

OVERVIEW OF EPA'S PROPOSAL TO REVISE THE AIR QUALITY STANDARDS FOR PARTICLE POLLUTION (PARTICULATE MATTER)

- On June 14, 2012, the U.S. Environmental Protection Agency (EPA) proposed to strengthen the National Ambient Air Quality Standards (NAAQS) for fine particle pollution, also known as fine particulate matter (PM_{2.5}). The agency also proposed to retain the existing standards for coarse particle pollution (PM₁₀).
- An extensive body of scientific evidence shows that exposure to particle pollution causes premature death and is linked to a [variety of significant health problems](#), such as increased hospital admissions and emergency department visits for cardiovascular and respiratory problems, including non-fatal heart attacks. PM also is linked to the development of chronic respiratory disease.
- People most at risk from fine and coarse particle pollution exposure include people with heart or lung disease (including asthma), older adults, children, and people of lower socioeconomic status. Research indicates that pregnant women, newborns, and people with certain health conditions, such as obesity or diabetes, also may be more susceptible to PM-related effects.
- Particle pollution also causes haze in cities and some of our nation's most treasured national parks.
- Fine particles come from a variety of sources, including vehicles, smokestacks and fires. They also form when gases emitted by power plants, industrial processes, and gasoline and diesel engines react in the atmosphere. Sources of coarse particles include road dust that is kicked up by traffic, some agricultural operations, construction and demolition operations, industrial processes and biomass burning. Emission reductions from EPA rules already on the books will help states meet the proposed revised standards by making significant strides toward reducing fine particle pollution. These include clean diesel rules for vehicles, rules to reduce pollution from power plants and rules to reduce pollution from stationary diesel engines.
- For fine particles, today's proposal would:
 - **Strengthen the annual health standard** for fine particles by setting the standard at a level within the range of 12 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 13 $\mu\text{g}/\text{m}^3$. The current annual standard, 15 $\mu\text{g}/\text{m}^3$, has been in place since 1997.
 - **Retain the existing 24-hour fine particle standard**, at 35 $\mu\text{g}/\text{m}^3$. EPA set the 24-hour standard in 2006.

- **Set a separate fine particle standard to improve visibility**, primarily in urban areas. EPA is proposing two options for this 24-hour standard, at 30 deciviews or 28 deciviews. (A deciview is a yardstick for measuring visibility.)
- **Retain the existing secondary standards** for PM_{2.5} and PM₁₀ to provide protection against other effects, such as ecological effects, effects on materials, and climate impacts.
- EPA's proposed changes to the fine particle standards are consistent with advice from its independent science advisors, the Clean Air Scientific Advisory Committee (CASAC).
- **For coarse particles, today's proposal would retain the existing 24-hour standard.** This standard, with a level of 150 µg/m³, has been in place since 1987.
- EPA examined thousands of studies as part of this review of the standards, including hundreds of new studies published since EPA completed the last review of the standards in 2006. The new evidence includes more than 300 new epidemiological studies, many of which report adverse health effects even in areas that meet the current PM_{2.5} standards. EPA also considered analyses by agency experts, along with input CASAC, which provided comments at several points throughout the review process..
- As part of EPA's commitment to a transparent, open government, the agency will seek and encourage broad public input in setting this standard that provides critical health protection to millions of Americans.
- The Clean Air Act requires EPA to review the particle pollution standards every five years. The proposed revisions, which are a result of that review, also respond to a court remand of a portion of the existing PM_{2.5} standards, which were issued in 2006.

[More details about the proposed standards](#)

- The proposal also addresses several issues related to the proposed standards. Among them:
 - To ensure a smooth transition to the new standards., EPA is proposing to grandfather [preconstruction permitting](#) applications that have made substantial progress through the review process at the time the final standards are issued;
 - The agency is proposing [updates and improvements to the nation's PM_{2.5} monitoring network](#) that include relocating a small number of monitors to measure fine particles near heavily traveled roads. EPA's proposal does not require additional monitors.
 - In addition, the proposal would [update the Air Quality Index \(AQI\)](#) for particle pollution.

- EPA anticipates making attainment/nonattainment designations by December 2014, with those designations likely becoming effective in early 2015.
- States would have until 2020 (five years after designations are effective) to meet the proposed health standards. Most states are familiar with this process and can build off work they are already doing to reduce pollution to help them meet the standards.
- A state may request a possible extension to 2025, depending on the severity of an area's fine particle pollution problems and the availability of pollution controls.
- The Clean Air Act does not specify a date for states to meet secondary PM_{2.5} standards; EPA and states determine that date through the implementation planning process. The same controls that will be installed to meet the primary, health-based standards will also help areas meet the secondary standards. In 2020, we expect virtually all counties will meet the secondary standards without state/local reductions.
- By law, EPA cannot consider costs in setting or revising national ambient air quality standards. However, to inform the public, EPA analyzes the benefits and costs of implementing the standards as required by Executive Orders 12866 and 13563 and guidance from the White House Office of Management and Budget.
- EPA will issue a regulatory impact analysis that estimates the potential benefits and costs of meeting a revised annual health standard in the year 2020. The proposed standards are expected to yield significant health benefits, valued at \$2.3 billion to \$5.9 billion annually for a proposed standard of 12 µg/m³ and \$88 million to \$220 million annually for a proposed standard of 13 µg/m³ – a return of \$30 to \$86 for every dollar invested in pollution control. Estimated costs of implementing the proposal are \$69 million for a proposed standard of 12 µg/m³ and \$2.9 million for a proposed standard of 13 µg/m³.
- EPA will take comment on the proposed rules for nine weeks (63 days) after the proposal is published in the Federal Register. The Agency will hold two public hearings, in Philadelphia and Sacramento, Calif. Details will be announced in a separate notice.
- EPA will issue final standards by Dec. 14 2012.

FOR MORE INFORMATION

- To read the proposed standards and additional summaries, visit <http://www.epa.gov/airquality/particlepollution/actions.html>