



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

MAR 23 2006

THE ADMINISTRATOR

Dr. Rogene Henderson
Chair
Clean Air Scientific Advisory Committee
Science Advisory Board
U.S. Environmental Protection Agency
1025 F Street, N.W., Suite 3700
Washington, D.C. 20004

Dear Dr. Henderson:

Thank you for providing me with the Clean Air Scientific Advisory Committee's peer review of the proposed Federal Reference Method for coarse particulate matter (PM_{10-2.5}), EPA-CASAC-06-001, and for completing the assignment in time for the Agency to consider it as part of the proposed rule on National Ambient Air Quality Standards for Particulate Matter.

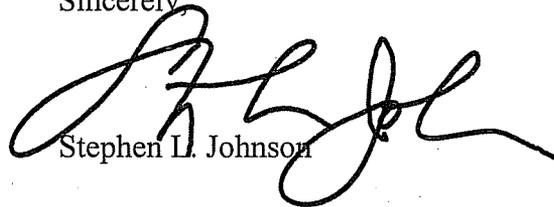
Consistent with the CASAC peer review, I have proposed the difference method for PM_{10-2.5} to be used as the FRM. We agree with the Committee's advice that no other better, currently available candidate FRM has been identified. Although we are proposing the difference method as the FRM, we are also soliciting public comment regarding consideration of a filter-based PM_{10-2.5} reference or equivalent method based on the use of a virtual impactor to aerodynamically separate fine mode aerosols from coarse mode aerosols. As you note, an FRM that actually provides a coarse particle sample should be proposed as a second FRM in addition to the proposed PM_{10-2.5} difference method. While there are issues to be resolved using a virtual impactor as the means to separate fine and coarse particles, given your advice, I believe it is appropriate to solicit public comment on its use. Both the difference method approach and a method based on use of a virtual impactor have advantages and disadvantages, as you have documented in your review. Among the disadvantages are that they are typically integrated filter-based manual samplers with poor time resolution. Therefore, in either case, we are envisioning only widely deploying automated continuous methods which will provide for near real-time data, while also allowing some flexibility for state and local agencies to transition to these new technologies, as you also recommended.

In addition, your review offered several recommendations regarding how a monitoring network for PM_{10-2.5} might be deployed, as well as specific research areas for the Agency to address. Recommendations incorporated in the recently proposed rule revising EPA's ambient air monitoring regulations (71 FR 2710, January 17, 2006) include allowing states to use PM₁₀

monitors to demonstrate attainment; emphasizing use of continuous methods in the network at middle and neighborhood scales for purposes of determining compliance; and requiring some sites at neighborhood to urban scale exposures that can also support future health studies, as proposed at the National Core Monitoring Network multi-pollutant sites. This proposal also takes comment on all aspects of the PM_{10-2.5} probe siting criteria, including a more restrictive inlet height for monitors at middle scale sites than exists for PM₁₀ or PM_{2.5} monitors at this scale. In our research efforts, we are working to compare and evaluate the aerodynamic size separation characteristics of the virtual impactor, which was successfully used in our field campaigns. Your letter offered several other research recommendations. We will be evaluating how we can best accommodate the rest of these recommendations in our research planning process.

Your timely peer review was very useful for the Agency to propose a PM_{10-2.5} monitoring program. I appreciate the efforts of the CASAC and its technical subcommittee on ambient air monitoring and methods to meet the Agency's needs for this scientific review. Please extend my gratitude to both the Committee and Subcommittee for their efforts.

Sincerely,



Stephen L. Johnson