UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

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MEMORANDUM

SUBJECT: Area Designations for the Revised 24-Hour Fine Particle National Ambient Air Quality Standard

FROM: Robert J. Meyers
Acting Assistant Administrator

TO: Regional Administrators, Regions I-X

This memorandum provides information on the timeline for designating areas for the purpose of implementing the revised 24-hour fine particle ($PM_{2.5}$) national ambient air quality standard (NAAQS). In addition, this memorandum identifies important factors for States and Tribes to consider in making recommendations for area designations. Please share this information with the State and Tribal agencies in your Region.

The EPA promulgated a revised NAAQS for $PM_{2.5}$ on October 17, 2006 (71 Federal Register 61144). The effective date for the new standard was December 18, 2006. The EPA retained the annual $PM_{2.5}$ standard of 15 $\mu g/m^3$ and revised the 24-hour $PM_{2.5}$ standard, changing it from 65 $\mu g/m^3$ to 35 $\mu g/m^3$. The 24-hour $PM_{2.5}$ standard was revised based on a number of health studies showing that short-term exposure to $PM_{2.5}$ is associated with increased mortality and a range of serious health effects, including aggravation of lung disease, asthma attacks, and heart problems. This memo describes the designation process for the revised 24-hour $PM_{2.5}$ standard. It outlines the next step in developing and implementing emission control programs for attaining and maintaining this standard – a standard that addresses an important public health problem.

Section 107(d) of the Clean Air Act (CAA) governs the process for area designations following the establishment of new or revised NAAQS. Under section 107(d), States are required to submit recommendations to EPA not later than one year after the promulgation of a new or revised standard. Therefore, each State must provide recommendations to EPA by December 18, 2007. Areas should be identified as attaining, or not attaining, the revised 24-hour $PM_{2.5}$ standard, or as not classifiable on the basis of available information. If, after careful consideration of the recommendations, EPA intends to promulgate a designation that deviates from the State recommendation, EPA must notify the State at least 120 days prior to

promulgating the modified designation, and EPA must provide the State an opportunity to comment on the potential modification. The Clean Air Act requires EPA to complete the designation process within two years of the effective date of the standard unless the Administrator finds that additional information is needed to make these decisions. In such a case, EPA may take up to an additional year to make the designations, i.e., no later than three years after the effective date of the standard. While the language of Section 107 specifically addresses States, EPA will follow the same process for Tribes to the extent practicable, pursuant to Sections 110(o) and 301(d) of the Act and the Tribal Authority Rule, or TAR (see 63 FR 7254).

EPA recommends that States and Tribes identify violating areas using the most recent three years of air quality data. In most cases, we expect these to be data from calendar years 2004-2006 that are stored in the EPA Air Quality System (AQS). In general, violations are identified using data from Federal reference method (FRM) and Federal equivalent method (FEM) monitors that are sited and operated in accordance with 40 CFR Part 58, as revised on October 17, 2006 (see 71 FR 61236). Procedures for using these data to determine whether a violation has occurred are given in 40 CFR Part 50 Appendix N, as revised on October 17, 2006 (see 71 FR 61144).

Air quality monitoring data affected by exceptional events may be excluded from use in identifying a violation if they meet the criteria for such an exclusion, as specified in the Final Rule on the Treatment of Data Influenced by Exceptional Events (72 FR 13560). For determining violations of the 24-hour $PM_{2.5}$ NAAQS, States must ensure that any 2004-2006 monitoring data affected by an exceptional event are flagged in AQS by October 1, 2007. Further, documentation to support the determination that the data were influenced by exceptional events must be noticed for public comment and submitted to EPA no later than the submittal of the Governor's recommendation letter on nonattainment areas, which is due no later than December 18, 2007.

EPA believes that, in making their boundary recommendations for nonattainment areas, States and Tribes should evaluate each area on a case-by-case basis. The CAA requires that a nonattainment area must include not only the area that is violating the standard, but also nearby areas that contribute to the violation. Thus, for each monitor or group of monitors that indicate violations of a standard, EPA will establish nonattainment boundaries that cover a sufficiently large area to include both the area that violates the standard and the areas that contribute to the violations. EPA recommends that States and Tribes base their boundary recommendations for violating areas on an evaluation of the nine factors used in the prior $PM_{2.5}$ designations process, as well as on any other relevant factors or circumstances specific to a particular area.

Two attachments provide additional information. Attachment 1 is a time line of important dates in the revised 24-hour $PM_{2.5}$ NAAQS designation process. Attachment 2 includes a list of the nine factors that EPA plans to consider in evaluating and making decisions on nonattainment area boundaries. When determining boundaries in urban areas for the annual $PM_{2.5}$ NAAQS, EPA applied a presumption that the boundaries for urban nonattainment areas

should be based on metropolitan area boundaries as defined by the U.S. Office of Management and Budget. For the $PM_{2.5}$ 24-hour NAAQS, EPA is establishing no such presumption. EPA anticipates that the same boundaries established for implementing the annual $PM_{2.5}$ standard may also be appropriate for implementing the 24-hour $PM_{2.5}$ NAAQS in areas where both standards are violated. Adopting this approach may more easily facilitate overall air quality planning for attaining the suite of $PM_{2.5}$ standards.

Staff in EPA's Office of Air Quality Planning and Standards are available for assistance and consultation throughout the designation process. Questions on this guidance may be directed to Amy Vasu at 919-541-0107, or Rich Damberg at 919-541-5592.

Attachments: 2

cc: Stephen D. Page, OAQPS
Air Division Directors, Regions I-X
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ATTACHMENT 1

TIME LINE FOR REVISED 24-HOUR $PM_{2.5}$ NAAQS DESIGNATION PROCESS	
Milestone	**Date**
Effective date of revised 24-hour $PM_{2.5}$ NAAQS	December 18, 2006
State and Tribal recommendations due for 24-hour $PM_{2.5}$ designations.	December 18, 2007
EPA notifies States and Tribes concerning any modifications to their recommendations.	No later than August 20, 2008 (120 days prior to final designations)
EPA issues final 24-hour $PM_{2.5}$ designations.	No later than December 18, 2008*

* In the event the Administrator has insufficient information to promulgate the designations by December 18, 2008, the date of final designations may be extended up to one year, but no later than December 18, 2009.

ATTACHMENT 2

Factors EPA Will Consider as the Basis for Nonattainment Area Boundaries

EPA believes that certain factors are appropriate to consider in making nonattainment area boundary recommendations and final boundary determinations. EPA will consider these same factors,[1] along with any other relevant information, in evaluating modifications to the boundary recommendations from States and Tribes. EPA recommends that States and Tribes consider the following nine factors in assessing whether to include an area in the designated nonattainment area boundary:

- Emission data
- Air quality data
- Population density and degree of urbanization (including commercial development)
- Traffic and commuting patterns
- Growth rates and patterns
- Meteorology (weather/transport patterns)
- Geography/topography (mountain ranges or other air basin boundaries)
- Jurisdictional boundaries (e.g., counties, air districts, Reservations, metropolitan planning organizations (MPOs))
- Level of control of emission sources

This list of recommended factors is not intended to be exhaustive, and States and Tribes may submit additional information on factors they believe are relevant for EPA to consider. In general, a State's or Tribe's demonstration supporting the boundary recommendation for an area should show that: 1) violations are not occurring in the excluded portions of the recommended area, and 2) the excluded portions do not contain emission sources that contribute to the observed violations. A State or Tribal submittal that only addresses whether monitored violations are occurring in an area will not suffice as the sole justification for designating the boundaries of a nonattainment area.

[1] An explanation of each of these nine factors is provided in Chapter 5 of the Technical Support Document for December 17, 2004 designations and April 2005 modifications, available at: http://www.epa.gov/pmdesignations/tech.htm