



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

March 10, 1998

MEMORANDUM

SUBJECT: PM_{2.5} Monitoring Program Implementation

FROM: John S. Seitz, Director (*original signed by John Seitz*)
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Office of Environmental Measurement and Evaluation, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Environmental Services Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Environmental Services Division, Region VII
Director, Air Program, Region VIII
Director, Air Division, Region IX
Director, Office of Air Quality, Region X

This memorandum provides follow-up to my November 13, 1997 request for input from each of you on the abilities and concerns that the State and local agencies have on implementing the PM_{2.5} monitoring program. As a first priority, I would like to thank you and your staff for coordinating this effort with your State and local agencies, and for the thoughtful input you have provided for this program.

My original request asked for your input in four areas including: the number of proposed PM_{2.5} monitoring sites by State, information on State and local agency participation in the National PM_{2.5} Sampler Procurement Contract, your views on merging the PM_{2.5} and visibility monitoring networks, and the State/local agencies' ability to deploy and operate the PM_{2.5} network. We have received and reviewed memorandums from each Regional Office, many of which also included the letters from individual State and local agencies, STAPPA/ALAPCO, and NESCAUM. A summary of the major issues identified and our responses are included in the attachment to this memorandum. Please feel free to share this information with your State and local agencies.

Several important technical issues related to very specific program elements were also identified. These issues will be incorporated into the weekly discussions between our Monitoring and Quality Assurance Group and the Regional PM_{2.5} monitoring contacts for resolution.

I want to emphasize the importance of your input and support for this program, and to

thank you in advance for your continued efforts to ensure its success. Please contact Richard Scheffe at (919) 541-4650 with your questions and suggestions on the PM_{2.5} monitoring program.

Attachment

cc: Deputy Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Science and Assessment, Region II
Director, Air Protection Division, Region III
Director, Science & Ecosystems Support Division, Region IV
Director, Air, RCRA, and Toxics Division, Region VII
Director, Office of Environmental Assessment, Region X
Regional PM_{2.5} Monitoring Contacts
Michael Bower, CMD
Larry Cupitt, ORD
Bill Harnett, OAQPS
Bill Hunt, OAQPS
Mary Kemp, Region VI
Jerry Kurtzweg, OPMO
David Mobley, OAQPS
Joe Paisie, OAQPS
Rich Scheffe, OAQPS
Sally Shaver, OAQPS
Ieva Spons, OAQPS

Attachment

**Summary of Regional Office and State/local Agencies' Concerns
Expressed in Responses to Seitz Memo**

The OAQPS is prepared to work with the Regional Offices to provide flexibility to each State and local agency in the design, deployment, and operation of their particulate matter (both PM_{2.5} and PM₁₀) air monitoring network. The OAQPS recognizes that a single, national approach to all aspects of the network deployment is simply not plausible, or the most effective approach in some cases. The OAQPS and the Regional Offices must and will consider the obstacles that each State and local agency must overcome in achieving their PM_{2.5} network deployment goals, which in many instances may be on an individual basis, and we will help to develop mutually agreeable, common sense approaches that will ensure this program's success.

A. Number of proposed PM_{2.5} monitoring sites by State (too many, too few, etc.)

The PM_{2.5} network descriptions will not be complete until July 1, 1998, although many details on numbers of sites will be finalized prior to this date. All numbers of sites contained in the responses are viewed as preliminary. At this time, most States agree with OAQPS' estimates of numbers of sites, either exactly or within a few sites (either more or fewer sites). States with more significant differences include Louisiana (which plans to run 27 rather than 37 sites), Utah (which plans to operate 5 fewer sites by the end of CY99), and Wyoming (which also plans to operate 5 fewer sites by the end of CY99). Region VIII believes that the PM_{2.5} network in place at the end of the national contract period (5-years) in their region will meet the OAQPS estimate of 116 sites.

The OAQPS will continue to work with the Regional Offices and the State and local agencies on the development of the PM_{2.5} networks. Status reports on the progress of the PM_{2.5} network designs are provided on AMTIC Internet site at <http://www.epa.gov/ttn/amtic/amticpm.html> under the Network Design Section.

B. National PM_{2.5} Sampler Procurement Contract participation.

Nearly all States are currently planning to purchase their samplers from the National PM_{2.5} Sampler Procurement Contract with the exceptions of Missouri and South Carolina.

States have received only limited information on the PM_{2.5} samplers and their operation due to the sensitive nature of the national procurement. Understandably, this has led to concerns about these samplers and their operation. Many States have expressed interest in being able to select a specific vendor from the national contract as part of their orders. Most States want to receive equipment from only one vendor (whomever it may be) in order to minimize the number and types of spare parts that they must store. The OAQPS' goals for all orders are to provide one vendor per State/local agency first, and to meet all vendor preferences as much as possible within

the contract's limitations and scope. The National PM_{2.5} Sampler Procurement Contract is scheduled to be awarded by March 31, 1998, and additional information on which vendors are available and specific prices will be made available at that time.

C. Integration of PM_{2.5} and IMPROVE visibility monitoring networks.

States generally agree with this integration provided that it does not detract from the overall PM_{2.5} monitoring program (i.e., funding issues), and that the FLMs operate the sites within the same quality assurance, quality control, data management, and data reporting requirements that a State is required to meet.

STAPPA/ALAPCO's comments included the suggestion that more State and local agency participants be added to the IMPROVE Steering Committee which oversees the visibility monitoring program.

The IMPROVE Network is operated by a Steering Committee that includes representatives of EPA, NOAA, and the FLMs who are responsible for preserving and improving air quality over the lands in their charge (National Park Service, Forest Service, Fish and Wildlife Service, and Bureau of Land Management). The IMPROVE Steering Committee also includes representatives from three State-based organizations: (1) STAPPA; (2) WESTAR; and (3) NESCAUM. STAPPA/ALAPCO's recommendation that State and local agency participation be increased will be forwarded to the IMPROVE Steering Committee. It is important to note that there have been no limitations on the numbers of State and local agency participants who can participate in the IMPROVE program.

The IMPROVE Steering Committee is committed to work closely with the States to select the Class I areas for the expanded network, as well as specific sites for monitors within the selected areas. The first priority is to deploy monitoring sites that are representative of all of the class I areas that can be accomplished in a cost-effective manner. This may be done by some combination of high elevation and low elevation sites in a region with clusters of nearby Class I areas (e.g., along the Cascade or Sierra mountain ranges).

The IMPROVE Steering Committee Chair will send a preliminary list of 25 to 30 Class I areas to all impacted State agencies for their comments and suggestions. The letter will also invite State representatives to accompany the FLM and IMPROVE contractors, to select the specific locations for equipment during field trips (Spring 1998), to selected areas in their States or adjoining States. Responses from the States concerning the first 20 Class I areas will be requested within 3 weeks. The same process operated on a somewhat more flexible schedule will be conducted for the remaining 58 sites to be installed in 1999.

The IMPROVE Steering Committee has adopted several resolutions to facilitate the integration of the PM_{2.5} and visibility networks:

- * The IMPROVE Steering Committee agrees to select additional sites in close consultation

and full partnership with affected States for an expanded IMPROVE network in visibility-protected Class I areas that can be monitored routinely in a cost-effective manner.

* The IMPROVE Steering Committee endorses a continued and expanded State-FLM partnership to provide for the upgrade, continued operation, and analytical support of aerosol monitoring at the 30 existing IMPROVE monitoring sites, and the expansion of this network from 30 to 108 sites. The committee will seek recommendations from the States and FLMs, for selection of areas and sites for representative visibility monitoring, and will strive for consensus in development of the new national network. The purpose of this expansion is to track visibility in 156 mandatory class I areas, and to provide information about regional transport of fine particles that will support PM_{2.5} State Implementation Plans. The State's contribution of §103 and §105 grant dollars will pay for new or upgraded samplers, quality assurance, and analytical support. The FLMs will coordinate and arrange for all operational support for the collection of aerosol samples.

* The IMPROVE Steering Committee agrees to the following in order to promote integration of the IMPROVE aerosol monitoring with the national PM monitoring program:

! the sampling schedule will be changed to 1 in 3 day schedule starting in 1998;

! that all past and new data will be provided to EPA for storage in the new Aerometric Information Retrieval System database; and,

! that a fraction of the monitoring sites will include routine collocated sampling to allow precision and comparability assessments.

D. States' ability to deploy and operate the PM_{2.5} network (funding, hiring, legislative concerns or barriers, etc.).

All States are committed to implementing this program to the best of their abilities, given the constraints they must operate within, such as limitations on hiring new personnel (FTEs). Virginia is the only State that clearly expressed significant and potentially uncorrectable concerns about their ability to implement this program on the accelerated schedule, as they have hiring constraints and are concerned about the program funding being inadequate (no specific inadequacies were identified).

All States are concerned about future funding for the PM_{2.5} program, that is, beyond FY99. They are very concerned that EPA will not provide additional funds for running this program, and that EPA will reprogram these costs from other areas. They are also concerned about the program's transition from funding authorized under §103 grants to funding under §105 grant authority, and how this transition is going to occur.

North Dakota is concerned about the timing of legislative cycles (biennial or other cycles) impacting their ability to be able to spend our grant funds or to get approval to hire new FTEs. Massachusetts has some concern about being able to identify new monitoring site locations and to

negotiate land use agreements with property owners in time to meet the deployment schedule.

States with FTE hiring caps include, at a minimum: Alabama; Alaska; Arkansas; Georgia; Idaho; Indiana; Kansas; Louisville, Kentucky; Maryland; Massachusetts; Michigan; Nebraska; New Jersey; Oklahoma; Pennsylvania; Rhode Island; Texas; Utah; Vermont; Virginia; and Washington, D.C. (ranging from permanent to temporary, statewide to department-specific caps). Many of these States plan on using contracting or cooperative arrangements to implement the program. Oklahoma requested help from EPA in identifying their options to address the FTE concerns. The OAQPS encourages State and local agencies with personnel hiring limitations to consider using contracts, cooperative agreements with local universities or other organizations, summer students, and temporary position hiring options, as alternatives for meeting personnel requirements inherent in deploying the PM_{2.5} network.

E. Other issues brought up by the State/local agencies or the Regions.

Many States are interested in EPA providing some flexibility in granting waivers to the PM_{2.5} sampling frequency. This authority to provide waivers is given to the Regional Offices in the regulation, under 40 CFR §58.13, as published in the corrections notice. The OAQPS is preparing a technical memorandum to the Regional Offices that will provide additional guidance on PM_{2.5} sampling frequency waivers.

Several States expressed their concern about having the necessary technical guidance for their quality assurance program elements. OAQPS is providing this guidance, including a model quality assurance project plan, revisions to the quality assurance handbook, and other documents that will address issues raised in these responses. The OAQPS quality assurance work group will continue to work with State and local agencies and the Regional Offices, throughout the deployment of the PM_{2.5} network, to support their quality assurance and quality control activities.