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Paul J. Miller Executive Director

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

Attn: Docket ID No. EPA-HQ-OAR-2021-0668

Re: Interim Final Rule – Federal 'Good Neighbor Plan' for the 2015 Ozone National Ambient Air Quality Standards; Response to Additional Judicial Stays of SIP Disapproval Action for Certain States

Dear Administrator Regan:

The Ozone Transport Commission (OTC) is providing these comments on the U.S. Environmental Protection Agency's (EPA's) Interim Final Rule *Federal "Good Neighbor Plan" for the 2015 Ozone National Ambient Air Quality Standards; Response to Additional Judicial Stays of SIP Disapproval Action for Certain States* [88 Fed. Reg. 67102-67108 (September 29, 2023)]. 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.

In these comments, we are expressing our disappointment and frustration with the upwind states that are using the circuit courts to undermine the historically-proven and impressive public health and environmental success of regional ozone pollution control programs like the Good Neighbor Plan. We ask that they withdraw their challenges to the Good Neighbor Plan.²

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

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

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.

Good Neighbor requirements of the CAA. Downwind states with ozone nonattainment areas, however, need those reductions to occur within the statutory attainment deadlines they are obligated to meet under the CAA.

The OTC supports the Good Neighbor Plan

The OTC has previously commented to EPA in support of the Good Neighbor Plan to help the region attain and maintain the 2015 ozone NAAQS.³ In issuing the Good Neighbor Plan, EPA acted in accordance with CAA Section 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.

The Good Neighbor Plan is one more positive step EPA has taken in a series of FIPs to reduce ozone-forming emissions of nitrogen oxides (NOx) from electric generating units (EGUs). Of additional importance is EPA's coverage of a number of non-EGU source sectors with the Good Neighbor Plan that will directly constrain individual non-EGU source emissions, a step that the OTC has been requesting for two decades.⁴ The OTC also welcomes EPA's incorporation of solid waste incinerators among the covered non-EGU sources in the final Good Neighbor Plan. The OTC has developed a technical analysis demonstrating the cost effectiveness of additional controls for NOx from these source types.⁵

EPA's historical approach in addressing interstate ozone contributions, while conservative, works

The Good Neighbor Plan did not evolve out of thin air. EPA has been promulgating regional NOx control programs through federal implementation plans for the past 25 years.⁶ In issuing the Good Neighbor Plan, EPA continued 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 EPA's framework, air quality modeling is used for establishing contribution linkages between upwind NOx emissions and downwind ozone problem areas.

³ 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. 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%200AR%20200 9%200491_with%20Appendix%20101001.pdf.

⁵ Ozone Transport Commission Stationary and Area Sources Committee, *Municipal Waste Combustor Workgroup Report* (April 2022), <u>https://otcair.org/upload/Documents/Reports/MWC%20Report_revised%2020220425.pdf</u>.

⁶ The first regional NOx control program to address "good neighbor" interstate ozone contributions to downwind nonattainment problems was the "NOx SIP Call" promulgated by EPA in 1998, 63 Fed. Reg. 57356-57538 (October 27, 1998).

Lowering the highest daily ozone concentrations is key to achieving the health based national ambient air quality standards (NAAQS), which 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., NOx SIP Call, CAIR, CSAPR) has consistently shown that EPA's framework with its use of air quality modeling 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 EPA's approach.⁷ The abundant number of peer-reviewed studies serve as robust validation of EPA's framework approach underpinning its Good Neighbor FIPs.

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 is conservative (i.e., less prone to establishing a linkage).⁸ EPA modeling of current ozone design values when projected from a past emissions inventory year (e.g., 2016) tends to underpredict the monitored design values.⁹ This suggests that modeled regional interstate ozone contributions could be larger than currently estimated, further emphasizing the need for timely implementation of the Good Neighbor Plan.

⁷ Aleksic, N., Ku, J. Y., & Sedefian, L. (2013). Effects of the NOx 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 NOx 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); Gégo, 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-NOx-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., Crounse, 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.

⁸ 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.pd f.

⁹ 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.

Finally, we note that studies of ozone trends indicate that with the increasing sensitivity of ozone formation to NOx as the result of past control programs, additional regional NOx controls implemented now will improve ozone air quality even more than would have occurred if these same NOx controls had been implemented in 2005.¹⁰ Knowing this, it is extremely disconcerting that the current delays caused by upwind states through circuit court stays are unnecessarily prolonging the public's exposure to harmful ozone levels, and impeding the ability of downwind states to meet ozone attainment deadlines that the CAA requires to be met "as expeditiously as practicable."

Use of a 1 ppb contribution threshold is not justifiable

The OTC strongly disagrees with states' assertions that they should be able to use a 1 part per billion (ppb) linkage 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 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."¹¹ 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 EPA on the proposed 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."¹²

The OTC objected to the use of a 1 ppb metric when a 2018 EPA memo¹³ first suggested that it could be an alternative, if justified, to the 1% of the NAAQS linkage threshold.¹⁴ It cannot be justified. It is backsliding. It undermines national consistency and an equitable assignment of pollution reduction responsibilities across states. It shifts a greater burden to downwind states

¹¹ 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. ¹² 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.pd f.

¹⁰ Henneman, L. R., Shen, H., Liu, C., Hu, Y., Mulholland, J. A., & Russell, A. G. (2017). Responses in ozone and its production efficiency attributable to recent and future emissions changes in the Eastern United

States. *Environmental Science & Technology*, *51*(23), 13797-13805; 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-NOx-VOC sensitivity over midlatitude source regions and application to decadal trends. *Journal of Geophysical Research: Atmospheres*, *122*(19), 10-439.

¹³ 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).

¹⁴ 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.

already struggling to find additional ozone reduction measures at greater cost when some portion of their problem can be addressed through highly cost effective measures in upwind states. And use of a higher contribution threshold defies common sense when applied to a more stringent ozone NAAQS level.

A state's significant ozone contribution stands on its own

Even when linked at the higher 1 ppb contribution threshold based on their own modeling, a number of states are asserting that their contributions are not significant by pointing the finger elsewhere, such as international transport and "exceptional events." This is irrelevant and extraneous to the significant contribution analysis. EPA's consistent approach is to determine what amount of highly cost effective reductions are available in upwind states that are linked to downwind ozone problem areas. That significant contribution stands alone. It is not relative to the contribution of others. It is the 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.

OTC requests challenging states to withdraw their litigation and lift the stays

In conclusion, we ask our upwind neighbors challenging EPA's disapprovals of their Good Neighbor SIPs to act like good neighbors and withdraw their litigation and lift the stays. The challenges are not supported by science, and are harming public health by delaying air quality progress. Because we all share one atmosphere, it is not only to the benefit of the OTC members, but to our upwind neighbors as well.

Sincerely,

Paul J. Miller

Paul J. Miller Executive Director

cc: OTC Directors

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