EPA's Proposed "Good Neighbor" Plan to Address Ozone Pollution - Overview

EPA's Good Neighbor proposal would deliver improvements in air quality in cities and counties across the country to protect people from preventable premature deaths, asthma attacks, and respiratory illness. In the year 2026, EPA projects that the proposed rule would prevent approximately 1,000 premature deaths, 2,400 hospital and emergency room visits, 1.3 million cases of asthma symptoms, and 470,000 school absence days. These public health benefits are due to proposed reductions in emissions of oxides of nitrogen (NO_X), a pollutant critical to the formation of ozone "smog", from sources in the power sector by 29% and heavy industry by 15% across 26 states during the ozone season.

The Good Neighbor proposal targets the ozone and ozone-forming NO_x emissions that are being transported by wind across state lines, often over long distances. Downwind areas – urban, suburban, and rural – that are impacted by pollution from upwind states, would benefit from the proposal. The proposal fulfills EPA's Clean Air Act obligation to act when states fail to meet the Act's requirement to develop and carry out plans to reduce the pollution that threatens the air quality of their downwind neighbors.

Summary of Action

On February 28, 2022, the U.S. Environmental Protection Agency (EPA) proposed significant reductions in ozone-forming emissions of NO_x. This action would ensure that the 26 states covered in the proposal meet the Clean Air Act's "Good Neighbor" requirements by reducing pollution that significantly contributes to problems attaining and maintaining the 2015 Ozone National Ambient Air Quality Standards (NAAQS) in downwind states. The pollution reduction measures in this proposal not only would save lives and improve public health in smog-affected communities across the United States, but would also be cost-effective and affordable for businesses, workers, and consumers.

To help deliver the health and environmental benefits of the 2015 ozone NAAQS, EPA is proposing a combination of approaches.

NO_x emissions budgets for fossil fuel-fired power plants in 25 states. Beginning in the 2023 ozone season, EPA is proposing to include these states in a revised and strengthened Cross-State Air Pollution Rule (CSAPR) "NOx Ozone Season Group 3 Trading Program." The proposed emissions budgets would initially be set at the level of reductions achievable through immediately available measures, including consistently operating emissions controls already installed at power plants. Starting in 2026, the budgets would be set at levels achieved by the installation of modern and cost-effective selective catalytic reduction (SCR) controls at the approximately 30 percent of large coal-fired power plants in the covered states that do not now have them. By 2026, EPA projects that the program would result in a 29 percent reduction in ozone-season NO_x emissions from power plants in the 25 covered states.

Further, the proposal would build upon the demonstrated success of existing CSAPR trading programs by including additional features that promote consistent operation of emissions controls to enhance public health and environmental protection for the region and for local communities:

- A daily emissions rate limit for large coal-fired units, which would take effect in 2024 for units with existing controls and in 2027 for units installing new controls, to ensure controls are operated effectively and consistently at these plants throughout the ozone season;
- Limiting the size of the emissions allowance bank to maintain strong long-term incentives to reduce NO_x pollution;
- Starting in 2025, annually updating budgets to account for new retirements, new units, and changing operation.
- NO_x emissions standards for certain emissions units in identified large industries in 23 states, with an initial compliance date of 2026. EPA evaluated air quality modeling information, annual emissions, and information about potential controls to determine which industries, beyond the power sector, could have the greatest impact in providing ozone air quality improvements in affected downwind states. Based on this analysis, EPA is proposing emissions standards for certain new and existing emissions units at industrial facilities that reflect proven, cost-effective pollution reduction measures and that are in many cases consistent with standards that sources in downwind states have long implemented. The proposed standards would apply to the following emissions units in selected industries:
 - o reciprocating internal combustion engines in Pipeline Transportation of Natural Gas;
 - o kilns in Cement and Cement Product Manufacturing;
 - o boilers and furnaces in Iron and Steel Mills and Ferroalloy Manufacturing;
 - o furnaces in Glass and Glass Product Manufacturing; and
 - high-emitting, large boilers in Basic Chemical Manufacturing, Petroleum and Coal Products Manufacturing, and Pulp, Paper, and Paperboard Mills.



EPA's proposal would ensure that emissions reductions will happen as quickly as possible and be aligned with Clean Air Act deadlines for states to achieve the 2015 ozone NAAQS – which vary according to the severity of nonattainment. The initial phase of NO_x emissions reductions in this proposal would take effect in 2023 and further emissions reductions would phase in through 2026.

EPA based this proposal on a careful evaluation of cost-effective measures to reduce NO_x pollution, as well as the Agency's most recent air quality modeling data identifying:

- areas expected to have trouble attaining and maintaining the 2015 standards in 2023, 2026, and 2032, and
- contributions from upwind states causing downwind ozone problems.

Applying a frequently used and court-approved framework to consider this information, EPA is proposing to determine that the 26 states covered in this proposal must secure additional reductions in NO_x pollution to meet the Clean Air Act's Good Neighbor requirements. The proposed rule would help states covered in the proposal fully resolve outstanding good neighbor obligations under the 2015 ozone NAAQS.

If EPA finalizes the proposed federal implementation plans, states would still have the option to replace its requirements by submitting state implementation plans (SIPs) that satisfy good neighbor requirements for EPA's review and approval.

EPA will accept comment on the proposed Federal Plan for 60 days after publication in the *Federal Register*.

EPA's Proposed Good Neighbor Rule Would Substantially Reduce Summertime Ozone Levels

EPA estimates that this proposal would reduce ozone forming NO_x emissions from the 26 significantly contributing upwind states by approximately 94,000 tons during the 2026 ozone season (May 1 - September 30) compared to a business-as-usual scenario.

About half of those emissions reductions would come from fossil fuel-fired power plants -reducing their ozone season NO_x emissions by 29% from pre-proposal levels. The additional 47,000 tons of NO_x emissions reductions would come from the other industrial sources covered by the proposal, representing a 15% reduction from pre-proposal levels. These reductions would improve air quality in dozens of areas.

This proposed plan would also reduce other harmful pollutants from power plants. In 2026 alone, EPA estimates that this proposal would reduce sulfur dioxide emissions by 106,000 tons, fine particle emissions by 9,000 tons, and carbon dioxide emissions by 40 million metric tons.

Human Health and Environmental Benefits of Reducing Ozone Far Exceed Costs

In the year 2026, the proposed rule would prevent approximately 1,000 premature deaths, reduce hospital and emergency room visits for thousands of people with asthma and other respiratory problems, help keep hundreds of thousands of children and adults from missing school and work due to respiratory illness, and decrease asthma symptoms for millions of Americans. For each year from 2027 through 2042, EPA estimates the benefits will be at least as large as in 2026.

The benefits of EPA's proposed Good Neighbor rule would far outweigh the costs. EPA estimates the benefits in 2026 would be at least \$9.3 billion and could be as high as \$18 billion (2016\$, 3 percent discount rate). Annually, the net benefits of EPA's proposed rule – after accounting for the costs of compliance - would be \$15 billion (2016\$, 3 percent discount rate) each year over the period from 2023 to 2042.

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. In 2026, the cost of achieving these reductions would be approximately \$1.1 billion (2016\$), a fraction of the estimated value of the benefits. As noted above, EPA's proposed emissions reduction requirements are also based on highly cost-effective, well-demonstrated pollution control measures that many states have been implementing for years. EPA projects that the proposal would not have a significant impact on small businesses, and that once fully implemented the proposal would increase the overall costs of electricity production by only slightly more than 1 percent.

Background

The Clean Air Act requires states to submit a State Implementation Plan (SIP) that provides for the implementation, maintenance, and enforcement of each primary or secondary NAAQS. Each state must make this new SIP submission within 3 years after promulgation of a new or revised NAAQS. A key Clean Air Act requirement for these SIPs, known as the "good neighbor" provision, is that they ensure that sources within the state do not contribute significantly to nonattainment or interfere with maintenance of any NAAQS in other states.

Where EPA finds that a state has not submitted a good neighbor SIP, or if the EPA disapproves the SIP, within two years, the EPA must issue a Federal Implementation Plan (FIP) to assure downwind states are protected.

This proposal continues EPA's efforts since the 1990s to implement good neighbor requirements, including through rules such as the NO_x SIP Call (1998), the Clean Air Interstate Rule (2005), the Cross-State Air Pollution Rule (CSAPR, 2011), and updates to the CSAPR rule issued in 2016 and 2021. While these prior rules addressed less stringent ozone NAAQS set in earlier years, this proposal would address the revised and strengthened 2015 ozone NAAQS.

In this proposal, as in its prior interstate transport rules, EPA has employed a court-approved 4step framework to identify downwind receptors that are expected to have problems attaining or maintaining the NAAQS, determine which states contribute significantly to these downwind air quality problems, and identify available pollution reduction measures and enforceable requirements necessary to meet the Clean Air Act's good neighbor requirements.

Public Participation

EPA has conducted several pre-proposal outreach activities, including holding an environmental justice webinar and opening a non-regulatory docket for feedback related to interstate ozone pollution on October 26, 2021, and releasing updated emissions inventories and modeling results earlier this year for stakeholders to review.

EPA will accept comment on the proposed Federal Plan for 60 days after publication in the *Federal Register*.

To provide interested parties the opportunity to present data, views or arguments concerning the proposed Federal Plan, EPA also plans to hold a virtual public hearing. Learn more about the hearing and how to register to speak at: <u>https://www.epa.gov/csapr/good-neighbor-plan-</u>2015-ozone-naaqs

Comments, identified by Docket ID No. EPA-HQ-OAR-2021-0668, may be submitted via <u>https://www.regulations.gov</u>. Please follow the online instructions for submitting comments.

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More Information

Interested parties can download a copy of the proposed rule from EPA's website at the following address: <u>https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs</u>. Today's action and other background information are also available electronically at <u>https://www.regulations.gov</u>, EPA's electronic public docket and comment system.

For further information about the proposed action, contact <u>Elizabeth Selbst</u> with EPA's Office of Air Quality Planning and Standards, at 919-541-3918 or by e-mail at selbst.elizabeth@epa.gov.