

September 15, 2017

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

Subject: Principles for Addressing Interstate and International Ozone Transport

Dear Administrator Pruitt:

The Association of Air Pollution Control Agencies (AAPCA)¹ appreciates the opportunity to provide additional feedback to the U.S. Environmental Protection Agency (EPA) on consensus principles for the Agency to address interstate and international ozone transport as it relates to the 2008 and 2015 National Ambient Air Quality Standards (NAAQS) for ground-level ozone. This communication lays out principles to facilitate approvable Good Neighbor State Implementation Plans (SIPs) under Clean Air Act (CAA) Section 110(a)(2)(D)(i)(I) for the 2008 and 2015 ozone NAAQS and is grounded in state and local air agency comments on a number of recent EPA actions.²

AAPCA applauds the efforts of EPA, through the Office of Air Quality Planning and Standards and Office of Atmospheric Programs, to conduct more credible modeling for interstate transport in 2023 for the purposes of Good Neighbor SIP development. Based on comments from EPA officials on calls in August, we understand that EPA intends to complete updated national modeling this month that continues to use a 2011 base year and 2023 as a future year. This modeling will update emissions inventories, remove the Clean Power Plan assumptions, and incorporate Reasonably Available Control Technology (RACT) regulations for Pennsylvania and Connecticut for 2023.

Now is the time for EPA to make meaningful updates to its approach to address interstate transport for the ozone NAAQS. Recent state and local comments highlight the need for EPA action on the following issues:

- Re-evaluate the 1 percent threshold for significant contribution, including the assessment for the 2015 ozone NAAQS
- Determine that states should not be required to offset international or non-anthropogenic emissions through interstate transport requirements

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. AAPCA represents more than 40 state and local air agencies, and senior officials from 20 state environmental agencies currently sit on the AAPCA Board of Directors. You can find more information about AAPCA at: <http://www.cleanairact.org>.

² See compiled comments on: [Executive Order \(EO\) 13777 on Enforcing the Regulatory Reform Agenda](#) (AAPCA also released a July 2017 report, [The State of Regulatory Reform: Navigating State Perspectives on Clean Air Act Regulations Under Executive Order 13777](#)); [Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone NAAQS](#) (herein “2017 NODA”); [Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS and related Notice of Data Availability](#) (herein “CSAPR Update”); [Implementation of the 2015 NAAQS Standards for Ozone: Nonattainment Area Classifications and SIP Requirements](#) (herein “proposed SIP Requirements Rule”); and the [proposed revision to the ozone NAAQS in 2015](#) (AAPCA reports on state environmental agency perspectives [on timely NAAQS implementation](#) and [background ozone & regulatory relief](#) provide additional information).

- Embrace a state-driven process to address interstate transport, including EPA action on timely and relevant SIPs and a re-assessment of expectations for Infrastructure SIPs
- Adjust EPA’s methodology for cost-effective nitrogen oxide (NO_x) controls
- Reassess its approach to identifying downwind maintenance and nonattainment receptors
- Address controls on in-state sources first
- Abandon non-transparent and unreliable modeling platforms
- Pursue other provisions for regulatory relief for international transport

Similarly, tools available to provide regulatory relief to air agencies for significant international contributions of ozone and its precursors have not kept pace with the state of the science and the needs of state and local governments. As discussed in AAPCA’s 2017 report, *The Greatest Story Seldom Told: Profiles and Success Stories in Air Pollution Control*,³ and U.S. EPA’s 2017 air trends report, *Our Nation’s Air: Status and Trends Through 2016*,⁴ tremendous air quality improvements have been made in the U.S., far exceeding international trends, in virtually every measure of air pollution control over the last several decades. EPA’s own modeling for interstate transport rules, as well as a series of recent studies – including research from experts at U.S. EPA, the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration (NOAA) – suggests the challenge of international and non-North American transport has grown substantially with more stringent NAAQS revisions.

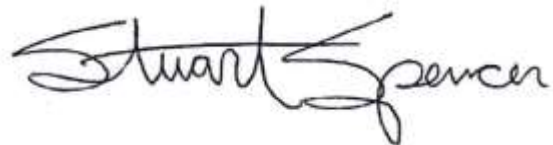
To ensure state and local agencies are not inappropriately burdened by ozone concentrations outside their control, additional flexibilities are necessary. The experience of AAPCA members suggests that EPA can take steps to animate policy decisions and statutory provisions to address international ozone transport – including not requiring states to offset international contributions through the Good Neighbor SIP process, applying CAA Section 179B to address international transport and excluding exceptional event data from international sources under CAA Section 319 – and that these moves may have a greater impact on NAAQS attainment than the level of the standard.

Thank you for the attention to the enclosed comments, *Principles for Addressing Interstate and International Ozone Transport*. AAPCA and its members look forward to working with EPA to help carry out these principles to address interstate and international ozone transport under the 2008 and 2015 ozone NAAQS. If you have any questions, please contact Mr. Clint Woods, Executive Director, at cwoods@csq.org or (859) 244-8040.

Sincerely,



Sean Alteri
 Director, Kentucky Division for Air Quality
 2017 President, AAPCA



Stuart Spencer
 Associate Director, Office of Air Quality
 Arkansas Department of Environmental Quality
 2018 President, AAPCA

³ http://www.csq.org/aapca_site/documents/GreatestStory4-17-17.pdf.

⁴ <https://www.epa.gov/newsreleases/air-quality-continues-improve-while-us-economy-continues-grow>.

Principles for Addressing Interstate and International Ozone Transport

U.S. EPA has an opportunity to establish a revised, transparent, state-driven framework for addressing interstate transport as well as to animate provisions to provide regulatory relief for state and local air agencies affected by international ozone contributions. These key decisions (which could be facilitated by the Agency’s recently created Task Forces on Regulatory Reform and Ozone Cooperative Compliance⁵) can help address CAA responsibilities in a manner consistent with cooperative federalism, Executive Orders (EOs) on Promoting Energy Independence and Economic Growth⁶ and Enforcing the Regulatory Reform Agenda,⁷ and the Administration’s America First Energy Plan and Foreign Policy. These changes would also be consistent with Administrator Pruitt’s belief “in states working collaboratively to address crossborder environmental challenges,” and intention 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.”⁸

Updated EPA modeling efforts are a critical first step. However, these technical changes are inextricably linked to the overall EPA framework which could ensure approvable SIPs – rather than Federal Implementation Plans (FIPs) which may not even provide a full remedy – address interstate transport. Court-ordered FIPs may be issued to 21 states for interstate transport obligations that were not addressed under the CSAPR Update,⁹ and EPA has received a number of petitions for administrative reconsideration of the underlying rule.¹⁰ Regardless of the timing of EPA’s issuance of initial area designations, air agencies must meet an October 2018 deadline for Good Neighbor SIPs under the 2015 ozone NAAQS. In addition to being of interest to air agencies that have been impacted directly by prior interstate transport rules, 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.¹¹

EPA should re-evaluate the 1 percent threshold for significant contribution

In CSAPR, the CSAPR Update, and its 2017 NODA, EPA has relied upon a “contribution screening threshold”¹² of 1 percent to identify upwind states that may significantly contribute to downwind nonattainment and/or maintenance receptors. Although EPA has “historically found that the 1 percent threshold is appropriate,”¹³ 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.¹⁴

⁵ https://www.epa.gov/sites/production/files/2017-06/documents/az_ducey_6-6-17.pdf.

⁶ 82 FR 16093.

⁷ 82 FR 12285.

⁸ https://www.epw.senate.gov/public/_cache/files/6d95005c-bd1a-4779-af7e-be831db6866a/scott-pruitt-qfr-responses-01.18.2017.pdf.

⁹ The U.S. District Court for the Northern District Court of California has ordered EPA to issue a FIP for Kentucky no later than June 30, 2018. For more information, see CASE NO. 3:15-CV-04328-JD, “[EPA’S OPP. & CROSS-MOTION](#),” filed December 15, 2016, page 17 (“However, EPA could not conclude that the reductions required by the CSAPR Update represent the full amounts of emission reductions necessary for Kentucky (or 20 other states) to satisfy the requirements of the good neighbor provision.”)

¹⁰ <https://www.epa.gov/airmarkets/petitions-reconsideration-received-csapr-update>.

¹¹ For example, see 82 FR 9142.

¹² 81 FR 54573.

¹³ 82 FR 1740.

¹⁴ *EPA v. EME Homer City Generation, L.P.*, (2014).

While EPA characterizes this 1 percent threshold as a screening mechanism, in practice it is used as a black-and-white test for significant contribution.

AAPCA noted in its March 13, 2017 comments on EPA’s preliminary transport modeling for the 2015 ozone NAAQS that: “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.” The need to evaluate alternative thresholds is even more important due to increasingly stringent NAAQS. As Ohio EPA stated in their comments on EO 13777: “The lower standards get with each subsequent review by U.S. EPA, approaching background concentrations, the more meaningful this 1 percent threshold becomes and the more insurmountable the task of finding reductions to eliminate the contribution. U.S. EPA must reevaluate this process and raise this threshold if it intends to continue this framework.”¹⁵

These concerns were reiterated in NODA comments from a dozen AAPCA state members,¹⁶ as well as in comments on EPA regulatory reform.¹⁷ A number of state comments discussed EPA’s inconsistency in continuing to use this 0.7 ppb threshold after recommending a Significant Impact Level value of 1.0 ppb in its 2016 draft Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program.¹⁸ Kentucky cites past EPA practice related to a Section 126 petition in which cross-border emissions of approximately three percent of a NAAQS in a nonattainment area was not considered to cause or contribute to violations.¹⁹

EPA should allow the use of Anthropogenic Precursor Culpability Assessment (APCA), Ozone Source Apportionment Technology (OSAT), Decoupled Direct Method (DDM), and zero-out brute force (BF) sensitivity runs to determine contribution from upwind states to downwind receptors. EPA should also consider a transition from a 3x3 array to a 1x1 array over some coastal monitors and develop emissions data files to support finer-grid (e.g., 4 kilometer) modeling domain.

EPA should not require states to offset international or non-anthropogenic emissions through interstate transport requirements

U.S. EPA modeling, state agency comments, and recent peer-reviewed science indicate that international emissions and background ozone contribute significantly to downwind nonattainment and maintenance areas. EPA recognized in its proposed SIP Requirements Rule that “contributions to U.S. ozone concentrations from sources outside of the U.S., which can be from nearby sources in a bordering country or from sources many thousands of miles away, can affect to varying degrees the ability of some areas to attain and maintain the 2015 ozone NAAQS.”²⁰ In the memorandum, “Tools for Addressing Background Ozone,” which accompanied the October 2015 revision to the ozone NAAQS, EPA noted that: “Under

¹⁵ Ohio Environmental Protection Agency, [comments](#) on U.S. EPA’s Evaluation of Existing Regulations, May 15, 2017 (pg. 2).

¹⁶ See related comments from: [Alabama](#) (pg. 1); [Arkansas](#) (pg. 1); [Georgia](#) (pg. 1, 6 – 7); [Kentucky](#) (pg. 3 – 4); [Nevada](#) (pg. 1); [North Carolina](#) (pg. 5 – 6); [Ohio](#) (pg. 1); [South Carolina](#) (pg. 2); [Texas](#) (pg. 7); [West Virginia](#) (pg. 3 – 4); [Wyoming](#) (pg. 4).

¹⁷ See related comments from [North Carolina](#) (Attachment, pg. 2 – 3) and [Ohio](#) (pg. 1).

¹⁸ [Draft Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program](#). In the [accompanying legal document](#), EPA states it has “often equated an insignificant impact with one that is trivial or *de minimis* in nature.”

¹⁹ [Kentucky DAQ](#), April 6, 2017, pg. 3 – 4.

²⁰ 81 FR 81303.

the Clean Air Act, states are not responsible for reducing emissions from background sources.”²¹ Despite these acknowledgements, the failure to account for these contributions in the interstate transport process, upwind states are being “required to offset compensate for international emissions.”²²

U.S. EPA’s August 14 *Report to Congress on Administrative Options to Enable States to Enter into Cooperative Agreements to Provide Regulatory Relief for Implementing Ozone Standards* highlights “understanding the role of background ozone levels” and “appropriately accounting for international transport” as two of the complex issues the Agency and its Ozone Cooperative Compliance Task Force will be evaluating.²³ AAPCA encourages EPA to examine these factors in the interstate transport context as well. In their comments on the proposed revisions to the ozone NAAQS in 2015, more than half of state environmental agencies from across the country identified background ozone or international transport as an achievability or implementation challenge under a revised standard.²⁴ Recent comments suggest that these contributions are significant and that EPA’s failure to address these concentrations penalizes upwind states for international contributions:

- “Because the modeling domain only includes small fractions of Canada and Mexico, it is very likely that no monitor east of the Rockies would be classified as ‘nonattainment’ or ‘maintenance’ were it not for ‘emissions emanating from outside of the United States’. A rational interpretation of Section 818 of the Federal Clean Air Act (42 U.S. Code, §7509a), therefore, is that while some monitors still may not attain the 2015 ozone standard by 2023, upwind states should not be held responsible for making extraordinary emission reduction to compensate for international emissions.” - Texas Commission on Environmental Quality (CEQ), [comments](#) on U.S. EPA’s 2017 NODA, April 5, 2017 (pg. 10)
- “EPA’s modeling identified six counties in four western states, none of which adjoin international borders, with contributions to the 2017 DV from manmade state sources of less than 12 percent and contributions from manmade U.S. sources less than 25 percent, including one with contributions from manmade U.S. sources of 10 percent... Moreover, EPA’s modeling for the 2008 Ozone NAAQS transport assessment demonstrates that in 2017, there are 36 monitor locations in 28 counties in 8 states that will be affected by international contributions of greater than 75 percent of their design values. Further, there are 55 monitors in 38 counties that are modeled to be affected by international contributions greater than 70 percent of the monitors’ design values.” - Western States Air Resources Council (WESTAR), [comments](#) on U.S. EPA’s proposed SIP Requirements Rule, February 13, 2017 (Attachment, pg. 1)
- “The latest research estimates ozone transported from Asia range from a few ppb to more than 15 ppb under certain conditions. The science and understanding of international ozone transport is still growing, and to prematurely prevent its use would be in conflict with the intent of the Act.” - San Joaquin Valley Air Pollution Control District, [comments](#) on U.S. EPA’s proposed SIP Requirements Rule, February 13, 2017 (pg. 7)
- “For example, the NODA shows 32 sites in Ohio show a significant contribution (up to 3.33 ppb) from Canada/Mexico, including many in counties that are not adjoining the Canadian border.” - Ohio EPA, [comments](#) on U.S. EPA’s proposed SIP Requirements Rule, February 13, 2017 (pg. 11)

²¹ https://www.epa.gov/sites/production/files/2015-10/documents/20151001_background_ozone.pdf.

²² Texas Commission on Environmental Quality, [comments](#) on U.S. EPA’s Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone National Ambient Air Quality Standard, April 5, 2017 (pg. 9).

²³ http://www.csg.org/aapca_site/news/documents/FY17OzoneRRR.PDF.

²⁴ AAPCA, [State Environmental Agency Perspectives on Background Ozone & Regulatory Relief](#), June 2015.

- Several recent, peer-reviewed studies suggest international emissions are a major driver of ozone concentrations through the U.S. and have offset as much as half of nitrogen oxide emission controls in the western U.S.²⁵
- Other analyses indicate that, based on EPA's transport modeling, but for international transport (through the identification of boundary conditions, initial conditions, Canadian, and Mexican emissions from 2011), no monitor in the country would have an ozone design value greater than 66 ppb in 2017 or 57 ppb in 2023.²⁶

EPA should consistently apply the same approach to identifying and addressing interstate and international ozone transport, and the failure to do so subjects states to an overcontrol of emissions as a result of international and background contributions. The inconsistency is highlighted by EPA's proposal in the SIP Requirements Rule to limit the applicability of Section 179B to only allow areas directly adjoining an international border to make international transport demonstrations. As Texas CEQ stated, "EPA has routinely linked upwind states to downwind receptors that are significantly distant from the upwind state. For example, in the EPA's recent Cross State Air Pollution Rule Update, the EPA identified Texas as significantly contributing to ozone nonattainment in Sheboygan County, Wisconsin, approximately 900 miles from the Texas border. It is irrational for the EPA to apply one geographic standard for interstate transport and another far more restrictive standard for international transport of the same criteria pollutant."²⁷ Similarly, EPA also proposed requiring that areas seeking relief under Section 179B to show that all Reasonably Available Control Measures (RACM) are implemented, even though such a requirement does not exist for downwind areas under recent interstate transport rules.²⁸

EPA should embrace a state-driven process to address interstate transport, including EPA action on timely and relevant SIPs and a re-assessment of expectations for Infrastructure SIPs

U.S. EPA's August 2017 *Report to Congress on Administrative Options to Enable States to Enter into Cooperative Agreements to Provide Regulatory Relief for Implementing Ozone Standards*, notes that "all states must submit an 'infrastructure' plan, which addresses basic air quality management provisions of Section 110 of the Act."²⁹ AAPCA's May 15, 2017 comments on EPA regulatory reform described the shifting expectations for infrastructure/Good Neighbor SIPs: "Historically, states were required to generally demonstrate that they had the adequate authorities and resources in place to comply with each requirement in Section 110(a)(1) and (2). This was commonly achieved by submitting relevant state-level rules that provided these authorities and resources to the state. Over the past several years, however, much more has been asked of the states to fulfill the requirements of these Infrastructure SIPs (iSIPs) for

²⁵ Lin, M., Horowitz, L. W., Payton, R., Fiore, A. M., and Tonnesen, G.: [US surface ozone trends and extremes from 1980 to 2014: quantifying the roles of rising Asian emissions, domestic controls, wildfires, and climate](#), *Atmos. Chem. Phys.*, 17, 2943-2970.

Nopmongcol, U., Liu, Z., Stoeckenius, T., and Yarwood, G.: [Modeling intercontinental transport of ozone in North America with CAMx for the Air Quality Model Evaluation International Initiative \(AQMEII\) Phase 3](#), *Atmos. Chem. Phys.*, 17, 9931-9943.

Verstraeten, W., Neu, J., Williams, J., Bowman, K., Worden, J., and Boersmal, K., [Rapid increases in tropospheric ozone production and export from China](#), *Nature Geoscience*, August 2015, 1-6.

Cooper, O., Langford, A., Parrish, D., and Fahey, D., [Challenges of a lowered U.S. ozone standard](#), *Science*, June 2015, 1096-1097.

²⁶ Midwest Ozone Group, ["Assessment of International Transport and Improved Ozone Air Quality,"](#) (June 22, 2017) and [comments](#) on Proposed Denial of 176A Petition.

²⁷ Texas CEQ, [comments](#) on U.S. EPA's 2017 NODA, April 5, 2017 (pg. 7).

²⁸ Ohio EPA, [comments](#) on U.S. EPA's proposed SIP Requirements Rule, February 13, 2017 (pg. 11).

²⁹ http://www.csg.org/aapca_site/news/documents/FY17OzoneRRR.PDF.

promulgations and revisions of various NAAQS. In fact, the states are now asked to submit information for iSIPs that is more appropriate for inclusion into full SIPs or attainment demonstrations. This process has become overly burdensome and requires far too many resources.”³⁰

As Ohio EPA indicated in their comments, “U.S. EPA has set a standard for implementation that no State could realistically perform on their own in order to fulfill their obligation to address the good neighbor provision in their infrastructure SIPs, or at least not without significant resource burdens to all the individual States. Therefore, States are repeatedly subject to the FIP process and deterred from their right to try to address the obligation in the first instance with a SIP.”³¹ Previous interstate transport rules have involved U.S. EPA issuing a FIP “before even proposing action on relevant and timely submitted SIPs.”³² States should not be bound by the contribution assessed by U.S. EPA and should be given discretion to craft individualized approaches to address interstate transport.³³

EPA should adjust its methodology for cost-effective NO_x controls

EO 13783 on Promoting Energy Independence and Economic Growth states that “... necessary and appropriate environmental regulations... are of greater benefit than cost...”³⁴ Under CSAPR, the CSAPR Update, and the 2017 NODA, states have repeatedly highlighted concerns about EPA’s methodology for determining cost-effective NO_x controls. As Kentucky explained in their comments on the 2017 NODA, “EPA’s explanation of the non-linear relationship between emissions reductions of NO_x and the reduction of ozone concentrations measured at downwind receptors further highlights the technical limitations of interstate transport modeling and questions whether its use is appropriate in determining cost-effective control scenarios.”³⁵

EPA should reassess its approach to identifying downwind maintenance and nonattainment receptors

EPA should base its identification of downwind receptors of interest on monitoring data and consider only receptors located in areas designated nonattainment for the applicable standards in its transport analysis. EPA should stop treating projected maintenance areas as identical to projected nonattainment areas when identifying receptors and quantifying upwind emission reductions. This approach is inconsistent with CAA Section 107(a) and results in upwind state NO_x budgets that control emissions more than the level necessary to maintain attainment with the NAAQS. If EPA continues including maintenance receptors that were never designated nonattainment in their framework, the Agency needs to adopt a more realistic scenario for calculating future design values. Prior to CSAPR, U.S. EPA used a “monitored-plus-modeled” approach to assess interstate transport and determine remedies.³⁶

³⁰ http://www.csg.org/aapca_site/documents/AAPCA-EPARegulatoryReform-DocketIDEPA-HQ-OA-2017-0190-5-15-17.pdf.

³¹ Ohio EPA, [comments](#) on U.S. EPA's Evaluation of Existing Regulations, May 15, 2017 (pg. 2).

³² Texas CEQ, [comments](#) on CSAPR Update (pg. 1).

³³ See related comments: Arizona Department of Environmental Quality, [comments](#) on U.S. EPA’s regulatory reform, May 15, 2017 (Attachment 1, pg. 1); Texas CEQ, [comments](#) on 2017 NODA, April 5, 2017 (pg. 3); Ohio EPA, [comments](#) on 2017 NODA (cover letter, pg. 2).

³⁴ 82 FR 16093.

³⁵ Kentucky Division for Air Quality, [comments](#) on 2017 NODA, April 6, 2017 (pg. 5). See similar comments on CSAPR Update by [Arkansas](#) (pg. 1 - 2), [Indiana](#) (pg. 1), [Kentucky](#) (pg. 2) [Mississippi](#) (pg. 2), [Ohio](#) (pg. 1), [Tennessee](#) (pg. 1), [Iowa](#), and [Michigan](#).

³⁵ 62 FR 60324 – 60325; 69 FR 4581.

³⁶ 62 FR 60324 – 60325; 69 FR 4581.

The Wyoming Department of Environmental Quality (DEQ) argued in comments on the 2017 NODA that “EPA’s recent actions on transport SIPs have departed from previous approaches to determining adequacy by using the results of a single model rather than weighing all available evidence as it did prior to using CSAPR thresholds.”³⁷ EPA should differentiate nonattainment and maintenance areas, utilize monitoring data, and account for air quality trends when identifying affected receptors.³⁸

EPA needs to address controls on in-state sources first

Section 107(a) of the Clean Air Act states: “Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.” In order to avoid disproportionate emission reductions from upwind states, U.S. EPA should ensure that downwind areas should address local, in-state control strategies for downwind nonattainment or maintenance receptors. Tennessee stated in its comments on the CSAPR Update, “. . . because the circumstances are such that downwind states are going to need more reductions to attain the NAAQS than is represented by the upwind states contribution, EPA should first identify reasonable reductions available within the downwind nonattainment areas and exhaust those opportunities first.”³⁹

EPA should abandon non-transparent and unreliable modeling platforms

AAPCA agencies have continued concern about EPA’s reliance on the Integrated Planning Model (IPM), and appreciate Agency moves to shift to more transparent platforms. Air agencies have catalogued a series of unit-level errors, including inaccurate retirements, in IPM runs used to support prior interstate transport rules.⁴⁰ IPM is a proprietary model that often forces air agencies to guess about key inputs and assumptions. As such, its use by EPA is inconsistent with provisions of EO 13777 (requiring Regulatory Reform Task Forces to identify regulations that “rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard for reproducibility”) and EO 13783 (establishing a policy that environmental regulations “are developed through transparent processes that employ the best available, peer-reviewed science and economics”).

The 2017 NODA acknowledges other projection methodologies, such as the approach used by ERTAC,⁴¹ 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.⁴² AAPCA members have expressed concerns about IPM projections that often “include erroneous assumptions about the future use of electric generating units”⁴³ and “one size fits all assumptions.”⁴⁴ Currently, EPA is preparing emissions

³⁷ Wyoming DEQ, [comments](#) on 2017 NODA, April 6, 2017 (pg. 3).

³⁸ See related comments from: Arkansas DEQ, [comments](#) on CSAPR Update, pg. 4; Texas CEQ, [comments](#) on 2017 NODA (pg. 8); AAPCA, [comments](#) on 2017 NODA (pg. 4); North Carolina Division of Air Quality, [comments](#) on CSAPR Update (pg. 12).

³⁹ Tennessee DEC, [comments](#) on CSAPR Update, pg. 4. See also: [North Carolina Division of Air Quality](#), pg. 3 – 4.

⁴⁰ 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](#).

⁴¹ 82 FR 1736.

⁴² http://www.csg.org/aapca_site/news/documents/CSAPRModelingwithERTAC-10-24-2016.pdf.

⁴³ South Carolina Department of Health and Environmental Control, [comments](#) on 2017 NODA, April 4, 2017 (pg. 1).

⁴⁴ Ohio EPA, [comments](#) on 2017 NODA, April 6, 2017 (pg. 5).

inventories and modeling for 2023 in response to the court-ordered deadline to implement a Federal Implementation Plan for Kentucky. States believe that this is an excellent opportunity to accept and utilize the latest ERTAC modeling results, with specific input provided by state air agencies.

EPA should seek to animate other provisions for regulatory relief for international transport

In light of peer-reviewed science and EPA modeling showing significant contribution to ground-level ozone from international sources, EPA and its Ozone Cooperative Compliance and Regulatory Reform Task Forces should seek to maximize regulatory relief for air agencies. Utilizing provisions in the Clean Air Act to avoid penalizing state and local governments for international ozone should be a key element of the Administration’s pursuit of an America First Energy Policy and Foreign Policy. There are a number of provisions designed to provide regulatory relief from international contributions within EPA’s existing authority and the Agency should seek to provide maximum flexibility through the final SIP Requirements Rule or other mechanisms.

Section 179B – International Transport

According to EPA, Section 179B of the CAA is a “tool for air agencies to address exceedances of an ozone standard potentially caused by background ozone” that “allows EPA to approve an ozone attainment plan for a nonattainment area, if the state demonstrates that it has taken appropriate local measures and international transport of pollution is a significant impediment to meeting the standard on time.”⁴⁵ However, an AAPCA survey of comments on the 2015 proposed revision to the ozone NAAQS found that more than one-third of state environmental agencies commented on limitations to the use of CAA Section 179B for demonstrating attainment “but for” international emissions. A follow up survey of AAPCA members found that at least half of responding agencies identified a lack of familiarity with this tool, resource and time constraints, low likelihood of EPA approval, and lack of applicability for their state as limitations to the use of Section 179B.⁴⁶ As EPA noted in its final revisions to the Exceptional Events Rule, “CAA Section 179B... does not provide a pathway from designation as a nonattainment area.”⁴⁷

In order to animate this provision and follow Congress’ intent,⁴⁸ U.S. EPA should:

- Not limit this relief to areas affected by Mexico or Canada, or areas directly adjoining international borders, as suggested in the proposed SIP Requirements Rule.⁴⁹ EPA previously stated that it “does not believe this provision is restricted to areas adjoining international borders.”⁵⁰ As discussed previously, EPA modeling and recent, peer-reviewed studies suggest significant contributions from non-North American sources and for areas not adjoining international borders.
- Identify a deadline for EPA action on Section 179B demonstrations.⁵¹

⁴⁵ https://www.epa.gov/sites/production/files/2015-10/documents/20151001_background_ozone.pdf.

⁴⁶ AAPCA, [State Environmental Agency Perspectives on Background Ozone & Regulatory Relief](#), June 2015.

⁴⁷ 80 FR 72865.

⁴⁸ During debates over CAA Amendments of 1990, Senator Gramm of Texas stated: “It is unfair to hold El Paso accountable for pollution that is generated in a foreign country that they have no control over.” Senate Debate on S. 1630, March 9, 1990, reprinted in 4 Environment and Natural Resources Policy Division, Library of Congress, *A Legislative History of the Clean Air Act Amendments 5674, 5742* (1998). See related comments from: [Arizona](#) (pg. 11); and [WESTAR](#) (pg. 3).

⁴⁹ See related comments from: [Arizona](#) (pg. 8); [Ohio](#) (pg. 10 – 11); [North Carolina](#) (pg. 10 – 11); [Texas](#) (pg. 7 – 8); [Wyoming](#) (pg. 4 – 5); [San Joaquin Valley APCD](#) (pg. 6 – 7); and, [WESTAR](#) (pg. 1 – 2).

⁵⁰ 80 FR 12294.

⁵¹ See related comments from: [Arizona](#) (pg. 8) and [WESTAR](#) (pg. 2).

- Avoid requiring that areas making demonstrations under Section 179B implement RACT and RACM⁵² before qualifying for relief and, if possible, limit Nonattainment New Source Review requirements.⁵³
- Ensure consistency between the handling of interstate and international ozone transport, as discussed above.
- Provide updated guidance or a general framework outlining steps for successful Section 179B demonstrations.⁵⁴ EPA’s summary of the background ozone workshop in early 2016 identifies a number of areas in which state air agencies have requested clarity.⁵⁵ EPA should consolidate and update related guidance.⁵⁶
- Give states maximum discretion regarding international transport demonstrations.⁵⁷

Section 319 – Exceptional Event Exclusions

Another tool identified by EPA to address exceedances of the ozone NAAQS is the Exceptional Events Rule under CAA Section 319. AAPCA and its members have provided comments on limitations to the use of this tool through comments on the 2015 ozone NAAQS revision and proposed revisions to the Exceptional Events Rule.⁵⁸ EPA has been inconsistent on the applicability of this regulatory relief tool for international contributions, as well as to the role of international transport in other CAA programs.⁵⁹ In its final revisions to the Exceptional Events Rule, the Agency stated: “routine or long-term international manmade emissions are not exceptional events because they are caused by human activity that is *likely to recur* at a given location...”⁶⁰ In 2015, EPA concluded: “Although monitored data cannot be excluded for a determination of whether an area has attained a NAAQS based solely on the fact the data are affected by emissions from outside the U.S., such data may be excluded from consideration if they were significantly influenced by exceptional events as described in CAA section 319(b).”⁶¹

In comments on EPA regulatory reform, the Clark County Department of Air Quality argued that EPA should use the same approach to excluding monitored data that is influenced by exceptional events as it

⁵² See related comments from: [Arizona](#) (pg. 8 – 10); [Ohio](#) (pg. 11); [North Carolina](#) (pg. 11 – 12); [Texas](#) (pg. 7 – 8); [Wyoming](#) (pg. 4 – 5); and, [WESTAR](#) (pg. 3).

⁵³ See related comments from: [Arizona](#) (pg. 1).

⁵⁴ See related comments from: [Arizona](#) (pg. 8); [North Carolina](#) (pg. 12); [San Joaquin Valley APCD](#) (pg. 7); and [WESTAR](#) (pg. 2). Also see comments on the proposed 2015 ozone NAAQS by [Texas](#) (pg. 34 – 35) and [Wyoming](#) (pg. 3), as well as the WESTAR [comments](#) on background ozone white paper (pg. 2, 10 – 11).

⁵⁵ U.S. EPA, “[High-Level Summary of Background Ozone Workshop](#),” March 15, 2016 (pg. 3).

⁵⁶ For example, EPA’s [Criteria for Assessing the Role of Transported Ozone/Precursors in Ozone Nonattainment Areas](#) was last updated in May 1991.

⁵⁷ Arizona DEQ, [comments](#) on EPA’s regulatory reform (pg. 1).

⁵⁸ Compiled comments [here](#). See also: AAPCA’s June 2015 report, [State Environmental Agency Perspectives on Background Ozone & Regulatory Relief](#).

⁵⁹ For example, in EPA’s 1999 revisions to regional haze regulations, the Agency stated: “The EPA agrees that the projected emissions from international sources will in some cases affect the ability of States to meet reasonable progress goals” (64 FR 35736). However, [comments](#) from the Alaska Department of Environmental Conservation (DEC) on EPA regulatory reform highlight a related concern: “ADEC supports the ability to deduct emissions originating from anthropogenic, extreme episodic natural events, and international emission sources from our baseline emissions and progress to reaching natural visibility conditions in 2064. However, ADEC is concerned that EPA acted arbitrary and capriciously, and contrary to the Clean Air Act, by requiring that Alaska quantify international emission impacts on Class I Areas in Alaska without first identifying the methods for doing so and by shifting EPA’s responsibilities under the CAA to quantify and address those international air emissions to the state.”

⁶⁰ 81 FR 68228.

⁶¹ 80 FR 12293.

does for monitored data that is influenced by international transport. These comments also stated: “it is important to delay issuance of a final rule on implementation of the 2015 NAAQS for ozone until EPA has had an opportunity to evaluate the extent to which foreign sources of air pollution... impact designations of areas under section 107(d) of the [CAA] as well as attainment and maintenance of NAAQS.”⁶² WESTAR encouraged EPA to further characterize contributions from international anthropogenic emissions which “would facilitate the identification of long-range transport events which may qualify for [Exceptional Event Rule] relief under certain meteorological conditions.”⁶³

Other Approaches to Regulatory Relief

In addition to the tools discussed above, EPA’s 2015 White Paper on background ozone identified three other mechanisms – including through revised data handling and designations – to account for background or internationally transported ozone. EPA stated that these mechanisms were not discussed “due to legal or other deficiencies.”⁶⁴ EPA should assess the potential for these mechanisms to address international transport. In light of the consensus comments of state environmental agencies raising concerns about internationally transported ozone creating NAAQS implementation and achievability challenges,⁶⁵ EPA and the Clean Air Scientific Advisory Committee should consider these contributions in future NAAQS reviews. EPA should also re-examine the findings and recommendations from the 2010 National Research Council report, *Global Sources of Local Pollution: An Assessment of Long-Range Transport of Key Air Pollutants to and from the United States*.⁶⁶

Additionally, WESTAR’s comments on the background ozone white paper identified concepts for further discussion. These included a principal contributor concept, where “where all background contributions, regardless of origin, are excluded by either a change in the form of the standard or via the [Exceptional Events Rule] from attainment/nonattainment designation following a demonstration that background is the principal contributor to monitored exceedances.”⁶⁷ As Nevada Division of Environmental Protection (DEP) comments on EPA regulatory reform stated: “Significant sources of ozone in these areas are not controllable by the states, with international transport, inter-state transport, western wildfires, and stratospheric intrusion the principal contributors.”⁶⁸

⁶² Clark County Department of Air Quality, [comments](#) on U.S. EPA’s regulatory reform, May 15, 2017 (pg. 2).

⁶³ WESTAR, [comments](#) on background ozone white paper (pg. 7).

⁶⁴ U.S. EPA, “[Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone](#),” White Paper for Discussion, December 30, 2015 (pg. 12, footnote 41).

⁶⁵ AAPCA, [State Environmental Agency Perspectives on Background Ozone & Regulatory Relief](#), June 2015

⁶⁶ National Research Council, [Global Sources of Local Pollution: An Assessment of Long-Range Transport of Key Air Pollutants to and from the United States](#), 2010.

⁶⁷ WESTAR, “[Western States Responses Regarding Background Ozone and Recommendations for Additional Efforts in the Western U.S.](#),” May 11, 2016 (Attachment, pg. 9).

⁶⁸ Nevada DEP, [comments](#) on EPA regulatory reform (pg. 1).