

Fact Sheet

Proposed Rule To Implement The Fine Particle National Ambient Air Quality Standards

ACTION

- On September 8, 2005, the Environmental Protection Agency (EPA) proposed requirements that state and local governments have to meet as they implement the national ambient air quality standards for fine particulate matter (PM_{2.5}). EPA established the PM_{2.5} standards in 1997 and designated areas as attainment or nonattainment in December 2004. This proposed rule is the next step toward improving particle pollution air quality for millions of Americans.
- The proposed rule describes the implementation framework and requirements that state, local, and tribal governments must meet in developing their implementation plans. An implementation plan must show how an area that is not attaining the PM_{2.5} standards will reduce air pollutant emissions in order to meet the standards as soon as possible. The implementation plan must include supporting technical analyses and any adopted state regulations as needed. State, local, and tribal plans must be reviewed and approved by EPA.
- Once an area is designated as nonattainment, the Clean Air Act requires the state to submit an implementation plan to EPA within three years. State plans are due in April 2008. A Tribal area designated as not attaining the standards may submit an implementation plan. If they elect not to do so, the law requires EPA to develop an implementation plan on their behalf.
- States must meet the PM 2.5 standard by 2010. However, in their 2008 implementation plans, states may propose an attainment date extension for up to five years. Those areas for which EPA approves an extension must achieve clean air as soon as possible, but no later than 2015.
- The proposed rule includes:
 - attainment demonstrations and modeling -- The Clean Air Act requires implementation plans for most nonattainment areas to demonstrate that the area will attain the fine particle standards as expeditiously as practicable and within the Act's deadlines. The proposed rule would provide the timing and guidelines for states on this requirement and identifies the modeling guidance available to make the demonstration.
 - reasonably available control measures (RACM) -- For each nonattainment area required to submit an attainment demonstration, the Clean Air Act requires the state to demonstrate that it has adopted all control measures necessary to show that it will attain the fine particle standards as expeditiously as practicable. The Act also requires them to show reasonable further progress towards attaining the standard. The proposed rule would require implementation plans to address this requirement.
 - reasonably available control technology (RACT) -- The Clean Air Act requires implementation plans for nonattainment areas to require emission controls that are economically and technologically feasible. Emissions control technologies

that meet these criteria are known as "RACT". The proposed rule would set forth guidelines for making RACT determinations in fine particle nonattainment areas.

- policy on PM2.5 and precursors -- The proposed rule identifies pollutants to be controlled :
 - PM2.5 direct emissions (including organic carbon, elemental carbon and crustal material) must be addressed in all nonattainment areas.
 - Sulfur dioxide must be addressed in all nonattainment areas.
 - Nitrogen oxides (NOx) must be addressed in all areas unless the state or EPA demonstrates that NOx is not a significant contributor in a specific area.
 - Volatile organic compounds and ammonia would not be required to be addressed in all areas, but may be addressed if the state or EPA demonstrates that either compound is a significant contributor.

- new source review (NSR) requirements -- To clarify how the NSR requirements are to be implemented for fine particles, EPA is proposing to add provisions to four regulations that govern preconstruction permitting of major stationary sources. These rules focus on the:
 1. implementation plan requirements for major new or modified sources in attainment or unclassifiable areas;
 2. implementation plan requirements for addressing major new or modified sources in nonattainment areas and sources located in attainment or unclassifiable areas that would impact a nonattainment area;
 3. the federal implementation plan for areas lacking an approved implementation program to regulate construction or modification of major stationary sources in an attainment or unclassifiable area.
 4. provisions for issuing permits before a state has an approved implementation plan regulating construction or modification of major stationary sources.

- EPA's comprehensive clean air strategy includes the May 2004 Clean Air Nonroad Diesel Rule to reduce pollution from nonroad diesel engines, and the March 2005 Clean Air Interstate Rule to reduce pollution from power plants in the eastern U.S. These two rules are an important component of EPA's efforts to implement the more-protective fine particle national air quality standards, and will help all areas of the country to meet these standards. States should take into account the significant emissions reductions provided by these rules as they develop their plans to meet and maintain the fine particle air quality standards.

- The Agency will accept public comment on this proposal for 60 days from the date the notice appears in the Federal Register. The proposed regulation is available from EPA's website at:<http://www.epa.gov/pmdesignations>.

BACKGROUND

- The health effects associated with exposure to fine particles are significant. Epidemiological studies have shown a significant correlation between elevated fine particle levels and premature mortality. Other important effects associated with fine particle exposure include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and cardiac arrhythmia.
- Individuals particularly sensitive to fine particle exposure include older adults, people with heart and lung disease, and children.
- In July 1997, EPA promulgated the National Ambient Air Quality Standards for Fine Particles (PM-2.5). The annual standard is a level of 15 micrograms per cubic meter, based on the 3-year average of annual mean PM2.5 concentrations. The 24-hour standard is a level of 65 micrograms per cubic meter, based on the 3-year average of the 98th percentile of 24-hour concentrations.
- A number of events delayed the implementation of the PM-2.5 standard.
 - EPA's new standards were challenged by the American Trucking Association, the U.S. Chamber of Commerce and other state and business groups (resolved in 2002).
 - In February 2001, the Supreme Court upheld EPA's authority under the Clean Air Act to set National Ambient Air Quality Standards that protect the American public from harmful effects of air pollution. The Supreme Court also sent the case back to the D.C. Circuit Court of Appeals to resolve several additional issues. In March 2002, the DC Circuit Court rejected all remaining legal challenges to EPA's 1997 ambient air quality standards for PM-2.5.
 - The Transportation Equity Act for the Twenty-first Century revised the deadline to publish nonattainment designations in order to provide additional time to collect three years of air quality monitoring data.
- In April 2005, designations became effective for 39 metropolitan areas not attaining the fine particle standards. These areas are comprised of all or part of 208 counties, with a population of 88 million.

FOR FURTHER INFORMATION

- Interested parties can download the notice from EPA's web site on the Internet at: www.epa.gov/pmdesignations
- Today's proposed action and other background information are also available either electronically in EDOCKET, EPA's electronic public docket and comment system, or in hard copy at EPA's Air and Radiation Docket and Information Center, Environmental Protection Agency, Room B102, 1301 Constitution Avenue, NW, Washington, DC (Docket ID No. OAR-2004-0019). The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742.

- HOW TO COMMENT: Comments will be accepted for 60 days beginning when this proposal is published in the Federal Register. All comments should be identified by Docket ID No. OAR-2003-0062 and submitted by one of the following methods:
 - Federal e-rulemaking portal;
 - EDOCKET;
 - E-mail (a-and-r-docket@epa.gov);
 - Facsimile (202) 566-1741;
 - Mail (Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460); or
 - Hand delivery (Air and Radiation Docket and Information Center, Environmental Protection Agency, Room B102, 1301 Constitution Avenue, NW, Washington, DC).

- For additional information, visit the EPA's website at: www.epa.gov/pmdesignations, or contact the following individuals at the EPA's Office of Air Quality Planning and Standards Rich Damberg (919) 541-5592, damberg.rich@epa.gov or Amy Vasu at (919) 541-0107 vasu.amy@epa.gov . For issues related to New Source Review contact Raj Rao (919) 541-5344, rao.raj@epa.gov.