



Implementing the Final Rule to Strengthen the National Air Quality Health Standard for Particulate Matter – Clean Air Act Permitting, Air Quality Designations, and State Planning Requirements

Fact Sheet

- On February 7, 2024, the U.S. Environmental Protection Agency (EPA) strengthened the National Ambient Air Quality Standards (NAAQS) for fine particle pollution (PM_{2.5}) by revising the level of the primary (health-based) annual PM_{2.5} standard to 9.0 micrograms per cubic meter (µg/m³).
- EPA is not making changes to other air quality standards for PM including the primary 24-hour PM_{2.5} standard, the primary 24-hour PM₁₀ standard, and the secondary PM_{2.5} and PM₁₀ standards.
- Improving air quality and implementing the revised primary annual PM_{2.5} NAAQS is a partnership between the federal government, state and local governments, and Tribal Nations. EPA will support states and Tribes in the process of implementing and achieving the revised annual PM_{2.5} NAAQS, building on successful efforts to reduce particle pollution and strengthening this vital clean air protection.
- EPA, states, and Tribes have numerous tools to successfully achieve national air pollution standards and have years of experience using these.
- EPA's national rules in the power, transportation, and industrial sectors will continue to help reduce PM and make the strengthened standard easier to achieve and maintain. Recent EPA actions include methane standards for oil and gas sector operations, emissions standards for heavy-duty vehicles and engines, and the Good Neighbor Plan to reduce pollution from power plants and industrial facilities. EPA expects to adopt additional measures that could help further reduce fine particle pollution, including emissions standards and air toxics control requirements for power plants and updated rules for light and medium duty vehicles.
- President Biden's Investing in America Agenda will also support air quality improvements, with funding under the Bipartisan Infrastructure Law and the Inflation Reduction Act aimed at reducing pollution from school buses and trucks, port operations, and electricity generation.
- EPA is committed to partnering with federal agencies, working with states, Tribes, air quality management districts, and other stakeholders to address particle pollution from

wildland fires, and address them as part of the implementation of the revised PM standard. EPA and partners are developing and providing the necessary tools and resources to engage in responsible wildfire risk reduction activities while ensuring attainment and maintenance of air quality standards to protect public health and welfare under the Clean Air Act. EPA is maintaining flexibilities for states to help implement this program, including new, additional tools to support the exceptional events process for requesting exclusion of event-influenced data, such as wildfire. These updates will be critical as the nation is facing a wildfire crisis. Wildfires have been growing in size, duration, and destructivity, with millions of people at risk from wildfire and wildfire smoke. Federal agencies have jointly recognized that increasing prescribed burning in a strategic and coordinated manner may mitigate the risk of high severity wildfire and its associated smoke impacts.

- After EPA issues the final PM_{2.5} NAAQS, a series of implementation steps will occur as required by the Clean Air Act (CAA). The first implementation steps include an initial process to designate whether areas meet the revised PM_{2.5} NAAQS, as well as the development and submittal of “infrastructure” state implementation plans that demonstrate states have the necessary clean air programs and authorities to meet the revised standard. Additionally, at the effective date (60 days after publication in the *Federal Register*) of the final rule, all applicants for permits to construct a new major source or major modification of an existing stationary source will need to conduct an air quality analysis that considers the revised PM_{2.5} NAAQS.
- Once the initial area designations process is complete, areas designated nonattainment have planning obligations to demonstrate attainment and meet the new standard within 6 years following the nonattainment designations. The CAA also includes a pathway for states to seek additional time for attainment with the new standard.

Clean Air Act Permitting

- The Clean Air Act’s New Source Review (NSR) permitting program requires industrial facilities to install modern pollution control equipment when they are built or when making a change that increases emissions significantly. The NSR permitting process protects communities from air pollution and allows clean industry to build or expand. Only new and expanding facilities with large emissions will need an NSR permit. Permits are enforceable, legal documents that outline what construction is allowed; what air emission limits must be met; how the source can be operated; and include monitoring, recordkeeping and reporting requirements to show compliance.

- NSR permits are issued by state and local air agencies, and in rare cases by EPA. Facility owners or operators that need an air pollution permit follow a well-established process to apply for and receive their NSR permits. The permitting process provides sources significant flexibility to choose how to design their facilities, including air pollution control technologies as needed to obtain permit approval. Air pollution control technology to reduce emissions that contribute to PM_{2.5} is proven, effective, and available.
- The NSR program protects public health and the environment, even as new industrial facilities are built and existing facilities expand. There are two programs for large emitters known as major sources:
 1. Nonattainment New Source Review (NNSR) ensures that air quality does not worsen where the air is currently unhealthy to breathe - nonattainment areas.
 2. Prevention of Significant Deterioration (PSD) ensures air quality is not significantly degraded where the air is currently clean - attainment areas.
- EPA has a long history of successfully working with state and local permitting authorities and Tribes to implement the NSR program following a revision of the clean air standards. EPA, state, and Tribal permitting authorities, and permit applicants, have a range of tools and approaches to help them successfully continue implementation of NSR permitting following this revision of the health-protective standard for PM_{2.5}.
- PSD permitting will continue to apply in existing clean areas until EPA completes the process of designating areas as meeting or not meeting the strengthened PM_{2.5} standard (likely in 2026). Only sources that are “major” need a major source PSD permit when constructing or expanding, and existing sources only need a permit addressing PM_{2.5} when an expansion project would result in a significant increase in PM_{2.5} emissions.
- The first milestone for applying the revised NAAQS in Clean Air Act permitting will occur for certain large stationary sources at the effective date of the final rule, 60-days following publication in the *Federal Register*. At that point, applicants that need a PSD permit must show that their new or modified source will not cause or contribute to a violation of the

What is needed for a Clean Air Act permit?

To obtain a Clean Air Act permit from a state, the owner of a facility must demonstrate that its emissions will not cause nor contribute to a violation of the strengthened standard. This demonstration will be based on:

- What type of air pollution will be emitted?
- How much will be emitted and from what parts of the facility?
- What are the current conditions, including air pollutant levels, meteorology and terrain?

This information is used to predict the air quality impacts of the facility and determine if it would meet the requirements of the Clean Air Act.

more health-protective standard. For PM_{2.5}, an air pollutant with significant health concerns, this has been done successfully since EPA established the fine particle standards in 1997 and strengthened them in 2006 and 2012.

- Permit applicants that received their final PSD permit before the effective date of the new standards will not need to make any adjustments.
- Facility owners with PSD permits still in process will need to determine if their modeling already demonstrates that their planned project will not cause or contribute to an exceedance of the new standard.
 - If there is not a violation, the permit application can continue through review.
 - If modeling does show that the new emissions would cause or contribute to a violation of the revised standard, the owner has options for how they modify their planned project and what types of emission controls they install. A more detailed modeling assessment must show either no violation or that impacts fall below levels considered significant.
- Permitting authorities and regulated industries are familiar with the NSR program requirements and the flexibility it provides to locate and design projects that can successfully obtain permits that ensure clean air and allow for growth. There are many project-specific variables that can be modified to align a new project with clean air requirements, including the use of cost-effective control technologies.
- When EPA last strengthened the health-based annual standard for PM_{2.5} in 2012, the Agency successfully worked with states, Tribes, and permit applicants to ensure a smooth transition to the new permitting requirements and to enable NSR permitting to continue without significant disruption.
 - More than 50 sources were able to identify cost-effective emissions controls necessary to obtain a PSD permit in the two-year period following that revision.
 - These sources included a wide array of industries including power plants, steel mills, lumber companies, fertilizer production plants, and lime manufacturing, among others.
 - Sources successfully relied on existing implementation tools to perform air quality modeling and identify applicable controls to address emissions of fine particles and precursors. Since 2012, EPA has updated its regulations and guidance, significantly improving and streamlining its NSR permitting tools to help sources and agencies move through the permitting process. This places EPA, the states, Tribes, and

permitting authorities in a stronger position to successfully implement NSR permitting under the revised PM_{2.5} NAAQS.

Air Quality Designations

- Within 2 years of issuing a revised NAAQS, EPA designates all areas of the country as **attainment** (meeting the standards), **nonattainment** (not meeting the standards), or **unclassifiable** (not enough data to make a determination). This process is referred to as initial area designations. From a geographic perspective, nonattainment areas include areas with monitors that are violating the standards and other nearby areas with sources of emissions that contribute to the violation. EPA works closely with states and Tribes as it determines the initial area designations and the appropriate geographic boundaries.
- For the PM_{2.5} NAAQS, the Clean Air Act provides that all nonattainment areas are initially classified as “Moderate.” If an area does not attain the NAAQS by the Moderate attainment date (6 years from designations), then the area is reclassified to “Serious”, must meet additional planning requirements, and has a new attainment date of 10 years from designations.
- The initial area designations process is collaborative, with states and Tribes having an opportunity to provide recommendations to EPA, and EPA considering multiple factors in its analysis. The public will also have an opportunity to provide comment on initial area designations. More information about the designations process overall is available on EPA’s website at: <https://www.epa.gov/particle-pollution-designations>.
- In addition, in a memorandum to be released close in time with the final rule, EPA will be providing the Agency’s expectations on the process and schedule for designating areas under the revised standard. This memorandum identifies important factors that EPA intends to use and recommends air agencies consider in developing their recommendations for area designations. Attachments to the memorandum provide detailed information on the schedule, factors to analyze, and technical tools to use for evaluating nonattainment area boundaries.

Wildland Fire and Exceptional Events Considerations in Initial Area Designations

- Wildfires have been growing in size and severity, with millions of people at risk from wildfire and wildfire smoke. The wildfire crisis is a public health crisis, including significant impacts on air quality. As wildfires increase in size and severity, the related public health impacts, including from smoke exposure, will continue to grow. At the same time, increasing the application of prescribed fire in a strategic and coordinated manner may mitigate the risk and adverse effects of high severity wildfire and future smoke exposure.

- EPA works closely with other federal agencies, state and local health departments and air agencies, Tribal nations, and other partners to provide information, tools, and resources to support communities in preparing for, responding to, and mitigating health impacts from wildland fire and smoke.
- On November 9, 2023, EPA, the Department of the Interior, Department of Agriculture, and the Centers for Disease Control and Prevention announced a Memorandum of Understanding to further their joint work to protect communities from the impacts of wildfire smoke, while promoting land management practices, including prescribed fire, that reduce the risk of large, severe fires.
- The CAA and EPA’s [Exceptional Events Rule](#) provide a framework for addressing air quality data influenced by exceptional events when EPA is making certain regulatory decisions, including initial area designations and reclassifications to a higher level of nonattainment. EPA is committed to working with air agencies interested in submitting exceptional events demonstrations and assisting air agencies with the implementation process.
 - For example, EPA is committed to working closely with air agencies in managing the impacts of wildland fire and smoke events, such as the 2023 Canadian, Mexican, and domestic wildfires, on initial area designations for the revised PM_{2.5} NAAQS.
- To help support air agencies in evaluating for impacts of exceptional events, and developing exceptional events demonstrations, EPA is developing new tools. EPA anticipates that these tools will be helpful for PM_{2.5} implementation and they are expected to help states in developing exceptional events demonstrations for both the annual and 24-hour PM_{2.5} standards. as part of the initial area designations process to come.
 - **Data visualization and comparison tools.** EPA is developing a suite of tools to help air agencies identify and evaluate event-influenced PM_{2.5} data for potential exclusion. These tools will assist air agencies in identifying which impacted days affect calculated levels of PM_{2.5} known as “design values” and whether the events have regulatory significance.
 - **PM_{2.5} Wildfire Exceptional Events Tiering Document.** To supplement EPA’s already issued guidance on developing exceptional events demonstrations for both prescribed fires on wildland and wildfires, the Agency is developing a resource that would include information on tiering wildfire/PM events, similar to the tiering approach used for wildfire/ozone events. This tool is expected to help to right-size demonstrations by identifying the minimum required information needed to support the criteria for an exceptional events demonstration for PM_{2.5} influenced by wildfire.

- **Prescribed Fire Demonstration Example.** EPA is working closely with the State of California and other collaborators to develop an exceptional events demonstration for a prescribed fire in California.
- Relatedly, EPA acknowledges the importance of strategically used prescribed fire to mitigate the wildfire crisis while protecting public health and focusing attention on controlling other sources of PM_{2.5} air pollution that may contribute to exceedances and violations of the revised standard. EPA has issued detailed [guidance](#) on how states can seek to exclude data influenced by prescribed fire under the Exceptional Events Rule.
- EPA is committed to partnering with federal land managers and working with states, Tribes, air quality management districts, and other stakeholders to provide the necessary tools and resources to attain and maintain air quality standards to protect public health and welfare under the Clean Air act while engaging in responsible wildfire [risk reduction](#) activities.
- As part of these efforts, EPA is working with the State of California, US Forest Service, and other partners to develop an exceptional events demonstration for a prescribed fire in California, which EPA expects that the state will formally submit in early 2024. EPA is committed to ensuring that air agencies have a clear pathway for developing exceptional events demonstrations for prescribed fires ignited to mitigate the effects of high-severity wildfires. EPA anticipates this demonstration will provide a useful model for other prescribed fire demonstrations that may be needed going forward.
- More information on exceptional events demonstration submission deadlines for initial area designations will be provided in the Designations Memorandum. In addition, EPA has established a general schedule for submission of exceptional events demonstrations associated with initial area designations. That schedule is found in Table 2 to [40 CFR section 50.14\(c\)\(2\)\(vi\)](#) – “Schedule for Initial Notification and Demonstration Submission for Data Influenced by Exceptional Events for Use in Initial Area Designations.”

State Implementation Plan Requirements for the Revised Standard

- In addition to the permitting analyses, promulgation of a revised NAAQS triggers other implementation planning obligations. For example, within three years after promulgating a new or revised NAAQS, the CAA requires each state to develop and submit to EPA a new, “infrastructure State implementation Plan (SIP) submission.”
- The purpose of the infrastructure SIP submission is to assure that the state has in place the basic building blocks of state air quality management programs, such as air quality monitoring and enforcement programs. Infrastructure SIP submissions must address the requirements of CAA sections 110(a)(2)(A) through 110(a)(2)(M), as applicable.

- EPA has issued guidance to address development and submission of infrastructure SIPs: See e.g., “Guidance on Infrastructure State Implementation Plan (SIP) Elements under CAA Sections 110(a)(1) and 110(a)(2),” (September 2013) (<https://www.epa.gov/air-quality-implementation-plans/infrastructure-sip-requirements-and-guidance>).
- The next implementation milestone occurs once the initial area designations process is completed. At that point, states with nonattainment areas must develop state implementation plans (SIPs) showing how they will meet the revised standard.
 - States with Moderate nonattainment areas are required to adopt and submit nonattainment plan SIP submissions to EPA within 18 months of the effective date of designations. These SIP submissions must meet applicable statutory and regulatory requirements.
 - States with Moderate nonattainment areas must attain the PM_{2.5} NAAQS as quickly as possible, but by no later than the end of the sixth calendar year after designations. Under certain circumstances, states may qualify for up to two 1-year extensions.
 - In the event of reclassification to Serious, states must meet additional statutory and regulatory requirements in a new nonattainment plan SIP submission.
 - States with Serious nonattainment areas must attain the NAAQS as quickly as possible, but by no later than the end of the 10th calendar year following designations. Under certain circumstances, states may qualify for one additional extension of the attainment date up to 5 additional years.
- EPA’s [PM_{2.5} SIP Requirements Rule](#) provides additional details concerning Moderate and Serious area plan requirements.
- Tribes may, but are not required to, develop their own plans for nonattainment areas in Indian country. If a Tribe elects to do an implementation plan, EPA will work with the Tribe to develop an appropriate schedule that meets the needs of the Tribe and does not interfere with the attainment of the NAAQS in other jurisdictions.
- While air quality planning obligations for areas designated as nonattainment will not be triggered until the completion of the designations process, EPA encourages areas to begin to plan. As a part of the nonattainment plan SIP development process, EPA encourages states to address environmental justice (EJ) considerations. States are encouraged to involve community groups in the SIP development process, and to use updated tools, such as [EJScreen](#) or the [Climate and Economic Justice Screening Tool](#) to identify low income and disadvantaged communities where control measures could be appropriately targeted.

- Reductions in particle pollution from upcoming transportation, power plant, and other air pollution federal regulations will help areas attain the revised standards.
- EPA expects to host an informational webinar in the upcoming weeks to provide an overview of the implementation requirements included in the [PM_{2.5} SIP Requirements Rule](#). Please visit www.epa.gov/pm-pollution for more details.

Additional Background

- In August 2016, EPA published the [PM_{2.5} SIP Requirements Rule](#) to apply to all existing and future PM_{2.5} NAAQS. The PM_{2.5} SIP Requirements Rule addresses important nonattainment area planning issues, including clarifying SIP due dates and attainment date extension criteria, the process for determining control strategies, and provisions and definitions related to the Nonattainment New Source Review permitting program.
- The PM_{2.5} SIP Requirements Rule also includes environmental justice considerations in the context of PM_{2.5} nonattainment area planning. EPA encourages states to address environmental justice concerns, such as increasing opportunities for meaningful involvement by community groups in SIP development and using updated tools to identify low income and disadvantaged communities where additional monitoring may be needed, and where control measures can be targeted.
- In this final action, EPA is not making changes to the PM_{2.5} SIP Requirements Rule. In the future, EPA may consider whether additional guidance on the topic of environmental justice and PM_{2.5} implementation is appropriate, beyond what is already included in the existing PM_{2.5} SIP Requirements.

For More Information

- For more information on particle pollution and to read the final action, visit <https://www.epa.gov/pm-pollution>
- For more information on state implementation planning requirements, visit <https://www.epa.gov/pm-pollution/pm25-naags-final-sip-requirements-rule-july-2016>
- For more information on the Exceptional Events Rule and related guidance, visit <https://www.epa.gov/air-quality-analysis/treatment-air-quality-data-influenced-exceptional-events-homepage-exceptional>