



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

OCT 03 2005

MEMORANDUM

OFFICE OF
AIR AND RADIATION

SUBJECT: Analysis of EPA's Action Plan in Response to the Office of Inspector General's evaluation report, *EPA Needs to Direct More Attention, Efforts, and Funding to Enhance Its Speciation Monitoring Program for Measuring Fine Particulate Matter*, Report No. 2005-P-00004, issued February 7, 2005.

FROM: William L. Wehrum 
Acting Assistant Administrator

TO: J. Rick Beusse
Director for Program Evaluation, Air Quality Issues

Thank you for providing the results of your analysis of the Environmental Protection Agency's (EPA) action plan in response to the Office of Inspector General's (OIG) evaluation, dated May 24, 2005. We are pleased that your analysis has resulted in the closeout of 8 of 11 recommendations made in your report on the speciation monitoring program. This memorandum is in response to your request for more specific information regarding the three open recommendations (3-2b, 3-3b, and 3-4). A summary of each open recommendation, the additional information requested, and the Agency's responses are provided below. In addition, the table summarizing OIG's analysis from the May 24th memo has been annotated for the open items only and included as an attachment for background information and more detail.

Recommendation 3-2b: Expedite Agency efforts to determine whether the Speciation Trends Network (STN) and Interagency Monitoring of Protected Visual Environments (IMPROVE) monitors can produce adequately comparable data and, if not, determine which method should be further deployed to increase data consistency.

OIG Information request: More specific information will be needed regarding Agency estimates for when the Office of Air Quality, Planning and Standards (OAQPS) plans will be completed to address comparability issues between the STN and IMPROVE programs.

Agency Response: The Agency has recently engaged the Clean Air Science Advisory Committee (CASAC) and Ambient Air Monitoring Steering Committee on this topic and estimates that plans to address this issue will be completed by December 2005.

Recommendation 3-3b: Identifying and minimizing the uncertainties associated with measuring the organic fraction of PM_{2.5}.

OIG Information request: The Office of Research and Development (ORD) is conducting an assessment of artifact correction methods for organic carbon and developing calibration standards for carbon through an Interagency Agreement with the National Institute of Standards and Technology (NIST). More information is needed regarding estimates for completion of the work with NIST.

Agency Response: ORD estimates that efforts to develop an optimized Thermal Optical Analysis (TOA) protocol and organic PM standards through NIST will be completed by May 31, 2006. The assessment of artifact correction methods is being addressed with support from Rutgers University and the estimate for completion is December 2005.

Recommendation 3-4: Address the challenges described in Recommendations 3-1, 3-2, and 3-3 by establishing a new workgroup or through an existing workgroup, comprised of officials from OAQPS, ORD, and selected EPA regions; State, local, and tribal agencies; State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO); Regional Planning Organizations (RPOs); affected industries; academia; and monitor manufacturers.

OIG Information Request: Before this recommendation can be closed, OIG requests that at least one of the existing workgroups be expanded to add representation from the monitor manufacturers.

Agency Response: We have considered, but do not accept this request. Individual companies in the monitor manufacturing community are engaged on a regular basis in discussions with EPA on specific projects, research, and monitoring initiatives. Monitoring manufacturers are regular attendees at air quality monitoring conferences, where we engage our stakeholders and at the CASAC subcommittee meetings, which are open to the public. Adding representation from the monitor manufacturing community to our existing workgroups is impractical for a variety of reasons. Monitor manufacturers are competitors and it would be difficult to find one, or a subset of manufacturers, that would fairly represent all interests. The manufacturers that are represented would be perceived as having an unfair competitive advantage. It would also be difficult to know all of the potential monitoring manufacturers and not unknowingly be exclusive. For these reasons, we will continue to engage the manufacturing community as described above.

We hope that this information is sufficient to close the remaining three recommendations. If you have any questions, please contact Peter Tsirigotis at 919-541-9411.

Attachment

cc: Pete Cosier, Office of Air and Radiation, Audit Follow-up Coordinator (6102A)
Stephen D. Page, Director, Office of Air Quality Planning and Standards (C404-04)
Timothy Oppelt, Assistant Administrator, Office of Research and Development (163A)
Laurie Trinca, Audit Liaison, Office of Air Quality Planning and Standards (C404-2)
Peter Tsigotis, Director, Emission, Monitoring and Analysis Division (C304-02)
Timothy Watkins, Deputy Director, Human Exposure and Atmospheric Sciences Division (E205-01)
Cheryl Varkalis, Office of Research and Development, Audit Follow-up Coordinator (163A)

Open IG Recommendations	Agency Action(s) Taken, Ongoing, or Planned	OIG Analysis and Information Request	EPA Response
<p>3-2 b) Expedite Agency efforts to determine whether the STN and IMPROVE monitors can produce adequately comparable data and, if not, determine which method should be further deployed to increase data consistency.</p>	<p>OAR is engaged in discussions with CASAC to possibly convert STN sampling and protocols to IMPROVE. This process will require extensive stakeholder participation and scientific review which will be factored into the decision-making and the development of a plan to establish network comparability. In the meantime, OAQPS is developing a contingency plan to switch all STN sites to "IMPROVE-like" sampling and protocols. ORD will continue research as resources allow to find the "optimal" method for the measurement of carbon.</p>	<p>We agree with the direction of the Agency's proposed actions, however, before we can close this recommendation, more specific information will be needed regarding Agency estimates for when the two plans will be completed.</p>	<p>OAQPS has recently engaged the CASAC and Ambient Air Monitoring Steering Committees on this topic and estimates that plans to address this issue will be completed by December 2005.</p>
<p>3-3 b) Identifying and minimizing the uncertainties associated with measuring the organic fraction of PM2.5.</p>	<p>EPA will continue on-going efforts that address this recommendation. ORD is conducting an assessment of artifact correction methods for organic carbon and developing calibration standards for carbon through an Interagency Agreement with the National Institute of Standards and Technology (NIST). ORD is also conducting relevant research through the STAR grants to help improve emission source estimates of primary and secondary organic aerosol precursors and develop cost effective techniques for the analysis of organic compounds in atmospheric and source samples.</p>	<p>We agree with Agency's actions, however, we will need more information regarding estimates for completion of the work with NIST.</p>	<p>ORD estimates that development of an optimized Thermal Optical Analysis (TOA) protocol and organic PM standards through NIST will be completed by May 31, 2006. The assessment of artifact correction methods is being addressed with support from Rutgers University and the estimate for completion is December 2005.</p>
<p>3-4 Address the challenges described in Recommendations 3-1, 3-2, and 3-3 by establishing a new workgroup or through an existing workgroup, comprised of officials from OAQPS, ORD, and selected EPA regions; State, local, and tribal agencies; State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials; RPOs; affected industries; academia; and monitor manufacturers.</p>	<p>EPA will use two existing workgroups to address the concerns of these recommendations. The two workgroups are CASAC's subcommittee, and the EPA / State / Local Ambient Air Monitoring Steering Committee.</p>	<p>We agree with the Agency's plan to use existing workgroups to confront the many challenges involved in measuring particulate matter. However, before we can close this recommendation, at least one of the existing workgroups should be expanded to add representation from any of the following key stakeholders that are not currently participating: OAQPS, ORD, and selected EPA regions; State, local, and tribal agencies; State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control officials; RPOs; affected industries; academia; and monitor manufacturers. We note that, with the exception of monitor manufacturers, the Clean Air Act Advisory Committee Air Quality Management Work Group consists of these key stakeholders.</p>	<p>We have considered, but do not accept this OIG request; however, we will continue to engage the manufacturing community on EPA projects, research, and monitoring initiatives.</p>