



May 16, 2024

Michael S. Regan, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Attn: Docket ID No. EPA-HQ-OAR-2023-0402

Re: *Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards and Supplemental Federal “Good Neighbor Plan” Requirements for the 2015 8-hour Ozone National Ambient Air Quality Standards*

Dear Administrator Regan:

The Ozone Transport Commission (OTC) is providing these comments on the U.S. Environmental Protection Agency’s (EPA’s) Proposed Rule *Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards and Supplemental Federal “Good Neighbor Plan” Requirements for the 2015 8-hour Ozone National Ambient Air Quality Standards* [89 Fed. Reg. 12666 (February 16, 2024)] (also referred to in these comments as the “supplemental proposal”). The OTC is a non-partisan multi-state organization created under section 184 of the 1990 Clean Air Act (CAA) Amendments. As established by Congress, the OTC is led by the governors and their designated representatives from 12 states and the District of Columbia¹ to advise the EPA on addressing its shared ground-level ozone problem. Ozone pollution affects the health of more than 66 million people in the Ozone Transport Region (OTR), particularly the young, elderly, and persons with compromised health. Protecting public health and the environment from the harms of ozone pollution is at the core of the OTC’s work.

When states do not submit or submit inadequate Good Neighbor state implementation plans (SIPs), EPA must issue a federal implementation plan (FIP) to protect the public’s health and environment in downwind states. States remain free to submit alternative SIPs identifying how they will achieve the necessary emission reductions within their states to meet the Good Neighbor requirements of the CAA. Downwind states with ozone nonattainment and maintenance areas, however, need those reductions to occur within the statutory attainment deadlines they are obligated to meet under the CAA. Downwind states also need these upwind reductions to

¹ The Washington, DC mayor designates its two OTC representatives.

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- Connecticut
 - Delaware
 - District of Columbia
 - Maine
 - Maryland
 - Massachusetts
 - New Hampshire
 - New Jersey
 - New York
 - Pennsylvania
 - Rhode Island
 - Vermont
 - Virginia

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maintain the air quality improvements achieved through their own SIP requirements.

The OTC's comments are responsive to the EPA's request for comments in the following two areas:²

- (1) the EPA's proposed conclusions that the five states identified in the supplemental proposal (Arizona, Iowa, Kansas, New Mexico, and Tennessee) have emissions that interfere with maintenance of the 2015 ozone national ambient air quality standards (NAAQS) in other states, and
- (2) the EPA's proposed decision to apply the Federal Good Neighbor Plan emissions-control programs as the FIP requirements to address these emissions in these five states.

In commenting on these two areas, our focus is on the EPA's application of its 4-step framework for determining significant contributions to downwind nonattainment and maintenance receptors.

The OTC supports application of the EPA's 4-step framework in the supplemental proposal

The EPA has been promulgating regional nitrogen oxides (NOx) control programs through federal implementation plans for the past 25 years.³ In this supplemental proposal, the EPA is continuing to follow its longstanding, court-affirmed 4-step framework in determining which states must achieve additional reductions in NOx pollution to fully resolve their outstanding Good Neighbor obligations. Within the EPA framework, air quality modeling is used for establishing contribution linkages between upwind NOx emissions and downwind ozone problem areas.

The supplemental proposal is the latest in a series of FIPs the EPA has undertaken to reduce ozone-forming emissions of NOx from electric generating units (EGUs). EPA's original Good Neighbor Plan also directly addresses individual non-EGU source emissions, a step that the OTC has been requesting for two decades.⁴

The OTC has previously commented to the EPA in support of the initial Good Neighbor Plan to help the region attain and maintain the 2015 ozone NAAQS.⁵ In issuing the Good Neighbor Plan and this supplemental proposal to it, the EPA has acted in accordance with CAA Section

² These comments reflect the consensus majority views of the OTC members. The views of individual member jurisdictions may differ from the OTC membership consensus.

³ The first regional NOx control program to address "good neighbor" interstate ozone contributions to downwind nonattainment problems was the "NOx SIP Call" promulgated by the EPA in 1998, 63 Fed. Reg. 57356-57538 (October 27, 1998).

⁴ See, e.g., OTC Comments on the Interstate Air Quality Rule (IAQR) Preamble, submitted to Docket ID No. OAR-2003-0053 (March 30, 2004), available at https://otcair.org/upload/Documents/Correspondence/040330_OTC%20COMMENTS%20ON%20IAQR_Final_pos_t.pdf; OTC Comments on proposed Transport Rule, submitted to Docket ID No. EPA-HQ-OAR-2009-0491 (October 1, 2010), available at https://otcair.org/upload/Documents/Correspondence/OTC%20Comments%20on%20EPA%20HQ%20AR%202009%200491_with%20Appendix%20101001.pdf.

⁵ OTC Comments on EPA's Proposed FIP Addressing Regional Ozone Transport for the 2015 Ozone NAAQS, submitted to Docket ID No. EPA-HQ-OAR-2021-0668 (June 21, 2022), available at <https://otcair.org/upload/Documents/Correspondence/OTC%20GN%20FIP%20comments%20final%2020220621.pdf>.

110(a)(2)(D), which prohibits emissions from within a state from contributing significantly to nonattainment or interfering with maintenance of any NAAQS in other states.

Lowering the highest daily ozone concentrations is key to achieving the health based NAAQS, which, for ozone, are based on the 4th-highest daily maximum 8-hour concentration averaged over three consecutive years. The history of previous interstate transport rules (e.g., NO_x SIP Call, CAIR, CSAPR) has consistently shown that the EPA's framework with its use of the most current air quality modeling and inventory information is directionally correct in achieving these ozone reductions on the highest ozone days. Numerous peer-reviewed scientific studies conducted after implementation of previous FIPs have retrospectively corroborated the efficacy of the EPA's approach.⁶ The abundant number of peer-reviewed studies serve as robust validation of the EPA's framework approach underpinning its Good Neighbor FIPs.

The EPA's use of the most recent information from the 2016v3 emissions modeling platform is appropriate

In the supplemental proposal, the EPA is continuing to use the same 2016v3 emissions modeling platform as it used for the initial Good Neighbor Plan. While noting that a 2022-based modeling platform is currently under development, the OTC agrees that the continued use of the 2016v3 platform provides a consistent approach that applies to all covered states and sources in the Good Neighbor Plan. The 2016v3 platform is responsive to public comments made during the comment period for the proposed Good Neighbor Plan, and reflects incorporation of those comments, where warranted, to improve the analysis. It is appropriate that the EPA, in response to public comments following a rule's proposal, consider and incorporate, as needed,

⁶ Aleksic, N., Ku, J. Y., & Sedefian, L. (2013). Effects of the NO_x SIP Call program on ozone levels in New York. *Journal of the Air & Waste Management Association*, 63(11), 1335-1342; Butler, T. J., Vermeylen, F. M., Rury, M., Likens, G. E., Lee, B., Bowker, G. E., & McCluney, L. (2011). Response of ozone and nitrate to stationary source NO_x emission reductions in the eastern USA. *Atmospheric Environment*, 45(5), 1084-1094; Chan, E., & Vet, R. J. (2010). Baseline levels and trends of ground level ozone in Canada and the United States. *Atmospheric Chemistry and Physics*, 10(18), 8629-8647; Chen, Y., Rich, D. Q., Masiol, M., & Hopke, P. K. (2023). Changes in ambient air pollutants in New York State from 2005 to 2019: Effects of policy implementations and economic and technological changes. *Atmospheric Environment*, 311, 119996; Cooper, O. R., Gao, R. S., Tarasick, D., Leblanc, T., & Sweeney, C. (2012). Long-term ozone trends at rural ozone monitoring sites across the United States, 1990–2010. *Journal of Geophysical Research: Atmospheres*, 117(D22); G go, E., Porter, P. S., Gilliland, A., & Rao, S. T. (2007). Observation-based assessment of the impact of nitrogen oxides emissions reductions on ozone air quality over the eastern United States. *Journal of Applied Meteorology and Climatology*, 46(7), 994-1008; He, H., Liang, X. Z., Sun, C., Tao, Z., & Tong, D. Q. (2020). The long-term trend and production sensitivity change in the US ozone pollution from observations and model simulations. *Atmospheric Chemistry and Physics*, 20(5), 3191-3208; He, H., Stehr, J. W., Hains, J. C., Krask, D. J., Doddridge, B. G., Vinnikov, K. Y., ... & Dickerson, R. R. (2013). Trends in emissions and concentrations of air pollutants in the lower troposphere in the Baltimore/Washington airshed from 1997 to 2011. *Atmospheric Chemistry and Physics*, 13(15), 7859-7874; Jin, X., Fiore, A. M., Murray, L. T., Valin, L. C., Lamsal, L. N., Duncan, B., ... & Tonnesen, G. S. (2017). Evaluating a space-based indicator of surface ozone-NO_x-VOC sensitivity over midlatitude source regions and application to decadal trends. *Journal of Geophysical Research: Atmospheres*, 122(19), 10-439; Li, J., Mao, J., Fiore, A. M., Cohen, R. C., Crouse, J. D., Teng, A. P., ... & Horowitz, L. W. (2018). Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. *Atmospheric Chemistry and Physics*, 18(3), 2341-2361; Yan, Y., Lin, J., & He, C. (2018). Ozone trends over the United States at different times of day. *Atmospheric Chemistry and Physics*, 18(2), 1185-1202.

improvements to its analytical approach and the data it relies on. Doing so directly aligns with the purpose of having a public comment period.

The EPA's use of the most up-to-date science and modeling information maintains equity among the states by using a consistent approach at the final stage of the rulemaking process. As in the case of the supplemental proposal, incorporating better information can uncover additional upwind-downwind linkages that were not accounted for in prior iterations of the analysis. Conversely, incorporating better information can also prevent unnecessary regulatory burden on states and sources by uncovering "false positive" linkages identified in prior analysis iterations. The end result is a final rule that applies to all states and sources equally because it is based on the best available science and data and it takes into account the most up-to-date information, including that gathered in response to public comments.

While the EPA's modeling approach provides confidence in establishing linkages between upwind emissions and downwind ozone problems, the OTC has previously noted that the modeling methodology for determining if a linkage exists has been conservative (i.e., less prone to establishing a linkage).⁷ The EPA's modeling of current ozone design values when projected from a past emissions inventory year (e.g., 2016) tends to underpredict the monitored design values.⁸ This suggests that modeled regional interstate ozone contributions could be larger than currently estimated. This supports the EPA's inclusion of "violating-monitor maintenance-only receptors." These are receptors that are projected by the 2016v3 platform to be in attainment for the 2023 analytic year. But because these receptors actually monitored nonattainment in 2021 and 2022, they could be at risk of failing to maintain the 2015 ozone NAAQS.

The EPA is correct in consistently applying a 1% of the NAAQS threshold at Step 2

The OTC strongly agrees with the EPA that it should consistently apply a 1% of the NAAQS threshold for establishing linkages in its significant contribution analyses. As the OTC has stated in the past, we strongly disagree with assertions that a state should be able to use a 1 part per billion (ppb) linkage or any other greater threshold rather than the previously consistent use of 1% of the NAAQS in determining significant contribution linkages. In 2009, 17 states in the eastern United States that make up the OTC and the Lake Michigan Air Directors Consortium (LADCO) collectively agreed, and then wrote to the EPA, that "[a]n upwind state significantly contributes to nonattainment or interferes with maintenance in a downwind area of interest if its total impact from all source sectors equals or exceeds 1% of the applicable NAAQS."⁹ This was at a time when the ozone NAAQS was based on an 8-hour maximum daily average of 75 ppb. In the context of the now strengthened ozone NAAQS of 70 ppb, the OTC commented to the EPA

⁷ OTC Comments on EPA's Proposed FIP Addressing Regional Ozone Transport for the 2015 Ozone NAAQS, submitted to Docket ID No. EPA-HQ-OAR-2021-0668 (June 21, 2022), at p. 3, available at <https://otcair.org/upload/Documents/Correspondence/OTC%20GN%20FIP%20comments%20final%2020220621.pdf>.

⁸ See e.g., OTC, 2023 Fall OTC and MANEVU Stakeholder Meeting, Presentation – Modeling (September 21, 2023), slides 5 & 6, https://otcair.org/upload/Documents/Meeting%20Materials/3%2020230921_OTC_MC_Stakeholders%20final.pdf.

⁹ OTC and LADCO Joint Letter to EPA on CAIR Replacement Rule (September 2, 2009), https://otcair.org/upload/Documents/Correspondence/Final%20Recommendation%20Letter_090902.pdf.

at the time it proposed the Good Neighbor Plan that “[t]o raise the linkage threshold to 1 ppb (or greater) in the face of increasingly stringent air quality health standards creates the counterintuitive result that upwind contributions have to be quantitatively larger in order to ‘contribute significantly’ to nonattainment or maintenance problems under a more stringent NAAQS than with prior weaker standards.”¹⁰

The OTC objected to the use of a 1 ppb metric when a 2018 EPA memo¹¹ first suggested that it could be an alternative, if justified, to the 1% of the NAAQS linkage threshold.¹² A 1 ppb metric would undermine national consistency and the equitable assignment of pollution reduction responsibilities across states. It would shift a greater burden to downwind states already struggling to find additional, and at higher cost, ozone reduction measures. This would be very inefficient considering that significant downwind ozone reductions can be realized through highly cost effective measures in upwind states. And, as mentioned earlier, use of a higher contribution threshold is counterintuitive when applied to a more stringent ozone NAAQS level.

A state’s significant ozone contribution stands on its own

The EPA’s consistent approach is to quantify the highly cost effective emissions reductions that are available in those upwind states that are linked to downwind ozone problem areas. The quantified contribution is unique to each state and not relative to the contribution of others. Therefore, states’ arguments asserting greater contributions from other places and sources are irrelevant and extraneous to the significant contribution analysis. It is each contributing upwind state’s responsibility as a good neighbor to address that portion of its contribution to downwind air quality problems regardless of any other contributors.

Summary

We support the EPA’s continued use of the 4-step framework with its 1% of the NAAQS threshold. This framework provides a nationally consistent methodology that equitably assigns pollution reduction requirements across all contributing states. While acknowledging the current ongoing work to assemble a new 2022-based modeling platform, we support the EPA’s use of the 2016v3 platform in making significant contribution determinations in this supplemental proposal. This maintains consistency and equity with how contribution determinations have been made during all phases of modeling to support the Good Neighbor Plan.

The EPA’s approach has a long and well-documented history of success in reducing the interstate transport of pollutants contributing to ground-level ozone problems in downwind

¹⁰ OTC Comments on EPA’s Proposed FIP Addressing Regional Ozone Transport for the 2015 Ozone NAAQS, submitted to Docket ID No. EPA–HQ–OAR–2021–0668 (June 21, 2022), at p. 4, available at <https://otcair.org/upload/Documents/Correspondence/OTC%20GN%20FIP%20comments%20final%2020220621.pdf>.

¹¹ EPA Memorandum, “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).

¹² OTC Letter to EPA Assistant Administrator Wehrum Concerning Good Neighbor SIPs (January 23, 2019), <https://otcair.org/upload/Documents/Correspondence/OTC-Good%20Neighbor%20State%20Implementation.pdf>.

states. The 4-step framework and 2016v3 platform maintain the same consistent approach in the EPA's supplemental proposal as done with the initial Good Neighbor Plan.

Sincerely,

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Chair, OTC Stationary and Area Sources Committee
Director, Division of Air Quality and Radiation Protection
New Jersey Department of Environmental Protection

cc: OTC Directors
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Peter Tsirigotis, Scott Mathias, Chet Wayland, EPA OAQPS
Rona Birnbaum, Beth Murray, EPA OAP CAMD
Lynne Hamjian, Cynthia Greene, EPA Region 1
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Cristina Fernandez, EPA Region 3