

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[OAR -2003-0061; FRL]

[RIN-2060-AM04]

Air Quality Designations and Classifications for the Fine Particles (PM2.5) National Ambient Air Quality Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: This rule sets forth the initial air quality designations and classifications for all areas in the United States, including Indian country, for the fine particles (PM2.5) National Ambient Air Quality Standards (NAAQS). The EPA is issuing this rule so that citizens will know whether the air quality where they live and work is healthful or unhealthful. Health studies have shown significant associations between exposure to PM2.5 and premature death from heart or lung disease. Fine particles can also aggravate heart and lung diseases and have been linked to effects such as cardiovascular symptoms, cardiac arrhythmias, heart attacks, respiratory symptoms, asthma attacks, and bronchitis. These effects can result in increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days.

Individuals that may be particularly sensitive to PM2.5 exposure include people with heart or lung disease, older adults, and children. This rule establishes the boundaries for areas designated as nonattainment, unclassifiable, or attainment/unclassifiable. This rule does not establish or address State and Tribal obligations for planning and control requirements that apply to nonattainment areas for the PM2.5 standards. The EPA will publish a separate rule which will set forth the planning and control requirements that apply to nonattainment areas for the PM2.5 standards.

EFFECTIVE DATE: The effective date of this rule is
[Insert date 90 days from date of publication].

ADDRESSES: The EPA has established a docket for this action under Docket ID NO. OAR-2003-0061. All documents in the docket are listed in the EDOCKET index at <http://www.epa.gov/edocket>. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in the EDOCKET or in hard copy at the Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave.,

NW, Washington, DC. 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 Office of Air and Radiation Docket and Information Center is (202) 566-1742. In addition, we have placed a copy of the rule and a variety of materials regarding designations on EPA's designation web site at:

<http://www.epa.gov/oar/oaqps/particles/designations/index.htm>

and on the Tribal web site at:

<http://www.epa.gov/air/tribal>.

FOR FURTHER INFORMATION CONTACT:

Designations: Mr. Rich Damberg, Office of Air Quality Planning and Standards, U. S. Environmental Protection Agency, Mail Code C504-02, Research Triangle Park, N.C., 27711, phone number (919) 541-5592 or by e-mail at:

damberg.rich@epa.gov.

Designations and Part 81 Code of Federal Regulations: Dr. Larry D. Wallace, Office of Air Quality Planning and Standards, U. S. Environmental Protection Agency, Mail Code C504-02, Research Triangle Park, N.C., 27711, phone number (919) 541-0906 or by e-mail at: wallace.larry@epa.gov.

Technical Issues Related to Designations: Mr. Thomas Rosendahl, Office of Air Quality Planning and Standards,

U. S. Environmental Protection Agency, Mail Code C504-02,
Research Triangle Park, N.C., 27711, phone number (919) 541-
5314 or by e-mail at: rosendahl.tom@epa.gov.

PM2.5 Air Quality Data Issues: Mr. Mark Schmidt, Office of
Air Quality Planning and Standards, U. S. Environmental
Protection Agency, Mail Code C304-01, Research Triangle
Park, N.C., 27711, phone number (919) 541-5314 or by e-mail
at: schmidt.mark@epa.gov.

REGIONAL OFFICE CONTACTS:

Region I - Alison Simcox (617) 918-1684,
Region II- Kenneth Fradkin (212) 637-3702,
Region III- Denny Lohman (215) 814-2191,
Region IV- Steve Scofield (404) 562-9034,
Region V- John Summerhays (312) 886-6067,
Region VI - Joe Kordzi (214) 665-7186,
Region VII- Amy Algoe-Eakin (913) 551-7942,
Region VIII- Libby Faulk (303) 312-6083,
Region IX- Eleanor Kaplan (415) 744-1286,
Region X- Keith Rose (206) 553-1949.

SUPPLEMENTARY INFORMATION:

The public may inspect the rule and the technical support information at the following locations:

Regional Offices	States
Dave Conroy, Acting Branch Chief, Air Programs Branch, EPA New England, I Congress Street, Suite 1100, Boston, MA 02114-2023, (617) 918-1661.	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
Raymond Werner, Chief, Air Programs Branch, EPA Region II, 290 Broadway, 25 th Floor, New York, NY 10007-1866, (212) 637-4249.	New Jersey, New York, Puerto Rico, and Virgin Islands.
Makeba Morris, Branch Chief, Air Quality Planning Branch, EPA Region III, 1650 Arch Street, Philadelphia, PA 19103-2187, (215) 814-2187.	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.
Richard A. Schutt, Chief, Regulatory Development Section, EPA Region IV, Sam Nun Atlanta Federal Center, 61 Forsyth, Street, SW, 12 th Floor, Atlanta, GA 30303, (404) 562-9033.	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.
Jay Bortzer, Chief, Air Programs Branch, EPA Region V, 77 West Jackson Street, Chicago, IL 60604, (312) 886-4447.	Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
Donna Ascenzi, Acting Associate Director, Air Programs, EPA Region VI, 1445 Ross Avenue, Dallas, TX 75202, (214) 665-2725.	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
Joshua A. Tapp, Chief, Air Programs Branch, EPA Region VII, 901 North 5 th Street, Kansas City, Kansas 66101-2907, (913) 551-7606.	Iowa, Kansas, Missouri, and Nebraska.
Richard R. Long, Director, Air and Radiation Program, EPA Region VIII, 999 18 th , Suite 300, Denver, CO 80202, (303) 312-6005	Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
Steven Barhite, Air Planning Office, EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972-3980.	Arizona, California, Guam, Hawaii, and Nevada.

Mahbubul Islam, Manager, State and Tribal Air Programs, EPA Region X, Office of Air, Waste, and Toxics, Mail Code OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553-6985.	Alaska, Idaho, Oregon, and Washington.
--	--

Table of Contents

The following is an outline of the Preamble.

- I. Preamble Glossary of Terms and Acronyms.
- II. What is the Purpose of this Document?
- III. What are Fine Particles?
- IV. What are the Health Concerns Addressed by the PM2.5 Standard?
- V. What is the Chronology of Events Leading Up to This Rule?
- VI. What are the Clean Air Act (CAA) Requirements for Air Quality Designations and What Action has EPA Taken to Meet These Requirements?
- VII. What Guidance Did EPA Issue and How Did EPA Apply the Statutory Requirements and Applicable Guidance to Determine Boundaries for the PM2.5 NAAQS?
- VIII. Has EPA Used 2004 Air Quality Data?
- IX. How Do Designations Affect Indian Country?
- X. Where Can I Find Information Forming the Basis for This Rule and Exchanges Between EPA, States, and Tribes Related to This Rule?
- XI. Statutory and Executive Order Reviews

- A. Executive Order 12866: Regulatory Planning and Review
- B. Paperwork Reduction Act
- C. Regulatory Flexibility Act
- D. Unfunded Mandates Reform Act
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks
- H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer Advancement Act (NTTAA)
- J. Congressional Review Act
- K. Judicial Review

I. Preamble Glossary of Terms and Acronyms

The following are abbreviations of terms used in the preamble.

CAA	Clean Air Act
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation Air Quality
CMSA	Consolidated Metropolitan Statistical Area
D.C.	District of Columbia
EPA	Environmental Protection Agency
FR	Federal Register
MPO	Metropolitan Planning Organizations
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standard
NOx	Nitrogen Oxides
NOA	Notice of Availability
NPR	Notice of Proposed Rulemaking
NSR	New Source Review
OMB	Office of Management and Budget
RTC	Response to Comment
SIP	State Implementation Plan
TAR	Tribal Authority Rule
TEA-21	Transportation Equity Act for the 21 st Century
TPY	Tons Per Year
TSD	Technical Support Document
U.S.	United States
VOC	Volatile Organic Compounds

II. What is the Purpose of this Document?

The purpose of this document is to announce and promulgate designations and boundaries for areas of the country with respect to the PM_{2.5} NAAQS in accordance with the requirements of the CAA. The list of areas in each State, the boundaries of each area, and the designation of each area, appear in the table at the end of this final rule. This rule was signed by the EPA Administrator, Mike Leavitt, on December 17, 2004. Several steps were taken to announce that this rule is available. We posted the notice on several EPA web sites and provided a copy of the rule to States and Tribes.

III. What are Fine Particles?

Fine particles in the atmosphere are made up of a complex mixture of components. Common constituents include: sulfate (SO₄); nitrate (NO₃); ammonium (NH₄); elemental carbon; a great variety of organic compounds; water; and inorganic material (including metals, dust, sea salt, and other trace elements), which often is categorized as "crustal" material. Airborne particles with a nominal aerodynamic diameter of 2.5 micrometers or less (a micrometer is one-millionth of a meter; 2.5 micrometers is less than about one-thirtieth the thickness of a human hair) are considered to be "fine particles," and are also known as

PM2.5. "Primary" particles are emitted directly into the air as a solid or liquid particle (e.g., elemental carbon and organic particles from diesel engines or burning activities). "Secondary" particles (e.g., sulfate and nitrate) form in the atmosphere as a result of various chemical transformations of gaseous precursors such as sulfur dioxide (SO₂) and oxides of nitrogen (NO_x).

IV. What are the Health Concerns Addressed by the PM2.5 Standard?

Epidemiological studies have shown a significant association between elevated PM2.5 levels and a number of serious health effects, including premature mortality, 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 PM2.5 exposure include older adults, people with heart and lung disease, and children.

More information on the health effects of PM2.5 can be found at the following web site:

http://www.epa.gov/ttn/naags/pm/pm25_index.html.

V. What is the Chronology of Events Leading Up to This

Rule?

This section summarizes the relevant activities leading up to today's action, including promulgation of the PM2.5 NAAQS and litigation challenging that standard. The CAA establishes a process for air quality management through the establishment and implementation of the NAAQS. After the promulgation of a new or revised NAAQS, EPA is required to designate areas, pursuant to section 107(d)(1) of the CAA, as attainment, nonattainment, or unclassifiable.

On July 18, 1997, EPA revised the NAAQS for particulate matter to add new standards for PM2.5, using PM2.5 as the indicator for the pollutant. The EPA established health-based (primary) annual and 24-hour standards for PM2.5 (62 FR 38652). The annual standard is a level of 15 micrograms per cubic meter, based on a 3-year average of annual mean PM2.5 concentrations. The 24-hour standard is a level 65 micrograms per cubic meter, based on a 3-year average of the 98th percentile of 24-hour concentrations. The EPA established the standards based on significant evidence and numerous health studies demonstrating that serious health effects are associated with exposures to particulate matter.

The PM2.5 NAAQS were challenged by numerous litigants and in May 1999, the U.S. Court of Appeals for the D.C. Circuit issued a decision remanding, but not vacating, the

standards. American Trucking Assoc. v EPA, 175 F. 3d 1027, 1047-48, on rehearing 195 F. 3d 4 (D.C. Cir., 1999). The EPA sought review of two aspects of that decision in the U.S. Supreme Court. The Supreme Court upheld the PM2.5 standards. EPA v. American Trucking Assoc., 531 U.S. 457 (2001). In March 2002, the D.C. Circuit rejected all remaining challenges to the PM2.5 standards, American Trucking Assoc. v. EPA, 283 F. 3d 355 (D.C. Cir., 2002). Since final resolution of the litigation over the PM2.5 NAAQS, EPA has been acting to implement the standards.

The process for designating areas following promulgation of a new or revised NAAQS is contained in section 107(d)(1) of the CAA. In June 1998, Congress adopted the Transportation Equity Act for the 21st Century (TEA-21). Section 6102(c)(1)(d) of TEA-21 amended section 107 of the CAA by extending the time period for EPA to initiate the designations process for the PM2.5 NAAQS until 3 calendar years of air quality data, measured at Federal Reference Method monitors, were gathered. The EPA and State air quality agencies initiated the monitoring process for the PM2.5 NAAQS in 1999, and deployed all air quality monitors by January 2001. The EPA is designating areas across the country for the PM2.5 NAAQS based upon air quality monitoring data from these monitors for calendar years 2001-2003.

VI. What are the Clean Air Act (CAA) Requirements for Air Quality Designations and What Action has EPA Taken to Meet These Requirements?

This section summarizes the provisions of section 107(d)(1) of the CAA which governs the process that States and EPA must follow in order to recommend and promulgate designations. Following the promulgation of a new or revised standard, each State Governor or Tribal leader has an opportunity to recommend air quality designations, including the appropriate boundaries for areas, to EPA. By no later than 120 days prior to promulgating designations, EPA is required to notify States or Tribes of any intended modifications to their boundaries that EPA deems necessary. States and Tribes then have an opportunity to provide a demonstration as to why the proposed modification indicated by EPA is inappropriate. Whether or not a State or Tribe provides a recommendation, EPA must promulgate the designation that it deems appropriate.

In April 2003, EPA requested that States and Tribes submit their designation recommendations and supporting documentation to EPA by February 15, 2004. After receiving recommendations from the States and Tribes and carefully reviewing and evaluating each recommendation, EPA on June 28 and 29, 2004, provided a response to each State and Tribe

indicating whether or not EPA intended to make modifications to the initial recommendations, and explaining EPA's reasons for making any such modifications. The EPA provided an opportunity for States and Tribes to respond to any proposed modifications to their initial boundary recommendations until September 1, 2004. In response to our June 28 and 29, 2004 letters, EPA received letters from many States and Tribes suggesting changes to EPA's modifications and providing additional information. The EPA evaluated each supplemental letter, and all of the timely technical support information provided, before arriving at the final designation decisions reflected in today's action. Some of the designations reflect our modifications to the State and Tribal recommendations. We have placed these State and Tribal letters, and our responses to the issues contained in them, in the EPA docket for this action.

Tribal designation activities are covered under the authority of section 301(d) of the CAA. This provision of the CAA authorizes EPA to treat eligible Indian Tribes in the same manner as States. Pursuant to section 301(d)(2), we promulgated regulations, known as the Tribal Authority Rule (TAR), on February 12, 1999. 63 FR 7254, codified at 40 CFR 49 (1999). This rule specifies those provisions of the CAA for which it is appropriate to treat Tribes as States. Under the TAR, Tribes may choose to develop and

implement their own CAA programs, but are not required to do so. The TAR also establishes procedures and criteria by which Tribes may request from EPA a determination of eligibility for such treatment. The designations process contained in section 107(d) of the CAA is included among those provisions determined to be appropriate by EPA for treatment of Tribes in the same manner as States. As authorized by the TAR, Tribes may request an opportunity to submit designation recommendations to us. In cases where Tribes do not make their own recommendations, EPA, in consultation with the Tribes, will promulgate the designation that EPA deems appropriate on their behalf. All Tribes were invited to submit recommendations concerning designations for PM2.5.

The EPA worked with the Tribes that requested an opportunity to submit designation recommendations. Eligible Tribes were provided an opportunity to submit their own recommendations and supporting documentation. The EPA reviewed the recommendations made by Tribes and, in consultation with the Tribes, made modifications as deemed necessary and appropriate. Under the TAR, Tribes generally are not subject to the same submission schedules imposed by the CAA on States.

VII. What Guidance Did EPA Issue and How Did EPA Apply the

Statutory Requirements and Applicable Guidance to Determine Boundaries for the PM2.5 NAAQS?

Section 107(d)(1)(A)(I) of the CAA defines a nonattainment area as an area that is violating an ambient standard or is contributing to air quality in a nearby area that is violating the standard. If an area meets either prong of this definition, then EPA is obligated to designate the area as nonattainment. Section 107(d)(1)(A)(iii) provides that any area which EPA cannot designate on the basis of available information as meeting or not meeting the standards should be designated unclassifiable.

In April 2003, EPA issued designation guidance concerning how to determine the boundaries for PM2.5 nonattainment areas.¹ The guidance provided that EPA would use the 3 most recent calendar years of monitoring data for PM2.5 to determine each county's designation. For today's PM2.5 designations, we are basing our decision on air quality monitoring data from calendar years 2001-2003. When evaluating individual areas, we started with the premise that data recorded by a PM2.5 monitor in most cases represents air quality throughout the area in which it is

1

See, "Designations for the Fine Particle National Ambient Air Quality Standards," memorandum to Regional Administrators, Regions I-X, from Jeffrey R. Holmstead, Assistant Administrator, OAR, dated April 1, 2003.

located. In addition, we considered the county boundary as the basic jurisdictional boundary for determining the extent of the area reflected by the PM2.5 monitor. As a result, if a PM2.5 monitor was violating the standard based on the 2001-2003 data, at a minimum we designated the entire county where that monitor is located as nonattainment. We made exceptions to this approach in a few very large western counties where a significant geographic feature such as a mountain range divided a county, resulting in different air quality in different parts of the county. In such cases, we considered designations of partial counties to be appropriate. After identifying the counties with violating monitors, we then proceeded to identify nearby counties that were potentially contributing to the violation(s) at the monitors.

In assessing whether nearby areas contributed to a violation, EPA started with the Consolidated Metropolitan Statistical Area (CMSA) and the Metropolitan Statistical Area (MSA) as the presumptive boundaries for PM2.5 nonattainment areas. A metropolitan area, as defined by the Office of Management and Budget (OMB) in 1999, consisted of a single MSA in some cases, or a CMSA in other cases. These metropolitan areas provide boundaries for the geographic extent of urban areas. We suggested the use of metropolitan area boundaries as the presumptive boundaries for urban

nonattainment areas for air quality purposes, based upon evidence that violations of the PM2.5 air quality standards generally include a significant urban-scale contribution as well as a regional contribution. The actual size of each nonattainment area may be larger or smaller than the presumptive boundaries, depending upon the application of the nine factors contained in the April 2003 designations guidance for PM2.5.

In June 2003, OMB released a new list of metropolitan area descriptions. Because we had already issued the April 2003 designations guidance which recommended use of the 1999 OMB metropolitan definitions as a starting point, and because States and Tribes were already actively using this guidance in their planning efforts, we decided that it would be disruptive to recommend the use of the 2003 OMB definitions as the presumptive boundaries. Instead, we issued a second guidance memorandum in February 2004, which indicated that we would continue to consider the 1999 MSA boundaries as the presumptive boundaries, but that States should nevertheless take into consideration the 2003 OMB revised MSA boundaries. We particularly urged consideration of the 2003 MSA boundaries for those counties that OMB added to an existing metropolitan area due to growth, or because of a high degree of social and economic integration with the

primary urban area. ²

The April 2003 guidance memorandum described nine factors that EPA would take into consideration in determining appropriate nonattainment area boundaries, whether larger or smaller than the presumptive boundaries: (1) emissions and air quality in adjacent areas (including adjacent CMSAs and MSAs), (2) air quality in potentially included versus excluded areas, (3) population density and degree of urbanization including commercial development in included versus excluded areas, (4) traffic and commuting patterns, (5) expected growth (including extent, pattern and rate of growth), (6) meteorology (weather/transport patterns), (7) geography/topography (e.g., mountain ranges or other air basin boundaries), (8) jurisdictional boundaries (e.g., counties, air districts, Reservations, etc.), and (9) level of existing controls on emission sources.

In assessing emissions under the first factor, we developed a "weighted emissions score" that valued the effect of direct emissions of PM_{2.5} and its precursors that contribute to "urban excess" PM_{2.5} concentrations at monitor

²

See, "Additional Guidance on Defining Area Boundaries for PM-2.5 Designations," memorandum to Air Division Directors, Regions I-X, from Lydia N. Wegman, Director, AQSSD, dated February 13, 2004.

sites. The "urban excess" concentrations for each PM2.5 component (direct or precursor emissions) are calculated from two PM2.5 speciation monitors by subtracting the regional concentration from the urban concentration for each component. The methodology we used to calculate urban excess concentration and the weighted emission score is explained in more detail in the technical support document (TSD).

We used this metric to compare the relative emissions contribution of different counties in and around each metropolitan area. Using this approach, we were able to take into consideration, in a single metric, the county-level emissions of carbonaceous particles, inorganic particles, SO₂, and NO_x (all of which contribute to PM2.5 formation) in the vicinity of each violating monitor. By comparing weighted emissions scores across counties in a metropolitan area, EPA was able to identify those counties having the highest estimated emissions contribution to the local nonattainment problem. In addition, by examining the data from the urban speciation monitors, we could draw some conclusions concerning the likely sources of emissions contributing to the violation. Knowing the likely sources of the emissions, we could better evaluate which of the nearby counties had emissions likely to be contributing to the ambient concentrations at the violating monitor.

Evaluation of the weighted emissions score and speciation data was an important element in our nine factor analysis, and we believe that it provided a reasonable tool for evaluating the relative contribution of nearby areas to violations at a monitor, given the variety of precursors and sources that participate in the formation of PM_{2.5}. Further discussion of the weighted emissions score, and area-specific explanations of its application, appear in the TSD.

In some cases, considering the factors and additional information provided by the State, we determined that only part of a nearby county (e.g., the part of the county that contained the significant sources of contributing emissions) should be considered as contributing to the violation at the monitor, and therefore included only a portion of that adjacent county in the nonattainment area. In other cases, we determined that the emissions from an identifiable large power plant in a county were contributing to the violations in a nearby area. In these cases, we concluded that it was appropriate to designate only the portion of the county where the source is located, even if that portion is not contiguous with the remainder of the nonattainment area. We adopted this approach where we determined, following the nine factor analysis, that it would be inappropriate to include other portions of a county, merely because those

portions lay between the large stationary source and the remainder of the designated nonattainment area. We selected the boundaries for these noncontiguous portions of nonattainment areas by relying on legally recognized governmental boundaries (e.g., townships, tax districts, or census blocks) in which the source is located.

We believe that the individual facts and circumstances of each area must be considered in determining whether to include a county as contributing to a particular nonattainment problem. Thus, our guidance does not establish bright lines or cut-points for how a particular factor is applied. For example, the guidance does not identify a set amount of a pollutant, or a specific level of commuting between counties, that would automatically require a county to be included in a nonattainment area as a contributing county. We analyzed the information provided by each State or Tribe in its recommendation letter, subsequently submitted information, and any other pertinent information available to EPA, in order to determine whether a county should be designated nonattainment. We evaluated each State's or Tribe's designation recommendation in light of the nine factors, bringing to bear our best technical and policy judgement. If the result of the evaluation showed that a county, whether inside or outside of the CMSA or MSA contributes to the violation in a nearby area with a

violating monitor, we designated the area as nonattainment.

In a small number of areas, EPA concluded that there was insufficient information to designate a given area as either nonattainment or attainment/unclassifiable. In these instances, we have designated the area as unclassifiable. In each instance, these areas had violating monitors for the years 2000-2002, but incomplete data or other data issues for the years 2001-2003. Further explanation of the unclassifiable designations may be found in the TSD for this action.

The EPA did not rely on planned or potential regional PM2.5 reduction strategies in making decisions regarding nonattainment designations, even if those strategies predict that an area may attain the standard in the future. We recognize that some areas with a violating monitor may be projected to come into attainment in the future without additional local emission controls because of State and/or national programs that will reduce transported emissions. However, the CAA requires EPA to make nonattainment designations based on current data. While we cannot consider projected future attainment in determining current designations, we intend to expedite the redesignation of areas to attainment once they monitor clean air quality. We also intend to apply our policy which streamlines the planning process for nonattainment areas that are meeting

the NAAQS but are not yet redesignated to attainment.³

Today's designation action is a final rule which establishes designations for all areas of the country for the PM2.5 NAAQS. In this action, we have added regulatory text to provide for the amendment of 40 CFR part 81 to identify the designation of areas across the country for the PM2.5 standard.

VIII. Has EPA Used 2004 Air Quality Data?

The final PM2.5 designations announced in today's action are based upon air quality data for calendar years 2001 through 2003. Over the course of the designations process, a number of States have provided comments to EPA suggesting that the agency should delay designations in order to permit consideration of additional air quality data from 2004 as a part of the designation decision. As discussed above, EPA must by law make the designations by December 31, 2004. This statutory deadline and the practical difficulties of obtaining complete,⁴ quality

3

See "Clean Data Policy for the Fine Particle National Ambient Air Quality Standards" memorandum to Air Division Directors, Regions I-X from Steve Page, Director, Office of Air Quality Planning and Standards, December 14, 2004.

4

Fine particle monitoring data is to be determined as "complete" according to data handling regulations for the PM2.5 standards in 40 CFR Part 50, Appendix N (62 FR 138, July 18, 1997).

assured, certified data for calendar year 2004 by December 31, 2004, have precluded EPA from using 2004 data for today's action. Under normal circumstances, we would not expect such data to be available for some time following the end of the calendar year, and under the applicable regulations States would not be required to have submitted such data until April 1, 2005, and would not be required to have certified such data until July 1, 2005. However, because we are promulgating the designations so near the end of calendar year 2004, and because complete, quality assured, certified 2004 data may become available for some areas quickly, we are interested in providing a process by which we could utilize 2004 data where possible in the designation process.

We have provided that the final PM_{2.5} designations announced in today's action will be effective on the date 90 days following the date of publication. If any State submits complete, quality assured, certified 2004 data to EPA by **[Insert date 45 days from date of publication]** that suggest that a change of designation status is appropriate for any area within that State, and we agree that a change of designation status is appropriate, then we will withdraw the designation announced in today's action for such area and issue another designation that reflects the inclusion of

2004 data. We emphasize that we will conduct this process only for those States that submit the necessary complete, quality assured, certified data by the deadline and in those instances where we can complete the analysis and effect the change of designation status before the original effective date established by today's final action.

If inclusion of 2004 data causes an area to change from nonattainment to attainment, EPA will change the designation if every county in the area is neither monitoring a violation of the standards nor contributing to a violation of the standards in another nearby area. If inclusion of 2004 data results in nonattainment in an area that was designated attainment, we will evaluate the reasons for the violation in the area and determine the appropriate course of action, which could include redesignation of the area to nonattainment. Also, EPA commits to evaluate 2004 data for unclassifiable areas when it receives complete, quality assured, certified data from the State, which is due no later than July 2005. At that time, EPA will determine whether a change of designation for an unclassifiable area is appropriate.

IX. How Do Designations Affect Indian Country?

All counties, partial counties or Air Quality Control Regions listed in the table at the end of this document are designated as indicated, and include Indian Country

geographically located within such areas, except as otherwise indicated in the table.

As mentioned earlier in this document, EPA's guidance for determining nonattainment area boundaries presumes that the CMSA or MSA monitor forms the presumptive boundary of the nonattainment areas but that the size of the area can be larger or smaller depending on contribution to the violation from nearby areas and other air quality-related technical factors. In general, and consistent with relevant air quality information, EPA intends to include Indian country encompassed within the presumptive CMSA or MSA boundaries as within the boundaries of the area for designation purposes, in order to protect public health and welfare. The EPA anticipates that in most cases, relevant air quality information will indicate that areas of Indian country located within CMSAs or MSAs should have the same designation as the surrounding area. However, based on the nine factors outlined in our guidance, there may be instances where a different designation is appropriate.

A State recommendation for a designation of an area that surrounds Indian country does not indicate the designation for Indian country. However, the conditions that support a State's designation recommendation, such as air quality data at the location of the sources, may indicate the likelihood that similar conditions exists for

the Indian country located in that area. States generally have neither the responsibility nor the authority for planning and regulatory activities under the CAA in Indian country.

X. Where Can I Find Information Forming the Basis for This Rule and Exchanges Between EPA, States, and Tribes Related to this Rule?

Information providing the basis for today's action and related decisions are provided in the TSD. The TSD, applicable EPA guidance memoranda, copies of correspondence regarding this process between EPA and the States, Tribes, and other parties, and EPA's responses to comments, are available for review at the EPA Docket Center listed above in the addresses section of this document and on our designation web site at

<http://www.epa.gov/oar/oaqps/particles/designations/index.htm>. State specific information is available at the EPA Regional Offices.

XI. Statutory and Executive Order Reviews

Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate areas as attaining or not attaining the NAAQS. The CAA then specifies requirements for areas based on whether such areas are attaining or not attaining the NAAQS. In this final rule, EPA assigns

designations to areas as required.

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is "significant" and, therefore, subject to OMB review and the requirements of the Executive Order. The order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a "significant regulatory action" because none of the above factors apply. As such, this final rule was not formally submitted to OMB for review.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. This rule responds to the requirement to promulgate air quality designations after promulgation of a NAAQS. This requirement is prescribed in the CAA section 107 of title 1. The present final rule does not establish any new information collection apart from that required by law. Burden means that total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's

regulations in the CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For the purpose of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) a small business that is a small industry entity as defined in the United States Small Business Administration (SBA) size standards (See 13 CFR part 121); (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominate in its field.

The rule designating nonattainment areas for the PM2.5 NAAQS is not subject to RFA because it was not subject to notice and comment rulemaking requirements. See CAA section 107(d)(2)(B).

After considering the economic impacts of today's final rule on small entities, I certify that this rule will not have a significant economic impact on a substantial number of small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal Agencies to assess the effects of their regulatory actions on State, local and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandate" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with

the final rule an explanation of why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small government on compliance with regulatory requirements.

Today's final action does not include a Federal mandate within the meaning of UMRA that may result in expenditures of \$100 million or more in any 1 year by either State, local, or Tribal governments in the aggregate or to the private sector, and therefore, is not subject to the requirements of sections 202 and 205 of the UMRA. It does not create any additional requirements beyond those of the PM2.5 NAAQS (62 FR 38652; July 18, 1997), therefore, no UMRA analysis is needed. This rule establishes the application of the PM2.5 standard and the designation for each area of the country for the PM2.5 NAAQS. The CAA requires States to develop plans, including control measures, based on their designations and classifications.

One mandate that may apply as a consequence of this

action to all designated nonattainment areas is the requirement under CAA section 176(c) and associated regulations to demonstrate conformity of Federal actions to State Implementation Plans (SIPs). These rules apply to Federal agencies and Metropolitan Planning Organizations (MPOs) making conformity determinations. The EPA concludes that such conformity determinations will not cost \$100 million or more in the aggregate.

The EPA believes that any new controls imposed as a result of this action will not cost in the aggregate \$100 million or more annually. Thus, this Federal action will not impose mandates that will require expenditures of \$100 million or more in the aggregate in any 1 year.

Nonetheless, EPA carried out consultation with government entities affected by this rule, including States, Tribal governments, and local air pollution control agencies.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications."

"Policies that have federalism implications" is defined in the Executive Order to include regulations that have

"substantial direct effects on the States, or the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The CAA establishes the scheme whereby States take the lead in developing plans to meet the NAAQS. This rule will not modify the relationship of the States and EPA for purposes of developing programs to implement the NAAQS. Thus, Executive Order 13132 does not apply to this rule.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by Tribal officials in the development of regulatory policies that have Tribal implications." This final rule does not have "Tribal implications" as specified in Executive Order 13175.

This rule concerns the designation and classification of areas as attainment and nonattainment for the PM2.5 air quality standard. The CAA provides for States to develop plans to regulate emissions of air pollutants within their jurisdictions. The TAR provides Tribes the opportunity to develop and implement CAA programs such as programs to attain and maintain the PM2.5 NAAQS, but it leaves to the discretion of the Tribe the decision of whether to develop these programs and which programs, or appropriate elements of a program, the Tribe will adopt.

This final rule does not have Tribal implications as defined by Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes, since no Tribe has implemented a CAA program to attain the PM2.5 NAAQS at this time. Furthermore, this rule does not affect the relationship or distribution of power and responsibilities between the Federal government and Indian Tribes. The CAA and the TAR establish the relationship of the Federal government and Tribes in developing plans to attain the NAAQS, and this rule does nothing to modify that relationship. Because this rule does not have Tribal implications, Executive Order 13175 does not apply.

Although Executive Order 13175 does not apply to this rule, EPA did outreach to Tribal leaders and environmental staff regarding the designations process. The EPA supports

a national "Tribal Designations and Implementation Work Group" which provides an open forum for all Tribes to voice concerns to EPA about the designations and implementation process for the NAAQS, including the PM2.5 NAAQS. These discussions informed EPA about key Tribal concerns regarding designations as the rule was under development and gave Tribes the opportunity to express concerns about designations to EPA. Furthermore, EPA sent individualized letters to all federally recognized Tribes about EPA's intention to designate areas for the PM2.5 standard and gave Tribal leaders the opportunity for consultation.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Executive Order 13045: "Protection of Children From Environmental Health and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health and safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably

feasible alternatives considered by the EPA.

The final rule is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because EPA does not have reason to believe that the environmental health risks or safety risks addressed by this rule present a disproportionate risk or safety risk to children. Nonetheless, we have evaluated the environmental health or safety effects of the PM2.5 NAAQS on children. The results of this risk assessment are contained in the NAAQS for PM2.5, Final Rule (July 18, 1997, 62 FR 38652).

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, "Actions That Significantly Affect Energy Supply, Distribution, or Use," (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

Information on the methodology and data regarding the assessment of potential energy impacts is found in Chapter 6 of U.S. EPA 2002, Cost, Emission Reduction, Energy, and the Implementation Framework for the PM2.5 NAAQS, prepared by the Innovative Strategies and Economics Group, Office of Air Quality Planning and Standards, Research Triangle Park,

N.C., April 24, 2003.

I. National Technology Transfer Advancement Act (NTTAA)

Section 12(d) of the NTTAA of 1995, Public Law No. 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impracticable. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable VCS.

This action does not involve technical standards. Therefore, EPA did not consider the use of any VCS.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S.

House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective **[Insert date 90 days from date of publication]**.

K. Judicial Review

Section 307 (b) (1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit (i) when the agency action consists of "nationally applicable regulations promulgated, or final actions taken, by the Administrator," or (ii) when such action is locally or regionally applicable, if "such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

This rule designating areas for the PM2.5 NAAQS is "nationally applicable" within the meaning of section 307(b)(1). This rule establishes designations for all areas of the United States for the PM2.5 NAAQS. At the core of

this rulemaking is EPA's interpretation of the definition of nonattainment under section 107(d)(1) of the CAA. In determining which areas should be designated nonattainment (or conversely, should be designated attainment/unclassifiable), EPA used a set of nine technical factors that it applied consistently across the United States.

For the same reasons, the Administrator also is determining that the final designations are of nationwide scope and effect for the purposes of section 307(b)(1). This is particularly appropriate because in the report on the 1977 Amendments that revised section 307(b)(1) of the CAA, Congress noted that the Administrator's determination that an action is of "nationwide scope or effect" would be appropriate for any action that has "scope or effect beyond a single judicial circuit." H.R. Rep. No. 95-294 at 323, 324, reprinted in 1977 U.S.C.C.A.N. 1402-03. Here, the scope and effect of this rulemaking extends to numerous judicial circuits since the designations apply to all areas of the country. In these circumstances, section 307(b)(1) and its legislative history calls for the Administrator to find the rule to be of "nationwide scope or effect" and for venue to be in the D.C. Circuit. Thus, any petitions for review of final designations must be filed in the Court of Appeals for the District of Columbia Circuit within 60 days

from the date final action is published in the Federal Register.

**Air Quality Designations and Classifications for the PM2.5
NAAQS - pg. 41 of __ pgs.**

LIST OF SUBJECTS in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Dated:

Michael O. Leavitt,
EPA Administrator

For the reasons set forth in the preamble, 40 CFR Part 81, Subpart C is amended as follows:

PART 81- DESIGNATIONS OF AREAS FOR AIR QUALITY PLANNING

PURPOSES

Part 81 - [Amended]

1. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401, et. Seq.

Subpart C-Section 107 Attainment Status Designations

2. Section 81.300 is amended by revising paragraph (a) to read as follows:

§ 81.300 Scope.

* * * * *

(a) Attainment status designations as approved or designated by the Environmental Protection Agency (EPA) pursuant to section 107 of the CAA are listed in this subpart. Area designations are subject to revision whenever sufficient data becomes available to warrant a redesignation. Both the State and EPA can initiate changes to these designations, but any State redesignation must be submitted to EPA for concurrence. The EPA has replaced the national ambient air quality standards for particulate matter measured as total suspended particulate with standards measured as particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM-

10). Accordingly, area designations for PM-10 are included in the lists in subpart C of this part. However, the TSP area designations will also remain in effect until the Administrator determines that the designations are no longer necessary for implementing the maximum allowable increases in concentrations of particulate matter pursuant to section 163(b) of the CAA, as explained in paragraph (b) of this section. The EPA has also added national ambient air quality standards for fine particulate matter measured as particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM2.5). Accordingly, area designations for PM2.5 are included in the lists in subpart C of this part.

* * * * *