

FACT SHEET: NOTICE OF PROPOSED RULEMAKING FOR THE EPA RECONSIDERATION OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER

AIR MONITORING FOR FINE PARTICLE POLLUTION (PM_{2.5})

On January 6, 2023, the U.S. Environmental Protection Agency (EPA) announced a proposal to strengthen 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 from 12 micrograms per cubic meter (µg/m³) to within the range of 9.0 to 10.0 µg/m³. EPA proposed to retain the primary 24-hour PM_{2.5} standard, with its level of 35 µg/m³.

EPA also proposed to retain the primary (health-based) 24-hour PM₁₀ standard, which provides public health protection against exposures to coarse particles. The Administrator proposes to conclude that current evidence does not call into question the adequacy of that standard.

In addition, EPA proposed not to revise the current secondary (welfare-based) standards for both PM_{2.5} and PM₁₀ at this time. The Administrator proposes to conclude that the available evidence and information do not call into question the adequacy of protection provided by the current secondary PM standards for non-ecological effects (i.e., visibility, climate, and materials effects).

PM_{2.5} MONITORING

- As part of the proposed revisions to the PM_{2.5} standards, EPA is proposing to update monitoring requirements for fine particles.
- To enhance protection of air quality, especially in overburdened and vulnerable communities with environmental justice concerns subject to disproportionate air pollution risk, EPA is proposing to modify the PM_{2.5} monitoring network design criteria to include an environmental justice factor. This factor will account for proximity of populations at increased risk of PM_{2.5}-related health effects to sources of air pollution.
- PM_{2.5} monitors are required in each metropolitan statistical area (MSA) over 500,000 in population, as well as many lower population areas.
- EPA currently determines how many monitors, at minimum, are required in an area based on two factors: the population of the area, as well as the expected air quality status of the area relative to the NAAQS.
- According to current PM_{2.5} monitoring requirements:
 - At least one monitor must be located at the site of expected maximum PM_{2.5} concentration.
 - For MSA's with a population of 1 million or more people, one additional monitor must be located at a near-road site.
 - For some locations, an additional third monitor is required in an area of poor air quality.

- In this rule, EPA proposes to make this requirement more specific by requiring the monitor to be sited in an at-risk community, particularly where there are anticipated effects from sources of air pollution in the area.
- EPA is also proposing revisions to data calculations and other ambient air monitoring requirements for PM to improve the quality of data used in regulatory decision making and to better characterize air quality in communities that are at increased risk of PM_{2.5} exposure and health risk. These revisions include:
 - Updates in data calculations
 - Approval of reference and equivalent methods
 - Updates in quality assurance statistical calculations to account for lower concentration measurements
 - Updates to support improvements in PM methods
 - Updates to the Probe and Monitoring Path Siting Criteria for NAAQS pollutants.
- EPA is also encouraging commenters to submit information on whether and how advanced and emerging PM monitoring technologies, such as satellite-based instruments and low-cost ground-based air sensors, can help meet non-regulatory air quality data needs or aid in implementation issues such as siting regulatory monitors or identifying sources to consider in developing SIPs.
- EPA is not proposing requirements to add new monitors. However, if the primary (health-based) annual PM_{2.5} NAAQS is strengthened, there may be a small (~1%) increase in the number of minimally required monitors.
 - There are currently around 1,000 monitoring stations in the PM_{2.5} monitoring network across the country.
- Data from new monitors may not be available in time for use in making initial attainment and nonattainment designations for the revised primary annual PM_{2.5} standard, if finalized.
- Better quality data will allow regulatory air agencies to better assist communities in reducing exposures and implementing NAAQS and will also help inform future PM NAAQS reviews.
- The PM_{2.5} monitoring requirements were last updated as a part of the 2012 review of the PM NAAQS. In the 2012 review, the near-road PM_{2.5} monitoring requirement was added.
- EPA is not proposing changes to monitoring requirements for the PM₁₀ monitoring network.

FOR MORE INFORMATION

- For more information on particle pollution and to read the proposed action, visit <https://www.epa.gov/pm-pollution>
- EPA has regulated particle pollution since 1971. The agency has revised the standards four times -- in 1987, 1997, 2006 and 2012 – to ensure they continue to protect public health and welfare. A [table of historical PM standards](http://www.epa.gov/ttn/naqs/standards/pm/s_pm_history.html) is available at http://www.epa.gov/ttn/naqs/standards/pm/s_pm_history.html