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Washington, D.C. 20460

**Subject: Comment on the Proposed Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements (81 Fed. Reg. 81,276 (Nov. 17, 2016))**

The American Petroleum Institute (“API”) provides these comments on the U.S. Environmental Protection Agency’s (“EPA’s” or “the Agency’s”) Proposed Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements (“Proposed Implementation Rule”).<sup>1</sup> The API represents over 625 oil and natural gas companies, leaders of a technology-driven industry that supplies most of America’s energy, supports more than 9.8 million jobs and 8 percent of the U.S. economy, and, since 2000, has invested nearly \$2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. API and its members are dedicated to meeting environmental requirements, while economically developing and supplying energy resources to meet consumer needs.

The oil and gas industry has made significant contributions to cleaner air. A combination of cleaner gasoline and diesel fuels, modernized equipment and facilities, and more fuel-efficient vehicles has contributed to nationwide reductions of ozone precursor emissions of nitrogen oxides (“NOx”) by 55 percent and volatile organic compounds (“VOC”) by 53 percent between 1980 and

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<sup>1</sup> 81 Fed. Reg. 81,276 (Nov. 17, 2016).

2014.<sup>2</sup> Progress is clear – ground level ozone in the U.S. declined by 17 percent between 2000 and 2015.<sup>3</sup>

EPA has continued to lower the Ozone NAAQS to unprecedented levels. The significantly lower 2015 ozone standards raise several implementation concerns involving how to further implement the 2008 standard, the achievability and timing of attainment deadlines, and the treatment of background and transported ozone and ozone precursors. EPA seemingly recognized the complexity of implementing the 2015 ozone standards and included within the Proposed Implementation Rule mechanisms to clarify implementation requirements and attempt to ameliorate some unnecessary implementation burdens. API welcomes these aspects of the Proposed Implementation Rule and herein provides additional recommendations for reducing unnecessary compliance burdens while timely pursuing implementation of these standards.

With the 2015 Ozone NAAQS now approaching background levels in some areas, meeting the Clean Air Act’s (“CAA’s”) admonition to “insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources”<sup>4</sup> increasingly requires EPA to use the NAAQS implementation process to alleviate or remove the unnecessary regulatory and administrative burdens associated with the unprecedented stringency of the standards. API therefore urges EPA to use the full scope of its authority under the CAA to transition from the 2008 standard without saddling states and regulated entities with overlapping attainment requirements and to provide compliance flexibility reflecting the inherent difficulty in implementing and achieving standards that can be exceeded through the occurrence of natural phenomena and the influents of foreign emissions sources for which states and tribes have no authority to control. Many of these concerns arise from the stringency of the 2015 NAAQS itself and several subsequent rules that have not adequately mitigated the unprecedented impact of the 2015 standards, API incorporates by reference the following previously submitted comments:

- API’s comments on the 2015 Ozone NAAQS;<sup>5</sup>
- API’s comments on the 2016 “Exceptional Events Rule”;<sup>6</sup>
- API’s comments on the 2016 Control Techniques Guidelines for the Oil and Gas Industry;<sup>7</sup>
- API’s comments on the “Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone” (white paper);<sup>8</sup> and,
- NAAQS Implementation Coalition comments on EPA’s “implementation of the 2015 Ozone NAAQS: Issues Associated with Background Ozone” Whitepaper.<sup>9</sup>

<sup>2</sup> <https://www.epa.gov/air-trends/air-quality-national-summary>, retrieved February 1, 2017

<sup>3</sup> <https://www.epa.gov/air-trends/ozone-trends#oznat>, retrieved February 1, 2017

<sup>4</sup> CAA § 160(3)

<sup>5</sup> 80 Fed. Reg. 65,292 (Oct. 1, 2015).

<sup>6</sup> 81 Fed. Reg. 68,216 (Oct. 3, 2016).

<sup>7</sup> 81 Fed. Reg. 74,798 (Oct. 27, 2016).

<sup>8</sup> EPA-HQ-OAR-2016-0097-0030.

<sup>9</sup> Docket No. EPA-HQ-OAR-2016-0097.

## Comment Summary

API appreciates the opportunity to comment and offers the following:

- Support for EPA’s proposed Option 1 for the transition from the 2008 Ozone NAAQS to the 2015 Ozone NAAQS. API’s comments contain important clarifying suggestions for consideration in the final rule.
- Concern with EPA’s proposal to narrow its interpretation of §179B that would further reduce the relief afforded by these provisions to address international transport. Generally, rather than narrowing the existing applicability of background ozone provisions, API encourages EPA to use its discretion to expand them.
- Support for EPA proposed provisions for Interprecursor Trading for Ozone Offset Credits.

Please see the discussion below on these key comments and other issues. We look forward to working with EPA to develop a protective and legally compliant final implementation rule.

### **I. Transition from the 2008 Ozone NAAQS to the 2015 Ozone NAAQS**

EPA’s Proposed Implementation Rule presents two alternatives approaches for revoking the 2008 standard and transitioning to the 2015 standard.<sup>10</sup> Under the first option (“Option 1”), the 2008 NAAQS would be revoked one year after finalization of the ozone designations, at which point anti-backsliding provisions would apply. Under the second option (“Option 2”), the 2008 NAAQS would be revoked one year after designation of attainment designations only for areas in attainment with the 2008 NAAQS.

API agrees with EPA that Option 1 likely allows for a less burdensome transition between the 2008 and 2015 standards while maintaining the controls required under the CAA and applicable case law.<sup>11</sup> As such, subject to the clarifications requested below, API requests that EPA utilize Option 1 for transitioning from the 2008 standard to the 2015 standards, and further urges EPA to utilize the full scope of its statutory authority to extend compliance flexibility to areas not presently attaining the 2008 standards.

#### a. Option 1

Under the Proposed Implementation Rule’s Option 1 for transitioning from the 2008 to the 2015 ozone NAAQS, the 2008 ozone NAAQS would be revoked one year following the effective date

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<sup>10</sup> 81 Fed. Reg. at 81,286.

<sup>11</sup> CAA § 172(e); *South Coast Air Quality Management District v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).

of the 2015 ozone designations.<sup>12</sup> After revocation, the 2008 Ozone NAAQS designations (and the classifications associated with those designations) would no longer be in effect. The classifications for these areas, however, would be preserved in the Code of Federal Regulations (“CFR”)<sup>13</sup> for the limited purpose of identifying areas subject to applicable anti-backsliding provisions.<sup>14</sup>

Revocation of the 2008 standards is appropriate and necessary because it minimizes the burdens associated with transitioning to new standards by essentially harmonizing the activities toward continued progress. While certain anti-backsliding provisions related to the prior ozone NAAQS will remain in some nonattainment areas, revocation of the 2008 ozone NAAQS allows states and regulated entities to largely focus on implementation of a single standard, while preserving the progress an area has made toward attainment through the anti-backsliding provisions. With the exception of the residual requirements mandated pursuant to § 172(e), states and regulated entities will not be required to implement multiple (and potentially conflicting) standards and controls, or navigate overlapping compliance milestones. This approach is clearly more efficient, and because the 2015 ozone NAAQS are far more stringent than the 2008 ozone NAAQS, this approach is also more protective.

b. Option 1 Complies with the CAA

In addition to being more protective and efficient, Option 1 is also the most legally sound interpretation of the anti-backsliding requirements of the CAA and the various court cases interpreting those requirements. Under § 172(e) of the CAA,

[i]f the Administrator relaxes a national primary ambient air quality standard . . .the Administrator shall, within 12 months after the relaxation, promulgate requirements applicable to all areas that have not attained that standard as of the date of such relaxation. Such requirements shall provide for controls which are not less stringent than the controls.

The language of this provision reveals that Congress envisioned that EPA would one day decrease the stringency of NAAQS making necessary these “anti-backsliding” provisions to avoid the erosion of protections that made the decrease in stringency possible. However, EPA has currently tightened NAAQS in the case of ozone and has done so to near-background levels.

Nonetheless, in legal challenges to EPA’s 2005 decision to replace the 1-hour ozone standard with an 8-hour ozone standard, the United States Court of Appeals for the D.C. Circuit (“D.C. Circuit”)

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<sup>12</sup> 81 Fed. Reg. at 81,286.

<sup>13</sup> 40 C.F.R. Part 81.

<sup>14</sup> 81 Fed. Reg. at 81,286.

held that EPA was required to apply the anti-backsliding provisions in § 172(e) even if the NAAQS was made more stringent.<sup>15</sup> Subsequent cases have upheld this interpretation.<sup>16</sup>

Notwithstanding the application of § 172(e) to situations where NAAQS are strengthened, the scope of anti-backsliding provisions required to remain in place is constrained in many ways. First, pursuant to § 172(e), anti-backsliding protections are only required for areas that remain in nonattainment with the revoked NAAQS. Attainment areas remain subject to applicable Prevention of Significant Deterioration (“PSD”) provisions and must continue to implement maintenance plans, but are not required to maintain anti-backsliding provisions.

Second, the anti-backsliding provisions that are required to remain in place after the revocation of a NAAQS are limited to “controls.” Courts have taken a rather expansive view of the types of measures that constitute controls,<sup>17</sup> but no court has interpreted §172(e) to require areas in nonattainment for the revoked standard to continue to be reclassified (“bumped-up”) pursuant to the Subpart 2 classification table. In fact, in reviewing EPA’s implementation rule for the transitions from the 1-hour to the 8-hour ozone NAAQS, the D.C. Circuit upheld EPA’s approach to freezing nonattainment areas to the classification level they held at the time of the revocation.<sup>18</sup>

Even where EPA’s anti-backsliding provisions require continued attainment demonstrations after the revocation date, those demonstrations are for the limited purpose of evaluating the need for contingency measures<sup>19</sup> - areas in nonattainment with the revoked NAAQS are not required to “bump up” classifications for failing attainment demonstrations and need not undertake any additional controls, demonstrations, or limitations required under the higher classification. The statute and the case law are clear on this fact – anti-backsliding provisions need only maintain the level of control required at the time of the relaxation (or revocation) of the standard.<sup>20</sup>

Bump-ups, and the new controls that are required when an area bumps up its classification, are not controls in existence at the time of revocation. These are measures that could have increased the stringency of the NAAQS had it not been revoked. When a NAAQS is revoked and replaced by a more stringent standard, however, that latter standard provides the mechanism for increasing the stringency of attainment requirements. Anti-backsliding measures are required to prevent retreat – not perpetuate future stringency. To conclude otherwise would be inconsistent with EPA’s prior practice (which was upheld in court), would undermine the sole purpose of §172(e), and would

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<sup>15</sup> *South Coast Air Quality Management District v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).

<sup>16</sup> *NRDC v. EPA*, 643 F.3d 311 (D.C. Cir. 2011); *NRDC v. EPA*, 799 F.3d 1119 (2015).

<sup>17</sup> *See South Coast Air Quality Management District v. EPA*, 472 F.3d 882 (D.C. Cir. 2006); *NRDC v. EPA*, 643 F.3d 311 (D.C. Cir. 2011); *NRDC v. EPA*, 799 F.3d 1119 (2015).

<sup>18</sup> *South Coast Air Quality Management District v. EPA*, 472 F.3d 882 (2006).

<sup>19</sup> Attainment demonstrations also play a role in fee programs for Severe and Extreme nonattainment areas.

<sup>20</sup> *See South Coast Air Quality Management District v. EPA*, 472 F.3d 882 (D.C. Cir. 2006); *NRDC v. EPA*, 643 F.3d 311 (D.C. Cir. 2011); *NRDC v. EPA*, 799 F.3d 1119 (2015).

create an unnecessarily complex scenario where the same area may be continually classified and reclassified relative to multiple standards.

As such, Option 2, which would require the simultaneous and continued implementation of both the 2008 and 2015 ozone NAAQS in all nonattainment areas until they achieve attainment, would create an unwieldy and confusing implementation process that would do little more than create uncertainty and drain administrative resources. Indeed, Option 2 would actually undermine the goals of the NAAQS program.

Devoting resources to implementing two standards rather than a single *more stringent* standard saps agency and state resources without providing any additional environmental protection. Given the limits on state and agency resources, this misallocation of resources can be viewed as an opportunity cost in terms of environmental protection. Further, the NAAQS program is intended, in part, to help the public better understand the air quality where they live and work. Perpetuating two different standards with differing nonattainment classifications and severity would make communicating the attainment status of an area very difficult and would impede – rather than improve - people’s understanding of air quality.

Option 2 would be unnecessarily burdensome, and so complex that it would stymie areas’ more efficient paths toward attainment and undermine environmental and air quality awareness. Nothing in §172(e) or the various case law compels EPA to adopt Option 2. In fact, Option 2’s requirement that nonattainment areas continue to bump-up classification and increase control requirements conflicts with the anti-backsliding provision’s requirement that EPA merely preserve the stringency of controls as they existed “as of the date of such relaxation.” EPA has a solid legal basis for rejecting Option 2 and the adverse administrative and environmental consequences it would create. API urges EPA to do so in its final implementation rule and requests that the final implementation rule use Option 1 because is consistent with the CAA, applicable court decisions, and prior Agency practice.

c. Option 1 Clarifications

While API supports Option 1 for transitioning from the 2008 to the 2015 ozone NAAQS, our support is conditioned on the following requested changes and clarifications.

1. *Attainment Demonstrations*

Proposed 40 C.F.R. § 51.1305, which EPA drafted to implement “Option 1,” states that areas that are designated nonattainment for both the 2008 and 2015 ozone NAAQS remain “subject to the obligation to adopt and implement the applicable requirements of [proposed] § 51.1300(p), for any ozone NAAQS for which it was designated nonattainment as of the effective date of its classification for the NAAQS, in accordance with its classification for that NAAQS as of the

effective date of its revocation . . .<sup>21</sup> Proposed § 51.1300(p) lists the specific anti-backsliding measures that could apply depending on the area's nonattainment classification, and it includes attainment demonstration requirements.<sup>22</sup> The attainment demonstration provisions that EPA is proposing to continue to require as anti-backsliding provisions include those found in CAA § 172(c)(4), CAA § 182(b)(1)(A), and CAA § 182(c)(2).<sup>23</sup>

If, as stated in the preamble to the Proposed Implementation Rule and proposed 40 C.F.R. § 51.1305(d), EPA intends to impose anti-backsliding provisions only to the extent that they maintain the current level of control at the time of revocation and do not require increases in controls or bump-ups, it is unclear why these compliance demonstrations will be required at all. Compliance demonstrations do not control emissions, nor are they necessary in this context to demonstrate the adequacy of controls because Option 1 will already require the continuation in nonattainment areas of all controls in place at the time the 2008 ozone NAAQS is revoked.

Compliance demonstrations may be necessary where a state seeks to alter an area's attainment status through use of a redesignation substitute, but the potential for redesignation of individual nonattainment areas does not require EPA to broadly require attainment demonstrations as part of its anti-backsliding regulations. EPA can, and should, simply allow states to conduct compliance demonstrations for the narrow purpose of obtaining redesignation substitutes, but should not require further attainment demonstrations for the 2008 Ozone NAAQS after revocation.

## 2. *Bump-Up Discretion*

The preamble to the Proposed Implementation Rule states that:

[a]fter the 2008 ozone NAAQS is revoked for an area, the EPA will no longer take action to reclassify or to redesignate that area for that NAAQS. Further, the designations for the 2008 NAAQS would be no longer be [sic] in effect in such areas, and the sole designations that would remain in effect would be those for the 2015 ozone NAAQS.<sup>24</sup>

While this language indicates that reclassifications will affirmatively stop at the time of revocation, the regulatory language EPA proposed for implementing Option 1 suggests that EPA is only preserving the Agency's discretion to halt reclassifications at the time of revocation. Under proposed § 51.1305(d)(2)(i) (emphasis added),

As of the effective date of revocation of a prior ozone NAAQS, the EPA *is no longer obligated* to determine pursuant to CAA section 182(b)(2) or section 179(c) whether an

<sup>21</sup> 81 Fed. Reg. at 81,311.

<sup>22</sup> 81 Fed. Reg. at 81,309.

<sup>23</sup> 81 Fed. Reg. at 81,309.

<sup>24</sup> 81 Fed. Reg. at 81,287.

area attained the respective NAAQS by that areas attainment date for that prior ozone NAAQS.

And, per proposed § 51.1305(d)(2)(ii) (emphasis added),

As of the effective date of the revocation of the prior ozone NAAQS, the EPA *is no longer obligated* to reclassify an area to a higher classification for the respective prior ozone NAAQS based upon a determination that the area failed to attain the prior ozone NAAQS by the area's attainment date for that prior ozone NAAQS.

Statements that EPA is no longer *compelled* to reclassify 2008 nonattainment areas after the revocation of the 2008 ozone NAAQS do not provide assurance that these reclassifications will no longer occur. The proposed language suggests that EPA is merely asserting the Agency's discretion to halt reclassifications, but it does not appear to require this result. Nor does this language indicate how EPA would exercise the discretion it seems to be preserving or what factors EPA would consider in making these determinations.

If the Proposed Implementation Rule is simply preserving for EPA the authority, but not the obligation, to cease reclassifying 2008 nonattainment areas after revocation of the 2008 ozone NAAQS, then it is undermining the full purpose of Option 1. Absent an automatic cessation of reclassifications after revocation, Option 1 fails to provide any of the efficiency or certainty that EPA identifies as reasons for offering Option 1. As such, API suspects that the equivocal language in proposed § 51.1305(d)(2)(i) and § 51.1305(d)(2)(ii) may be a function of drafting imprecision. If so, we request clarification of the proposed regulatory language. If not, API cannot support Option 1, and would request initiation of discussions regarding new transition options for the Proposed Implementation Rule.

### 3. *Reclassification Timing*

API's support for Option 1 largely stems from the potential relief it could provide in areas that may otherwise be required to be reclassified from "Moderate" to "serious" nonattainment with the 2008 ozone NAAQS. As discussed above, by limiting the types of controls that would be required under the anti-backsliding provisions to those that are in existence or required to be implemented at the time of revocation, Option 1 should avoid the requirement that "Moderate" nonattainment areas bump up to "serious" nonattainment areas, and undertake the more stringent provisions applied in serious nonattainment areas.

Under Option 1, the 2008 ozone NAAQS will be revoked one year after final designations are issued for the 2015 ozone NAAQS. Option 1 further states that designations for the 2015 ozone



NAAQS will be finalized by October 1, 2017.<sup>25</sup> As such, the Proposed Implementation Rule suggests that 2008 Ozone NAAQS is scheduled to be revoked by October 1, 2018. The “Moderate” nonattainment demonstration deadline for the 2008 ozone NAAQS, however, is July 20, 2018.<sup>26</sup> While this attainment demonstration pre-dates the date of the proposed revocation of the 2008 ozone NAAQS under Option 1 (October 1, 2018), the CAA does not require an area to bump up to a higher classification until six months after a nonattainment demonstration (January 20, 2019).<sup>27</sup> Accordingly, even if “Moderate” nonattainment areas are not able to demonstrate attainment by July 20, 2018, the October 1, 2018 revocation date would sever the requirement that nonattaining areas “bump up” to “Severe” nonattainment or implement the more rigorous requirements mandated under that classification.

Allowing areas in “Moderate” nonattainment with the 2008 ozone NAAQS to avoid an unnecessary bump-up to Severe nonattainment while simultaneously implementing the stricter 2015 ozone NAAQS is an important aspect of Option 1. In order for Option 1 to deliver this relief, API requests that EPA take the following steps to clarify the timing and sequence of key elements:

- EPA should finalize Option 1 and specify that revocation of the 2008 Ozone NAAQS will be three years after the 2015 Ozone NAAQS final rule was effective,<sup>28</sup> in lieu of one year after final designations, to establish a date certain by specifying a completed milestone.
- EPA should make explicit in its final implementation rule that areas in Moderate nonattainment with the 2008 Ozone NAAQS need not be reclassified to Severe nonattainment or adopt requirements applicable to Severe nonattainment areas even if a nonattainment demonstration is made prior to the revocation of the 2008 Ozone NAAQS. EPA should only require Moderate nonattainment areas to bump up to serious nonattainment if the reclassification deadline is reached prior to revocation of the 2008 Ozone NAAQS.
- Where necessary, EPA should use the full extent of its flexibility under CAA §181(a)(5) to provide states extensions to their attainment deadlines.

We believe that the clarifications and changes above will make Option 1 clearer, easier to implement, and more likely to deliver the efficiency and protectiveness that EPA sought in proposing this option.

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<sup>25</sup> Under CAA § 107(d)(1)(B), EPA must finalize designations within two years of a new or revised NAAQS. See also 81 Fed. Reg. at 81,283.

<sup>26</sup> 80 Fed. Reg. at 12,268 (Mar. 6, 2015); Calculated as six year after July 20, 2012 effective date for designations for the 2008 Ozone NAAQS.

<sup>27</sup> CAA § 181(b)(2).

<sup>28</sup> 80 Fed. Reg. 65,292.

## II. International Transport

In the preamble to the Proposed Implementation Rule, EPA notes that high ozone background levels have received significant attention in connection with the new ozone NAAQS and that the Agency addressed the issue both in its recent revisions to the Exceptional Events Rule (“EER”) and in a recent white paper and technical workshop.<sup>29</sup> As API has previously commented, background ozone will be a significant added challenge in attainment determinations under the new standard and will increase implementation burdens. Moreover, API views EPA’s approach to addressing background ozone as more restrictive than necessary and not statutorily required. API incorporates its prior comments regarding the EER to illustrate that point and urges EPA not to further restrict available background ozone relief provisions here.

We remain concerned whether existing provisions can work together to effectively provide meaningful relief regarding background ozone. EPA has pointed to the EER, the International Border Provisions of § 179B and the Rural Transport Area mechanism in § 182(h) as each addressing different components of background under different circumstances. This approach is problematic because, in some cases, it is the *combination* of background contributors that is responsible for NAAQS exceedances where they occur -- and because identifying and quantifying the role of each separate contributor is difficult, if not impossible. The preamble focuses on the contribution of international ozone transport to background and the potential for relief under the International Area provisions of § 179B.<sup>30</sup> However §179B, even without potentially narrowing its application to border states, only provides a partial solution for background-related exceedances. Where invoked, §179B does not relieve states from a non-attainment determination, but would simply provide greater flexibility in the timing of measures to meet the standard. This Implementation rule proposes to further limit states’ ability to address international transport under §179B, which only exacerbates this background ozone challenges.

EPA is now proposing to narrow its interpretation of §179B to even further reduce the relief afforded by these provisions to address international transport. EPA is therefore further disadvantaging states where attainment is impacted by international transport and other background sources over which those states have no control by limiting this mechanism to transported ozone from Mexico and Canada.

EPA should not narrow the interpretation of 179B only to permit consideration of transported ozone from Mexico and Canada. Generally, rather than narrowing the existing applicability of background ozone provisions, API encourages EPA to use its discretion to expand them. In the Western United States, for example, background ozone significantly contributes to continuous regional enhancements. The Weminuche Wilderness Area had over 100 days where the MDA8

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<sup>29</sup> 81 Fed. Reg. at 81,304-5.

<sup>30</sup> 81 Fed. Reg. at 81,303.

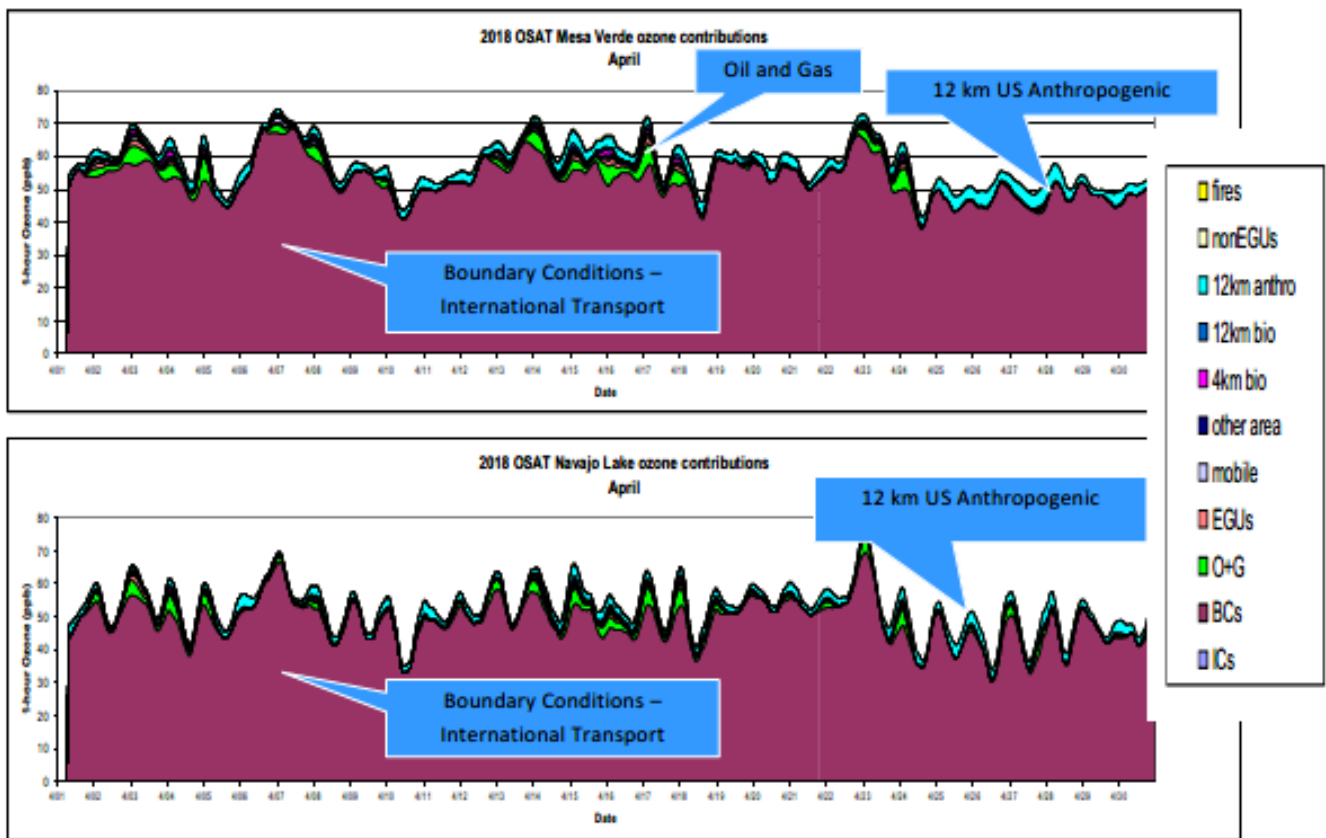
ozone is greater than 60 ppb,<sup>31</sup> which given the remoteness of the area and relative lack of anthropogenic sources, likely reflects background values and/or intrusion. Work by Lin *et al.* (2012) and Langford *et al.* (2014) provides evidence that background and internationally transported ozone/precursors will significantly and routinely contribute to multiple areas nonattainment status of many areas in the Western U.S. at the levels required under the 2015 Ozone NAAQS. Langford *et al.* (2014) noted in a recent study of Clark County Nevada that exceedances of the NAAQS (for a 65 ppb standard) generated by high background concentrations and stratospheric intrusions would have occurred on 60% of days observed. Langford *et al.* (2014) also showed that the contribution from (“stratosphere-to-troposphere”) STT and international transport is quite high stating that:

The back trajectories show stratospheric contributions of 15-30 ppbv to the O<sub>3</sub> at 1000 m asl for extended periods in late May and immediately before or on each of the three exceedance days. The FLEXPART Asian CO tracer is generally much smaller, and exceeded 10 ppbv only on June 17-18 when it was 12 ppbv (cf. Fig. 14b)... The largest single day AM3 STT contribution was 45 ppbv on May 23 (and 33 ppbv on May 24), one day before the highest observed values and two days before the second Clark County exceedance event on May 25.

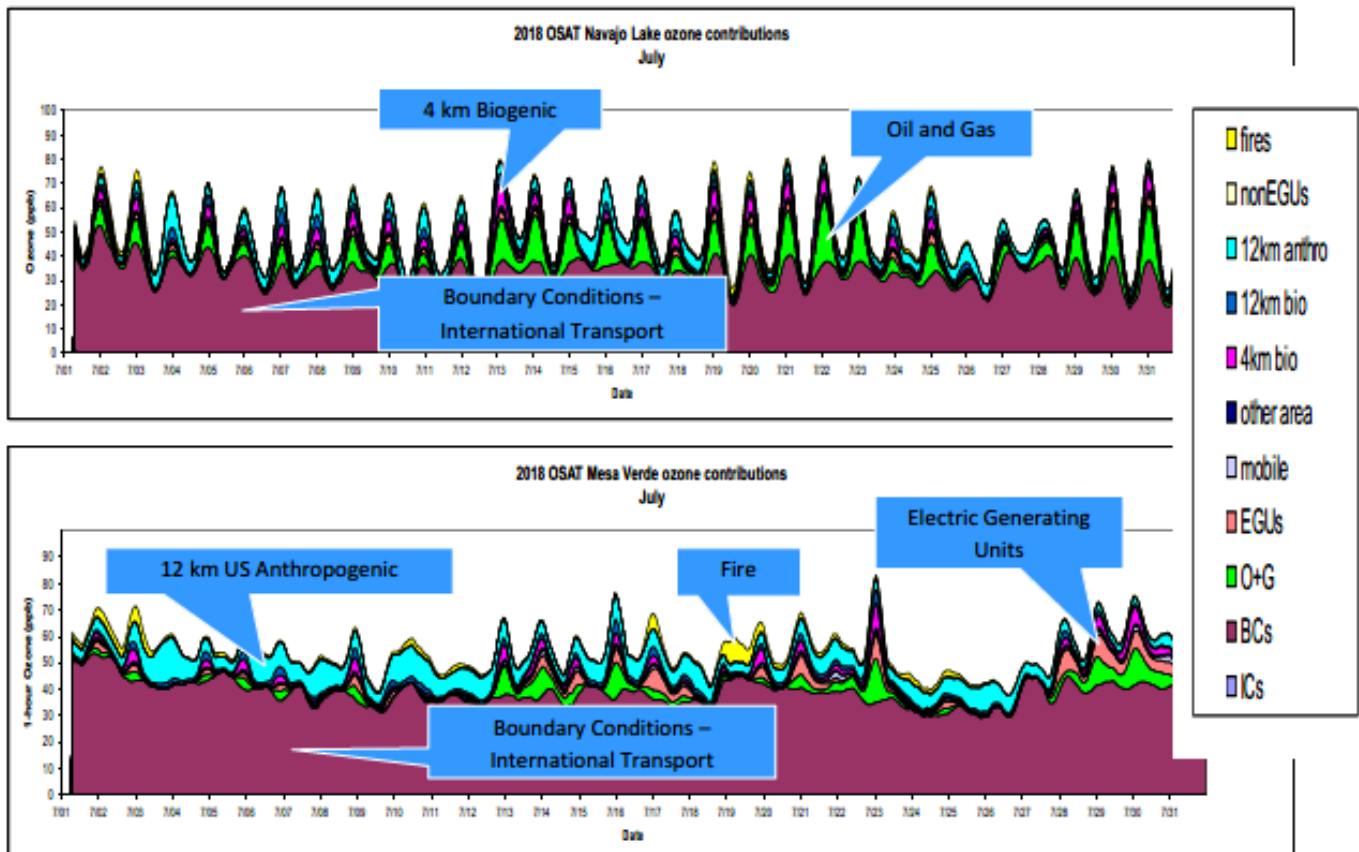
To illustrate another example, Figures 1 and 2, taken from the Four Corners Air Quality Task Force Modeling Analysis,<sup>32</sup> show modeled contributions from various sources to ozone concentrations at two locations, Navajo Lake and Mesa Verde, and were prepared using ozone source apportionment technology (“OSAT”). In OSAT, precursor emissions are stratified by source category and by source region; tracers are used to tag emissions from each category-region pair and track transport, chemical evolution, and removal. NO<sub>x</sub> and VOC tracers were run to apportion total ozone throughout the grid to NO<sub>x</sub> and VOC precursor source categories and regions. Figures 1 and 2 indicate that during the spring in the intermountain West, boundary conditions dominate predicted (and presumably measured) ozone concentrations with very little enhancement from U.S. anthropogenic sources. Also, during the summer, boundary conditions still dominate predicted concentrations. The boundary conditions for these simulations represent monthly average concentrations at the edge of the 12 km modeling domain shown in Figure 3, which is essentially international transport. Figures 1 and 2 show that no one source contributes solely to each ozone event. There are cases where there are spikes with higher contributions from a particular source than seen historically such as the spikes from fires and biogenic sources shown in Figure 2; however, they are still dominated by boundary conditions and have contributions from other sources as well.

<sup>31</sup> Regulatory Impact Analysis of the Proposed Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone; EPA-452/P-14-006 (U.S. EPA 2014).

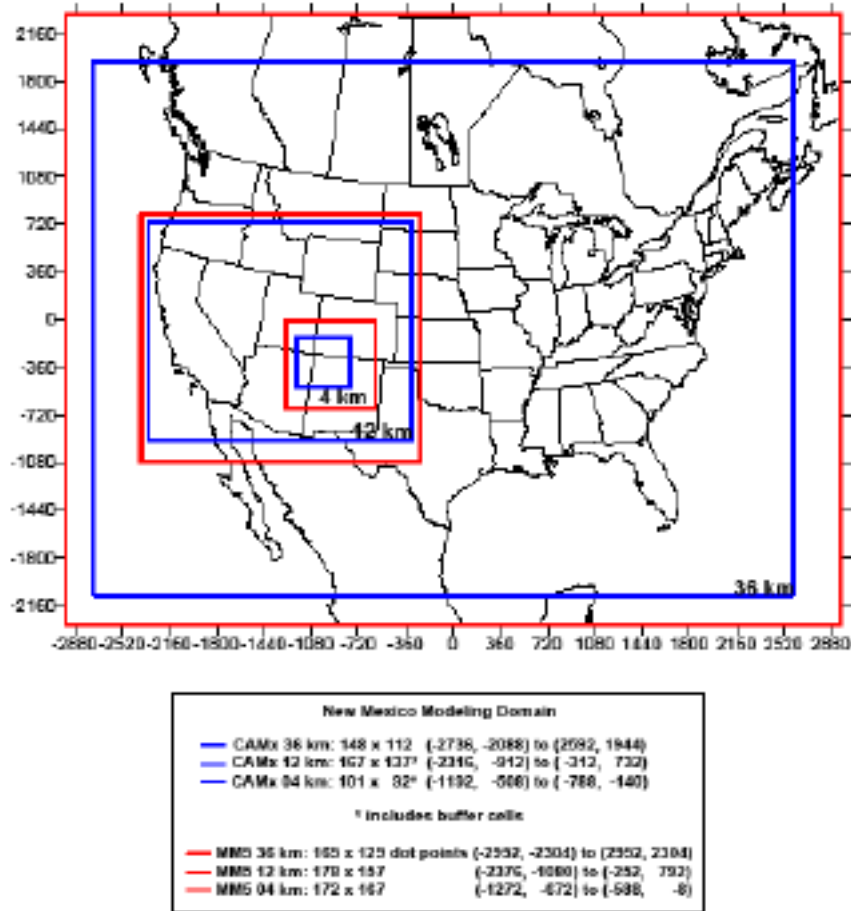
<sup>32</sup> Stoeckenius, TE; Emery, CA; Shah, TP; Johnson, JR; Parker, LK; Pollack, AK. 2009. "Air Quality Modeling Study For the Four Corners Region and Addendum." ENVIRON International Corp., Revised Report, August. Accessed at <http://www.nmenv.state.nm.us/aqb/4C/Modeling.html>. (hereafter “Stoeckenius *et al.*, (2009)”); Stoeckenius, TE; Emery, CA; Shah, TP; Johnson, JR; Parker, LK; Pollack, AK. 2010. "Air Quality Modeling Study For the Four Corners Region and Addendum." ENVIRON International Corp., Revised Report, January. Accessed at <http://www.nmenv.state.nm.us/aqb/4C/Modeling.html>. (hereafter “Stoeckenius *et al.*, (2010)”)



**Figure 1 Source Apportionment Results for 8-Hour Average Ozone at Mesa Verde and Navajo Lake in April.** Figure Source: Stoekenius *et al.* (2010).



**Figure 2 Source Apportionment Results for 8-Hour Average Ozone at Mesa Verde and Navajo Lake in July.** Figure Source: Stoekenius *et al.* (2010).



**Figure 3 Four Corners Interagency Air Quality Task Force Modeling Domain.** Figure Source: Stoekenius *et al.* (2009).

EPA has itself conceded that emissions resulting from anthropogenic sources or natural events outside the jurisdiction of states are a “source of particular complexity.”<sup>33</sup> EPA has further concluded that “it is not reasonable to expect a downwind air agency . . . to have required or persuaded the upwind foreign country . . . to have implemented controls on sources sufficient to limit event-related air concentrations in the downwind state . . .”<sup>34</sup>

API agrees. It is the federal government, through the use of diplomatic relations, treaty-making authority, and the development of trade policies, that has the capability and obligation to influence the reduction of foreign sources impacting domestic air quality. States and tribes have little or no ability to control foreign contributors to local nonattainment. As such, states, tribes, and regulated entities cannot be expected to incur costs to increase controls beyond what is necessary to address local contributors to nonattainment so that foreign sources of nonattainment

<sup>33</sup> 80 Fed. Reg. at 72,857.

<sup>34</sup> 80 Fed. Reg. at 72,857.

are allowed to persist unchecked. This is particularly true where domestic industries must be “over controlled” to offset the unchecked contribution of foreign sources.

Congress recognized that the NAAQS program was not intended to impose on states and tribes a mandate to solve environmental conditions caused in whole or in part by insufficient international environmental controls. That is precisely why Congress crafted CAA § 179B as a mechanism to relieve states and tribes of that untenable burden. EPA should not now further minimize that relief through an impermissibly narrow construction of CAA § 179B.

a. The Relief Provided by CAA § 179B Should Not be Limited to Border States

The Proposed Implementation Rule suggests that EPA intends to limit the Agency’s consideration of international transport under CAA § 179B to those areas bordering Mexico and Canada. Limiting EPA’s consideration of international transport in this way would violate Congress’s clear directive in drafting CAA § 179B, arbitrarily reverse EPA’s existing interpretation of CAA § 179B, and conflict with the data before the Agency. As such, API requests that EPA not adopt an interpretation of CAA § 179B that creates a presumption against considering impacts from international transport in non-border states.

As a threshold matter, the CAA requires no such limitation. In fact, Congress’s intent can be inferred by the language of CAA § 179B, which requires consideration of international transport regardless of the area’s proximity to an international border. Congress likely understood that international contributions to local attainment status would not solely be observed in border states, and the progressively stricter NAAQS and ensuing advancements in detection and modeling have only made the consideration of international contributions more important. Had Congress intended to limit CAA § 179B to border states, it could easily have crafted the provision to say so. The absence of this limitation confirms Congress’s intent that CAA § 179B apply regardless of proximity to an international border.

Indeed, this interpretation of Congress’s intent is exactly the same interpretation EPA currently utilizes. In the 2008 ozone SIP Requirements Rule, the Agency stated that the CAA § 179B could include consideration of any emissions from North American or intercontinental sources,<sup>35</sup> and expressly stated that demonstrations under CAA § 179B were not limited to nonattainment areas adjoining international borders.<sup>36</sup> EPA is proposing to now adopt a more restrictive interpretation of CAA § 179B based solely on information that the influence of international sources on U.S. ozone levels will be largest in border states and the fact that CAA § 179B considerations have thus far only been used in nonattainment areas adjoining Mexico.<sup>37</sup> These factors, however, do not justify a reversal of EPA’s existing interpretation or an impermissible constraint on the application of CAA § 179B.

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<sup>35</sup> 80 Fed. Reg. at 12,293.

<sup>36</sup> 80 Fed. Reg. at 12,294.

<sup>37</sup> 81 Fed. Reg. at 81,303.

Noting that the influence of international sources on U.S. ozone levels will be largest in border states is neither enlightening nor relevant. All that matters is that, but for the international contribution, the area would be in attainment. Proximity is certainly a factor that influences the level in which international sources impact local nonattainment, but it is not the only factor influencing international contribution. Moreover, CAA § 179B relief is not limited to areas where international influences are the “largest” – it is limited to areas that would be in attainment “but for” contribution from international sources.<sup>38</sup> Whether contribution from international sources is “large” or “small” relative to non-border states is immaterial to the CAA § 179B analysis and a capricious basis for attempting to constrain this congressionally mandated analysis.

EPA’s consideration of the historic use of CAA § 179B is similarly immaterial and unpersuasive. While it may be true that EPA has only provided CAA § 179B relief in nonattainment areas bordering Mexico, that prior use related to standards that were far less strict than those imposed in the 2015 Ozone NAAQS.<sup>39</sup> As EPA’s Ozone NAAQS have become increasingly more stringent, the relative contribution from international sources necessarily increases. Many more areas may be in nonattainment with the significantly stricter 2015 Ozone NAAQS “but for” the contribution of international sources.

EPA knows that international influences to U.S. ozone levels do not all originate in bordering nations and that foreign emission sources impact air quality in non-border areas. EPA produced a whitepaper on background ozone issues, and through workshops attended by representatives of state, local, and tribal air agencies, as well as other stakeholders, was told that it is underestimating the magnitude of impacts from long-range transport of ozone/precursors.<sup>40</sup> EPA has studies demonstrating considerable influence from transport of ozone precursors emitted from sources throughout Asia.<sup>41</sup> And EPA’s own Taskforce on Hemispheric Transport of Air Pollution demonstrated that international ozone precursor emissions can lead to ozone formation within the atmospheric boundary layer over far-upwind areas.<sup>42</sup> When meteorological conditions are favorable, this ozone can be transported within the mid- and upper-troposphere where ozone

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<sup>38</sup> CAA § 179B(b)

<sup>39</sup> 59 Fed. Reg. 2532 (Jan. 18, 1994); 68 Fed. Reg. 39,457 (July 2, 2003); 69 Fed. Reg. 32,450 (June 10, 2004); 66 Fed. Reg. 53,106 (Oct. 19, 2001); 77 Fed. Reg. 58,962 (Sept. 25, 2012).

<sup>40</sup> EPA Docket Id. No. EPA-HQ-OAR-2016-0097.

<sup>41</sup> Lin, M; Fiore, AM; Horowitz, LW; Cooper, OR; Naik, V; Holloway, J; Johnson, BJ; Middlebrook, AM; Oltmans, SJ; Pollack, IB; Ryerson, TB; Warner, JX; Wiedenmyer, C; Wilson, J; Wyman, B. 2012. "Transport of Asian ozone pollution into surface air over the western United States in spring." *Journal of Geophysical Research: Atmospheres* 117(21):D00V07.

<sup>42</sup> [http://www.htap.org/publications/2010\\_report/2010\\_Final\\_Report/HTAP%202010%20Part%20A%20110407.pdf](http://www.htap.org/publications/2010_report/2010_Final_Report/HTAP%202010%20Part%20A%20110407.pdf) (accessed 12/29/16).

lifetimes can exceed one week.<sup>43</sup> Eventually, these ozone plumes contribute to ozone nonattainment in the U.S.<sup>44</sup>

Because EPA knows that U.S. ozone levels are influenced by sources in areas other than Canada and Mexico and that these influences are not limited to areas bordering Canada and Mexico, it is illogical for EPA to propose that CAA § 179B relief should only be available in areas adjoining international borders. Given the inconsistency with the CAA, EPA's prior interpretations, and the data before the Agency, API requests that EPA refrain from finalizing a presumption against using CAA § 179B in nonattainment areas inland from international borders.

b. EPA Should Not Require Adoption of Reasonably Available Control Measures in Marginal Nonattainment Areas as a Prerequisite for Providing Relief under CAA § 179B

The Proposed Implementation Rule is suggesting that all demonstrations under CAA § 179B (including Marginal nonattainment areas) include a showing that the air agency adopted all Reasonably Available Control Measures ("RACM"). API requests that EPA refrain from finalizing this aspect of the proposal because, here again, the proposed requirement conflicts with the CAA and EPA's existing interpretation of the Act.

CAA § 179B states that determinations of whether international contributions cause nonattainment be based on an evaluation of whether presently required controls would have been sufficient to achieve attainment. The controls required to be evaluated, therefore, are those required to be in place based on the area's specific nonattainment classification. States are not required to adopt RACM for Marginal nonattainment areas. As such, the proposed language would require as a prerequisite to obtaining relief under CAA § 179B that Marginal nonattainment areas adopt new control measures that the CAA only requires for higher nonattainment classifications. There simply is no way EPA can read CAA § 179B's requirement that EPA evaluate compliance with *existing* controls as allowing EPA to mandate the imposition and evaluation of *additional* controls.

In fact, EPA's proposed interpretation renders meaningless CAA § 179B's analytical framework evaluating whether an area's adoption of all required controls would have achieved attainment "but for" international influences. An area's existing control requirements provide the baseline for measuring whether the sufficiency of the controls or the international contributions caused the nonattainment. This proposal eliminates the baseline and changes the entire analysis. Under EPA's proposed interpretation, the Agency would no longer conduct an analysis of whether existing controls would be enough to achieve attainment – EPA would simply evaluate whether the area adopted RACM.

<sup>43</sup> [http://www.htap.org/publications/2010\\_report/2010\\_Final\\_Report/HTAP%202010%20Part%20A%20110407.pdf](http://www.htap.org/publications/2010_report/2010_Final_Report/HTAP%202010%20Part%20A%20110407.pdf) (accessed 12/29/16).

<sup>44</sup> [http://www.htap.org/publications/2010\\_report/2010\\_Final\\_Report/HTAP%202010%20Part%20A%20110407.pdf](http://www.htap.org/publications/2010_report/2010_Final_Report/HTAP%202010%20Part%20A%20110407.pdf) (accessed 12/29/16).



The Proposed Implementation Rule suggests that this interpretation is permissible under the CAA § 179B requirement that demonstrations be made “to the satisfaction of the Administrator.”<sup>45</sup> The phrase “to the satisfaction of the Administrator,” however, provides the evidentiary standard for the “but for” analysis that EPA is required to utilize – it does not supplant or replace the “but for” analysis. While EPA is entitled to some discretion in interpreting the statutes it implements, no principle of statutory construction would allow EPA to interpret a phrase in a way that renders another statutory provision meaningless.

The CAA does not allow the interpretation EPA proposes. If finalized, the RACM mandate for Marginal nonattainment areas would be viewed as inconsistent with the statute and an abuse of EPA’s discretion. API therefore requests that EPA refrain from finalizing this aspect of the Proposed Implementation Rule.

### **III. Interprecursor Trading**

API is supportive of EPA provisions for Interprecursor Trading (IPT) for Ozone Offset Credits as proposed in the draft rule as it is based in sound science and consistent with past IPT provisions (2008 PM<sub>2.5</sub> NAAQS Implementation Rule). API supports the IPT provisions as it provides critical flexibility for states and businesses in meeting the offset requirements required under the NNSR program without a negative impact to ozone concentrations. The IPT provisions critically recognize that each non-attainment area has unique conditions which lead to the formation of ozone. As such, reductions in one of the two precursors (NO<sub>x</sub> or VOCs) in a specific region may have little to no impact on ozone concentrations while reductions in the other precursor will lead to reduced ozone concentrations. API encourages the EPA to promulgate the IPT provisions and allow for the use of the case-by-case IPT ratio option, the area-specific default IPT ratio option, or a combination of the two in order to allow states the greatest flexibility in determining which approach is right for their unique local needs and conditions.

### **IV. Other Issues**

There are two ozone monitor issues that can have an impact on implementation. Below we are including further information to support future discussion.

#### **a. Use of Updated Ozone Monitors**

The Proposed Implementation Rule states that EPA is not proposing any updates to the existing ozone ambient monitoring requirements in 40 C.F.R. Part 58. API suggests EPA consider encouraging state, local and tribal monitoring network operations to explore updating the O<sub>3</sub> monitors. API would appreciate the opportunity to discuss the record of positive interference bias in deployed compliance network NAAQS Federal Reference (FRM) and Equivalent Method (FEM) monitors documented in ASTM O<sub>3</sub> and nitrogen dioxide (NO<sub>2</sub>) methods.<sup>46</sup>

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<sup>45</sup> 81 Fed. Reg. at 81,304; CAA § 179B(a)(2); (b).

<sup>46</sup> 80 Fed. Reg. 65,426 (Nov. 26, 2015).

b. Credit for Altitude Effects

API suggests that, in implementing the 2015 Ozone NAAQS, EPA could consider providing a mechanism whereby nonattainment areas can avoid the imposition of unreasonable planning requirements where nonattainment status or classification may be impacted by elevation. The 2015 Ozone NAAQS use of standardized volume/volume concentrations irrespective of elevation effectively results in a more stringent standard for those parts of the country with an elevation higher than sea level. NAAQS are expressed as either a volume/volume (ppm) concentration or a mass/volume concentration ( $\mu\text{g}/\text{m}^3$ ). For a concentration expressed as ppm, the level of a NAAQS does not vary with elevation; a concentration is equivalent at sea level or at an elevation of 5,000 feet. In the case of a concentration expressed as  $\mu\text{g}/\text{m}^3$ , the concentration changes with altitude because the volume of air containing a given mass of pollutant expands resulting in lower  $\mu\text{g}/\text{m}^3$  concentrations at altitude. The consequences can be significant, for example, with the temperature fixed at 25°C, 0.075 ppm ozone is equivalent to 147.2  $\mu\text{g}/\text{m}^3$  at sea level or 123.6  $\mu\text{g}/\text{m}^3$  at an elevation of 5000 feet, a 16% difference.<sup>47</sup> The mass exposure of ozone that a person is exposed to in this example is decreased by 16% simply by changing the elevation.

The challenge in attaining the current Ozone NAAQS in some elevated areas of the US suggests the significant effort of evaluating and developing an elevation mechanism may now be justified. This is especially true when, in some cases, much of the ozone present has been transported into these elevated areas from elsewhere. API would welcome discussing this further with EPA.

## Conclusion

Given the significantly increased stringency of the 2015 Ozone NAAQS, API encourages EPA to use the full scope of its authority under the CAA to ease transition from the 2008 standard. The final Implementation Rule should minimize overlapping attainment requirements for the states and regulated entities. API supports providing compliance flexibility reflecting the inherent difficulty in implementing and achieving standards that can be exceeded through the occurrence of natural phenomena and the influences of foreign emissions sources for which states and tribes have no authority to control. As written, the Proposed Implementation Rule would extend modest additional compliance flexibility, but does not go far enough. API believes that the changes we have herein recommended would substantially ease the unique implementation burdens associated with the 2015 Ozone NAAQS, while fully protecting human health.

API appreciates the opportunity to provide these comments. We look forward to working with the Agency in continuing to seek way to address NAAQS attainment. If you have any questions, please contact me at (202) 682-8568 or [steichent@api.org](mailto:steichent@api.org).

Sincerely,

/s/

Ted Steichen

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<sup>47</sup> Stoeckenius *et al.*, (2009).