



February 13, 2017

U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
1200 Pennsylvania Avenue,
N.W. Washington, DC 20760

Docket ID No. EPA-HQ-OAR-2016-0202

The Western States Air Resources (WESTAR) Council, an association of 15 western state air quality agencies, is pleased to comment on the proposal: *Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements*. The attached comments expand upon WESTAR comments presented at the January 12, 2017 public hearing on this proposal. California will be submitting separate comments on the proposal. To the extent that any portion of these comments conflict with Wyoming's litigation position in *Wisconsin v. EPA*, D.C. Circuit Docket No. 16-1406, or with any portion of any of Wyoming's prior comments on Interstate Transport, Wyoming does not join in those portions of these comments.

Please contact WESTAR Executive Director Mary Uhl, if you have any questions or need additional information about our comments.

Sincerely,

A handwritten signature in black ink that reads "Terry O'Clair". The signature is written in a cursive, flowing style.

Terry O'Clair
President, WESTAR Council

Attachment

International Transport and Background Ozone

EPA proposes to limit international transport demonstration eligibility to those areas directly adjoining a foreign border.¹ WESTAR believes this requirement is unreasonable. There are many areas throughout the entire United States that are overwhelmingly affected by international transport, whether these areas are affected by nearby border sources or from foreign sources from many thousands of miles away. Accordingly WESTAR does not support any limitations on which states or jurisdictions have the opportunity to make CAA § 179B demonstrations (i.e., the opportunity for § 179B demonstrations should not be limited only to nonattainment areas adjoining international borders).

EPA's modeling identified² six counties in four western states, none of which adjoin international borders, with contributions to the 2017 DV from manmade state sources of less than 12 percent and contributions from manmade U.S. sources less than 25 percent, including one with contributions from manmade U.S. sources of 10 percent. Manmade state sources only contribute two percent to a monitor in White Pine County, Nevada while manmade U.S. sources contribute 15 percent. Monitors in all these counties have 2012-2014 ozone design values (DV) greater than 70 ppb.

Moreover, EPA's modeling³ for the 2008 Ozone NAAQS transport assessment demonstrates that in 2017, there are 36 monitor locations in 28 counties in 8 states that will be affected by international⁴ contributions of greater than 75 percent of their design values. Further, there are 55 monitors in 38 counties that are modeled to be affected by international contributions greater than 70 percent of the monitors' design values. WESTAR recognizes that only a few of the monitors are modeled to have 2017 DV greater than 70 ppb. However, WESTAR is concerned some of these monitors could record DV's greater than the NAAQS in the future due to increasing contributions from international sources or a lower future NAAQS, among other influences.

These data show the magnitude of international contributions across broad reaches of the western U.S. and as Dr. Owen Cooper of the Cooperative Institute for Research in Environmental Sciences at the NOAA Earth System Research Lab noted during the EPA's ozone background workshop⁵, despite reductions in international emissions and due to long-lived atmospheric processes, the trend of increasing global ozone entering the U.S. will persist for the foreseeable future.

¹ 2015 Ozone Implementation NPRM, *supra* note 18 at 81303.

² U.S. EPA, *Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone White Paper for Discussion*, Table 2c.

³ U.S. EPA, 2017 Ozone Contributions under Docket EPA-HQ-OAR-2015-0500-0007, available from: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0500-0007>

⁴ Canada & Mexico plus Initial & Boundary, which is commonly recognized as international

⁵ U.S. EPA Workshop to Advance the Collective Understanding of Technical and Policy Issues Associated with Background Ozone, February 24-25, 2016, Phoenix, AZ.

For these reasons, WESTAR believes all jurisdictions, without limitation, should have the opportunity to apply for regulatory relief through CAA § 179B demonstrations that the area could attain the NAAQS “but for” emissions emanating from outside the U.S. and each demonstration should be considered case by case on its own merits.

WESTAR has additional concerns with the § 179B demonstration process and requests that EPA identify a reasonable hard deadline for EPA action on § 179B demonstrations. Such a deadline provides additional certainty to agencies for nonattainment area planning. WESTAR also requests a consistent evaluation process for § 179B demonstrations across EPA Regional Offices.

EPA invites comment as to whether the EPA should develop technical guidance for the “but for” analysis in a CAA § 179B demonstration. Although WESTAR has previously⁶ requested § 179B guidance, at this time WESTAR does not believe such EPA guidance is necessary. Instead, WESTAR suggests EPA provide a general outlined framework that includes the essential steps to make a successful § 179B demonstration.

WESTAR also requests that EPA refine its interstate ozone transport modeling for the 2015 ozone NAAQS to characterize the U.S. background ozone (USB) and its components at each nonattainment and maintenance monitor. Given the broad extent of significant international contributions and the issues of background ozone, WESTAR strongly advocates that the EPA better characterize USB ozone through state-of-the-science source appointment modeling. One objective of this modeling is to provide robust data sets adequate to support § 179B demonstrations and additionally could support regional haze planning activities.

WESTAR provided⁷ responses to questions regarding USB posed by EPA and made numerous recommendations for further efforts in the western U.S. to characterize USB. International contributions are a significant component of USB, so many of WESTAR’s recommendations are germane to this characterization and WESTAR suggests EPA incorporate these recommendations in the characterization, as appropriate. All agencies, including EPA, will benefit from a consistent evaluation of the components of USB, including not only the contributions from sources in Canada and Mexico, but also contributions from more distant international sources.

WESTAR is engaged with EPA to better characterize USB ozone and looks forward to further opportunities to collaborate with EPA such as the biennial air quality modeling workshops co-sponsored by WESTAR-WRAP and EPA (2013 Western Air Quality Modeling Workshop – Technical Methods and Applications, 2015 Modeling Air Quality from Global to Local Scale, and upcoming 2107 Western Modeling Workshop) and the upcoming Background Ozone Scientific Assessment Workshop co-sponsored by WESTAR-WRAP and API.

EPA proposes to codify a requirement in 40 CFR § 51.1309 that all areas, including marginal areas, must implement Reasonably Available Control Measures (RACM) in order to establish

⁶ May 11, 2016 letter from WESTAR to Docket EPA-HQ-OAR-2016-0097

⁷ Id.

that an area would attain the NAAQS but for emissions emanating from outside the United States.⁸ This proposed requirement contradicts the plain meaning and purpose of CAA § 179B, and is also infeasible for marginal areas given SIP submission and attainment date timeframes. For these reasons and those discussed below, WESTAR does not support codification of this new requirement in 40 CFR § 51.1309, as proposed by EPA.

The proposed requirement for RACM in all areas making an international transport demonstration contradicts the plain meaning and purpose of CAA § 179B. That statute mandates that if an area meets two specific gatekeeping provisions, then EPA must approve the area's SIP. First, the area must meet all the requirements applicable to it under the Act, except meeting attainment by the attainment date. Second, the area must establish to the satisfaction of the EPA that the SIP would be adequate to attain by the required date but for emissions emanating from outside the United States. CAA § 179B additionally mandates that "any State that establishes to the satisfaction of the administrator that...such State would have attained the [ozone NAAQS] by the applicable attainment date, but for emissions emanating from outside the United States, shall not be subject to the provisions for section 181(a)(2) or (5) or section 185." The cross-referenced provisions include the involuntary reclassification provisions for failure to attain, extension of attainment dates, and penalty fee provisions.⁹

The statute limits the EPA's discretion to approving an international demonstration based on whether an area meets the two gatekeepers and the plain reading of CAA § 179B(a) and (b) indicates that it is the technical demonstration itself that must be done to the satisfaction of the Administrator. That is, an area must meet applicable SIP requirements according to its classification and technically establish that the area would attain but for international emissions. If an area meets these gatekeepers, then an area may avoid mandatory reclassifications and ensuing additional controls. Thus, under the statute, marginal areas with approved international transport demonstrations would avoid future moderate level control requirements, such as RACM.

WESTAR notes that in areas where international contributions are overwhelming, it is improbable that the imposition of control measures will be meaningful in mitigating public health impacts in these areas. The intended purpose of this statute was to provide relief for such areas. During U.S. Senate debates on the inclusion of § 179B, Senator Gramm of Texas stated, "It is unfair to hold El Paso accountable for pollution that is generated in a foreign country that they have no control over..."¹⁰ The statute was enacted in furtherance of fairness for nonattainment areas like El Paso that have little control over their nonattainment status because of foreign emissions transport. However, in certain urban areas with high locally-sourced emissions, WESTAR recognizes that it may be practical and appropriate for the EPA to apply some kind of contribution threshold. If an area exceeds such contribution threshold an area should perhaps implement some type of emissions control for its own locally-sourced emissions.

⁸ 2015 Ozone Implementation NPRM, *supra* note 18 at 81304, 81313.

⁹ The statute erroneously references § 181(a)(2) (severe area attainment dates) instead of 181(b)(2) (mandatory reclassification provision). See *SIPs General Preamble Implementation of 1990 CAA Amendments*, 57 Fed. Reg. 13498, 13569 (Apr. 16, 1992).

¹⁰ Committee on Environment and Public Work, Legislative History of the Clean Air Act of 1990, at 5741-42 (statement of Sen. Gramm, Senate debate, Mar. 9, 1990). Congressional Information Service, 1993.

Additionally, the proposed “but for” demonstration control requirement unduly constrains an agency’s ability to comply because for many areas, it would not be feasible to implement controls within the proposed required timeframe. The proposed provision would require areas to have fully implemented RACM, which includes, at a minimum, RACT, in order to prove a “but for” demonstration. In contrast, under the proposed general RACM/RACT requirements, a moderate area adopts RACM/RACT with a SIP and has an additional three years to implement RACT and whatever time necessary to implement RACM as will lead to attainment by the required date. Under the EPA’s international transport demonstration proposal, however, a moderate area that adopts RACM/RACT with a SIP submission must also implement RACM/RACT before it even submits an international transport demonstration. This timeline might be reasonable for a moderate area since it would have six years to attain from designations, but this timeline is not reasonable for a marginal area submitting for approval under CAA § 179B. A marginal area cannot evaluate sources and possible controls, adopt controls, and implement them by the time the area submits an international transport demonstration to the EPA with enough time for EPA to act on the demonstration. The amount of effort involved would be unreasonable to fit within the proposed required timeframe.

Intrastate RACM/RACT:

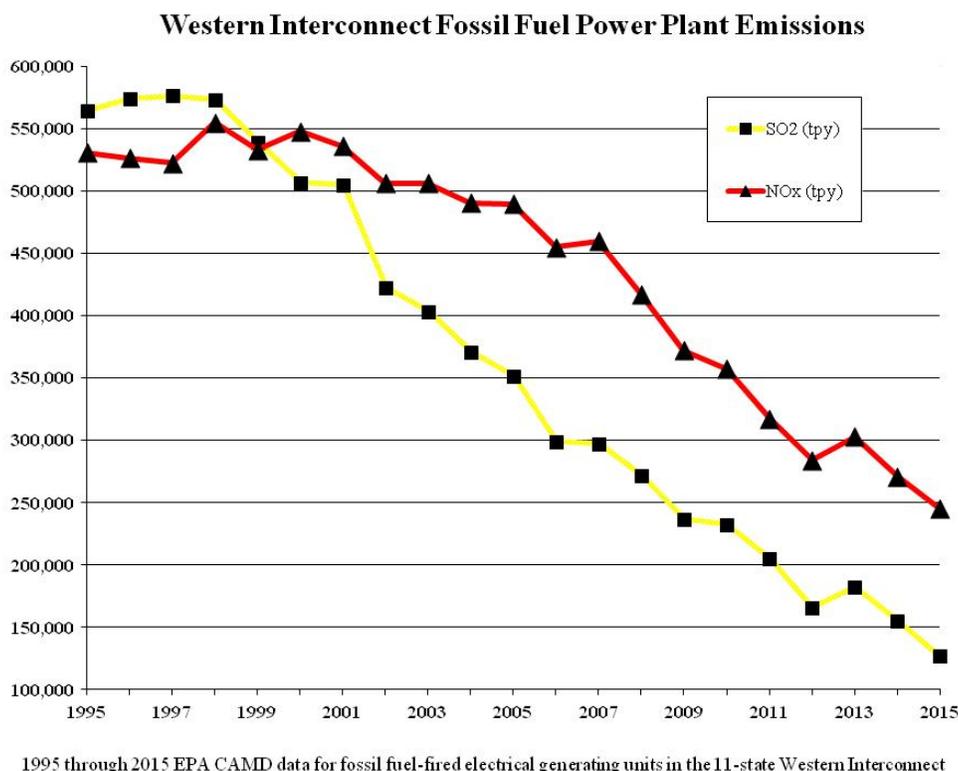
EPA proposes to interpret CAA section 172(c)(6) to require intrastate sources (outside the nonattainment area) to be subject to “other measures” of emission control (i.e. RACM) as necessary or appropriate to provide for attainment of the standard. This interpretation is not consistent with the longstanding implementation of nonattainment plan general provisions under CAA §172(c), which unambiguously applies to the nonattainment area (NAA) only, or at least could be considered an unreasonable interpretation of CAA §172(c). Further, if §172(c) should apply to all sources within a state that impact the NAA, then this seems to contradict the purpose of establishing a nonattainment area boundary. Under the ozone designations process, as described in EPA guidance,¹¹ states are required to carefully evaluate all source emissions potentially impacting the area for determining the appropriate boundary recommendation for the NAA. Consequently, the procedure for determining which sources impact the NAA and thus subject to RACM/RACT is already enshrined in the boundary recommendations process, which requires the advice and consent of EPA.

Beyond the policy questions of requiring RACM/RACT on intrastate sources outside the NAA, there are technical challenges associated with determining which sources contribute to ozone formation in the NAA. Photochemical Grid Modeling (PGM) in conjunction with Ozone Source Apportionment Technology (OSAT) allows for tracking of sources or source categories to determine which sources contribute to ozone formation and at what levels. Unfortunately there are practical limits when balancing the benefits of knowing each and every source contribution against the cost and time necessary to conduct the OSAT modeling. Therefore, the practical result of requiring RACM/RACT on intrastate sources impacting the NAA is the establishment of a new modeling paradigm where all sources within a jurisdiction must be tracked in OSAT thereby significantly raising the expense of the PGM modeling demonstration.

¹¹ See EPA Memorandum from Janet McCabe “Area Designations for the 2015 Ozone National Ambient Air Quality Standards” dated February 25, 2015

Perhaps a better approach could involve EPA providing technical guidance that describes tools and methods for evaluating and addressing contributions to nonattainment areas from intrastate emission sources. This guidance should take into account the interplay between intrastate, interstate, and international contributions, as well as contributions from natural sources, to western nonattainment areas. In numerous cases, EPA modeling¹² shows western state monitors that violate the 2015 ozone NAAQS would achieve the standard based on emissions from within the state, but for contributions from outside the state itself or natural contributions from sources such as natural fire and/or biogenic emissions.

In addition, WESTAR observes that the west is different than the east, particularly because western sources are generally well controlled and often sparsely located, where the distance between intrastate sources and the NAA can be very large. Accordingly, the emission reduction benefits associated with the implementation of intrastate RACM would be attenuated by distance thus rendering any potential controls less cost effective. The below chart shows the substantial NOx and SO2 reductions for one sector (fossil fueled electric generating units-see figure below), which has occurred over the past 20 years in the 11 state western interconnect.



For these reasons, WESTAR is opposed to EPA requiring RACM/RACT on intrastate sources impacting the NAA. However, WESTAR does support the voluntary implementation of intrastate RACM/RACT in situations where a state determines a need for more emission reductions that could help to attain the standard. Further, WESTAR supports EPA providing

¹² U.S. EPA, *Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone White Paper for Discussion, Table 2c.*

technical guidance that describes tools and methods for evaluating and addressing contributions to nonattainment areas from intrastate emission sources.

Baseline Inventory Year Options for Reasonable Further Progress

EPA proposes two RFP baseline inventory year options:¹³

The first proposed approach would require the RFP baseline year to be the year of the most recently available National Emissions Inventory (NEI)¹⁴ (i.e. 2017 for initial designations effective in 2018), or an alternate year between the year of NAAQS promulgation (2015) and the year that nonattainment designations are effective. The second proposed approach would require states to use the year of the effective date of an area's designation as the baseline year.

WESTAR requests that states be allowed to use either the most recent NEI year (tied to when RFP plans are developed), or any year between 2015 and the year that designations are effective. This is the most flexible and reasonable approach. It permits states to use resources already available from the most recent NEI, and also allows the flexibility to use a different year as needed. It is unclear what the benefit of requiring states to use the area designation year as the base inventory year. Assuming the designation year does not align with a NEI year, then states would unnecessarily waste resources allocated to other projects, such as modeling demonstrations, to produce an additional inventory. Further, the burden to produce an additional inventory would continue every three years when periodic inventories are also due under § 182(a)(2).

If a state must use its designation effective year as the base RFP year, assuming it would be 2018, a state would struggle to develop an inventory because it wouldn't align with the 2017 NEI. The development of emissions inventories demands significant resources. States are already required to develop emissions data and submit such information to the NEI. The second proposed approach would not allow a state to easily use available data from a recent NEI. Instead, a state would have to waste resources and develop a new inventory. As part of developing the new inventory, it is likely that many States would project emissions from the 2017 NEI to the 2018 base year. Not only would this result in more work with no identifiable benefit, it would also result in a decreased accuracy of estimated base year emissions.

Using resources to develop a new inventory would be especially critical for areas performing attainment demonstrations. Computing a RFP base inventory that doesn't align with a NEI would take significant additional time and money and could set an area behind in formulating its required attainment modeling demonstration efforts. An area doing an attainment demonstration already has to compute a separate modeling inventory aligning with a previous NEI because of the availability of NEI modeling platforms¹⁵ and the level of detail required for attainment

¹³ *Id.* at 81280.

¹⁴ In the proposed ozone implementation rule, the NEI is referred to as the triennial emissions inventory.

¹⁵ A national emissions modeling platform contains a particular year's national emissions inventories and other data sets, software tools, and programming scripts that process emissions into the form needed for air quality modeling. (<https://www.epa.gov/air-emissions-modeling/basic-information>) Modeling platforms form the basis of emissions modeling and require overwhelming resources to develop. Because of the sheer amount of information and

modeling inventories. Hence, under the second approach, a state performing an attainment demonstration would have to compute a detailed base modeling inventory for a previous NEI along with a base RFP inventory for the designation year, for which there would be no available inventory resources. These inventories would be required on top of the state's triennial obligation to submit inventory information to the NEI. This would create a significant burden for state agencies. It would also limit resources otherwise available to identify the most appropriate and effective control measures towards meeting attainment.

Also, choosing the second approach would mean that the periodic inventory required by CAA § 182(a)(2), which is due three years from the base inventory and every three years thereafter, would be required on a different schedule than the NEI. This would result in an unnecessary waste of state agency resources because a state is already required to submit emission information to the triennial NEI.

Consideration should also be given under Option 1 as to what truly qualifies as the most recent NEI year. EPA indicated that the most recently available NEI year for the 2015 standard would be 2017.¹⁶ However, if the same development timeframe for the 2014 NEI is applied to the 2017 NEI, states could expect a finalized 2017 NEI version 1 in September 2019,¹⁷ and such version is also subject to later modification. This would allow states about three months to develop a comprehensive emission inventory prior to the expected submittal deadline. Thus, even if states are expected to use the 2017 NEI as a base inventory under Option 1, states would struggle to develop a complete and presentable state inventory if the NEI is released so near the base inventory due date. This is because generally, states often rely on a significant amount of NEI information when developing a state's base inventory. Hence, EPA should clarify whether a "most recent" NEI year could be a previous inventory (i.e. 2014 NEI) if the 2017 NEI is not released or finalized within a reasonable time before the base inventory due date.

Options to Revoke the 2008 Ozone Standard

EPA proposes to revoke the 2008 Ozone NAAQS in one of two ways:

Under option 1,¹⁸ EPA proposes to revoke the 2008 standard for all areas, attainment and nonattainment, one year after the designation effective date under the 2015 Ozone NAAQS. While the standard is more stringent, some areas would be classified lower under the 2015 standard than under the 2008 standard. With the revocation, states must comply with anti-backsliding measures to prevent relaxation of planning requirements under the new more stringent standard. In this way, EPA ensures that requirements under the 2008 standard remain

complicated process to input and convert information into modeling platforms, it may take years for a triennial NEI and associated modeling platforms to be available. For example, the 2014 NEI was only released towards the end of 2016, and the modeling platforms, as of January 2017, are not yet available.

¹⁶ *2015 Ozone Implementation NPRM*, *supra* note 18 at 81320.

¹⁷ The 2014 NEI was only released in September 2016.

¹⁸ *Proposed Rule, Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements*, 81 Fed. Reg. 81276, 81286, 81308 (Nov. 17, 2016) [hereinafter *2015 Ozone Implementation NPRM*].

applicable, but future otherwise mandatory reclassifications under the 2008 standard are waived. EPA used this same method to transition from the 1997 ozone standard to the 2008 ozone standard.

Under option 2,¹⁹ EPA proposes to revoke the 2008 standard only for attainment areas one year after the designation effective date under the 2015 Ozone NAAQS. Nonattainment areas for the 2008 standards and the 2015 standards would follow CAA requirements in parallel.

WESTAR supports EPA's Option 1 to revoke the 2008 Ozone NAAQS for all areas and implement anti-backsliding measures for "applicable requirements" under the older standard in accordance with CAA § 172(e). Option 1 would reasonably reduce unnecessary and burdensome planning requirements that do not further CAA objectives for current nonattainment areas (e.g. potentially being required to track compliance with both standards and also model with different RFP base years). Option 1 also ensures necessary air quality protection because it does not allow for SIP relaxation.

RACT SIP Deadlines

Under proposed 40 CFR 51.1312(a), the EPA identifies schedules for RACT SIP submittals or RACT SIP revisions for three scenarios; initial area designations, reclassification of the nonattainment area, and issuance of a new Control Techniques Guideline (CTG). These deadlines are 24 months after the effective date of designation, 24 months from the date of the reclassification, or 24 months from the date of CTG issuance.

Based on member states' experience with RACT, WESTAR requests these deadlines for SIP submittal or SIP revision, in all three of these cases, be extended to 36 months from the date of designation, date of reclassification, or date of CTG issuance. This extension of the deadlines provides States additional time to collect and assess the data necessary to prepare RACT SIP or RACT SIP revisions.

¹⁹ *Id.*