretion confirms that the states’ submissions in this instance are ultimately approvable.
under EPA’s four step interstate transport framework. For areas that are identified as a nonattainment or maintenance receptor in 2021, we proceed to the next step of our four-step framework by identifying the upwind state’s contribution to those receptors.

EPA’s approach to identifying ozone nonattainment and maintenance receptors in this action is consistent with the approach used in previous transport rulemakings. EPA’s approach gives independent consideration to both the “contribute significantly to nonattainment” and the “interfere with maintenance” prongs of section 110(a)(2)(D)(i)(I), consistent with the D.C. Circuit’s direction in North Carolina.

For the purpose of this proposal, EPA identifies nonattainment receptors as those monitoring sites that are projected to have average design values that exceed the NAAQS and that are also measuring nonattainment based on the most recent monitored design values. This approach is consistent with prior transport rulemakings, such as CSAPR Update, where EPA defined nonattainment receptors as those areas that both currently monitor nonattainment and that EPA projects will be in nonattainment in the future analytic year.

In addition, in this proposal, EPA identifies a receptor to be a “maintenance” receptor for purposes of defining interference with maintenance, consistent with the method used in the CSAPR and upheld by the D.C. Circuit in EME Homer City Generation, L.P. v. EPA, 795 F.3d 118, 136 (D.C. Cir. 2015). Specifically, monitoring sites with a projected maximum design value in 2021 that exceeds the NAAQS are considered maintenance receptors. EPA’s method of

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19 While EPA has focused its analysis in this notice on the year 2021, modeling data in the record for years 2023 and 2028 confirm that no new linkages to downwind receptors are projected for these states in later years. This is not surprising as it is consistent with an overall, long-term downward trend in emissions from these states.

20 531 F.3d at 910-911 (holding that EPA must give “independent significance” to each prong of CAA section 110(a)(2)(D)(i)(I)).

21 See 81 FR 74504 (October 26, 2016). Revised CSAPR Update also used this approach. See 86 FR 23054 (April 30, 2021). This same concept, relying on both current monitoring data and modeling to define nonattainment receptor, was also applied in CAIR. See 70 FR 25241 (January 14, 2005). See also North Carolina, 531 F.3d at 913-914 (affirming as reasonable EPA’s approach to defining nonattainment in CAIR).

22 See 76 FR 48208 (August 8, 2011). CSAPR Update and Revised CSAPR Update also used this approach. See 81 FR 74504 (October 26, 2016) and See 86 FR 23054 (April 30, 2021).
defining these receptors takes into account both measured data and reasonable projections based on modeling analysis.

Recognizing that nonattainment receptors are also, by definition, maintenance receptors, EPA often uses the term “maintenance-only” to refer to receptors that are not also nonattainment receptors. Consistent with the methodology described above, monitoring sites with a projected maximum design value that exceeds the NAAQS, but with a projected average design value that is below the NAAQS, are identified as maintenance-only receptors. In addition, those sites that are currently measuring ozone concentrations below the level of the applicable NAAQS, but are projected to be nonattainment based on the average design value and that, by definition, are projected to have a maximum design value above the standard are also identified as maintenance-only receptors.

To evaluate future air quality in steps 1 and 2 of the interstate transport framework, EPA is using the 2016 and 2023 base case emissions developed under EPA/MJO/state collaborative emissions modeling platform project as the primary source for base year and 2023 future year emissions data for this proposal. Because this platform does not include emissions for 2021, EPA developed an interpolation technique based on modeling for 2023 and measured ozone data to determine ozone concentrations for 2021. To estimate average and maximum design values for 2021, EPA first performed air quality modeling for 2016 and 2023 to obtain design values in 2023. The 2023 design values were then coupled with the corresponding 2016 measured design values to estimate design values in 2021. Details on the modeling, including the interpolation methodology, can be found in the Air Quality Modeling TSD, found in the docket of this proposal.

\[\text{23 See 86 FR 23054 (April 30, 2021). The results of this modeling are included in a spreadsheet in the docket for this action. The underlying modeling files are available for public access in the docket for the Revised CSAPR Update (EPA-HQ-OAR-2020-0272).}\]
To quantify the contribution of emissions from specific upwind states on 2021 8-hour design values for the identified downwind nonattainment and maintenance receptors, EPA first performed nationwide, state-level ozone source apportionment modeling for 2023. The source apportionment modeling provided contributions to ozone from precursor emissions of anthropogenic nitrogen oxides (NO\textsubscript{X}) and volatile organic compounds (VOCs) in each state, individually. The modeled contributions were then applied in a relative sense to the 2021 average design value to estimate the contributions in 2021 from each state to each receptor. Details on the source apportionment modeling and the methods for determining contributions in 2021 are in the Air Quality Modeling TSD in the docket.

The 2021 design values and contributions were examined to determine if Maine and New Hampshire, considered separately, contribute at or above the threshold of one percent of the 2015 ozone NAAQS (0.70 ppb) to any downwind nonattainment or maintenance receptor. The data\textsuperscript{24} indicate that the highest contribution in 2021 from Maine to a downwind nonattainment or maintenance receptor is 0.01 ppb to a maintenance receptor in Fairfield County, Connecticut (monitoring site 90013007), and, from New Hampshire, is 0.10 ppb to the same downwind receptor. The data also show modeled ozone contributions from Maine and New Hampshire to the design values of a larger set of monitoring sites (independent of attainment status) and indicate that the highest projected contribution in 2021 from Maine to any of these sites is 0.12 ppb to monitors in Putnam and Westchester Counties in New York (monitoring sites 360790005 and 361192004; #307 and #314 on the Design Values and Contributions spreadsheet), and, from New Hampshire, is 1.46 ppb to the monitor in Knox County, Maine (monitoring site 230130004; #226 on the Design Values and Contributions spreadsheet). While New Hampshire’s modeled contribution to the Knox County monitor exceeds one percent of the 2015 ozone NAAQS,

\textsuperscript{24} The data are given in the “Air Quality Modeling Technical Support Document for the Revised Cross-State Air Pollution Rule Update” and “Ozone Design Values and Contributions Revised CSAPR Update.xlsx,” which are included in the docket for this action.
EPA’s analysis at step 1 does not identify the Knox County monitor as a downwind area that may have problems maintaining the 2015 ozone NAAQS. The Knox County monitor’s projected design value in 2021 is 57.4 ppb.

EPA also analyzed emissions trends for ozone precursors in Maine and New Hampshire to support the findings from the air quality analysis. In evaluating emissions trends, we first reviewed the information submitted by each state and then reviewed additional information available to the Agency. We focused on state-wide emissions of nitrogen oxides and volatile organic compounds.\(^{25,26}\) Emissions from mobile sources, electric generating units (“EGUs”), industrial facilities, gasoline vapors, and chemical solvents are some of the major anthropogenic sources of ozone precursors. This evaluation looks at both past emissions trends, as well as projected trends.

As shown in Table 1, for Maine, between 2016 and 2023, annual total $NO_X$ and VOC emissions are projected to decline by 38 percent and 20 percent, respectively. For New Hampshire, between 2016 and 2023, annual total $NO_X$ and VOC emissions are projected to decline by 36 percent and 15 percent, respectively. The projected reductions are a result of the implementation of existing control programs that will continue to decrease $NO_X$ and VOC emissions in Maine and New Hampshire, as indicated by EPA’s most recent 2021 and 2023 projected emissions.

As shown in Table 2, onroad and nonroad mobile source emissions collectively comprise a large portion of each state’s total anthropogenic NOx and VOC. For example, in 2019, NOx emissions from mobile sources in Maine comprised 52 percent of total NOx emissions and 48 percent of total VOC emissions. In New Hampshire for that same year, NOx emissions from

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\(^{25}\) This is because ground-level ozone is not emitted directly into the air but is formed by chemical reactions between ozone precursors, chiefly NO\(_X\) and non-methane VOCs, in the presence of sunlight.

\(^{26}\) 81 FR 74504, 74513-14.
mobile sources comprised 54 percent of total NOx emissions and 45 percent of total VOC emissions.

The large decrease in NO\textsubscript{X} emissions between 2016 emissions and projected 2023 emissions in each state is primarily driven by reductions in emissions from onroad and nonroad mobile sources. EPA projects that both VOC and NO\textsubscript{X} emissions will continue declining out to 2023 as newer vehicles and engines that are subject to the most recent, stringent mobile source standards replace older vehicles and engines.\textsuperscript{27}

In summary, there is no evidence to suggest that the overall emissions trend demonstrated in Table 1 in either state will suddenly reverse or spike in 2021 compared to historical emissions levels or those projected for 2023. Further, there is no evidence that the projected ozone precursor emissions trends out to 2023 and beyond would not continue to show a decline in emissions. In addition, EPA's normal practice is to include in our modeling only changes in NO\textsubscript{X} or VOC emissions that result from final regulatory actions. Any potential changes in NO\textsubscript{X} or VOC emissions that may result from possible future or proposed regulatory actions are speculative.

This downward trend in emissions in Maine and New Hampshire adds support to the air quality analyses presented above for each state, and indicates that the contributions from emissions from sources in Maine and New Hampshire to ozone receptors in downwind states will continue to decline and, for each state, remain below one percent of the NAAQS.

\textsuperscript{27} Tier 3 Motor Vehicle Emission and Fuel Standards (79 FR 23414, April 28, 2014); Mobile Source Air Toxics Rule (MSAT2) (72 FR 8428, February 26, 2007), Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (66 FR 5002, January 18, 2001); Clean Air Nonroad Diesel Rule (69 FR 38957, June 29, 2004); Locomotive and Marine Rule (73 FR 25098, May 6, 2008); Marine Spark-Ignition and Small Spark-Ignition Engine Rule (73 FR 59034, October 8, 2008); New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder Rule (75 FR 22895, April 30, 2010); and Aircraft and Aircraft Engine Emissions Standards (77 FR 36342, June 18, 2012).
Table 1. Annual Emissions of NO\textsubscript{X} and VOC from Anthropogenic Sources in Maine and New Hampshire (tons per year).\textsuperscript{28}

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<td>38,086</td>
<td>35,025</td>
<td>30,775</td>
<td>28,530</td>
<td>27,408</td>
<td>25,680</td>
<td>21,822</td>
<td>19,579</td>
</tr>
<tr>
<td>NH VOC</td>
<td>45,859</td>
<td>44,159</td>
<td>42,459</td>
<td>40,731</td>
<td>38,275</td>
<td>34,234</td>
<td>33,026</td>
<td>31,928</td>
<td>31,193</td>
<td>29,640</td>
<td>28,872</td>
</tr>
</tbody>
</table>

Table 2. Annual Emissions of NO\textsubscript{X} and VOC from Onroad and Nonroad Vehicles in Maine and New Hampshire (tons per year).

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ME NO\textsubscript{X}</td>
<td>41,601</td>
<td>38,861</td>
<td>36,122</td>
<td>33,382</td>
<td>31,465</td>
<td>27,286</td>
<td>26,570</td>
<td>25,714</td>
<td>24,005</td>
<td>17,841</td>
<td>16,214</td>
</tr>
<tr>
<td>ME VOC</td>
<td>40,376</td>
<td>38,091</td>
<td>35,805</td>
<td>33,519</td>
<td>30,884</td>
<td>25,929</td>
<td>24,683</td>
<td>23,423</td>
<td>22,064</td>
<td>18,037</td>
<td>16,499</td>
</tr>
<tr>
<td>NH NO\textsubscript{X}</td>
<td>26,038</td>
<td>24,979</td>
<td>23,921</td>
<td>22,862</td>
<td>20,835</td>
<td>17,619</td>
<td>16,408</td>
<td>15,022</td>
<td>13,970</td>
<td>10,776</td>
<td>9,878</td>
</tr>
<tr>
<td>NH VOC</td>
<td>25,314</td>
<td>24,184</td>
<td>23,054</td>
<td>21,924</td>
<td>20,027</td>
<td>16,544</td>
<td>15,895</td>
<td>14,796</td>
<td>14,062</td>
<td>11,947</td>
<td>11,277</td>
</tr>
</tbody>
</table>

Thus, EPA’s air quality and emissions analyses indicate that emissions from Maine or from New Hampshire, with each state considered individually, will not significantly contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state in 2021.

V. Proposed Action

\textsuperscript{28} The annual emissions data for the years 2011 through 2019 were obtained from EPA’s National Emissions Inventory web site: https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data. Note that emissions from miscellaneous sources are not included in the state totals. The emissions for 2021 and 2023 are based on the 2016 emissions modeling platform. See “2005 thru 2019 + 2021_2023_2028 Annual State Tier1 Emissions” and the Emissions Modeling TSD in the docket for this action.
As discussed in Sections II and III, Maine and New Hampshire have each concluded that emissions from sources in their individual state will not contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in any other state. Each state submission reached this conclusion by relying on information for the analytic year 2023. As discussed above, the Wisconsin and Maryland decisions of the D.C. Circuit have made clear that the good neighbor analysis for the 2015 ozone NAAQS must focus on the next attainment date, and that date is the Marginal area attainment date in 2021. Therefore, EPA conducted additional analysis to determine whether each state’s conclusions would remain valid in 2021 rather than 2023. EPA’s evaluation of measured and monitored data, including interpolating values to generate a reasonable expectation of air quality and contribution values in 2021, as discussed in Section IV, is consistent with conclusions made by Maine and New Hampshire that, with each state considered separately, emissions from sources in each state will not contribute to nonattainment or interference with maintenance of the 2015 ozone NAAQS in any other state. Because our analysis corroborates each state’s conclusion that emissions from within its state do not contribute to nonattainment or interfere with maintenance of the 2015 ozone NAAQS in another state, we propose to approve the Maine and New Hampshire submissions as meeting CAA section 110(a)(2)(D)(i)(I).

EPA is soliciting public comments on this notice. These comments will be considered before taking final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to this proposed rule by following the instructions listed in the ADDRESSES section of this Federal Register.

VI. Statutory and Executive Order Reviews

Under the Clean Air Act, 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 Clean Air Act. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed 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 (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 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 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).

**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.


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