

FACT SHEET

FINAL RULE: FINE PARTICULATE MATTER NATIONAL AMBIENT AIR QUALITY STANDARDS: STATE IMPLEMENTATION PLAN REQUIREMENTS

ACTION

- On July 29, 2016, the Environmental Protection Agency (EPA) finalized requirements for implementing the National Ambient Air Quality Standards (NAAQS) for fine particulate matter (also known as PM_{2.5}) in areas that are currently designated nonattainment for existing standards. These requirements would also apply to areas that are designated nonattainment for any PM_{2.5} NAAQS in the future.
- This rule interprets the statutory requirements that apply to PM_{2.5} NAAQS nonattainment areas under subparts 1 and 4 of the nonattainment provisions of the Clean Air Act (CAA). These requirements govern attainment plans and nonattainment new source review (NNSR) permitting programs.
- This final rule addresses a number of important attainment planning issues, including:
 - plan due dates, attainment dates and attainment date extension criteria;
 - the process for determining control strategies, including Reasonably Available Control Measures/Reasonably Available Control Technology (RACM/RACT) for Moderate areas; and Best Available Control Measures/Best Available Control Technology (BACM/BACT) and Most Stringent Measures (MSM) for Serious areas;
 - guidelines for attainment demonstrations for areas that can attain by the statutory attainment date, and “impracticability” demonstrations for areas that cannot practicably attain by the statutory attainment date;
 - reasonable further progress (RFP) and quantitative milestones for demonstrating RFP;
 - contingency measures for areas that fail to meet RFP or fail to attain the NAAQS by the attainment date;
 - revocation of the 1997 primary annual PM_{2.5} NAAQS (because it was revised in 2012);
 - codification of the clean data policy for PM_{2.5} NAAQS nonattainment areas; and,
 - environmental justice considerations, and compliance and enforcement of control measures.
- The final rule identifies sulfur dioxide (SO₂), oxides of nitrogen (NO_x), volatile organic compounds (VOC) and ammonia as PM_{2.5} precursors to be presumptively addressed in attainment planning and NNSR permitting. It also authorizes a state not to adopt control requirements to reduce emissions of a particular PM_{2.5} precursor if the state adequately demonstrates that the precursor does not contribute significantly to PM_{2.5} levels that exceed the NAAQS in a nonattainment area.
- This final rule also addresses several important issues for the NNSR permitting program, including:
 - defining “major source” and “major stationary source” for sources of PM_{2.5} and PM_{2.5} precursors for both Moderate and Serious nonattainment areas;
 - significant emissions rates (SERs) for PM_{2.5} and PM_{2.5} precursors that would apply for modifications of existing major stationary sources;

- updated provisions for the Appendix S program for a state that does not yet have an approved NNSR program, including provisions for phasing in coverage for all applicable PM_{2.5} precursors.
- This final rule repromulgates certain planning requirements for PM_{2.5} that were originally promulgated in the EPA's 2007 PM_{2.5} Implementation Rule and the 2008 PM_{2.5} New Source Review (NSR) Rule, which were remanded to the EPA by the U.S. Court of Appeals for the District of Columbia Circuit in a January 2013 court decision.

BACKGROUND

- Particle pollution, also called particulate matter or PM, is a complex mixture of extremely small particles and liquid droplets in the air. When inhaled, these particles can reach the deepest regions of the lungs. Exposure to particle pollution is linked to a variety of significant health problems, including:
 - premature death in people with heart or lung disease
 - nonfatal heart attacks
 - irregular heartbeat
 - aggravated asthma
 - decreased lung function
 - increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.
- Particle pollution also is the main cause of visibility impairment in the nation's cities and national parks.
- Fine particles – particles with a diameter equal to or less than 2.5 microns (PM_{2.5}) -- can be emitted directly into the atmosphere, such as black carbon emissions from a diesel engine or smoke from a fire, or they can form from chemical reactions of precursor gases including sulfur dioxide, nitrogen oxides, VOC, and ammonia. There are many sources of PM_{2.5} and PM_{2.5}-forming precursors, including power plants, gasoline and diesel engines, wood combustion, high-temperature industrial processes such as those at smelters and steel mills, and forest fires.
- The CAA directs the EPA to set and review air quality standards for common pollutants known as “criteria pollutants,” which the agency has identified based on their likelihood of harming public health and welfare. In 1997, the agency established the initial air quality standards for PM_{2.5}. The EPA subsequently revised the PM_{2.5} standards in 2006 and 2012 based on the most recently available scientific studies.
 - In December 2012, the EPA revised the primary annual PM_{2.5} standard from 15 micrograms per cubic meter (µg/m³) to 12 µg/m³ for the protection of public health. During the 2012 review of the standards, the EPA retained the 1997 secondary annual PM_{2.5} standard of 15 µg/m³ for the protection of public welfare.
 - The 2006 24-hour primary PM_{2.5} standards were set at a level of 35 µg/m³, and was not revised in 2012.

- After the EPA establishes or revises an air quality standard, the agency follows a process set out in the CAA for designating areas as attaining or not attaining the standard, based on air quality monitoring data and other factors. Areas with inadequate monitoring data may also be designated “unclassifiable.” When designated, each PM_{2.5} nonattainment area is initially classified as Moderate.
 - In April 2015, designations for nine PM_{2.5} nonattainment areas became effective for the 2012 NAAQS. Air agencies are required to submit state implementation plans (SIPs) for these areas within 18 months, by October 2016.
- States, and in some cases local agencies or tribes, are the primary implementers of the NAAQS, responsible for developing and submitting implementation plans for EPA approval that meet the nonattainment planning requirements under Title I, Part D of the CAA.
- After establishing the 1997 PM_{2.5} NAAQS, the EPA promulgated two rules to clarify the statutory requirements for states to implement the newly-established standards. These rules -- the 2007 PM_{2.5} Implementation Rule and the 2008 PM_{2.5} NSR Rule – required that PM_{2.5} nonattainment areas meet the general nonattainment planning requirements under “subpart 1” of the nonattainment area provisions of the CAA.
- On January 4, 2013, the U.S. Court of Appeals for the District of Columbia Circuit decided that PM_{2.5} nonattainment areas are subject to both the general nonattainment planning provisions of subpart 1, and the nonattainment planning requirements specific to PM₁₀ nonattainment areas under subpart 4 of Title I, Part D of the CAA (because PM_{2.5} is a subset of PM₁₀). The court remanded both the 2007 PM_{2.5} Implementation Rule and the 2008 PM_{2.5} NSR Rule to the EPA to be re-promulgated in accordance with subpart 4 requirements.
- This final rule responds in part to the court’s remand of these two rules, which applied only to the 1997 PM_{2.5} NAAQS. This final rule also is intended to apply to areas designated nonattainment for the 2006 24-hour PM_{2.5} NAAQS, the 2012 annual PM_{2.5} NAAQS, and any future revisions to these NAAQS.

FOR MORE INFORMATION

- To download a copy of the final rule from the EPA website, go to: <https://www.epa.gov/pm-pollution/implementation-national-ambient-air-quality-standards-naaqs-fine-particulate-matter>
- This final rule and other background information are also available either electronically at <http://www.regulations.gov>, the EPA’s electronic public docket and comment system; or in hardcopy at the EPA Docket Center’s Public Reading Room.
 - The Public Reading Room is located in the EPA Headquarters, Room 3334, William Jefferson Clinton West Building, 1301 Constitution Ave., N.W., Washington, D.C. 20460. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern standard time, Monday through Friday, excluding federal holidays.
 - Visitors are required to show photographic identification, pass through a metal detector and sign the EPA visitor log. All visitor materials will be processed through an x-ray machine as well. Visitors will be provided a badge that must be visible at all times.
 - Materials for this action can be accessed using Docket ID EPA-HQ-OAR-2013-0691.

- For further information about the final rule, contact Rich Damberg at (919) 541-5592 or damberg.rich@epa.gov or Patrick Lessard at (919) 541-5383 or lessard.patrick@epa.gov.