

2015 Ozone Transport ("Good Neighbor") Federal Implementation Plan (FIP)

Informational Update for RTOC Tribal Consultation Workgroup Meeting

April 26, 2022

Transport (Good Neighbor) SIPs for 2015 Ozone NAAQS



- After EPA establishes or revises a national ambient air quality standard (NAAQS), states must submit infrastructure State Implementation Plans (SIPs) that include provisions to address interstate transport of that pollutant.
 - The Good Neighbor provisions of the Clean Air Act require each SIP to include provisions sufficient to "prohibit[], any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any [NAAQS]."
- After EPA established the 2015 Ozone NAAQS, the Good Neighbor SIP submissions were due to EPA in 2018.

The Four-Step "Good Neighbor" Framework (Steps 1 & 2)



EPA uses a four-step analytic framework to quantify emission reductions necessary to address interstate ozone transport.

Step 1. Identify downwind monitoring sites expected to have problems attaining or maintaining the NAAQS (i.e., "receptors").

Step 2. Determine which upwind states are "linked" to these receptors based on the magnitude of contributions using a 1 percent of the NAAQS threshold (i.e., 0.70 ppb for the 2015 NAAQS).

- States that contribute < 1 percent do not significantly contribute to downwind nonattainment/maintenance.
- States that contribute > 1 percent warrant further analysis in Step 3 to determine whether they significantly contribute.

The Four-Step "Good Neighbor" Framework (Steps 3 & 4)



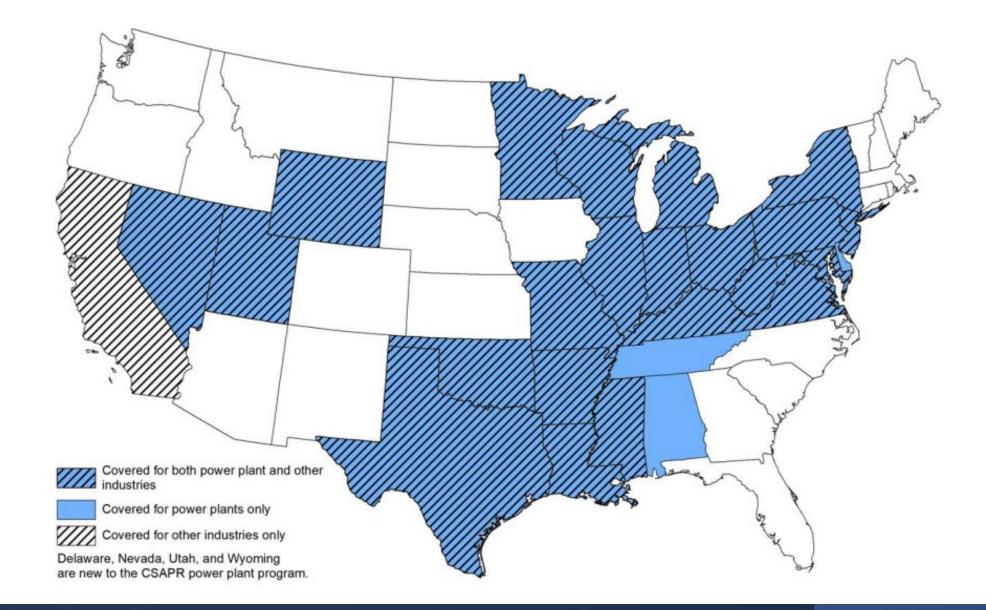
Step 3. For states linked to downwind air quality problems, identify upwind emissions on a statewide basis that significantly contribute to nonattainment or interfere with maintenance in any area, using a multifactor analysis

Step 4. For upwind states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, implement the necessary emissions reductions within the state

Transport (Good Neighbor) SIPs for 2015 Ozone NAAQS



- On February 22, 2022, the Federal Register published EPA's proposed actions to disapprove Good Neighbor SIP submittals from 19 states.
- On February 28, 2022, EPA proposed a Federal Implementation Plan (FIP) requiring significant NOx reductions to ensure the 26 states covered in the proposal would meet the Good Neighbor requirements.
- Four Western States are included in the proposed FIP: California, Nevada, Utah, and Wyoming.
- EPA has not yet proposed action on SIP submittals from California, Nevada, Utah, and Wyoming. EPA will be proposing action on these SIP submittals in the coming months.



The Proposed FIP for 2015 Ozone NAAQS



EPA is proposing a combination of approaches to reduce emissions of NOx:

- NOx emissions budgets during the Ozone Season (May 1 September 30) for fossil-fuel fired power plants in 25 states
 - Starting in 2023, the emissions budgets would be set at the level of reduction achievable through immediately available measures, including consistently operating emissions controls already installed at power plants
 - Starting in 2026, budgets would be set at levels achieved by installation and operation of modern cost-effective controls (selective catalytic reduction, or SCR) at the approximately 30% of large coal-fired plants that currently do not have them
 - By 2026, EPA projects the program will result in a 29% reduction in ozone season NOx emissions from power plants in 25 states.

The Proposed FIP for 2015 Ozone NAAQS



EPA is proposing a combination of approaches to reduce emissions of NOx:

- NOx emissions standards during the Ozone Season (May 1 September 30) for certain emissions units at large industries in 23 states starting in 2026
 - Reciprocating internal combustion engines in Pipeline Transportation of Natural Gas
 - Kilns in Cement and Cement Product Manufacturing
 - Boilers and Furnaces in Iron and Steel Mills and Ferroalloy Manufacturing
 - Furnaces in Glass and Glass Product Manufacturing
 - High-emitting large boilers in Basic Chemical Manufacturing, Petroleum and Coal Products Manufacturing, and Pulp, Paper, and Paperboard Mills

Proposed Transport FIP



- EPA estimates that the proposed FIP would reduce NOx emissions by approximately 94,000 tons during the 2026 ozone season.
- About half of the reductions would come from fossil-fuel fired power plants reducing ozone season NOx emissions by 29%.
- Additional 47,000 tons of NOx reductions would come from other industrial sources, representing a 15% reduction from pre-proposal levels.
- In addition, EPA expects that the emissions reductions projected in the proposal would yield a range of unquantified benefits, including improving visibility in national and state parks and increasing protection for sensitive ecosystems, coastal waters and estuaries, and forests. EPA carefully evaluated the impacts the proposed Good Neighbor Plan would have on minority populations, low-income populations and/or indigenous people. Importantly, EPA expects the proposed rule would lower ozone concentrations in many areas providing broadly shared benefits for people of color and low-income households.

Outreach and Next Steps



- EPA will accept comment on the proposed FIP until June 6, 2022.
- EPA invited tribes to consult on the proposed FIP. If tribal consultation is requested, please notify Toni Colon (<u>colon.toni@epa.gov</u> or at (919) 541-0069 by May 6.
- For further information about the proposed action, contact Elizabeth Selbst with EPA's Office of Air Quality Planning and Standards, at (919) 541-3918 or by e-mail at <u>selbst.elizabeth@epa.gov</u>.
- More information is also available here: <u>https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs</u>
- Power Point Overview:

https://www.epa.gov/system/files/documents/2022-03/2015-ozonetransport-proposed-rule-overview.pdf

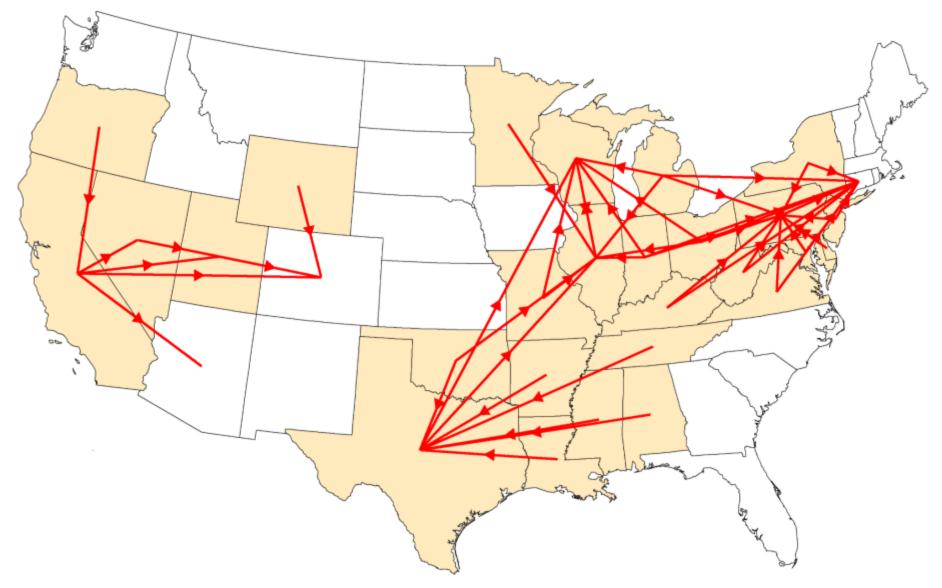
Additional Slides

Proposed Transport FIP – 4-Step Framework

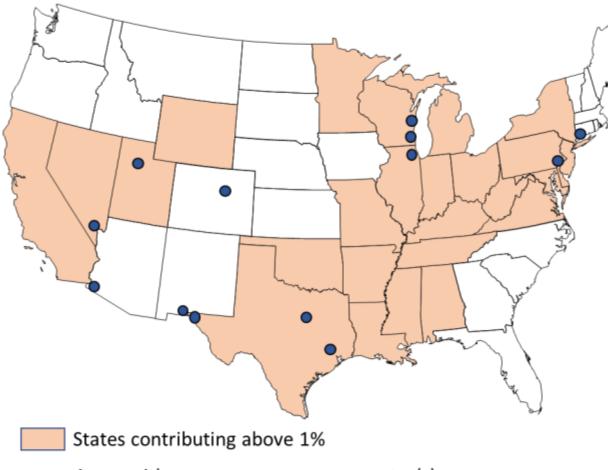


- Step 1: EPA performed air quality modeling to project ozone concentrations at monitoring sites in 2023, 2026, and 2032 to identify receptors anticipated to have problems attaining or maintaining the 2015 ozone NAAQS
- Step 2: EPA used air quality modeling to quantify the contributions from upwind states to the ozone concentrations in 2023 and 2026 at downwind receptors, and evaluated these contributions relative to a screening threshold of 1% of the NAAQS (0.70 ppb); states with contributions ≥ 1% warrant further analysis at Step 3
- Step 3: EPA applied a multi-factor test that incorporated cost, availability of emissions reductions, and air quality impacts at downwind receptors to determine amount of ozone precursor emissions from linked upwind states that significantly contribute to downwind nonattainment and maintenance receptors
- Step 4: EPA proposes to include enforceable measures in the FIP to achieve required emissions reduction in each of 26 states

Upwind States Contributing Above 1% of the 2015 ozone NAAQS



Transport Linkages for 2015 Ozone NAAQS*



Areas with one or more ozone receptor(s)

<u>Step 1:</u> EPA identified 36 nonattainment and maintenance problems in the following areas: Yuma, AZ; Denver,
CO; Coastal CT; Chicago, IL; Las Vegas,
NV; Doña Ana, NM; Philadelphia, PA; Dallas,
TX; El Paso, TX; Houston, TX; Salt Lake City,
UT; and along the western shoreline of Lake Michigan in WI.

<u>Step 2:</u> EPA identified 26 upwind states that are contributing above 1% of the NAAQS or 0.70 ppb to downwind air quality problems: Alabama; Arkansas; California; Delaware; Illinois; Indiana; Kentucky; Louisiana; Maryland; Michigan; Minnesota; Mississippi; Missouri; Nevada; New Jersey; New York; Ohio; Oklahoma; Pennsylvania; Tennessee; Texas; Utah; Virginia; West Virginia; Wisconsin; and Wyoming