

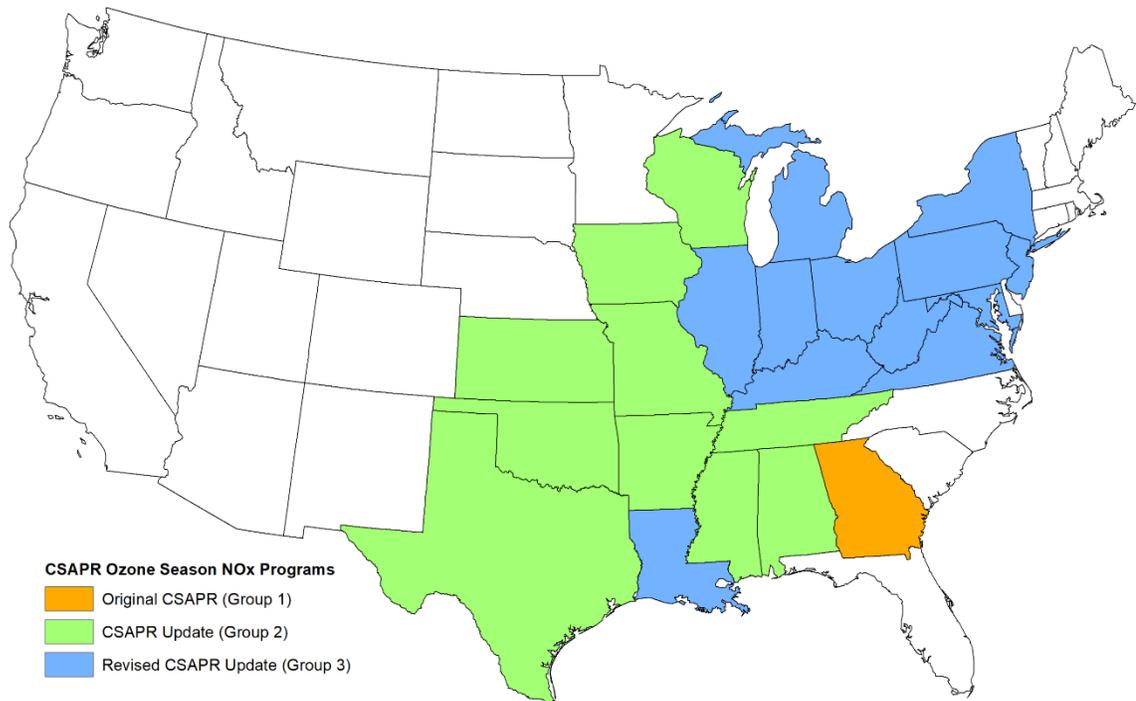
FACT SHEET
Final Rule:
Revised Cross-State Air Pollution Rule Update
for the 2008 Ozone NAAQS

SUMMARY OF ACTION

On March 15, 2021, EPA finalized the Revised Cross-State Air Pollution Rule (CSAPR) Update in order to resolve 21 states’ outstanding interstate pollution transport obligations for the 2008 ozone National Ambient Air Quality Standards (NAAQS). Starting in the 2021 ozone season, this final rule will reduce emissions of nitrogen oxides (NOx) from power plants in 12 states, improving air quality for millions of Americans.

This rulemaking responds to a September 2019 ruling by the United States Court of Appeals for the D.C. Circuit, *Wisconsin v. EPA*, which remanded the 2016 CSAPR Update to EPA for failing to fully eliminate significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS from these states by downwind areas’ attainment dates.

Cross-State Air Pollution Rule Regions



KEY FEATURES

Meets Clean Air Act “good neighbor” obligations for the 2008 ozone NAAQS

This action fully resolves 21 states' remaining "good neighbor" obligations under the 2008 ozone NAAQS.

For 9 out of the 21 states for which the CSAPR Update was previously found to be only a partial remedy (Alabama, Arkansas, Iowa, Kansas, Mississippi, Missouri, Oklahoma, Texas, and Wisconsin), projected 2021 emissions do not significantly contribute to nonattainment or maintenance problems for the 2008 ozone NAAQS in downwind states. Thus, no further emission reductions beyond those under the CSAPR Update are required for these states to address interstate air pollution under the 2008 ozone NAAQS.

For the 12 remaining states (Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia), projected 2021 emissions were found to contribute at or above a threshold of 1% of the NAAQS (0.75 ppb) to the identified nonattainment and/or maintenance problems in downwind states. After further analysis of emission-reduction potential, cost-effectiveness of controls, and downwind air quality improvement, EPA determined additional emission reductions relative to the CSAPR Update were necessary from all 12 of these states.

Specifically, emission reductions are required at power plants in these 12 states based on optimization of existing, already-installed selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) controls beginning in the 2021 ozone season, and installation or upgrade of state-of-the-art NO_x combustion controls beginning in the 2022 ozone season.

EPA is issuing new or amended Federal Implementation Plans (FIPs) for 12 states that revise state emission budgets that reflect these additional emission reductions beginning with the 2021 ozone season.

EPA will also adjust these 12 states' emission budgets for each ozone season thereafter to incentivize ongoing operation of identified emission controls until such time that air quality projections demonstrate resolution of these states' linkages to downwind nonattainment and/or maintenance problems for the 2008 ozone NAAQS. As such, this rulemaking includes adjusting emission budgets for each state for each ozone season for 2021 through 2024. Budgets from 2022 to 2024 are updated to account for known future unit retirements as well as construction of new units. After the 2024 ozone season, no further adjustments would be required for the purposes of this rule.

The new requirements for the 12 states to make further emission reductions will take effect 60 days after publication of the notice of final rulemaking in the Federal Register. This date is expected to fall before the July 20, 2021 Serious area attainment date for the 2008 ozone NAAQS. This will enable improvements in downwind ozone and associated public health benefits by the 2021 ozone season. While the new Group 3 trading program established in the rule will be implemented starting May 1, 2021 (the first day of the 2021 ozone season), EPA is issuing supplemental allowances to ensure

that the increased stringency reflected in the new emission budgets will not take effect before the rule's effective date. The amount of supplemental allowances issued for each state reflects the difference between the state's budgets under the Group 2 trading program and the new Group 3 trading program for the portion of the 2021 ozone season between May 1 and the rule's effective date.

It is important to note that this action is taken only with respect to good neighbor obligations under the 2008 ozone NAAQS, not the more stringent 2015 ozone NAAQS. Nonetheless, emission reductions and associated improvements in air quality achieved in this action are beneficial towards attaining the 2015 ozone NAAQS.

Utilizes a proven, achievable, and cost-effective mechanism

Under this rulemaking, FIPs will require power plants in the 12 linked states to participate in a new CSAPR NO_x Ozone Season Group 3 Trading Program that largely replicates the existing CSAPR NO_x Ozone Season Group 2 Trading Program, with the main differences being the geography and emission budget stringency. Aside from the removal of the 12 covered states from the current CSAPR NO_x Ozone Season Group 2 Trading Program, this rule leaves unchanged the emission budget stringency and geography of the existing CSAPR NO_x Ozone Season Group 1 and Group 2 Trading Programs.

This rule includes two mechanisms to facilitate implementation and promote compliance flexibility, while maintaining the environmental protection provided by the program:

- First, EPA is creating a limited initial bank of allowances for use in the new Group 3 trading program. Certain allowances banked in 2017-2020 under the existing Group 2 trading program will be converted at a ratio of 8:1 up to the initial Group 3 bank target amount.
- Second, additional Group 3 allowances are available as a "safety valve" for the 2021 control period. Sources can create an additional limited number of Group 3 allowances through the voluntary conversion of additional banked 2017-2020 Group 2 allowances at an 18:1 ratio.

This final rule does not include limits on ozone season NO_x emissions from non-EGU sources. Using the best information currently available to the Agency, EPA determined that there are relatively fewer emission reductions available from the non-EGU controls EPA evaluated at a cost threshold comparable to the cost threshold selected for EGUs. Such reductions are estimated to have a much smaller effect on any downwind receptor in the year by which EPA finds such controls could be installed. For these reasons, EPA concluded that limits on NO_x emissions from non-EGUs are not required to eliminate significant contribution or interference with maintenance under the 2008 ozone NAAQS.

EPA is also finalizing an error correction of its June 2018 approval of Kentucky's good neighbor state implementation plan (SIP), which had concluded that the CSAPR Update was a complete remedy based on modeling of the 2023 analytic year. The basis for that conclusion was invalidated by the decisions in *Wisconsin v. EPA* and *New York v. EPA* (which vacated a similar set of findings in a rule called the "CSAPR Close-out"). With finalization of this error correction and disapproval of Kentucky's SIP, Kentucky's good neighbor obligations would be outstanding, but are now resolved along with the other 20 states' in this rulemaking.

BENEFITS AND COSTS OF EMISSION REDUCTIONS

Ozone is linked to a variety of serious public health effects. Exposure to ozone can harm the respiratory system (the upper airways and lungs) and aggravate asthma and other lung diseases. Evidence indicates ozone also is likely to be one of the many causes of asthma development. Exposure to ozone is linked to early death from respiratory and cardiovascular causes.

Emissions of NO_x can react with emissions of other "ozone precursors" (such as volatile organic compounds) in the atmosphere to create ground-level ozone pollution, or smog. These pollutants can travel great distances, often crossing state lines and making it difficult for some states to meet or maintain the national clean air standards that protect public health and welfare. Reducing transport of these pollutants across state borders would help downwind states meet and maintain the health-based NAAQS for ozone.

In March 2008, to better protect the health and welfare of Americans, EPA strengthened the national air quality standards for ozone by setting an 8-hour standard at 75 parts per billion (ppb) – and, among other things, triggered states' obligation to reduce transported pollution that could affect downwind areas' ability to meet the standard.

Reducing the transport of ozone season NO_x pollution that crosses state borders will help downwind states meet and maintain these standards. EPA estimates the Revised CSAPR Update will reduce summertime NO_x emissions from power plants in the 12 linked upwind states by 17,000 tons in 2021 compared to projections without the rule. Due to this rule and other changes already underway in the power sector, ozone season NO_x emissions will be nearly 25,000 tons lower in 2021 than in 2019, a reduction of 19 percent. The reduction in emissions is estimated to prevent about 290,000 asthma events, 560 hospital and emergency room visits, 110,000 days of missed work and school, and up to 230 premature deaths in 2025. The public health and climate benefits are valued, on average, at up to \$2.8 billion each year over the period 2021 to 2040.

These emission reductions will also improve visibility in national and state parks and benefit sensitive ecosystems including Adirondack lakes and Appalachian streams, coastal waters and estuaries, and forests.

The annualized costs of the rule are, on average, \$25 million each year over the same period from 2021 to 2040.

BACKGROUND

The Clean Air Act's "good neighbor" provision (42 U.S.C. § 7410(a)(2)(D)(i)(I)) requires states to address interstate transport of air pollution that affects the ability of downwind states to attain and maintain clean air standards. The "good neighbor" provision requires states to submit State Implementation Plans, or SIPs, that eliminate pollution that contributes significantly to nonattainment or interferes with maintenance of the NAAQS in other states. The Clean Air Act requires EPA to issue Federal Implementation Plans, or FIPs, to address this type of interstate pollution in the event that states do not submit approvable SIPs. The final Revised CSAPR Update fulfills this backstop role.

This rule continues EPA's efforts since the 1990s to address interstate pollution, through rules such as the NO_x SIP Call (1998) and the Clean Air Interstate Rule (2005). More recently, in 2011, EPA finalized CSAPR to address "good neighbor" obligations for the 1997 ozone NAAQS and the 1997 and 2006 fine particle NAAQS. Building on the methodology of prior rules, CSAPR employed a 4-step framework to address the requirements of the good neighbor provision for ground-level ozone NAAQS:

- Identifying downwind receptors that are expected to have problems attaining or maintaining the NAAQS;
- Determining which upwind states contribute to these identified problems in amounts sufficient to "link" them to the downwind air quality problems (i.e., here, a one percent contribution threshold);
- For states linked to downwind air quality problems, identifying upwind emissions that significantly contribute to downwind nonattainment or interfere with downwind maintenance of the NAAQS; and
- For states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, implementing the necessary emission reductions through enforceable measures.

In October 2016, EPA finalized the CSAPR Update to address summertime transport of ozone for the 2008 ozone NAAQS and updated the CSAPR ozone season program. The CSAPR Update issued new and revised FIPs for 22 states in the eastern U.S. Based on information available at that time, EPA could not conclude that the rule fully addressed good neighbor obligations for 21 of the 22 CSAPR Update states (for Tennessee, the CSAPR Update was a full remedy).

In December 2018, EPA finalized the CSAPR Close-Out. Based on modelling, EPA projected that in 2023 there would be no remaining nonattainment or maintenance receptors in the eastern U.S. Thus, EPA determined that the CSAPR Update fully addressed interstate pollution transport obligations under the 2008 NAAQS for ozone in 20 eastern states.

On September 13, 2019, the United States Court of Appeals for the District of Columbia Circuit (DC Circuit) remanded the CSAPR Update in *Wisconsin v. EPA*, concluding that it unlawfully failed to eliminate significant contribution to nonattainment and interference with maintenance by downwind areas' attainment deadlines for the 2008 NAAQS.

On October 1, 2019, the DC Circuit in *New York v. EPA* vacated the CSAPR Close-Out on the same grounds that it remanded the CSAPR Update in *Wisconsin v. EPA*. Specifically, the Close-Out Rule analyzed the year 2023 as opposed to 2021, the next applicable attainment date for the 2008 ozone NAAQS, and failed to demonstrate that it was impossible to address significant contributions by the 2021 attainment date.

Today's final rule is in response to these decisions and fully resolves the outstanding good neighbor obligations at issue, in compliance with the holdings in these cases.

The proposed Revised CSAPR Update was signed on October 15, 2020 and published in the Federal Register on October 30, 2020. EPA held a public hearing on November 12, 2020, and the public comment period for the proposal was open through December 14, 2020. The EPA received approximately 80 comments on the proposal and considered these comments as we developed this final rule. The preamble for the final rule addresses many of these comments, and EPA's responses to the remaining comments can be found in a "response to comments" document located in the docket for this action.

FOR MORE INFORMATION

To read or download a copy of the final rule, go to <https://www.epa.gov/csapr/reviced-cross-state-air-pollution-rule-update> or <http://www.regulations.gov>. The final rule will also be available in hardcopy at the EPA Docket Center's Public Reading Room, subject to ongoing restrictions related to COVID-19. Materials for this final action can be accessed using Docket ID No. EPA-HQ-OAR-2020-0272. For further information about the final action, contact Daniel Hooper of EPA's Office of Atmospheric Programs, Clean Air Markets Division, at 202-343-9167 or by e-mail at hooper.daniel@epa.gov.