



June 17, 2022

U.S. Environmental Protection Agency
EPA Docket Center, OAR, Docket EPA-HQ-OAR-2021-0668
Mail Code 28221T, 1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OAR-2021-0668, Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Primary Ozone National Ambient Air Quality Standard

Dear Administrator Regan,

Thank you for taking the time to consider WESTAR's comments regarding the proposed Federal Implementation Plan (FIP) Addressing Regional Ozone Transport for the 2015 Primary Ozone National Ambient Air Quality Standard (NAAQS). The following comments represent the views of the WESTAR member states, except Colorado.

We also appreciate the slight time extension to comment on the FIP proposal to June 21 instead of June 6. As co-regulators, WESTAR member states included in the final FIP and the downwind states with nonattainment and maintenance areas will be responsible for analyzing, implementing, tracking, and assuring the stated benefits of the proposed FIP controls. WESTAR acknowledges the significant but unrequested effort undertaken by EPA in the FIP analysis, which involves the EPA's interpretation of dated emissions estimates supplied by and/or vetted with some states in the WESTAR region. No context was provided by EPA for use of these data, and we believe it is very uncertain if EPA's approach would be able to change air quality as EPA predicts. WESTAR has previously commented extensively on the Ozone NAAQS program, transport, technical analysis, and related policies.^{1,2,3,4,5,6,7,8}

We believe the FIP as proposed has wide regional significance now and will eventually affect all contiguous states in the WESTAR region. The FIP is premature for affected states in the WESTAR

¹ [WESTAR Comments on Exceptional Events Stratospheric Intrusion Guidance](#) and [attachment](#) - October 2018

² [WESTAR comments on Ozone Transport](#) - June 2018

³ [WESTAR comments on proposed Ozone Implementation Rule](#) - February 2017

⁴ [WESTAR public hearing comments on proposed Ozone Implementation Rule](#) - January 2017

⁵ [WESTAR background ozone white paper comments](#) - May 2016

⁶ [WESTAR comments on proposed revisions to the Ozone NAAQS](#) - March 2015

⁷ [Multi-Jurisdictional Organizations' comments on EPA emission inventory decisions](#) – July 2021

⁸ [WESTAR letter to EPA Office of Research and Development on western technical support and tool development needs](#) – June 2020

region as EPA has never consulted or discussed with western states participation by our states in the 25-year history of EPA-mandated regional oxides of Nitrogen (NOx) controls programs. This FIP was proposed with no prior consultations with respect to the programmatic approach and additional implementation effort it would require of states.

Deficiencies in EPA's approach for the West

The FIP proposes to dramatically expand the Cross-State Air Pollution Rule (CSAPR) region spatially, but not in a contiguous manner, to include fossil-fueled Electrical Generating Units (EGUs) operating in the Western Electrical Interconnection that are not associated with the Texas or Eastern Interconnections⁹, which were the affected interconnects of previous EPA regional stationary source NOx control programs. The emissions trading program proposed in this FIP crosses the separate interconnections' boundaries, even though electricity production and distribution are contained and managed within an interconnection. The effect of EPA's proposal is that a ton traded from a fossil-fueled EGU in an affected WESTAR region state to the East or Texas, or vice-versa, would result in air quality changes and operational costs not benefiting the impacted ozone monitoring sites in the West, the East, or Texas, depending on how the traded tons flow, and confuse or cloud EPA's proposed remedy for interstate transport from EGU sources. The litigation deadline EPA is pointing to for turnaround time on this FIP action is not for the WESTAR region. The FIP expansion of the regional NOx programmatic approach to include selected non-EGU industrial sources is also new for the whole country. In the West, adding more emissions reduction programs for states as directed by EPA may not be the most effective way to reduce interstate transport of ozone precursors to address implementation requirements for the 2015 NAAQS.

Deficiencies in FIP design

We believe clean air is essential for strong communities and superior quality of life¹⁰. Air quality in the WESTAR region is influenced by both human activities and natural phenomena. Baseline air quality and the sources of impacts to that baseline differ based on local industry, geography, population, meteorology, and other state or regional conditions. Across the West, high elevations, extreme variations in topography, vast landscapes, and variable weather patterns influence air quality. The West is also disproportionately affected by wildfires, high wind dust events, volcanic activity, and international transport of pollutants. Pollutant sources, methods of dispersion, and types of affected areas in the West are quite different from those in the eastern United States. The WESTAR region is complex in terms of air quality regulatory jurisdictions with interlinked responsibilities. In addition, a vast amount of the region are federal lands and federal agencies, including EPA, have primary responsibility to manage and control air pollution sources on those lands and from sectors the Clean Air Act has reserved for federal control. The West needs additional and ongoing research on background, interstate, and international ozone. This research should be transparent, comprehensive, and coordinated with state air quality agencies and regional organizations. With this added information, EPA should reconsider the one percent threshold for significant contribution for interstate ozone transport obligations such as applied in the proposed FIP.

We strongly support improvements to ozone and related air quality indicators across the WESTAR region at both urban and rural locations. The proposed FIP is an inappropriate regional solution for a small

⁹ [How the Power Grid Works | Poudre Valley REA, Inc](#)

¹⁰ [Western Governors' Association – Policy Resolution-2022-02-Air-Quality-Protection-and-Management](#), published December 10, 2021

number of affected sites hundreds of miles apart across complex terrain. The proposed FIP proposes what appears to be a narrow list of sources but is actually open-ended in terms of the state-regulated sources. We also note the problematic situation for contributions from international sources and how decisions are made by EPA about Exceptional Event data flagging for increasingly non-rare major air pollution episodes. Smoke impacts from wildfire are frequent and normal at this point and continuing for decades, accelerated by climate change.

The proposed FIP relies upon a complex array of multiple models and assumptions. Questions about EPA model performance have been raised for more than a decade, the EPA models' limitations for western air quality regulation have been discussed and are noted by EPA technical staff. The sheer volume of data in the FIP proposal, never previously discussed for a FIP proposal, make the timing of data availability and lack of sufficient time to analyze the models' inputs and modeled air quality predictions a major concern. We are being asked to take the EPA's extremely complex analysis at face value with insufficient time to evaluate the FIP proposal in addition to our other air quality management responsibilities. In Attachment 1, we lay out the chronology and effort to just obtain the data before analysis and evaluation could begin.

NO_x Emissions in the WESTAR Region

In the WESTAR region, sources regulated by EPA emit the plurality of the regional NO_x, specifically from the mobile source and goods movement sectors. NO_x emissions from these sectors will comprise 44.5% of the projected western inventory by 2028. By that time, State Implementation Plans (SIPs) from WESTAR region states will complete federally enforceable implementation of stationary source NO_x controls and/or require reduced NO_x emissions under the Regional Haze Rule, beyond the current "rules on the books" scenario developed in 2020^{11,12,13}, shown in Figure 1. Further planning to continue reductions of stationary source NO_x emissions will be ongoing with the upcoming 2028 Regional Haze SIP milestone, a major work effort for WESTAR region states.

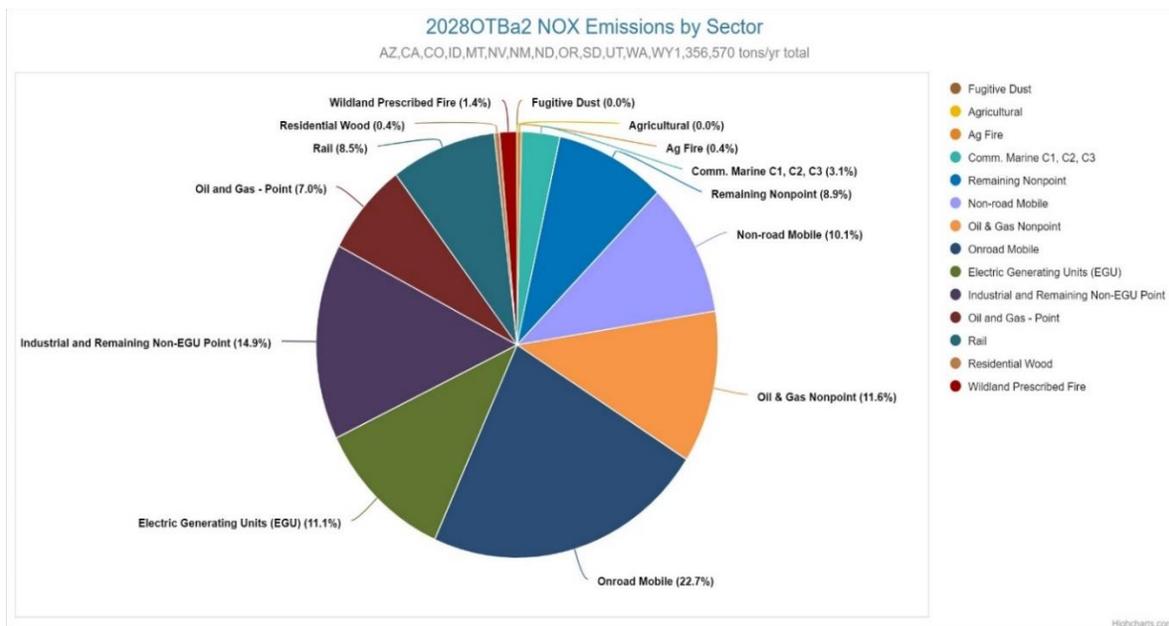
¹¹ WRAP Technical Support System (TSS); The Western Regional Air Partnership (WRAP) and the Cooperative Institute for Research in the Atmosphere (CIRA), 19 Apr 2022, <http://views.cira.colostate.edu/tssv2>

¹² [WESTAR comments on proposed Heavy-Duty Diesel Engine and Vehicle Standards](#) – May 2022

¹³ U.S. emissions up 4% as drivers log record number of miles, Benjamin Storrow, E&E News, May 27, 2022

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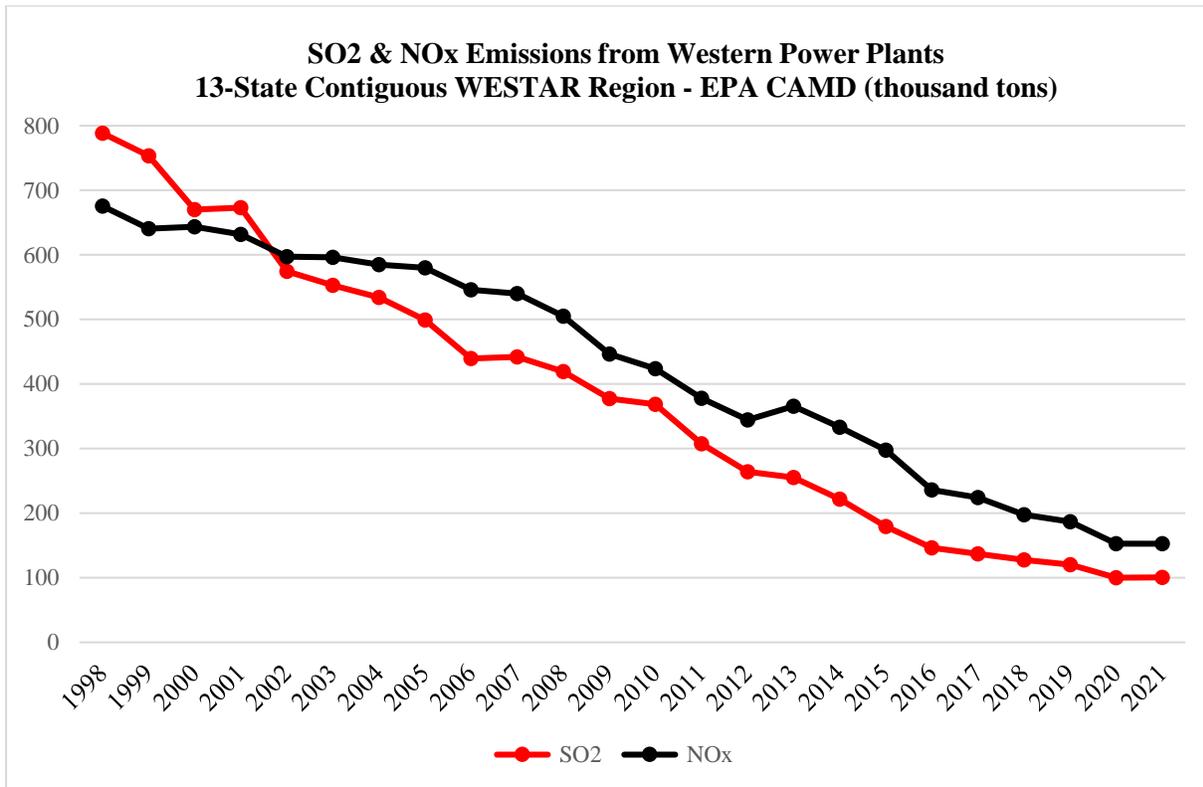
Figure 1. 2028 “rules on the books” NOx emissions projections by source sector for the 13 contiguous WESTAR region states.



Additional mobile source emissions reductions will be necessary for western states to continue to improve visibility in Class I areas as well. Of the 156 Mandatory Class I Federal areas, 118 (75 percent) are in the West. As shown in Figure 2, western states have made considerable progress in controlling stationary source emissions without an EPA-required regional emissions control program. Fossil-fueled EGU NOx emissions have declined by 77% and SO2 by 87% from 1998 through 2021, tracked with the Title IV CEM system data widely implemented by the late 1990s. Mobile source emission reductions must be made at a similar pace from this point forward to assist in reducing ozone transport across the WESTAR region. Reductions in emissions that can be controlled are particularly important as catastrophic wildfire smoke impacts western states with increasing severity and frequency. A recent study by the National Center for Atmospheric Research shows that the increase in wildfires has begun to reverse the last ten years of clean air gains and is changing the annual pattern of air quality in North America.¹⁴

¹⁴ Buchholz, R.R., Park, M., Worden, H.M. *et al.* New seasonal pattern of pollution emerges from changing North American wildfires. *Nature Communications* **13**, 2043 (2022). <https://doi.org/10.1038/s41467-022-29623-8>
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Figure 2. 1998-2021 SO₂ and NO_x fossil-fueled EGU emissions trends for the 13 contiguous WESTAR region states.



A ubiquitous goal of EPA in federal rulemakings for stationary and mobile sources’ emissions controls is to help states comply with the Ozone and Particulate Matter NAAQs and to help improve visibility as part of the Regional Haze program. The recent EPA Proposed Rule: “*Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards*” states that “The proposed Option 1 standards would significantly decrease ozone concentrations across the country, with a population-weighted average decrease of over 2 ppb in 2045.”¹⁵ In terms of emissions reductions, EPA estimates that Option 1 would reduce NO_x emissions from heavy-duty vehicles in 2040 by more than 50 percent and by 60 percent in 2045. Most nonattainment areas for the 2008 and 2015 Ozone NAAQS are required to attain the standard within the next six years (by 2028).

Lack of Prior Consultation for FIP proposal to expand to the West

On May 24, 2022, EPA published notices of proposed disapproval of four western states’ State Implementation Plans (California, Nevada, Utah, and Wyoming) for the Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards¹⁶, with comments due by

¹⁵ Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, 87 Fed Reg. 17427 (March 28, 2022)

¹⁶ Air Quality State Implementation Plans; Approvals and Promulgations: **California**; Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards; Disapproval, 31443-31462, <https://www.govinfo.gov/content/pkg/FR-2022-05-24/pdf/2022-11150.pdf>

July 25, 2022. These proposed actions for the same states in the proposed FIP are to justify the EPA FIP proposal controls and drive implementation on an accelerated timeline. The overlap in timing for comments, the changes from the historical approach to managing transported impacts as laid out in the proposed FIP, and the proposed SIP disapprovals are not thoughtful or comprehensive solutions for western U.S. ozone transport. In fact, these proposed disapprovals are for state plans containing reasonable and well-analyzed efforts to demonstrate a lack of significant transport, addressing critical factors for design values such as Exceptional Events data flagging in downwind nonattainment and maintenance areas, and documenting upwind jurisdictions' mitigation efforts. The FIP does not fix the sources beyond state control affecting ozone monitoring sites across the West and is based on finding state sources culpable before all other contributing sources. The combination of the proposed actions mean EPA has decided a heavily litigated and always-subject-to-change top-down regional NOx control program approach is the answer, without asking us.

Requested Response from EPA

For all the reasons listed in this letter and given the circumstances of EPA's actions to include the West for the first time, WESTAR requests EPA give western states an appropriate additional timeframe to consider and further comment on the proposed FIP analysis. We object to the proposed top-down FIP solution implemented on an accelerated timeline that is applicable only for litigation associated with eastern U.S. ozone transport issues. Please extend the FIP comment period for the WESTAR region states from June 21 through at least September 21, 2022, and offer us, the co-regulators, a meaningful and comprehensive co-regulator consultation process beginning in Fall 2022 to decide next steps on regulatory actions for transport aspects of 2015 8-hour Ozone NAAQS implementation.

WESTAR shares EPA's interest in improving air quality in the West through state programs developed via the SIP co-regulator process, on a timeline that assures sufficient state-EPA consultation across the WESTAR region, as well as critical and overdue timely federal actions that proportionally reduce federally regulated sources.

Sincerely,



Ali MIRZAKHALILI (Jun 21, 2022 13:13 PDT)

Ali Mirzakhali, President
Western States Air Resources Council

Air Quality State Implementation Plans; Approvals and Promulgations: **Nevada**; Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards; Disapproval, 31485-31495, <https://www.govinfo.gov/content/pkg/FR-2022-05-24/pdf/2022-11151.pdf>

Air Quality State Implementation Plans; Approvals and Promulgations: **Utah**; Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards; Disapproval, 31470-31484, <https://www.govinfo.gov/content/pkg/FR-2022-05-24/pdf/2022-11152.pdf>

Air Quality State Implementation Plans; Approvals and Promulgations: **Wyoming**; Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards; Disapproval, 31495-31510, <https://www.govinfo.gov/content/pkg/FR-2022-05-24/pdf/2022-11153.pdf>

Attachment 1 – Staff chronology of data availability, transfer effort, and analysis

Below is a chronology of our request to EPA for the modeling data files used in EPA’s proposed 2015 8-hour Ozone NAAQS Transport FIP (proposed Transport FIP). Our original request was March 17, 2022, well before the proposed FIP was published in the Federal Register on April 6, 2022. EPA estimated at that time that they will ship the data May 6, 2022, to have the data disks arrive May 7 or 8. This is 37 Tb of data so it will take days to weeks to copy, let alone begin to analyze, extract data, and quality assure. Then questions have to be formulated and discussed before EPA can be asked to respond with additional information to support state comments on the proposed Transport Rule. There is some analysis work started in the meantime with the data on the website (e.g., AQAT). The EPA 2016v2 modeling platform was already available, and a couple of smaller files were provided by EPA by Email. It is impossible to do a thorough review of EPA’s modeling files within a comment period ending in June 2022 given their delays in providing all the necessary data files.

- March 17, 2022: Sent Email to Elizabeth Selbst (Selbst.elizabeth@epa.gov; 919.541.3918) at EPA requesting all the modeling files related to the proposed Transport Rule. She is the contact person for the rule identified on EPA’s website documents (e.g., https://www.epa.gov/system/files/documents/2022-03/fact-sheet_2015-ozone-proposed-good-neighbor-rule.pdf).
- March 21, 2022: Elizabeth replied that she is forwarding our request to the EPA/OAQPS modeling group to let us know the size of the disk drives needed for the data transfer and whether some of the data may be transferred via email or by FTP.
- March 22, 2022: The OAQPS modeling group responds that they are putting together a list of the modeling files used in the 2015 Ozone NAAQS Transport Rule analysis so we can reply with which files we want.
- March 28, 2022: OAQPS modeling group sends an Email with forms to check off which files we are requesting.
- April 1, 2022: Replied to OAQPS modeling group that we want all the data. They reply to the same day to send the disk drives to a staff person at the EPA office in Durham, NC. We requested the size of the data so that we can send the right size of disk drives.
- April 6, 2022: OAQPS modeling group responds that the total data is 37.5 terabytes (Tb).
- April 10, 2022: Received spreadsheet from OAQPS modeling group that contains the 2023 daily contributions of states to nonattainment receptors ozone design values (DV) whose average across the top 10 highest days is used in the Step 2 state ozone significant contribution assessment.
- April 11, 2022: Received 2023 SMAT ozone DV output from OAQPS modeling group. Responded that what we really need is the SMAT inputs (i.e., CAMx 2016 and 2023.ozone results processed for SMAT) that should be small enough to transfer by FTP.
- April 11, 2022: Disk drives arrive at EPA.
- April 15, 2022: Received 2016, 2023, 2026 and 2032 SMAT inputs via FTP site.
- April 18, 2022: Emailed two FedEx overnight shipping labels with bill the recipient to EPA and asked when the estimated shipping date for the disk drives would be.
- April 19, 2022: EPA replied that the estimated date for shipping the disk drives with the proposed Transport Rule modeling data could be as late as May 6, 2022.
- April 25, 2022: EPA shipped the first batch of 2 disk drives for delivery April 26th, followed closely by the second batch
- After copying content all disk drives, analysis work effectively begins May 2, 2022.

2015OzoneNAAQSInterstateTransportFIP_Comments final June 16_2022

Final Audit Report

2022-06-21

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