March 13, 2017

Administrator Scott Pruitt
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: Docket ID No. EPA-HQ-OAR-2016-0751; Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard

Dear Administrator Pruitt:

The Association of Air Pollution Control Agencies (AAPCA)[1] appreciates the opportunity to provide general comments on the U.S. Environmental Protection Agency's (EPA) Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard (NAAQS). Many of AAPCA's member agencies will be transmitting detailed feedback on this Notice of Data Availability (NODA),[2] and this letter reflects consensus technical and policy comments to help inform EPA's approach to interstate transport for the 2015 ozone NAAQS. In light of the importance of EPA's quantification of a state's interstate pollution obligations and the uncertainty regarding the role of this preliminary modeling data, AAPCA asks that EPA clarify Agency plans and, as a top priority, provide updated, credible national modeling results for 2023, utilizing state inputs, by August 1, 2017 in order to provide the technical analysis needed for air agencies to meet the October 26, 2018 deadline for Good Neighbor State Implementation Plans (SIPs) under Clean Air Act (CAA) Section 110(a)(2)(D)(i)(I).

In responses to questions for the record from the U.S. Senate Environment and Public Works Committee, you raised concerns about "whether EPA had properly accounted for and allocated pollution from upwind states" in previous interstate transport rules and underscored your strong belief "in states working collaboratively to address crossborder environmental challenges." With respect to CAA Section 110(a)(2)(D), where the Act "contemplates a more direct role for EPA," you stated: "I intend to engage in a transparent process that will allow states to have a meaningful opportunity to understand their obligations with regard to reducing emissions that cause or contribute to nonattainment or interference with maintenance in other states through the SIP process."[3] AAPCA applauds this goal, and suggests that providing transparent, credible tools and clear direction for development of approvable Good Neighbor SIPs will allow air agencies to carry out their CAA responsibilities ahead of October 2018.

[1] AAPCA is a national, non-profit, consensus-driven organization focused on assisting state and local air quality agencies and personnel with implementation and technical issues associated with the federal Clean Air Act. Twenty state environmental agencies currently sit on AAPCA's Board of Directors. AAPCA is housed in Lexington, Kentucky as an affiliate of The Council of State Governments. You can find more information about AAPCA at: http://www.cleanairact.org.

[2] You can find state air agency comments on the NODA and proposed interstate transport rule for the 2008 ozone NAAQS here, and compiled AAPCA member comments, provided to the White House Office of Information and Regulatory Affairs meeting on August 23, 2016, here.

[3] https://www.epw.senate.gov/public/_cache/files/6d95005c-bd1a-4779-af7e-be831db6866a/scott-pruitt-qfr-responses-01.18.2017.pdf.

This preliminary modeling and future EPA plans on interstate transport are of great interest to state and local agencies as Good Neighbor SIPs are due within three years of promulgation of the revised 2015 ozone NAAQS, or by October 26, 2018.[4] In addition to being of interest to air agencies that have been impacted directly by prior interstate transport rules like the Clean Air Interstate Rule, Cross-State Air Pollution Rule (CSAPR) and CSAPR Update, EPA's modeling data may also affect other states as the Agency has relied on past transport modeling to disapprove interstate transport elements of SIP submissions.[5] In the absence of clear direction, collaborative technical analyses, and a willingness to act on relevant and timely SIPs, state agencies are left in the dark as they develop Good Neighbor SIPs.

A September 2015 AAPCA survey of state environmental agencies found that a strong majority wanted EPA to provide timely implementation tools, including for interstate transport and infrastructure SIPs, under a revised ozone NAAQS in order to avoid truncated implementation schedules and wasted air agency resources.[6] While EPA indicates that the preliminary modeling data "is being provided to help states develop" Good Neighbor SIPs,[7] air agencies have received mixed messages regarding future actions and the reliability of this information as a basis for state analyses. This confusion is illustrated in EPA's statement that: "These data are considered preliminary because states may choose to modify or supplement these data in developing their Good Neighbor SIPs and/or EPA may update these data for the purpose of potential future analyses or regulatory actions related to interstate ozone transport for the 2015 ozone NAAQS."[8]

In the October 2015 Memorandum on Implementing the 2015 Ozone NAAQS, Acting Assistant Administrator for the Office of Air and Radiation Janet McCabe wrote that, as "a first step in facilitating the implementation of the Good Neighbor provision for the 2015 NAAQS," EPA intended to "conduct modeling necessary to identify projected nonattainment and maintenance receptors and identify the upwind states that contribute significantly to these receptors" in fall 2016 through a NODA process.[9] The NODA, signed December 28, 2016[10] yet not published in the Federal Register until January 6, 2017, does not appear to satisfy these parameters for quality and timeliness. Air agencies appreciate the EPA's attempt to "continue to update and improve both EPA's and states' EGU projections" through technical collaboration and in conjunction with multi-jurisdictional organizations,[11] but note the need for clear, national direction to ensure that approvable Good Neighbor SIPs are developed ahead of October 2018.

AAPCA members understand the use of 2023 as the analytic year, but concerns raised by states in 2016 regarding the proposed and final CSAPR Update's emissions inventory and modeling data for 2017 demonstrate the inherent uncertainty for 2023 projections, as acknowledged by EPA.[12] AAPCA recognizes that EPA will need to rely on the 2011 base year for updating national modeling results by August 1, 2017 to provide a firm basis for air agencies to achieve the October 2018 deadline for Good Neighbor SIPs, but we encourage EPA to consider more recent base years for future interstate transport analyses.

---

[4] 82 FR 1734.
[5] 82 FR 9142.
[6] AAPCA, State Environmental Agency Perspectives on Timely NAAQS Implementation, June 2015.
[7] 82 FR 1733.
[8] 82 FR 1735.
[9] https://www.epa.gov/sites/production/files/2015-10/documents/implementation_memo.pdf.
[10] https://www.epa.gov/airmarkets/notice-data-availability-preliminary-interstate-ozone-transport-modeling-data-2015-ozone.
[11] 82 FR 1736.
[12] 82 FR 1736.

As part of these projections for 2023, EPA includes implementation of the Clean Power Plan (CPP), noting that "[t]he period of focus for the modeling here is in the mid-2020s, which falls within the CPP's interim performance period, and the EPA therefore believes it is appropriate to include in the modeling."[13] AAPCA disagrees. The U.S. Supreme Court stayed the CPP in February 2016 and, in the coming days, the White House is expected to issue an Executive Order related to the CPP as part of the America First Energy Plan.[14]

AAPCA members are concerned that if EPA approves a Good Neighbor SIP that includes the CPP in its base case modeling of EGU emissions, the SIP could be challenged or found deficient if actual 2023 emissions are different than those modeled by EPA in the NODA. EPA states that inclusion or exclusion of the CPP "may have limited impact on the concentration and contribution data in this NODA, which are based on total NO_x emissions."[15] However, Integrated Planning Model (IPM) projections for 2023 include retirement of 100 percent of coal and oil Electric Generating Units (EGUs) in the Northeast (7,115 MW) and 60 percent of coal EGUs in the Mid-Atlantic (21,571 MW).These retirements shift generation to result in a 68 percent reduction from current EGU annual NO_x emissions and a 56 percent reduction from 2023 "on-the-books" EGU annual NO_x emissions as quantified by the Eastern Regional Technical Advisory Committee (ERTAC) model.[16]

Using source apportionment modeling that tagged state-level contributions,[17] one AAPCA member state analyzed the impact of a 60 percent reduction in EGU annual NO_x emissions on transport of ozone from the Mid-Atlantic States. This analysis found that this approach may underestimate 2023 design values by 3 to 5 parts per billion (ppb) at monitors in the Eastern U.S. There may be 11 or more additional receptors with future design values above the NAAQS if these retirements do not occur.[18] Inclusion of the CPP or inaccurate predictions of future operating scenarios of the utility sector may have a significant impact on EGU NO_x emissions and ozone transport; therefore, AAPCA requests that EPA develop an alternative 2023 projection without the CPP and provide the states an opportunity to submit its own 2023 EGU emission projections based on data available from its power plant operators, commissions, and energy offices.

AAPCA recommends that EPA solicit input from states and fully incorporate anticipated regulatory programs in the base case modeling for 2023. As EPA develops and communicates its thinking on interstate transport obligations for the 2015 ozone NAAQS, AAPCA also encourages EPA to address controls on local emissions in nonattainment areas before seeking emissions reductions in upwind states, in a manner consistent with CAA Section 107(a).

---

[13] 82 FR 1736.
[14] *West Virginia et al. v. EPA*, No. 15A773 (U.S. Feb. 9, 2016).
[15] 82 FR 1736.
[16] The IPM modeled retirements shift generation in the Northeast and Mid-Atlantic to natural gas and renewable energy sources; resulting in a 68 percent decrease from present day EGU annual NO_x emissions and a 56 percent decrease from the 2023 "on-the-books" EGU annual NO_x emissions as quantified by the Eastern Regional Technical Advisory Committee (ERTAC) model.
[17] Midwest Ozone Group (prepared by Alpine Geophysics), Source Apportionment Scenario Modeling Results and Comparison to the 2017 Cross State Air Pollution Rule Modeling Platform, January 2016.
[18] According to the EPA air quality modeling for this NODA, there are 20 monitors in Northeast and Mid-Atlantic states that have a future maximum design value above 66 ppb. Increasing the design value for these monitors by 5 ppb would place future maximum design values for 11 of the monitors above the 2015 ozone NAAQS.

Although EPA has "historically found that the 1 percent threshold is appropriate,"[19] this approach is not preordained and EPA has also used several alternative metrics for previous significance assessments. The U.S. Supreme Court has noted delegation to EPA to "select among reasonable options" in allocating upwind state contributions to downwind pollution.[20] EPA established this threshold in CSAPR[21] but has the flexibility under CAA Section 110(a)(2)(D) to develop a level that matches modeling accuracy. In examining interstate transport obligations under increasingly stringent NAAQS approaching background levels,[22] EPA should recognize the tremendous progress that has been made in reducing ozone precursors, including a reduction in NO_x emissions from stationary fuel combustion of nearly 65 percent between 2000 and 2015.[23] EPA should consider whether an alternative threshold above 0.7 ppb is appropriate, particularly as this preliminary modeling includes complex, uncertain, six-year projections for linkages across long distances for contributions virtually undetectable by monitors.

For example, in 2016 draft Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program, EPA recommends a Significant Impact Level (SIL) value, based on an air quality variability analysis and the 4th highest daily maximum 8-hour concentration (averaged over three years), of 1.0 ppb. EPA's technical analysis of this SIL "provides a basis for a permitting authority to conclude that concentration increases below this SIL do not cause or contribute to violations of the relevant NAAQS or PSD increments."[24] In the accompanying legal document, EPA states it has "often equated an insignificant impact with one that is trivial or *de minimis* in nature."[25]

AAPCA agencies are also concerned about the continued reliance on IPM. Air agencies have catalogued a series of unit-level errors, including inaccurate retirements, in IPM runs used to support prior interstate transport rules,[26] and these issues are likely to be even more pronounced for 2023 projections. IPM is a proprietary model that often forces air agencies to guess about key inputs and assumptions. In a 2015 teleconference, EPA's Science Advisory Board raised "concern that the closed-source, proprietary nature of Integrated Planning Model is not very transparent to external testing and evaluation."[27] EPA's Scientific Integrity Policy states:

> The Agency will continue to expand and promote access to scientific information by making it available online in open formats in a timely manner, including access to data and non-proprietary models underlying Agency policy decisions. Further, the use of non-proprietary data and models are encouraged, when feasible, to increase transparency.[28]

---

[19] 82 FR 1740.
[20] *EPA v. EME Homer City Generation, L.P.,*(2014).
[21] 76 FR 48211, 48236.
[22] AAPCA, State Environmental Agency Perspectives on Background Ozone & Regulatory Relief, June 2015.
[23] U.S. EPA, "Our Nation's Air: Status and Trends Through 2015," 2016.
[24] https://www.epa.gov/sites/production/files/2016-08/documents/pm2_5_sils_and_ozone_draft_guidance.pdf.
[25] https://www.epa.gov/sites/production/files/2016-08/documents/pm2_5_sils_and_ozone_2060-za24_legal_document.pdf.
[26] See, for example, 2016 comments on the proposed interstate transport rule for the 2008 ozone NAAQS by environmental agencies of Georgia (pg. 4 -5), Indiana (pg. 1), Louisiana (pg. 2-3), Kentucky (pg. 2), Mississippi (pg. 1 - 2), North Carolina (pg. 1), North Dakota (pg. 1), Ohio (pg. 2), South Carolina (pg. 1), Tennessee (pg. 2 - 3), Virginia (pg. 5), Illinois, Iowa, Michigan, Missouri, New York, Wisconsin, and Connecticut.
[27] https://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/FBFE27E77C8E7E2F85257EA80058ADB7/$File/Minutes+QR++20150924.pdf.
[28] https://www.epa.gov/sites/production/files/2014-02/documents/scientific_integrity_policy_2012.pdf.

The NODA acknowledges other projection methodologies, such as the approach used by ERTAC,[29] and these alternatives may have advantages of non-proprietary code, the ability to be transferred to air agencies at no cost, and more frequently updated inputs.[30]

In conclusion, AAPCA requests that EPA (1) elevate the priority of 2015 ozone NAAQS transport modeling analysis, (2) accept the states' comments related to the NODA, (3) redo the contribution assessment by August 1, 2017 and (4) clarify that this analysis can provide a defensible position for states which choose to utilize it in their Good Neighbor SIP submittals. EPA's assistance in this matter will greatly help the states prepare scientifically defensible Good Neighbor SIPs before the October 26, 2018 deadline.

Thank you for the attention to these comments. As noted above, AAPCA and its members look forward to working with EPA to develop nation-wide technical information providing a reliable basis to fulfill interstate transport obligations under the 2015 ozone NAAQS. If you have any questions, please contact cwoods@csg.org or (859) 244-8040.

Sincerely,

Clinton J. Woods, Executive Director
AAPCA

[29] 82 FR 1736.
[30] http://www.csg.org/aapca_site/news/documents/CSAPRModelingwithERTAC-10-24-2016.pdf.