UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emissions, Monitoring, and Analysis Division
Office of Air Quality Planning and Standards
79 T.W. Alexander Drive, Research Triangle Park, North Carolina 27711

November 16, 2000

TECHNICAL MEMORANDUM

To: EPA Air Docket A-99-06

From: Eric Ginsburg, Senior Program Advisor
Emissions Monitoring and Analysis Division, OAQPS

Subject: Summary of Current Status of PM10 Nonattainment Areas

This memorandum:

1. summarizes those areas previously designated as nonattainment for the 24-hour and/or annual national ambient air quality standards (NAAQS) for particulate matter having an aerodynamic diameter less than or equal to 10 micrometers (PM10) which have recorded violations of the standards during the most recent complete 3-year period (1997-99), and

2. Provides information on the availability of air quality data to which the public has access, and on which EPA relied in identifying those areas which are currently measuring violations of the PM10 NAAQS.

Public access to PM10 air quality data

The Aerometric Information Retrieval System (AIRS) AIRS is a computer-based repository of information about airborne pollution in the United States and various World Health Organization member countries. The system is administered by EPA's Office of Air Quality Planning and Standards (OAQPS), Information Transfer and Program Integration Division, located in Research Triangle Park, North Carolina. AIRS is installed on the IBM computer system at the EPA's National Computer Center in Research Triangle Park, North Carolina. Any organization or individual with access to the EPA computer system may use AIRS to retrieve air pollution data. The Air Quality Subsystem (AQS) of AIRS contains measurements of ambient concentrations of air pollutants and meteorological data from thousands of monitoring stations operated by EPA, state and local agencies. AQS also contains descriptive information about each monitoring station, including its geographic location and who operates it. Individuals interested in viewing information on PM10 and other pollutant measurements through the internet can do so at the following web address: http://www.epa.gov/airsdata/monvals.htm.

Identification of Nonattainment Areas Recording violations in 1997-99

Using all valid data submitted by the States to AIRS, we determined which designated nonattainment areas measured violations of the standards in the most recent complete 3 years, based on the procedures established in 40 CFR Part 50, Appendix K. The source data set contains daily PM10 values from 1997 to 1999 based on a September 8, 2000 AIRS AMP350 retrieval. In 1998, some sites began reporting PM10 data in local conditions, instead of (or in addition to) standard conditions. To ensure all the data reflect standard conditions, we converted the local conditions data to standard conditions if a standard conditions value did not already exist for a given day. We then calculated estimated exceedances and annual means in accordance with 40 CFR Part 50, Appendix K to determine violations of the standards. Since the sampling schedules for many sites are not updated regularly in AIRS , we estimated the sampling schedules by using the mode of the gap between samples in each calendar quarter. The sampling schedule is used in the calculation of estimated exceedances.

An official designation of PM10 nonattainment indicates the existence of a confirmed PM10 problem that is more than a result of a one-time monitoring upset or a result of PM10 exceedances attributable to natural events. While we noted that violations of the PM10 standards were measured in 1997-99 in an additional 25 areas, we have not yet excluded the possibility that one or the other of these is responsible for the monitored violations in 1997-99 in these 25 unclassified areas. We adopted a policy in 1996 that allows areas whose PM10 exceedances are attributable to natural events to remain unclassified if the State is taking all reasonable measures to safeguard public health regardless of the sources of PM10 emissions. Areas that remain unclassified areas are not required to submit attainment plans, but we work with each of these areas to understand the nature of the PM10 problem and to determine what best can be done to reduce it.

The results of this analysis are provided in the attached table. We determined that 14 designated nonattainment areas, with a total population of 19.675 million, measured violations of the 24-hour and/or annual PM10 standards. This analysis of current air quality does not take into account controls that are adopted but not yet implemented, such as Tier 2 standards for light-duty vehicles and 2004 standards for heavy duty vehicles. Additional reductions may be achieved by further actions taken at the Federal, State, or local level which could affect future air quality.

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Attachment

PM10 Nonattainment Areas Violating the PM10 NAAQS in 1997-99[1]

Area	Classification	1990 Population (Millions)
Hayden/Miami, AZ	Moderate	0.003
Phoenix, AZ	Serious	2.212
Nogales, AZ	Moderate	0.019
San Joaquin Valley, CA	Serious	2.742
Imperial Valley, CA	Moderate	0.092
Owens Valley, CA	Serious	0.018
Searles Valley, CA	Moderate	0.030
Coachella Valley, CA	Serious	0.183
South Coast Air Basin	Serious	13.00
Las Vegas, NV	Serious	0.741
Reno, NV	Moderate	0.254
Anthony, NM[2]	Moderate	0.002
El Paso, TX[3]	Moderate	0.515
Wallula, WA[2]	Moderate	0.047
Total Population:		19.675

[1]In addition to these designated nonattainment areas, there are 25 unclassified areas, with a 1990 population of 10.093 million, for which States have reported PM10 monitoring data for this period indicating a PM10 NAAQS violation. Although we do not believe that we are limited to considering only designated nonattainment areas a part of this rulemaking, we have focused on the designated areas in the case of PM10. An official designation of PM10 nonattainment indicates the existence of a confirmed PM10 problem that is more than a result of a one-time monitoring upset of a result of PM10 exceedances attributable to natural events. We have not yet excluded the possibility that one or the other of these is responsible for the monitored violations in 1997-99 in the 25 unclassified areas. We adopted a policy in 1996 that allows areas whose PM10 exceedances are attributable to natural events to remain unclassified if the State is taking all reasonable measures to safeguard public health regardless of the sources of PM10 emissions. Areas that remain unclassified areas are not required to submit attainment plans, but we work with each of these areas to understand the nature of the PM10 problem and to determine what best can be done to reduce it.

[2]The violation in this area has been determined to be attributable to natural events under section 188(f) of the CAA.

[3]EPA has determined that continuing PM10 nonattainment in El Paso, TX is attributable to international transport under section 179(B) of the CAA.