



## Wildland Fire, Air Quality, and Public Health Considerations Fact Sheet

### Summary

- On February 7, 2024, the U.S. Environmental Protection Agency (EPA) announced a final rule to strengthen the nation's National Ambient Air Quality Standards (NAAQS) for fine particle pollution, also known as fine particulate matter (PM<sub>2.5</sub>) or soot.
- EPA is setting the level of the primary (health-based) annual PM<sub>2.5</sub> standard at 9.0 micrograms per cubic meter (µg/m<sup>3</sup>) to provide increased public health protection, consistent with the available health science. EPA is also finalizing revisions to other key aspects related to the PM NAAQS, including revisions to the monitoring requirements for the PM NAAQS with a focus on communities with environmental justice concerns and revisions to the Air Quality Index. EPA is changing the breakpoints of the PM<sub>2.5</sub> Air Quality Index (AQI) to reflect the revised level of the primary annual PM<sub>2.5</sub> standard and reflect recent health science on PM<sub>2.5</sub>.
- 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 is needed to mitigate the risk and adverse effects of high severity wildfire and future smoke exposure.
- A wildland fire is any fire that occurs in an area where human activity and development, if any, is substantially non-existent, which can include forests, shrublands, grasslands, or wetlands. Wildland fires – including both wildfires and prescribed fires – account for 44 percent of the nation's primary emissions of fine particulate matter (PM<sub>2.5</sub>). EPA recognizes the increasing challenges and human health impacts that wildland fire and smoke pose in communities all around the country.
- EPA works with other federal agencies, state and local health departments, and air and forestry agencies, Tribal Nations, state forestry agencies, and other partners to provide information, tools, and resources to support communities in preparing for, responding to, and manage health effects from wildland fire and smoke.
- EPA works with the U.S. Forest Service to provide the public with near real-time data on wildfire smoke and air quality through the [AirNow Fire and Smoke Map](#); jointly maintain

a [Smoke-Ready Toolbox](#) to provide communities, public health agencies, and other partners with information on how to reduce the health impacts of smoke from wildland fires; and provides [technical assistance to help communities](#) plan and prepare for smoke impacts. EPA will continue its longstanding participation in the U.S. Forest Service-led [Interagency Wildland Fire Air Quality Response Program](#) which provides operational smoke outlooks to help communities respond to smoke from large wildfires.

- EPA also provides the [Air Quality Index](#) - a color-coded tool for communicating air quality to the public. EPA is changing the AQI breakpoints to reflect the latest science on particle pollution and health, and the updates EPA has made to the annual standard for fine particle pollution. The new breakpoints will become effective 60 days following publication of the final rule in the Federal Register. Many areas can expect to see more days in the Moderate (Code Yellow) category because of the changes in the breakpoints. The Moderate category now begins when fine particle pollution concentrations reach 9 micrograms per cubic meter of air. Previously, the Moderate category began at 12 micrograms per cubic meter. The Unhealthy for Sensitive Groups (Code Orange) category does not change and remains at 35 micrograms per cubic meter. The Agency does not expect significant increases in days in the other AQI categories as a result of the updates to the category breakpoints. However, when events like wildfires affect air quality, the revised breakpoints in the upper AQI categories may shift some days from Unhealthy to Very Unhealthy, or from Very Unhealthy to Hazardous.
- EPA has recently signed a [Memorandum of Understanding \(MOU\)](#) on Wildland Fire and Air Quality with the U.S. Department of Agriculture, the Department of the Interior, and the Centers for Disease Control and Prevention. This MOU is designed to enhance coordination and communication while aligning air quality and land management goals for wildfire risk mitigation, including strategic increase in prescribed fires, and establish joint strategies for achieving those goals.
  - USDA, USDO, USEPA, and USCDC are working together and investing in the mutually important objectives of protecting public health from the impacts of smoke and enabling land management practices that reduce the future risk of large, high severity fire events.
  - USDA, USDO, USEPA, and USCDC are committed to working with our federal, state, local, and Tribal partners to strengthen our coordination, implementation, and communication of policies and programs that relate to the increased use of prescribed fire to improve ecosystem function and resilience of forests and other wildlands, while protecting communities from wildfire and smoke impacts. EPA is committed to ensuring there exists a clear path forward to allow for the

exclusion of air quality data influenced by exceptional events to be excluded from regulatory actions such as initial area designations.

- EPA will also continue to support states in managing the impacts of wildland fire and smoke on attainment of the National Ambient Air Quality Standards (NAAQS) for PM. Both the Exceptional Events Rule and the [PM<sub>2.5</sub> State Implementation Plan Requirements Rule](#) address fire-related emissions, including emissions from wildfires and prescribed fires on wildland.

### Exceptional Events Demonstrations

- EPA's mission includes preserving and improving the quality of our nation's ambient air to protect human health and the environment; however, the Clean Air Act also recognizes that it may not be appropriate to use the monitoring data influenced by "exceptional" events that are collected by the ambient air quality monitoring network when making certain regulatory decisions.
- The Exceptional Events Rule provides a framework for states and air agencies to request exclusion of air quality data influenced by exceptional events, including wildfires and prescribed fires, from certain regulatory decisions such as initial area designations. EPA has issued detailed [guidance](#) on how states can seek to exclude data influenced by such events under the Exceptional Events Rule.
- EPA is committed to ensuring that the process for requesting the exclusion of event-influenced data is clear. Where needed, EPA intends to offer clarifications or information to help support state, local, and Tribal air agencies (and their delegates) to seek exclusion of air quality monitoring data influenced by wildland fire smoke events.
- EPA appreciates that stakeholders across the nation are evaluating the impacts of wildfire smoke from the Summer of 2023 to initial area designations for the revised PM<sub>2.5</sub> standard. Information on the timeline for submission of exceptional events demonstrations associated with initial area designations is addressed in EPA's Exceptional Events Rule and will also be discussed in the forthcoming designations memorandum.
- Exceptional events demonstrations deadlines are due based on the data years that will be used for the initial area designations. The deadline for submitting demonstrations to the EPA for the first and second data years is 1 year following promulgation of the NAAQS. The deadline for the third data year used is the last day of the month that is 1 year and 7 months after promulgation.

- In addition to previously issued information, guidance, and tools, EPA is developing three new products to improve and support an efficient process for demonstrating that air quality data was influenced by exceptional events, when appropriate.
- These tools specifically address wildland fire events and events that influence PM2.5 concentrations. Each of these resources will go through some level of public review before they are finalized.
  - **Data visualization and comparison tools.** EPA is developing a suite of tools to help air agencies identify and evaluate event-influenced PM2.5 data for potential exclusion. These tools will assist air agencies in identifying which impacted days affect design values and whether the events have regulatory significance.
  - **PM2.5 Wildfire Exceptional Events Tiering Document.** To supplement EPA’s 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 EPA’s guidance on preparing exceptional events demonstrations for wildfire events influencing ozone concentrations. This tool would help to right-size demonstrations by identifying the minimum required information needed to support the criteria for an exceptional events demonstration.
  - **Prescribed Fire Demonstration Example.** EPA is committed to ensuring that air agencies have a clear pathway for needed exceptional events demonstrations for prescribed fires ignited to mitigate the effects of high-severity wildfires. EPA recognizes the importance of significantly increasing the application of prescribed fires to wildlands. To that end, EPA is working closely with the State of California, the United States Forest Service, and other collaborators to develop an exceptional events demonstration for a prescribed fire in Northern California. A public review opportunity on this document was offered in December 2023. This actual prescribed fire demonstration will go through the entire exceptional events process as an example of a successfully developed demonstration and will identify opportunities for land management and air agencies to efficiently collaborate on prescribed fire exceptional events demonstrations.

#### For More Information

- More information on exceptional events demonstration submission deadlines can be 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.”

- More information on the requirements and associated timelines for implementing the revised PM standards can be found in the [Implementation Fact Sheet](#).
- More information on the changes to the Air Quality Index can be found in the Changes to the [AQI Fact Sheet](#).