

EPA’s “Good Neighbor” Plan Cuts Ozone Pollution – Overview Fact Sheet

EPA’s final Good Neighbor Plan for the 2015 ozone NAAQS will improve air quality, saving lives and improving public health in smog-affected communities across the United States. This final rule, which requires emissions reductions from power plants and industrial sources that pollute across state lines, delivers substantial health benefits using proven, cost-effective control technologies and strategies.

Summary of Action

On March 15, 2023, the U.S. Environmental Protection Agency (EPA) issued its final Good Neighbor Plan, which secures significant reductions in ozone-forming emissions of nitrogen oxides (NO_x) from power plants and industrial facilities. This action will save thousands of lives and result in cleaner air and better health for millions of people living in downwind communities.

The Good Neighbor Plan ensures that 23 states meet the Clean Air Act’s “Good Neighbor” requirements by reducing pollution that significantly contributes to problems attaining and maintaining EPA’s health-based air quality standard for ground-level ozone (or “smog”), known as the 2015 Ozone National Ambient Air Quality Standards (NAAQS), in downwind states.

The final Good Neighbor Plan ensures 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 takes effect as soon as possible prior to the August 3, 2024 attainment date for areas classified as Moderate nonattainment.
- Further emissions reductions phase in at the beginning of the 2026 ozone season to coincide with the August 3, 2027 attainment date for Serious nonattainment areas.

The Final Rule Includes a Combination of Approaches to Reduce Ozone Pollution:

NO_x Allowance Trading Program for Fossil Fuel-Fired Power Plants in 22 States

Beginning in the 2023 ozone season, EPA will include power plants in 22 states in a revised and strengthened Group 3 Cross-State Air Pollution Rule (CSAPR) ozone season trading program. To achieve emissions reductions as soon as possible, EPA is setting the initial control stringency based on the level of reductions achievable through immediately available measures, including consistently operating emissions controls already installed at power plants.

In order to achieve the remaining needed emissions reductions from power plants, the final rule sets emissions budgets that decline over time based on the level of reductions achievable through phased installation of state-of-the-art emissions controls at power plants starting in 2024. Building on the long and successful track record of EPA’s CSAPR ozone season trading

program, this program will secure significant reductions in ozone-forming pollution while providing power plants operational flexibility they need to continue providing reliable and affordable electric service. The final rule's 2027 budget for power plants reflects a 50% reduction from 2021 ozone season NO_x emissions levels.

The final rule includes additional features that promote consistent operation of emissions controls to enhance public health and environmental protection for the affected downwind regions and will also benefit local communities:

- A backstop daily emissions rate in the form of a 3-for-1 allowance surrender for emissions from large coal-fired units that exceed a protective daily NO_x emissions rate. This backstop would take effect in 2024 for units with existing controls and one year after installation for units installing new controls, but no later than 2030;
- Annually recalibrating the size of the emissions allowance bank to maintain strong long-term incentives to reduce NO_x pollution;
- Annually updating emissions budgets starting in 2030 to account for changes in power generation, including new retirements, new units, and changing operation. Updating budgets may start as early as 2026 if the updated budget amount is higher than the state emissions budgets established by the final rule for 2026-2029.

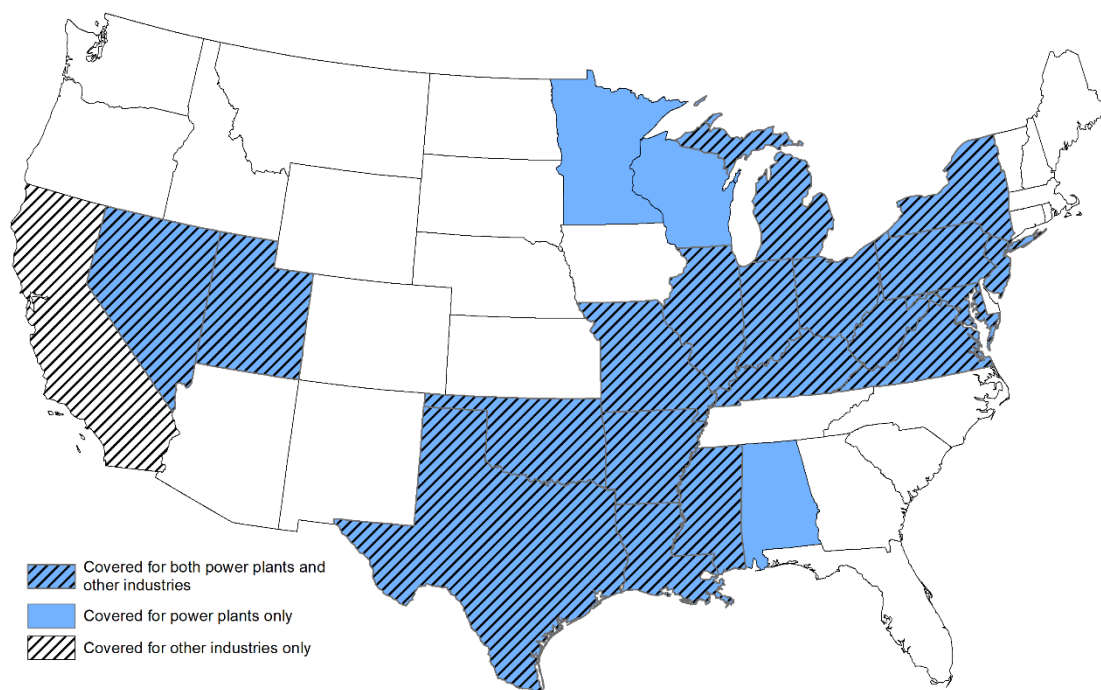
NO_x Emissions Standards for Nine Large Industries in 20 States

Beginning in the 2026 ozone season, EPA is setting enforceable NO_x emissions control requirements for existing and new emissions sources in industries that are estimated to have significant impacts on downwind air quality and the ability to install cost-effective pollution controls. These standards would collectively achieve an approximately 15% reduction in NO_x emissions from 2019 ozone season, point source emissions. The reduction in NO_x emissions comes from the following types of emissions sources:

- reciprocating internal combustion engines in **Pipeline Transportation of Natural Gas**;
- kilns in **Cement and Cement Product Manufacturing**;
- reheat furnaces in **Iron and Steel Mills and Ferroalloy Manufacturing**;
- furnaces in **Glass and Glass Product Manufacturing**;
- boilers in **Iron and Steel Mills and Ferroalloy Manufacturing, Metal Ore Mining, Basic Chemical Manufacturing, Petroleum and Coal Products Manufacturing, and Pulp, Paper, and Paperboard Mills**; and
- combustors and incinerators in **Solid Waste Combustors or Incinerators**.

These industry-specific requirements reflect proven, cost-effective pollution reduction measures that are consistent with standards that sources in downwind states, and throughout the country, have long implemented. With EPA's approval, individual facilities may be eligible for a one year compliance extension. If specific additional criteria are met, EPA may grant additional compliance extensions of up to two more years.

Map of States Covered by the Final Good Neighbor Plan



Since proposal, EPA updated its air quality modeling based on stakeholder input providing improved emissions data and recommendations to improve model performance. EPA's final Good Neighbor Plan relies upon the Agency's most recent air quality modeling data identifying:

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

Applying EPA's longstanding, court-affirmed 4-step framework to this information, the final Good Neighbor Plan determines that 23 states must achieve additional reductions in NO_x pollution to fully resolve their outstanding Good Neighbor obligations for the 2015 ozone NAAQS.

EPA's updated modeling analysis for 2023 suggests that the states of Arizona, Iowa, Kansas, and New Mexico, may be significantly contributing to nonattainment or maintenance in downwind sites. EPA intends to undertake additional assessment of its modeling for these states and will determine if it is necessary to address Good Neighbor obligations for these states in future action(s).

EPA's updated modeling analysis confirms that Delaware is not significantly contributing to downwind ozone air quality problems. The Agency is withdrawing the proposed error correction and the proposed Good Neighbor Plan for Delaware. In addition, EPA is deferring

final action on the Agency's proposed Good Neighbor Plans for Tennessee and Wyoming pending further review of the updated air quality and contribution modeling and analysis.

EPA's Good Neighbor Plan Would Substantially Reduce Summertime Ozone Levels

EPA estimates that the final Good Neighbor Plan will reduce ozone forming NO_x emissions from the 23 significantly contributing upwind states by approximately 70,000 tons during the 2026 ozone season (May 1 – September 30) compared to a business-as-usual scenario.

About 25,000 tons will come from fossil fuel-fired power plants -- reducing their ozone season NO_x emissions. The additional 45,000 tons of NO_x emissions reductions would come from the other covered industrial sources. These reductions will improve air quality for millions of people across the country.

The final Good Neighbor Plan will also reduce other harmful pollutants from power plants. In 2026 alone, EPA estimates that annual sulfur dioxide emissions will drop by 29,000 tons, annual fine particle emissions by 1,000 tons, and annual carbon dioxide emissions by 16 million metric tons.

Protecting Communities

EPA's final Good Neighbor Plan will reduce ozone across the U.S. with a focus on areas struggling to attain and maintain the 2015 ozone standards.

Program enhancements, including the daily backstop emissions rates for large power plants and program coverage for both existing and future power plant and industrial sources, will achieve air quality benefits in downwind communities that suffer a disproportionate burden from ozone pollution.

Human Health and Environmental Benefits of Reducing Ozone Far Exceed Costs

In the year 2026, the final Good Neighbor Plan will prevent up to 1,300 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 approximately as large as in 2026, although the annual benefits decline slightly over time based on EPA's projection that the health status of the population will improve over this period.

The benefits that EPA could quantify for the final Good Neighbor Plan far outweigh the costs. EPA estimates the benefits in 2026 will be \$4.3 billion and could be as much as \$15 billion (2016\$, 3 percent discount rate). In 2026, the net benefits of this final rule – after accounting for the costs of compliance – are estimated to be \$3.7 billion and could be as much as \$14 billion (2016\$, 3 percent discount rate). EPA estimates that the net present value of this rule over the period from 2023 to 2042, after taking into account compliance costs, is \$200 billion (2016\$, 3 percent discount rate).

In addition, the emissions reductions projected from the final Good Neighbor Plan will result in

a broad range of unquantified benefits, including improving visibility in national and state parks and increasing protection for sensitive ecosystems, coastal waters and estuaries, and forests.

To more fully understand the impacts of this rule, EPA evaluated the effects the Good Neighbor Plan would have on minority populations, low-income populations and/or tribal nations. Our analysis shows that the Good Neighbor Plan will lower ozone and fine particle concentrations in many areas, providing broadly shared benefits for people of color and low-income households.

The cost of achieving these reductions is estimated to be approximately \$910 million annually over the period 2023 to 2042 (2016\$, 3% discount rate), a fraction of the estimated value of the benefits. As noted above, the final emissions reduction requirements are also based on cost-effective, well-demonstrated pollution control measures that many states have been implementing for years. EPA projects that the final rule will not have a significant impact on small businesses, and that once fully implemented the Good Neighbor Plan will increase the overall costs of electricity production by only slightly more than 1 percent.

The Good Neighbor Plan Preserves Industry’s Ability to Deliver Reliable Electricity

The Agency made several adjustments to the proposed emissions reduction requirements for power plants – reflecting input received from grid operators across the country and other stakeholders – to ensure that the power sector can continue to deliver reliable electricity while also achieving cleaner and healthier air. These changes are designed to provide owners and operators of power plants with the operational flexibility and predictability needed to ensure electric system reliability, particularly in the early years of the program. For more detail, see the fact sheet: [The Good Neighbor Plan and Reliable Electricity](#)

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 submission, within two years, the EPA must issue a Federal Implementation Plan (FIP) to assure downwind states are protected.

EPA is continuing its 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. These prior rules successfully addressed less protective ozone NAAQS set in earlier years.

As in its prior interstate transport rules, EPA has employed a longstanding, court-affirmed 4-step 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.

More Information

Interested parties can download a copy of the final Good Neighbor Plan from EPA's website at the following address: <https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs>

Today's action and other background information are also available electronically at <https://www.regulations.gov>, EPA's electronic public docket and comment system.

For more information about the final action:

- For general questions about the rule, please contact Liz Selbst, Office of Air Quality Planning and Standards, at Selbst.elizabeth@epa.gov.
- For questions about regulatory requirements for power sector sources, please contact Beth Murray, Office of Atmospheric Protection, at Murray.beth@epa.gov.
- For questions about regulatory requirements for industrial sources, please contact Dylan Mataway-Novak, Office of Air Quality Planning and Standards, at Mataway-novak.dylan@epa.gov.