The National Ambient Air Quality Standards (NAAQS) for Particle Pollution

EPA'S REVISED AIR QUALITY STANDARDS FOR PARTICLE POLLUTION: MONITORING, DESIGNATIONS AND PERMITTING REQUIREMENTS

On Dec. 14, 2012 the U.S. Environmental Protection Agency (EPA) strengthened the nation's air quality standards for fine particle pollution to improve public health protection by revising the primary annual fine particle ($PM_{2.5}$) standard to 12 micrograms per cubic meter ($\mu g/m^3$) and retaining the 24-hour fine particle standard of 35 $\mu g/m^3$. Exposure to particle pollution can cause premature death and harmful effects on the cardiovascular system (the heart, blood and blood vessels). Fine particle pollution also is linked to a variety of other significant health problems. In addition, particle pollution harms public welfare, including by causing haze in cities and some of our nation's most treasured national parks.

EPA and states have issued a number of rules that will help states meet the revised standards by making significant strides toward reducing fine particle pollution.

CHANGES TO PM2.5 MONITORING REQUIREMENTS

- As part of the revisions to the PM_{2.5} standards, EPA is updating monitoring requirements for fine particles, including adding a requirement for monitoring near heavily traveled roads in large urban areas. Particle pollution can be higher along these roads as a result of emissions from cars and heavy-duty diesel trucks and buses.
- EPA will require **near-roadway PM_{2.5} monitoring** at one location in each urban area (a corebased statistical area, or CBSA) with a population of 1 million or more. These monitors will likely be located at existing near-road monitoring sites also measuring nitrogen dioxide or carbon monoxide. The near-roadway monitoring will be phased in, beginning with the largest urban areas (population of 2.5 million or more) by Jan. 1, 2015; and extending to the remainder of the areas by Jan. 1, 2017.
- EPA is not increasing the size of the national PM_{2.5} monitoring network, which consists of about 900 monitors. Today's rule minimizes the burden to state and local air agencies; EPA anticipates that states will be able to relocate existing monitors (about 52 total) to meet the near-roadway requirement at little or no additional cost.
- Data from these monitors will not be available in time for use in making initial attainment and nonattainment designations for the revised primary annual PM_{2.5} standard.

- EPA also is making other updates to the monitoring and data handling requirements for PM_{2.5} monitoring to reflect the changes to the standards and to clarify existing requirements.
- EPA is not making any changes to monitoring requirements for the coarse particle standard.

DESIGNATING ATTAINMENT AND NONATTAINMENT AREAS

- Improving air quality is a partnership between the federal government, states and tribes. EPA will work closely with states, local and tribal air agencies to implement the revised primary annual PM_{2.5} standard.
- Once EPA sets a new air quality standard, or revises an existing standard, the agency designates areas as meeting the standards (attainment areas), not meeting them (nonattainment areas), or there is not enough data to make a determination (unclassifiable). EPA works closely with states as it determines initial attainment and nonattainment boundaries.
- States with nonattainment areas must then develop state implementation plans (SIPs) showing how they will meet the new or revised standards. Tribes may, but are not required to, develop their own plans for nonattainment areas in Indian country. Where necessary, EPA will develop plans for any tribal area that chooses not to develop its own plans.
- EPA anticipates the following schedule for designating areas and implementing the revised primary annual PM_{2.5} standard:
 - By December 2013, states (and any tribes that choose to do so), make recommendations for areas to be designated.
 - By August 2014, EPA responds to states' and tribes' initial recommendations for attainment and nonattainment areas. States and tribes then will have the opportunity to comment on any modifications to their recommendations, and to provide new information and analyses to EPA if appropriate.
 - By December 2014, EPA makes final designations; those designations would likely become effective in early 2015 (60 days after the designations are published in the Federal Register).
 - 2018: Implementation plans, outlining how states or tribes will reduce pollution to meet the standards, are due to EPA (three years after designations). State plans can include emission reductions from federal rules and programs, along with local measures to demonstrate that an area will meet the standards.

- 2020: States are required to meet the standards. States must meet health standards "as expeditiously as practicable" but not later than five years after designations. 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.
- Recent Clean Air Act rules are projected to help states meet the revised standard by dramatically cutting pollution both regionally and across the country. These rules include rules to reduce pollution from power plants, clean diesel rules for vehicles and rules to reduce pollution from stationary diesel engines.
- EPA intends to propose additional guidance and regulations related to state implementation requirements for the revised PM standards as necessary. These guidance documents or rules would address SIP requirements and permitting requirements related to the revised standards. The agency intends to issue a final implementation rule in late 2014 – around the same time that the agency makes final designations.

PERMITTING REQUIREMENTS

- As part of this action, EPA is finalizing a grandfathering provision for preconstruction permitting to ensure that changes to the PM standards will not delay certain pending permits, and to reduce potential burdens to permit applicants and state, local and tribal air agencies. This provision applies to Prevention of Signification Deterioration (PSD) permits, which ensure that emissions from the addition of new or modified sources of pollution, such as factories, industrial boilers or power plants, do not significantly worsen air quality in areas with clean air.
- To receive a PSD permit, a project must not cause or contribute to a violation of any NAAQS or any maximum allowable pollution increase in areas with clean air. These requirements generally apply to the air quality standards that are in place at the time the permit is issued.
- To ensure that certain pending permits are not unreasonably delayed because of the changes to the fine particle standards, EPA will grandfather permit applications if either:
 - The permitting agency has deemed the application complete. This must occur by Dec. 14, 2012; or
 - The public notice for a draft permit or preliminary determination has been published prior to the date the revised PM standards become effective (60 days after publication in the Federal Register).
 - Permit applications that have not met these criteria will have to demonstrate compliance with the revised standards.

- The grandfathering provision does not apply to NAAQS for other pollutants.
 - Permit applications that qualify for the grandfathering provisions will have to demonstrate compliance with the 2006 fine particle standards.
 - The grandfathering provision will become part of EPA permitting regulations, but also may apply to permits issued by states with approved PSD programs.
- EPA is updating its modeling guidance to assist with the implementation of the PSD requirements for sources of PM_{2.5}. The agency anticipates issuing that guidance before the revised standard becomes effective. EPA will consider issuing additional guidance or rules related to permitting requirements for the revised standard as necessary.

MORE INFORMATION:

- To read the revised standards and additional summaries, visit http://www.epa.gov/airquality/particlepollution/actions.html
- For information on the designation process for PM_{2.5} standards, visit <u>http://www.epa.gov/pmdesignations/</u>.
- For information on EPA's preconstruction permitting program, visit http://www.epa.gov/nsr/