STEPTOE & JOHNSON PLLC
ATTORNEYS AT LAW

Chase Tower, 17th Floor
P.O. Box 1588
Charleston, WV 25326-1588
(304) 353-8000 (304) 353-8180 Fax
www.steptoe-johnson.com

Writer's Contact Information

December 21, 2016

Via Federal Express
The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: EPA Docket No. EPA-HQ-OAR-2015-0500; Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS.

Dear Administrator McCarthy;

Please find enclosed the Petition for Administrative Review of the October 26, 2016 final rule: "Cross-State Air Pollution Rule Update for the 2008 NAAQS," EPA-HQ-OAR-2015-0050; FRL-9950-30-OAR; RIN 2060-AS05. This Petition for Administrative Review is being filed by the Midwest Ozone Group. The reasons for the petition for administrative review are set forth in the enclosed petition.

Please contact me as counsel for the Midwest Ozone Group, if you have any questions.

Very truly yours,

David M. Flannery

David M. Flannery
Counsel to the Midwest Ozone Group

Enclosure

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS;
(81 Fed. Reg. 74504 (Oct. 26, 2016); EPA Docket No. EPA-HQ-OAR-2015-0500)

Petition for Administrative Reconsideration of Updated Cross State Air Pollution Rule

December 21, 2016

A. INTRODUCTION.

On September 7, 2016, EPA finalized an update to the Cross-State Air Pollution Rule (CSAPR) for the 2008 ozone National Ambient Air Quality Standards (NAAQS) by issuing the final CSAPR Update, which was published October 26, 2016 at 81 FR 74504. Because of what Midwest Ozone Group (MOG) believes to be fatal technical and legal flaws in the CSAPR update rule which are described below, MOG requests that EPA reconsider the rule finalized on September 7, 2016.

MOG is an affiliation of companies, trade organizations, and associations which have drawn upon their collective resources to advance the objective of seeking solutions to the development of a legally and technically sound national ambient air quality program. It is the primary goal of MOG to work with policy makers in evaluating air quality policies by encouraging the use of sound science. As members of the business community, the MOG

membership also has a keen interest in assuring that policy makers are appropriately assessing the data and information required to accurately evaluate its emission control strategies. MOG members operate some 85,000 MW of fossil-fuel fired electric generating capacity.

The following are the specific grounds upon which MOG bases this request for reconsideration.

B. SPECIFIC GROUNDS.

1. EPA failed to give consideration to all emission reduction programs legally mandated to be in effect in 2017.

In its comments on the proposed CSAPR (80 FR 75706, December 23, 2016), MOG urged that EPA fully include in its base case modeling for 2017 all regulatory programs that were anticipated to be in effect in 2017 as well as those programs that *are* legally mandated to be in effect in 2017. Emission reductions mandated in 2017 include Connecticut RACT, NY-NJ-CT HEDD, OTC Model Control, Pennsylvania RACT II, Boiler MACT, and Tier 3 gasoline/Tier 2 vehicle programs. In the preamble to the final rule, EPA states that "[t]he future base case scenario modeled for 2017 includes a representation of changes in activity data and of predicted emission reductions from on-the-books actions, including planned emission control installations and promulgated federal measures that affect anthropogenic emissions," (81 FR 74527). EPA failed, however, to consider numerous emission reduction programs that are legally mandated to be in effect in 2017 but which did not meet EPA's "on the-books" test. This is highly problematic since many of these programs are legally mandated to be in place by 2017 and EPA's own modeling shows that the remaining nonattainment monitors in the East are very

nearly in attainment. Consideration of these legally mandated controls is essential to complying with the court mandated prohibition against over-control.

In the final rule, EPA estimated significant improvement in air quality in its base case modeling compared to modeling performed for the proposed rule. EPA's results set forth in the following chart illustrate that nothing more than re-running the CAMx model results in ozone improvement reductions at the four nonattainment monitors ranging from 0.8 ppb to 1.6 ppb. This step in updating the modeling predicts one of the four monitors to be below the attainment level of 75.9 ppb and the other three with ozone values in the range of 76.2 to 76.5 ppb.

	Proposed CSAPR Update Base Case Modeling for 2017	**Final CSAPR Update Base Case Modeling for 2017 (without PA RACT NOx controls)**	**Final CSAPR Update Base Case Modeling for 2017 (with PA RACT NOx Controls)**	**Final CSAPR Update Control Strategy Case Modeling for 2017 (considering final CSAPR budgets)**
Connecticut Fairfield (90013007)	77.1	75.5	75.3	75.0
Connecticut Fairfield (90019003)	78.0	76.5	76.3	76.0
Connecticut New Haven (90099002)	77.2	76.2	76.1	76.0
Wisconsin Sheboygan (551170006)	77.0	76.2	76.2	76.0

EPA then adjusted the CAMx modeling results to take account of the adoption of PA RACT II which was published on April 23, 2016. (See Preamble, 81 FR 74528.) EPA, however, only looked at the NOx reductions from EGUs that are part of that rule and did not consider at all the NOx reductions from other non-EGU categories or the VOC reduction component of PA RACT II. Even as to the NOx reductions considered, EPA did not actually model those

reductions. It instead applied a scaling tool (AQAT) which resulted in additional ozone improvements at the Connecticut monitors but only in the range of 0.1 to 0.2 ppb. (81 FR 74550) When MOG considered the impact of the PA RACT II NOx controls, it found ozone improvements that varied from 0.7 to 1.0 ppb – more than enough to bring all Connecticut monitors into attainment even without the EGU NOx reductions envisioned under the revised ozone season CSAPR. See: "Impact Analysis of Pennsylvania RACT II Rule on Downwind Monitor Ozone Concentrations" prepared by Alpine Geophysics which can be found at: http://midwestozonegroup.com/files/ImpactAnalysisofPennsylvaniaRACTII.pdf.

Remarkably, when EPA applied the control strategy it developed as the outcome of the CSAPR Update, the remaining three nonattainment areas in the East all achieved exactly the same predicted ozone concentration – 76.0 ppb – the lowest possible ozone concentration that would allow EPA to consider the monitors to be considered to be in nonattainment. The modeling results which accompany the final rule illustrate the dramatic impact that accounting for the new programs can have on air quality – with every nonattainment monitor being no more than 0.4 ppb above the attainment threshold for the 2008 ozone NAAQS. As will be discussed later, had EPA taken account of all of the emission reduction programs that are legally mandated to be in effect in 2017, it is likely that all nonattainment monitors would reach the attainment level of 75.9 ppb even using only AQAT to estimate the benefits of the EGU NOx reductions provided by PA RACT II. Given the impact of the rule on the generators and consumers of electricity, EPA has both a legal and technical obligation to re-examine its air quality modeling and to take full account of all such programs and requests that EPA reconsider its refusal to include all 2017 legally mandated updated air quality projections in its base case modeling.

The CAA addresses the affirmative obligations of the states to meet the deadlines for submittal and implementation of state implementation plans designed to specifically address their degree of nonattainment designation. Review of Section 172(c)(1) of the CAA provides that State Implementation Plans (SIPs) for nonattainment areas shall include "reasonably available control measures", including "reasonably available control technology" (RACT), for existing sources of emissions. Section 182(a)(2)(A) requires that for Marginal Ozone nonattainment areas, states shall revise their SIPs to include RACT. Section 182(b)(2)(A) of the CAA requires that for Moderate Ozone nonattainment areas, states must revise their SIPs to include RACT for each category of VOC sources covered by a CTG document issued between November 15, 1990, and the date of attainment. CAA section 182(c) through (e) applies this requirement to States with ozone nonattainment areas classified as Serious, Severe and Extreme.

The CAA also imposes the same requirement on States in ozone transport regions (OTR). Specifically, CAA Section 184(b) provides that a state in the Ozone Transport Region (OTR) must revise their SIPs to implement RACT with respect to all sources of VOCs in the state covered by a CTG issues before or after November 15, 1990. CAA Section 184(a) establishes a single OTR comprised of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and the Consolidated Metropolitan Statistical Area (CMSA) that includes the District of Columbia.

The basic SIP components for nonattainment areas include: reasonable further progress (RFP) plan, RACT, reasonably available control measures (RACM), contingency measures, nonattainment new source review program, motor vehicle emissions budget and as applicable a variety of area-wide mobile source and stationary source control programs.

EPA undertook a partial examination of PA RACT II emission reductions after its CAMx modeling was completed. In doing so, EPA stated "the agency believes it is reasonable to evaluate the potential influence of the Pennsylvania RACT rule on the downwind receptor and state linkages identified in the final rule prior to evaluating any further NOx reductions for the CSAPR Update rule." (81 FR 74539)

A similar effort should be undertaken for the remainder of the PA RACT II controls and for all other legally mandated 2017 emission reduction programs. While EPA concluded that, as a result of the application of these selected emissions reductions, "no nonattainment or maintenance receptors …dropped below 76 ppb…," (81 FR 74539), the fact is that every non-attainment monitor in the East (specifically in Wisconsin and Connecticut) was affected by this program and the reductions from this program alone dropped all modeled ozone concentrations to exactly 76.0 ppb. In justifying the final rule as not causing over-control, EPA relied significantly on its conclusion that final controls did not eliminate nonattainment. That conclusion is, of course, negated by any minor improvement in air quality at any of the non-attainment monitors in Fairfield CT., New Haven, CT., and Sheboygan WI., that are currently reporting values of 76.0, 76.0 and 76.0 respectively. The inclusion of any one of the other programs cited above would likely result in the modeled concentrations for all remaining nonattainment receptors in the East to be below 76.0 ppb and thus attainment – raising significant questions about the rule imposing prohibited over-control on upwind states. Simply stated, it is highly questionable to force the implementation of additional reductions by sources in other states when sources in the state in which the non-attainment monitors located are not meeting, or at least being modeled as meeting, their CAA mandated requirements.

Perhaps the most significant omission by EPA is its failure to account for the mandate that Connecticut impose RACT controls by the start of the 2017 ozone season. As pointed out in MOG's comments on the proposed rule, in its document entitled "Reasonably Available Control Technology Analysis under the 2008 8-Hour Ozone National Ambient Air Quality Standard", dated July 17, 2014 (which can be found at: http://www.ct.gov/deep/lib/deep/air/ozone/ozoneplanningefforts/ract_2008_naaqs/2014-07-17_-_ct_final_ract_sip_revision.pdf) the Connecticut Department of Energy and Environmental Protection ("DEEP") Bureau of Air Management conducted an evaluation of its RACT controls. The principal conclusion reached by Connecticut at page 28 of that report is as follows:

> "DEEP commits to perform further evaluation of Connecticut's municipal waste combustor and fuel-burning source NOx requirements and to seek any regulatory revisions necessary to revise the control requirements to a RACT level for the 2008 ozone NAAQS. The main basis for the determination that these source categories are no longer subject to RACT is that other states now have in place emissions limitations that are more stringent than those required in Connecticut, so the more stringent emission limits, and the controls necessary to meet those emission limits, are technically and economically feasible."

With respect to Municipal Waste Combustors the Connecticut report offered the following statement (*Id. at* 28 - 29):

> "Connecticut has six facilities that burn municipal waste to create electricity and are comprised of a total of 15 units. Only three of the units are small municipal waste combustors, as defined by EPA in 40 CFR 60 Subpart AAAA and the associated emissions guidelines. Together, these 15 units are one of the most significant sources of NOx emissions in Connecticut. In 2011, the municipal waste combustor NOx emissions exceeded those of Connecticut's electric generating sector to become the largest stationary source category of NOx emissions in Connecticut.
> ...
> Based on these observations, DEEP believes that it may be both technically and economically reasonable to reduce NOx emissions from the Connecticut municipal waste combustor facilities. The municipal waste combustor units at the Bristol facility, at which the LN™ technology has been installed, are mass burn waterwall units, which are the dominant combustor type in Connecticut.27 New Jersey has

> adopted, and Massachusetts has proposed to adopt, a NOx emissions limit for mass burn waterwall units that is more stringent than Connecticut's emissions limit .... In addition, Massachusetts has proposed to adopt a NOx emissions limit for mass burn refractory units that is more stringent than Connecticut's emissions limit .... DEEP commits to investigate the cost and emissions reductions available from the municipal waste combustors and, if appropriate, initiate a stakeholder process to develop a regulatory amendment. DEEP would seek to move such an amendment through the regulatory adoption process to allow for adoption by December 31, 2016."

With respect to Fuel-Burning Sources (Boilers, Turbines, Engines) the Connecticut report observed (*Id. at* 30, 32) as follows:

> "Revisions to the NOx emissions control requirements for boilers, turbines and engines in RCSA section 22a-174-22 are necessary to establish a RACT level of control under the 2008 ozone NAAQS. Several nearby states, including New York and New Jersey, have updated NOx RACT regulations, and other states, including Maryland, are currently reviewing existing NOx RACT requirements with respect to boilers, turbines and engines. The Ozone Transport Commission (OTC) has also recently reviewed the short-term NOx emissions limitations for fuel-burning equipment throughout the Ozone Transport Region in part to allow states to address emissions from demand response units and other units that operate intermittently to meet electric demand, particularly in the summer months.
> ...
> Based on the comparison of Connecticut's NOx emissions limitations with those in other states ..., reductions in the emissions limitations of RCSA section 22a-174-22 are necessary, likely in conjunction with an elimination or adjustment of the NOx credit trading program, so that Connecticut's boilers, turbines and engines are controlled to a RACT level with respect to the 2008 ozone NAAQS."

As can be seen from this discussion, there is a clear statutory and regulatory mandate for states such as Connecticut to adopt updated RACT controls in advance of the 2017 ozone season – a point that is conceded by Connecticut itself. The reductions related to these RACT-based controls will, of course, have a direct impact on air quality and directly affect the Court mandated assessment of whether emission reductions imposed by a transport rule are more stringent than would be necessary to allow a downwind states to attain the 2008 ozone NAAQS. MOG therefore urges that EPA first consider the effects of these legally mandated controls on existing nonattainment area before seeking controls in upwind states. Even though Good

Neighbor SIPs are due before many of these known programs are implemented and affect air quality, EPA cannot simply ignore the fact that the programs are known and that the effects can be quantified. MOG therefore requests that EPA reconsider the exclusion of these and other programs in establishing its CSAPR update.

2. **EPA must require downwind states to implement local control first.**

EPA is required under the CAA to first consider the effects of local emissions in a nonattainment area and nearby areas in state(s) closest to the nonattainment area in question before seeking controls in upwind states. CAA §107(a) states that "[e]ach State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State." In addition, CAA §110(a)(1) requires that a state SIP "provides for implementation, maintenance, and enforcement" of the NAAQS "in each air quality control region . . . within such State." Moreover, EPA recognized the requirement to look locally in both its 1997 NOx SIP Call and in CAIR. We note that the requirement to consider emission reductions from local controls in downwind states was an element of CAIR (a factor that was not adversely impacted by the *North Carolina v. EPA* decision). EPA must study the impact of local controls and require that such local sources be appropriately controlled before turning to upwind states for additional reductions.

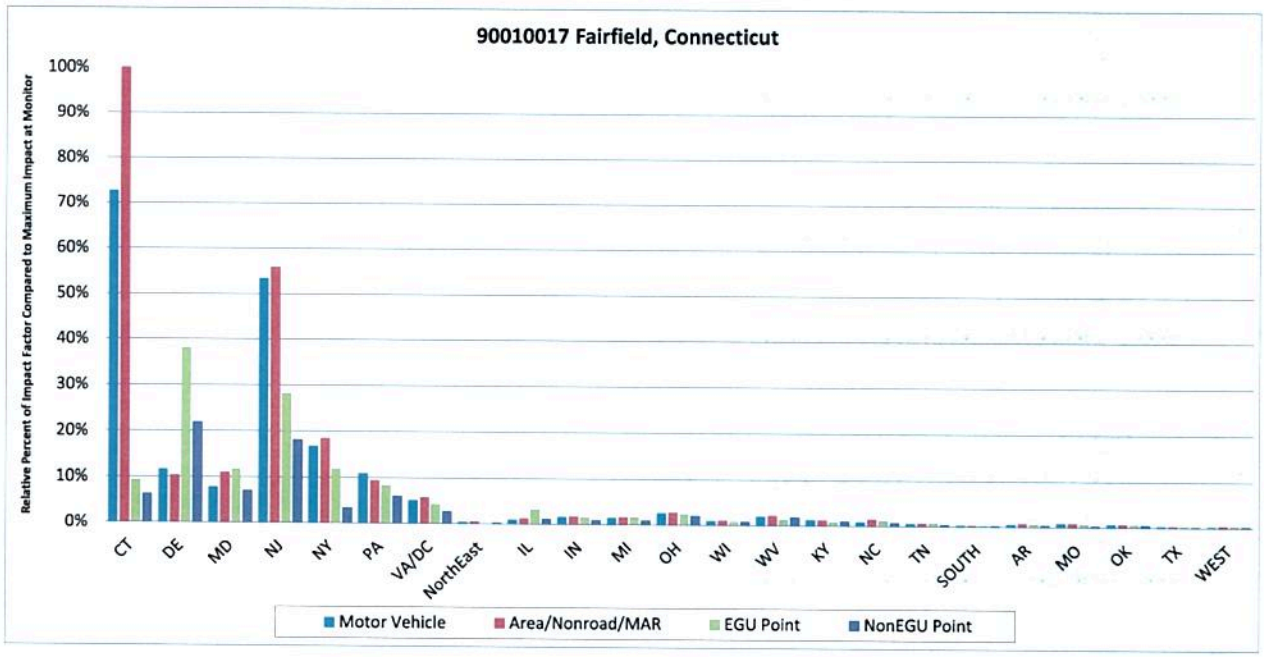
In particular, EPA must determine whether downwind states would experience non-attainment of the NAAQS even if no transport occurred at all. If local sources in a non-attainment area, or for that matter, local sources within the OTR, are causing the NAAQS to be exceeded four or more times in the critical year, independent of regional transport, then it is

imperative that the downwind states control those sources before EPA can turn to upwind states for further controls.

In a report prepared for MOG by Alpine Geophysics (Alpine) and entitled "Relative Impact of State and Source Category NOx Emissions on Downwind Monitors Identified Using the 2017 Cross State Air Pollution Rule Modeling Platform" which can be found at: http://www.midwestozonegroup.com/files/RelativeImpactofStateandSourceCategoryNOxEmissionsonDownwindMonitorsIdentifiedUsingthe2017CrossStateAirPollutionRuleModelingPlatform.pdf), Alpine has examined which state's emission have the greatest impact on downwind ozone concentrations.

In its report Alpine has determined, at each monitor, from where and what source category, on a ppb per ton basis, we see the greatest relative contribution to ozone concentrations. In other words, we see which source category, and from what state, has the greatest per ton NOx contribution to the monitors' modeled ozone concentrations. Results from Alpine's calculations were then normalized to the results of the maximum individual state/category contributor, so that one can easily identify the greatest ppb per ton state/source category and have an easy way of determining which categories have greater relative impact compared to all others. In addition to recognizing the usefulness of this impact factor in determining which states and categories are the largest ppb/ton contributors to each monitor, the results may be used in assisting policy makers in the development of control strategies and their relative impact on ozone concentrations at various locations. Resulting monitor-level, relative impact factors for the twenty-one eastern state proposed rule identified nonattainment and maintenance monitors are presented in the tables set forth in that report.

The following is the graph from that report related to one of the Fairfield Connecticut monitors:



As can be seen from this chart, assuming linearity of NOx emissions and ozone concentration changes, the greatest improvement in ozone concentrations occur with reductions in emissions from sources located in Connecticut itself and from area and mobile sources throughout the Northeast. It also turns out that the three states with the next greatest potential to improve air quality on a per ton reduced basis in Connecticut are:

New Jersey (over 50% of Connecticut's potential);

Delaware (nearly 40% of Connecticut's potential); and

New York (nearly 20% of Connecticut's potential).

This analysis further supports the conclusion that the control of local sources and local transport are key components to addressing residual nonattainment concerns in the region with

respect to the 2008 ozone NAAQS and provides an important preview of what might need to be done to address the 2015 ozone NAAQS.

MOG therefore urges that EPA reconsider its position regarding requiring local controls prior to the requirement for upwind state controls.

3. **EPA's approach and development of a control strategy in selection of maintenance receptors is fatally flawed.**

In its comments on the proposed rule, MOG challenged the methodology proposed by EPA to identify maintenance receptors in its step 1 analysis.

EPA's reliance on the CSAPR methodology to address "interference with maintenance" is not only inconsistent with the Clean Air Act, but also inconsistent with both the U.S. Supreme Court and D.C. Circuit decisions on CSAPR. The CSAPR methodology is not reasonable in its application, resulting in requirements beyond the Clean Air Act and therefore must be revised. EPA provides the following statement in the NODA on "interference with maintenance,"

> . . . as part of the approach for identifying sites with projected future maintenance problems, the highest (i.e., maximum) ambient design value from the 2011-centered 5-year period (i.e., the maximum design values from 2009-2011, 2010, 2010-2012, and 2011–2013) was projected to 2017 for each site using the site-specific RRFs. Following the CSAPR approach, monitoring sites with a maximum design value that exceeds the NAAQS, *even if the average design value is below the NAAQS*, are projected to have a maintenance problem in 2017. In this regard, nonattainment sites are also maintenance sites because the maximum design value at nonattainment sites is always greater than or equal to the 5-year weighted average. *Monitoring sites with a 2017 average design value below the NAAQS*, but with a maximum design value that exceeds the NAAQS, are considered maintenance-only sites. These sites are projected to have a maintenance problem, but not a nonattainment problem."

80 Fed. Reg. 46271, 46274 (August 4, 2015).

In its proposed CSAPR update, EPA stated:

> Moreover, as all nonattainment receptors are also maintenance receptors because the maximum design value will always be equal to or exceed the average design value, it is reasonable to control all sites consistent with the level of control necessary to reduce maintenance concerns.

80 Fed. Reg. 75730 (December 3, 2015).

The U.S. Supreme Court in *EPA v. EME Homer City Generation, LP*, explains the maintenance concept set forth in the Good Neighbor Provision as follows:

> Just as EPA is constrained, under the first part of the Good Neighbor Provision, to eliminate only those amounts that "contribute…to *nonattainment*," EPA is limited, by the second part of the provision, to reduce only by "amounts" that "interfere with *maintenance," i.e.* by just enough to permit an already-attaining State to maintain satisfactory air quality." 134 S.Ct. at 1604, Ftn 18.

Relative to the reasonableness of EPA's assessment of contribution, the U.S. Supreme Court also provides,

> The Good Neighbor Provision . . . prohibits only upwind emissions that contribute significantly to downwind nonattainment. EPA's authority is therefore limited to eliminating . . .the overage caused by the collective contribution . . ." *Id.* at 1064. (Emphasis added.)

> ". . . the Good Neighbor Provision . . . requires EPA to eliminate amounts of upwind pollution that "interfere with maintained" of a NAAQS by a downwind State. §7410(a)(2)(D)(i). This mandate contains no qualifier analogous to "significantly," and yet it entails a delegation of administrative authority of the same character as the [the nonattainment language of the Good Neighbor Provision]. Just as EPA is constrained, under the first part of the Good Neighbor Provision, to eliminate only those amounts that "contribute . . .to *nonattainment*," EPA is limited, by the second part of the provision, to reduce only by "amounts" that "interfere with *maintenance*," *i.e.,* by just enough to permit an already-attaining State to maintain satisfactory air quality. (Emphasis added.) With multiple upwind States contributing to the maintenance problem, however, EPA confronts the same challenge that the "contribute significantly" mandate creates: How should EPA allocate reductions among multiple upwind States, many of which contribute in amounts sufficient to impede downwind maintenance? Nothing in *either* clause of the Good Neighbor Provision provides the criteria by which EPA is meant to apportion responsibility." *Id.* at 1604, ftn 18.

It is noteworthy that the Supreme Court provides that lacking a dispositive statutory instruction to guide it, EPA's decision on the designation of significant contribution must meet the reasonableness test of the *Chevron* decision for filling the gap left open by Congress. *Id.* at 1604. The emphasis upon the single maximum design value to determine a maintenance problem for which sources (or states) must be accountable, creates a default assumption of contribution. A determination that the single highest modeled maximum design value is appropriate for the purpose to determining contribution to interference with maintenance is not reasonable either mathematically, in fact, or as prescribed by the Clean Air Act or the U.S. Supreme Court. The method chosen by EPA must be a "permissible construction of the Statute." *Id.* at 1606.

EPA's use of a modeled maximum design value, when the average is below the NAAQS, to define contribution, results in a conclusion that any modeled contribution is deemed to be a significant interference with maintenance. This concept is inconsistent with the Clean Air Act and the U.S. Supreme Court's assessment of its meaning.

As noted by the D.C. Circuit in the 2012 lower case of *EME Homer City Generation v. EPA*, "The good neighbor provision is not a free-standing tool for EPA to seek to achieve air quality levels in downwind States that are *well below* the NAAQS." 696 F.3d. at 22. "EPA must avoid using the good neighbor provision in a manner that would result in unnecessary over-control in the downwind States. Otherwise, EPA would be exceeding its statutory authority, which is expressly tied to achieving attainment in the downwind States." *Id.* EPA has not justified its proposal as necessary to avoid interference with maintenance.

In a stated effort to account for historical variability in air quality at a receptor, EPA offered the following proposal for determining maintenance receptors for purposes of this proposal:

> "... EPA assesses the magnitude of the maximum projected design value for 2017 at each receptor in relation to the 2008 ozone NAAQS and, where such a value exceeds the NAAQS, EPA determines that receptor to be a ''maintenance'' receptor for purposes of defining interference with maintenance in this proposal, consistent with the method used in CSAPR and upheld by the D.C. Circuit in *EME Homer City II.*81 That is, monitoring sites with a maximum design value that exceeds the NAAQS are projected to have a maintenance problem in 2017."

80 Fed. Reg. 75724 (December 3, 2015)

As stated above, however, we do not believe that the approach being advanced by EPA is consistent with the holding of the D.C Circuit which called for "a carefully calibrated and commonsense supplement to the "contribute significantly" requirement". *EME Homer v. EPA*, August 21, 2012.

It is significant to us and should be instructive to EPA that a careful process has existed for many years related to the identification and management of maintenance areas.

Indeed, Section 175A of the Clean Air Act provides:

> "(a) Plan revision
> Each State which submits a request under section 7407 (d) of this title for redesignation of a nonattainment area for any air pollutant as an area which has attained the national primary ambient air quality standard for that air pollutant shall also submit a revision of the applicable State implementation plan to provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance."

Moreover, the agency's principal guidance on the management of maintenance areas is set forth in "Procedures for Processing Requests to Redesignate Areas to Attainment", John Calcagni memorandum, 4 September 1992, which contains the following statement on page 9:

> "A State may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show what the future mix of source and emission rates will not cause a violation of the NAAQS. Under the Clean Air Act, many areas are required to submit modeled attainment demonstrations to show that proposed reductions in emissions will be sufficient to attain the applicable NAAQS. For these areas, the maintenance demonstration should be based upon the same level of modeling. In areas where no such modeling was required, the State should be able to rely on the attainment inventory approach. In both instances, the demonstration should be for a period of 10 years following the redesignation."

This guidance has been applied in several specific circumstances including the Denver Metropolitan Area where the submitted plan offered the following statement:

> "As required by CAA Section 175A(a), each request for redesignation shall be accompanied by a SIP revision which provides for maintenance of the NAAQS for at least 10 years after redesignation. Following EPA guidance and policy (September 4, 1992 EPA memorandum from John Calcagni to EPA regional offices), this maintenance demonstration is made by comparing projected 2006 and 2013 emissions with the attainment year 1993 emissions. If 2006 and 2013 emissions are less than 1993 emissions, then maintenance is demonstrated."

Ozone Redesignation Request And Maintenance Plan For the Denver Metropolitan Area, January 2001.

Similarly the plan submitted for Washoe County offered the following statement:

> "A key element of this maintenance plan is the demonstration of how Washoe County will remain in compliance with the 8-hour ozone standard for the 10-year period following the effective date of designation as attainment. Washoe County's effective date of designation is June 15, 2004, Therefore this maintenance plan projects attainment through 2014."

Maintenance Plan for the Washoe County 8-Hour Ozone Attainment Area, April 2007.

Given the clear statutory and regulatory directive for the management of maintenance areas, we urge EPA to apply the same approach to this proposed transport rule. As is set forth below, and as is discussed elsewhere in these comments, we have provided the current design

values for all 21 problem monitors along with EPA's future year project for each area identified in the proposal:

			Ozone DVs (ppb)	
State	**County**	**Monitor**	**2013-15**	**2025 NAAQS**
Connecticut	Fairfield	90010017	81	70.9
Connecticut	Fairfield	90013007	83	73.3
Connecticut	Fairfield	90019003	84	74.3
Connecticut	New Haven	90099002	78	72.2
Kentucky	Jefferson	211110067	70	70.1
Kentucky	Oldham	211850004	69	66.8
Maryland	Baltimore	240053001	68	66.6
Maryland	Harford	240251001	71	73.8
Michigan	Allegan	260050003	76	70.0
Michigan	Wayne	261630019	69	69.5
New Jersey	Camden	340071001	69	67.4
New Jersey	Gloucester	340150002	73	68.9
New Jersey	Middlesex	340230011	72	66.9
New Jersey	Ocean	340290006	72	67.7
New York	Queens	360810124	69	71.5
New York	Richmond	360850067	74	71.8
New York	Suffolk	361030002	72	75.7
Ohio	Hamilton	390610006	70	68.8
Pennsylvania	Allegheny	420031005	73	71.2
Pennsylvania	Philadelphia	421010024	72	69.9
Wisconsin	Sheboygan	551170006	77	71.1

See Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone, September 2015, p. 2A-42 which can be found at: http://www3.epa.gov/ozonepollution/pdfs/20151001ria.pdf.

Inasmuch as all of the problem areas, including all of the maintenance areas, will be in attainment with the 2008 NAAQS in 2017, it is inappropriate for EPA to finalize the adoption of this rule. Given the near and longer term attainment status of the maintenance monitors, any

additional emission reductions called for under EPA's proposal would result in over-control and be prohibited.

EPA proposes to take an approach to identify maintenance areas that is fundamentally different from that used to identify nonattainment areas. Specifically EPA offers the following explanation of how it will identify maintenance areas:

> Consistent with the CSAPR methodology, monitoring sites with a projected maximum design value that exceeds the NAAQS, but with a projected average design value that is below the NAAQS, are identified as maintenance-only receptors. In addition, those sites that are currently measuring clean data, but are projected to be nonattainment based on the average design value and that, by definition, are projected to have a maximum design value above the standard are also identified as maintenance-only receptors. We are not proposing that monitored data have any effect on the EPA's determination of maintenance receptors using the CSAPR method since even those receptor sites that are not currently monitoring violations are still subject to conditions that may allow violations to reoccur and therefore have future maintenance concerns.

80 Fed. Reg. 75724 (December 3, 2015).

In comparison, EPA very properly proposes to identify nonattainment areas taking into account monitoring data. That monitoring data is, of course, vital to an assessment of both nonattainment and maintenance areas. EPA fails to offer an adequate explanation of why that monitoring data should not be considered.

MOG urges EPA to consider monitor data when identifying maintenance areas. As set forth in the chart above, use of monitoring data will provide for the consideration of the extensive attainment that is currently being measured at these locations.

In responding to this comment, EPA noted that the CAA requires upwind states to submit Good Neighbor SIPs before consideration can be given to re-designating areas from non-

attainment (with attendant maintenance plan obligations), that emission reduction obligations should not be dependent on current or prior designations of downwind areas, that the CAA does not state that maintenance areas can only occur where there has once been non-attainment, that CAA §175A is not a limit on EPA authority to address maintenance, that because of the variability of meteorology, EPA will not consider monitoring data in the identification of maintenance receptors, and that the 2016 monitoring data indicates ozone has increased compared with 2014.

MOG notes that many more monitors in 2016 (71%) had ozone concentrations less than they had in 2015. This improvement of air quality is likely to continue, not only because NOx and VOC emissions have been steadily decreasing over recent years, but because of the additional NOx and VOC reduction programs mandated by the CAA in 2017 that will further reduce ozone levels.

In sum, MOG's analysis of monitoring data shows that use of more recent data indicates that maximum design values are in attainment and, for that reason, requests that EPA reconsider its approach for identifying and managing maintenance receptors.

4. **The 1% significant threshold is inappropriate given modeling accuracy.**

MOG opposes the use of the proposed one percent threshold because EPA has not technically demonstrated that continued use of the one percent screening metric is appropriate for linking an upwind state to a downwind nonattainment or maintenance receptor. Dispersion models simply cannot calculate air quality within that range of accuracy and the costs at stake are too high to allow a level of significance that is within the capability of the models.

The CAA includes no specifics regarding establishment of a significance level applicable to interstate transport. CAA Section 110(a)(2)(d) simply requires that:

> "(2) Each implementation plan submitted by a State under this chapter shall be adopted by the State after reasonable notice and public hearing. Each such plan shall—
> ...
> (D) contain adequate provisions—
> (i) prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—
> (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or
> (II) interfere with measures required to be included in the applicable implementation plan for any other State under part C of this subchapter to prevent significant deterioration of air quality or to protect visibility,
> (ii) insuring compliance with the applicable requirements of sections 7426 and 7415 of this title (relating to interstate and international pollution abatement);..."

There is no further guidance under the CAA to define "amounts [of emissions] which will contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such primary or secondary ambient air quality standard ...." EPA established the 1% significance level in its June 11, 2011 promulgation of CSAPR (76 Fed. Reg. 48211, 48236) and has done so again in this proposal, stating "[a]ccordingly, the EPA has applied an air quality screening threshold calculated as one percent of the 2008 ozone NAAQS, 0.75 ppb, to identify those states ''linked'' to downwind nonattainment and maintenance receptors with respect to the 2008 ozone NAAQS which require further analysis to identify potential emission reductions."(81 Fed. Reg. 74518).

As will be pointed out elsewhere in these comments, there are serious concerns about the performance of EPA's model particularly with respect to all of the nonattainment monitors

which coincidentally are located on a land-water interface which significantly complicates the accuracy of the model.

Given these and other uncertainties about the accuracy of EPA's modeling, MOG strongly urges that the significance level established in CSAPR and in this proposal be reconsidered and be increased to take account of these modeling limitations. In addition, setting a higher significance level is a useful approach for assurance that there is no over-control of emissions from upwind states.

EPA disagreed with the MOG comment that the 1% significance threshold should be set at a higher limit because "it is appropriate to use a low air quality threshold when analyzing states' collective contributions to downwind nonattainment and maintenance for ozone as well as PM2.5. (81 FR 74519) EPA added that, "[i]n response to commenters who advocated for a higher threshold, the EPA observes that the analysis of a 5 percent threshold shows that a higher threshold would result in a relatively large reduction in the overall percentage of ozone pollution transport captured relative to the amounts captured at the one percent level at a majority of the receptors. In fact, at a 5 percent threshold there would not be any upwind states linked to the nonattainment and maintenance receptors in Texas."

EPA's response completely ignores the concerns expressed about the sensitivity of the computer model to be able to predict such low levels. Moreover, EPA apparently did not consider a more moderate increase – i.e. 2%, or 3%, or any other level between 1% and 5%. Inasmuch as air quality models are not able to perform accurately at the 1% significance level for these low concentrations, MOG urges that EPA reconsider using a higher significance level to determine linkage.

5. **EPA has incorrectly given maintenance areas the same weight and status as it has given to nonattainment areas.**

In MOG's comments on the proposed rule, EPA's inappropriate application of the nonattainment area significance test to maintenance area was challenged. MOG also took issue with EPA's decision to give the same weight to the development of controls programs to address maintenance areas as it does to address nonattainment areas. Maintenance areas should not be subject to the same "significance" test as applies to nonattainment areas in that maintenance areas do not require the same emission reduction response as nonattainment areas.

The final rule inappropriately applies the nonattainment are significance test to maintenance areas and provides the same weight to the development of control programs to address maintenance areas as it does nonattainment areas. MOG objects to this approach both because maintenance areas are not subject to the same "significance" test as applies to nonattainment areas and because maintenance areas do not require the same emission reduction response as nonattainment areas.

As was stated by the U.S. Supreme Court opinion in *EPA v. EME Homer City*, April 29, 2014:

> "The statutory gap identified also exists in the Good Neighbor Provision's second instruction. That instruction requires EPA to eliminate amounts of upwind pollution that "interfere with maintenance" of a NAAQS by a downwind State. §7410(a)(2)(D)(i). This mandate contains no qualifier analogous to "significantly," and yet it entails a delegation of administrative authority of the same character as the one discussed above. Just as EPA is constrained, under the first part of the Good Neighbor Provision, to eliminate only those amounts that "contribute . . . to *nonattainment*," EPA is limited, by the second part of the provision, to reduce only by "amounts" that "interfere with *maintenance,*" i.e., by just enough to permit an already-attaining State to maintain satisfactory air quality. (Emphasis added). With multiple upwind States contributing to

> the maintenance problem, however, EPA confronts the same challenge that the "contribute significantly" mandate creates: How should EPA allocate reductions among multiple upwind States, many of which contribute in amounts sufficient to impede downwind maintenance" Nothing in *either* clause of the Good Neighbor Provision provides the criteria by which EPA is meant to apportion responsibility."

Excerpt from D.C. Circuit opinion in *EME Homer City v. EPA*, August 21, 2012:

> "The statute also requires upwind States to prohibit emissions that will "interfere with maintenance" of the NAAQS in a downwind State. "Amounts" of air pollution cannot be said to "interfere with maintenance" unless they leave the upwind State and reach a downwind State's maintenance area. To require a State to reduce "amounts" of emission pursuant to the "interfere with maintenance" prong, EPA must show some basis in evidence for believing that those "amounts" from an upwind State, together with amounts from other upwind contributors, will reach a specific maintenance area in a downwind State and push that maintenance area back over the NAAQS in the near future. Put simply, the "interfere with maintenance" prong of the statute is not an open-ended invitation for EPA to impose reductions on upwind States. Rather, it is a carefully calibrated and commonsense supplement to the "contribute significantly" requirement."

Rather than to recognize the distinction between "significance' and "interference" as urged by the Courts, EPA has treated the two as though they are the same. MOG urges EPA to reconsider this approach and to develop an appropriate test for "interference" with maintenance and to develop an alternative emission reduction approach that accounts for the fact that maintenance areas are already in attainment and cannot consequently justify the same level of emission reductions as might be called for with respect to nonattainment areas.

EPA disagreed with the comment in the final rule because the "CSAPR framework gives independent meaning to the 'maintenance' prong of CAA section 110(a)(2)(D)(i)(I) as required by D.C. Circuit's decision in *North Carolina.*" (81 FR 74520) EPA adds that "EPA is afforded deference to develop an appropriate application of this requirement so long as it is a 'permissible construction of the statute,''' citing *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 843, 104 S. Ct. 2778,2782 (1984) EPA notes that "states linked to maintenance-only receptors would generally have a lesser emission reduction obligation than states linked to nonattainment

receptors, but for the partial nature of this rule," and adds that, "even when all the emission reductions required by this rule are in place, both attainment and maintenance problems at downwind receptors may remain, and the EPA will need to evaluate whether the upwind states' emission reduction obligations should be more stringent considering other factors not addressed by this rule, including control strategies that can be implemented on a longer timeframe or by other source categories." In other words, because the final rule is only a partial remedy for addressing upwind impacts, EPA cannot say how final non-attainment versus maintenance emission reductions will compare.

EPA does not address the fact that the CAA uses different terms to address maintenance versus non-attainment, i.e., "significant contribution to non-attainment versus "interfere with maintenance." EPA treats the terms "significant" and "interference" as being the same and in doing so offers no justification. While both maintenance and nonattainment areas are subject to the protection of 110(a)(2)(D)(i) there is an open question about what level of control may be necessary to avoid "significant contribution" versus "interference with maintenance." EPA's comment that attainment concerns remain even after controls are in place, compels the observation that all remaining non-attainment monitors in the East have exactly the same ozone concentration – 76.0 ppb – the lowest possible concentration that would allow these monitors to remain in non-attainment. MOG therefore requests that EPA reconsider the weight given to maintenance versus nonattainment areas for the control program analysis.

6. **EPA failed to conduct model performance evaluation for the critical days selected for the proposed rule particularly for receptors at a land/water interface.**

MOG commented that "model performance should be evaluated for the individual days that were used in calculating projected 2017 ozone design values and projected 2017 ozone contributions." Commenters also said that, "in cases where model performance on these individual days is poor, the impact of the poor performance on projected concentrations and contributions must be investigated and considered in the final results by removing or adjusting these days to account for model bias." (81 FR 74527)

EPA rejected the comments because "there are no universally accepted, generally applicable numerical bright-line criteria for determining which days might be candidates to exclude or adjust based on model performance for specific days at individual sites," and because "[p]rior court rulings are deferential to modeling choices in this regard." (81 FR 74527) Significantly, EPA did not address the comment that the model performance used can fairly be described as "poor," particularly at land/water interface locations.

As part of its review of the EPA data behind the proposed transport rule, Alpine has prepared a report entitled "Model Performance Review at Monitors with Complex Meteorology Land-Water Interfaces" which can be found at: http://www.midwestozonegroup.com/files/ModelPerformanceReviewatMonitorswithComplexMeteorologyLand-WaterInterfaces.pdf).

In that report, Alpine notes that EPA ozone attainment modeling guidance states that "[t]he most important factor to consider when establishing grid cell size is model response to emissions controls. Analysis of ambient data, sensitivity modeling, and past modeling results can be used to evaluate the expected response to emissions controls at various horizontal resolutions for both ozone and PM2.5 and regional haze. If model response is expected to be different (and

presumably more accurate) at higher resolution, then higher resolution modeling should be considered. If model response is expected to be similar at both high and low(er) resolution, then high resolution modeling may not be necessary. *The use of grid resolution finer than 12 km would generally be more appropriate for areas with a combination of complex meteorology, strong gradients in emissions sources, and/or land-water interfaces in or near the nonattainment area(s)*" (emphasis added)

In its modeling in support of the proposed rule, EPA simulated a national domain using a 12km grid resolution domain wide. While this makes running a national, regional simulation easier from a technical perspective, it ends up neglecting the important issue of the complex meteorology and/or land-water interfaces in or near the nonattainment or maintenance monitors of interest. Photochemical modeling along coastlines is complex for two reasons. First, the temperature gradients along land/water interfaces can lead to localized on-shore/off-shore flows; and second, the photochemical model formulation spreads the emissions in a grid cell throughout the full grid volume of the cell.

Given the importance of certain monitors located in areas of complex meteorology, an analysis was undertaken by Alpine to examine the performance of the model when compared against observations, and to examine how the model results are used in the attainment test calculation to determine estimated future attainment status. Figures 1 and 2 set forth below present two unique areas in the eastern U.S. that are challenged by these complex meteorology land-water interfaces. For each monitor, Alpine has reviewed the EPA published model performance evaluation (MPE) metrics for ozone and compared them to additional MPE metrics from the same modeling platform.

Figure 1. Connecticut monitors located on land/water interface.

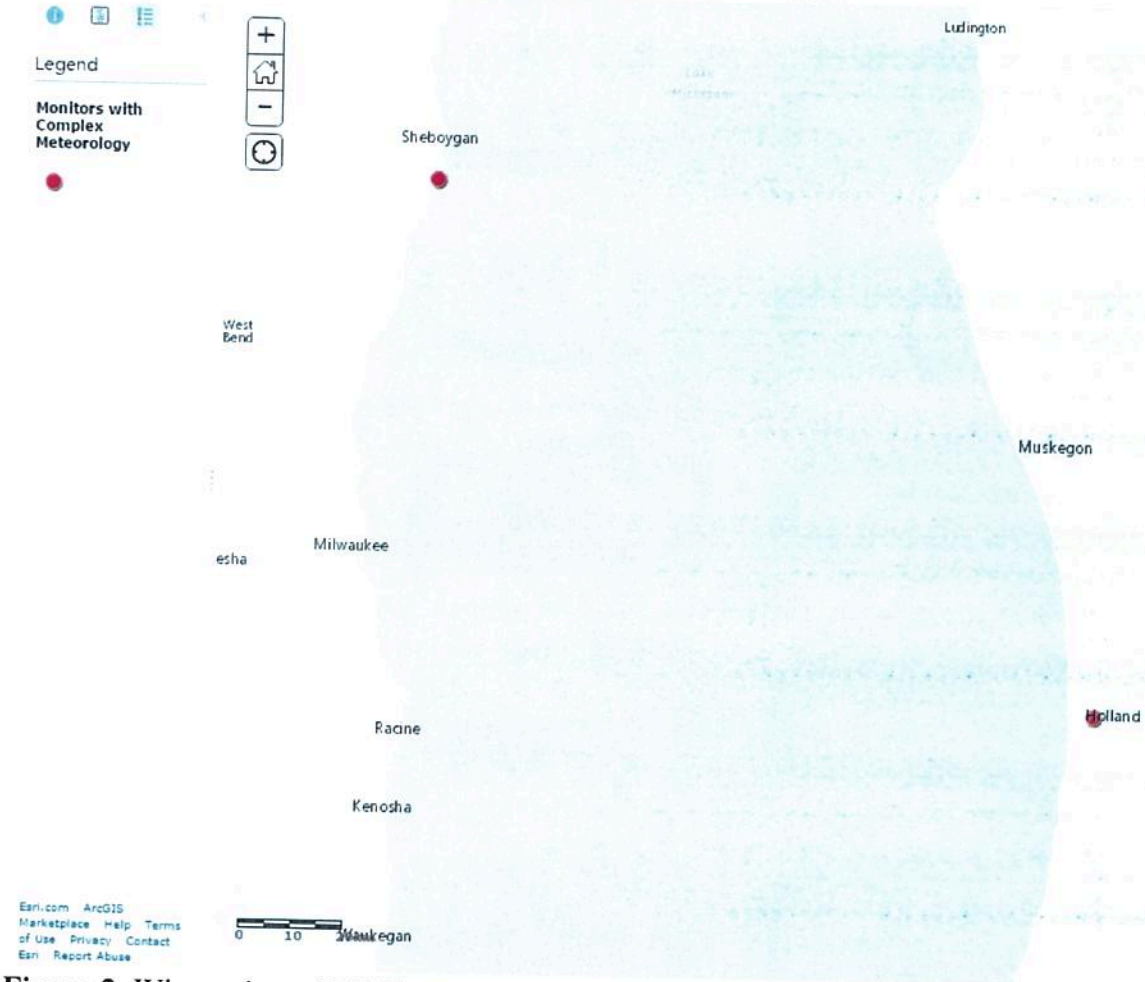


Figure 2. Wisconsin and Michigan monitors located on land/water interface. 3

In examining each of these monitors Alpine notes that a portion of the grid cell is located over or adjacent to a water body. Studies indicate that air quality forecast models typically predict large summertime ozone abundances over water relative to land in the Great Lakes region and that meteorology around the Long Island Sound is distinctly unique; both warranting individualized attention and the fine grid resolution required to best account for these issues.

Additionally, the 3x3 neighborhood of grid cells used in determining the design values of the relative response factor (RRF) extends into the water bodies. Under current guidance, the top ten modeled days within this 3x3 matrix are used in determining this RRF for each monitor. In this analysis Alpine reviewed the performance of the days selected for use in the RRF calculation for the grid cells determined to have been used in the attainment test.

Six monitors were initially identified for this review and are listed in the report with EPA's performance metrics for days observed at or above 60 ppb as documented in the air quality TSD (AQTSD). EPA notes that the performance evaluation was conducted comparing observed concentration data with the modeled concentration data simulated in the grid cell in which the monitor was located. In reviewing this table, considering all days observed at or above 60 ppb, both the NMB and NME fall within the thresholds identified above. Based on this broad indicator of model performance (all days observed at or above 60 ppb) the model appears to be performing adequately.

It is also important to understand how the model is performing on the days that are being used in the attainment demonstration. As suggested in the draft EPA modeling guidance, and

used in the CSAPR proposed rule, only the top 10 days with the highest modeled concentration in the vicinity of the monitoring site are considered.

To review this important issue, Alpine generated the performance metrics for these three example monitors using the days selected in the MATS attainment test, and for days selected for the MATS attainment test with the associated grid cell concentration actually used in the RRF calculation (max concentration in the 3x3 grid).

As is seen from this report, the MDA8 concentration value used to represent each monitor-day in the performance evaluations is always lower and generally significantly lower than the maximum grid cell used in EPA's RRF calculation. This difference ranges from a low of 3.17 ppb (at Fairfield on July 6, 2011) to 29.84 ppb (at Sheboygan on July 30). The impact of this change results in poorer model performance on these days at these monitors and in RRFs weighted to concentrations calculated over the water bodies and not to the grid cells and land-based grids more representative of the monitor's conditions.

Performance metrics have also been calculated for the 10 RRF days revealing that the monitor-sited concentrations have much lower bias and error values than the over-water concentrations. And while it is recognized that the base year grid cell and future year grid cell will be paired (as used in the relative sense), the resulting RRF could show more or less responsiveness in emissions changes relative to the ozone concentrations at each associated monitor. The report also notes that, while the EPA performance evaluation and metrics are based on the ability of the model to simulate observed concentrations where the monitor is located, in each example presented, the highest concentrations are dominantly selected from over-water locations. Based on these results and on EPA's own guidance related to finer grid cell size

selection for areas demonstrating a combination of complex meteorology, strong gradients in emissions sources, and/or land-water interfaces in or near the nonattainment area(s), Alpine finds that the ozone concentrations selected at these land/water boundary locations are insufficiently accurate, in both bias and error, to be considered as representative of the daily concentrations observed at each monitor and for the ten days selected for the RRF calculation.

It is Alpine's conclusion that this poor performance will have a direct impact on the future year attainment demonstration and significant contribution calculations that use these values as their basis.

In its response to comments, EPA recognized that MOG offered a comment that "the relative response factors for coastal sites should be based on modeled ozone in the grid cell containing the monitoring site or 'land' cells only, rather than the grid cell with the highest 2011 base case modeled value from among the 3 by 3 matrix of grid cells surrounding the monitoring site (i.e., the 3 x 3 matrix approach)." (81 FR 74534) EPA also recognized that "[s]ome commenters said that using the 3 x 3 approach for coastal sites can result in the use of modeled data from grid cells over water, which the commenters claim are not representative of the location of the monitor.

EPA published a lengthy response to those comments, principally noting that EPA's comparison of "land" versus "water" cells found that, of the 8 coastal sites examined, half had water cell values lower than or within 0.5 ppb of the corresponding land cell, and that it would not be appropriate to use different approaches for monitors in coastal areas. This conclusion is remarkable because 0.5 ppb is more than enough to bring all nonattainment monitors in the East into attainment.

Indeed the entire CSAPR update program can turn on design value differences of 0.1 ppb because the remaining monitors are all modeled to be at precisely 76.0 ppb. Therefore, MOG finds it remarkable and unacceptable that EPA dismisses the impact of the land/water interface monitors and requests that EPA reconsider its rejection of the comments regarding this extremely important issue.

7. **EPA has not properly accounted for international emissions.**

MOG was one of the commenters EPA quotes as citing CAA Section 179B for the proposition that "it requires the Administrator to approve plans that would be sufficient to attain or maintain the NAAQS but for emissions emanating from outside of the U.S. They therefore contend that, where a receptor in the EPA's modeling would attain or maintain the standard when international emissions are accounted for, the EPA has no authority to require emissions from upwind states pursuant to section 110(a)(2)(D)(i)(I). Commenters state that such reduction requirements would constitute the over-control of emissions from upwind states. The commenters explicitly recommend that the EPA exclude the projected contributions from Canada and Mexico from the projected design values before comparing the projections to the NAAQS for purposes of identifying receptors. Commenters further recommend that the EPA exclude a 'conservatively calculated' 5 percent of EPA-estimated contributions attributable to the anthropogenic fraction of boundary concentrations. The commenters propose that this approach would result in fewer receptors and relieve upwind states of the obligation to make emission reductions associated with these receptors." (81 FR 74535)

It is imperative that the modeling and associated data and methods prescribed by EPA for the purpose of developing any rulemaking proposal to address interstate ozone transport for the

2008 ozone NAAQS, take into consideration the impact of international transport on ozone air quality in the United States. In the NODA, EPA comments that it will be following the CSAPR approach. The CSAPR approach must, however, be modified to recognize the impacts of international ozone transport. Boundary concentrations and impacts from international sources, including Canada, Mexico, and beyond, are appropriate components to the ozone source apportionment modeling.

In the proposed CSAPR update, EPA acknowledges the existence of international emissions but seemingly only to the extent they contribute to exceptional events. EPA states:

> "The Clean Air Act's good neighbor provision requires states and the EPA to address interstate transport of air pollution that affects downwind states' ability to attain and maintain NAAQS. Other provisions of the CAA, namely sections 179B and 319(b), are available to deal with NAAQS exceedances not attributable to the interstate transport of pollution covered by the good neighbor provisions but caused by emission sources outside the control of a downwind state. These provisions address international transport and exceptional events, respectively."
>
> 80 Fed. Reg. 75712 (December 3, 2015).

As acknowledged in EPA's research of "background" ozone levels, international impacts are a significant factor. EPA provides in its "Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards, August 2014" (which can be found at: http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100KCZ5.txt) that background ozone can originate from natural sources of ozone and ozone precursors, as well as from manmade international emissions of ozone precursors. *Policy Assessment*. p. 2-12. In the first draft policy assessment document (USEPA, 2012), EPA identified three specific definitions of background O_3; natural background (NB), North American background (NAB), and United States background (USB). NAB and USB are based on a presumption that the U.S. has little influence

over anthropogenic emissions outside either our continental or domestic borders. *Policy Assessment,* p. 2-13. EPA's findings indicated that, "the relative importance of background O_3 would increase were ozone concentrations to decrease with a lower level of the O_3 NAAQS." *Policy Assessment,* p. 2-31. This is the circumstance we have today as the nation manages current levels of ozone concentrations relative to existing sources and current control and emissions reductions strategies and the NAAQS.

In the preamble to the adoption of the 2015 ozone NAAQS, EPA interjects the discussion of the impacts of international ozone levels. EPA offers discussion on the Clean Air Act section 179B which recognizes the possibility that certain nonattainment areas may be impacted by ozone or ozone precursor emissions from international sources beyond the regulatory jurisdiction of the state. 80 Fed. Reg. 65444 (October 26, 2015). EPA's science review suggests that the influence of international sources on U.S. ozone levels will be largest in locations are in the immediate vicinity of an international border with Canada or Mexico. Section 179B allows states to consider in their attainment plans and demonstrations (SIP and Good Neighbor SIP) whether an area might meet the ozone NAAQS by the attainment date "but for" emissions contributing to the area originating outside the U.S. If a state is unable to demonstrate attainment of the NAAQS in such an area impacted by international transport after adopting all reasonably available control measures, the EPA shall nonetheless approve the CAA-required state attainment plan and demonstration using the authority in section 179B as discussed further below.

Relative to Good Neighbor SIPs, international impacts also play an important role. Indeed, EPA's NODA data (which can be found at:

http://www.epa.gov/sites/production/files/2015-11/2017_ozone_contributions_transport_noda.xlsx) illustrates that international emissions contribute in excess of 15 ppb to all of the critical monitors in the East. We know the Clean Air Act was written to acknowledge the role of background and attainment. CAA §179B subsection (a) reads as follows addressing any implementation plan, whether downwind nonattainment SIPs or upwind good neighbor SIPs:

> Notwithstanding any other provision of law, an implementation plan or plan revision required under this chapter shall be approved by the Administrator if –
>
> (1) such plan or revision meets all the requirements applicable to it under the chapter other than a requirement that such plan or revision demonstrate attainment and maintenance of the relevant national ambient air quality standards by the attainment date specified under the applicable provision of this chapter, or in a regulation promulgated under such provision, and
>
> (2) the submitting State establishes to the satisfaction of the Administrator that the implementation plan of such State would be adequate to attain and maintain the relevant national ambient air quality standards by the attainment date specified under the applicable provision of this chapter, or in a regulation promulgated under such provision, but for emissions emanating from outside of the United States. (Emphasis added)."

The U.S. Supreme Court noted it is essential that states only be required to eliminate "only those "amounts" of pollutants that contribute to the nonattainment of NAAQS in downwind States…" *EPA v. EME Homer City Generation*, 134 S.Ct. 1584, 1606 (April 29, 2014). "EPA cannot require a State to reduce its output of pollution by more than is necessary to achieve attainment in every downwind State. . . " *Id.* at 1608. The subsequent 2015 D.C. Circuit *EME Homer City Generation* decision offered in response to the remand from the U.S. Supreme Court, expanded as follows, "we thus must determine whether a downwind location would still attain its NAAQS if linked upwind States were subject to less stringent emissions." *EME Homer City Generation v. EPA*, 795 F.3d 118, 127(D.C. Cir. July 28, 2015). This statement assumes the

variable for achieving attainment (or for not achieving attainment) is a set of sources in an upwind State, but it could have been a discussion of emissions from an upwind nation. In the circumstance of a variable of background ambient ozone concentrations attributable to international sources, the air quality deficit must be deducted from the formula for assigning whether a Good Neighbor SIP is warranted. The CAA provides for attainment "but for emissions emanating from outside the United States." As commented by the D.C. Circuit in the initial stages of the *EME Homer City Generation* Good Neighbor Litigation, ". . . the good neighbor provision requires upwind States to bear responsibility for their fair share of the mess in downwind States." *EME Homer City Generation, LP v. EPA,* 696 F.3d 7, 13 (D.C. Cir, August 21, 2012). Determination of "fair share of the mess" would be emissions reductions from the source state, after deduction of emission contributions from international sources, as contemplated by CAA §179B.

In addition, EPA notes that the new ozone NAAQS monitoring data influenced by international transport may be excluded from regulatory determinations. Depending on the nature and scope of international emissions events affecting air quality in the U.S., the event-influenced data may qualify for exclusion under the Exceptional Events Rule. EPA encourages affected air agencies to coordinate with their EPA regional office to identify approaches to evaluate the potential impacts of international transport and to determine the most appropriate information and analytical methods for each area's unique situation. October 1, 2015, Prepublication Final Rule for the National Ambient Air Quality Standard for Ozone, p. 553. In tandem with EPA's proposal to modify the ozone NAAQS, EPA has also commented that it is working on a number of fronts to better understand potential international sources of ozone and identify opportunities for reducing long-range transport . . ."

http://www3.epa.gov/ozonepollution/pdfs/20141125fs-tools.pdf. It is apparent that considerable further analysis of international emissions issue is warranted as the agency stands poised to dictate obligations on states to manage the good neighbor SIP obligations under the CAA.

EPA rejected the comments because it believes that CAA 179B does not provide for relaxation of any control requirement applicable to any downwind state, and notes that "[t]he commenters do not explain why, given the obligation of downwind states with designated nonattainment areas to impose reasonable controls on emissions, upwind states should not also be subject to a similar obligation to take certain reasonable steps to reduce emissions impacting those downwind areas." (81 FR 74535)

MOG believes that the Supreme Court decision in EPA v. EME Homer City Generation, L.P. (134 S. Ct. 2857) precludes EPA from imposing any more reduction in emissions from an upwind state than would be needed to achieve attainment downwind. There is no limitation placed on EPA's authority to require emissions reductions in downwind states. Accordingly, MOG requests that EPA reconsider its rejection of the comments on the proper treatment of international emissions in the CSAPR update process.

C. CONCLUSION

For all of the aforementioned reasons, EPA should grant reconsideration of the CSAPR Update Rule. MOG stands ready to assist EPA in its effort to reconsider any of the aforementioned positions in order to develop a legally and technically defensible CSAPR Update Rule.

Respectfully submitted this 21rd day of December, 2016.

David M. Flannery
Kathy G. Beckett
Steptoe & Johnson PLLC
P.O. Box 1588
Charleston, WV 25326-1588
304-353-8000

Edward L. Kropp
Steptoe & Johnson PLLC
P.O. Box 36425
Indianapolis, Indiana 46236
317-946-9882

Counsel for the Midwest Ozone Group