

**Summary Minutes of the
U.S. Environmental Protection Agency (EPA)
Clean Air Scientific Advisory Committee (CASAC)
Ambient Air Monitoring and Methods Subcommittee (AAMMS)
Public Meeting of September 15, 2010**

Date and Time: Tuesday Wednesday, September 15, 2010, 10:00 AM – 2:00 PM ET.

Location: Teleconference only

Purpose: The purpose of the meeting was to provide advice on EPA's White Paper, *Approach for Developing a New Federal Reference Method (FRM) for Lead in Total Suspended Particulates (Pb-TSP)*.

Participants: CASAC AAMMS (for full roster, see Attachment A)

Dr. Ted Russell, Chair
Mr. George A. Allen
Dr. Judith Chow
Mr. Bart Croes
Dr. Kenneth Demerjian
Dr. Delbert Eatough
Mr. Henry (Dirk) Felton
Dr. Philip Hopke
Dr. Rudolf Husar
Dr. Peter McMurry
Mr. Richard Poirot
Dr. Jay Turner
Dr. Warren White
Dr. Yousheng Zeng

Mr. Aaron Yeow, Designated Federal Officer (DFO)
Ms. Joann Rice, EPA Office of Air and Radiation (OAR)
Mr. Lewis Weinstock, EPA OAR

Other Attendees (See Attachment B)

Mr. Aaron Yeow, the DFO for the CASAC AAMMS review of the Pb-TSP FRM, opened the meeting. He noted that as required under the Federal Advisory Committee Act (FACA), the Committee's deliberations are held in public with advanced notice given in the Federal Register¹, and the meeting minutes will be made publicly available after the meeting. He noted that there were no requests from the public to present oral comments and no written comments were submitted. He also noted that the AAMMS members are all subject to federal ethics regulations and conflict-of-interest laws that pertain to them. He then took roll and turned the meeting over to Dr. Ted Russell, Chair of the CASAC AAMMS.

Dr. Ted Russell, Chair of the CASAC AAMMS welcomed everyone and indicated that as a result of the recently lowered National Ambient Air Quality Standard (NAAQS) for lead and improvements in analytical technology, EPA has developed a white paper, *Approach for the Development of a New Federal Reference Method (FRM) for Lead in Total Suspended Particulates (Pb-TSP)*². He indicated that the purpose of the teleconference was for the CASAC AAMMS to review the white paper. He turned the meeting over to Ms. Joann Rice from EPA's Office of Air and Radiation (OAR).

Ms. Joann Rice presented an overview of EPA's white paper using slides³. Items discussed included: description of current FRM for Pb-TSP, the need for a new FRM for Pb-TSP, the proposed FRM for Pb-TSP, and method performance.

The AAMMS proceeded to discuss each of the Charge Questions⁴, led by each lead discussant.

For Charge Question 1, there was concern from several members about the lack of inclusion of a broad range of extraction methods, such as microwave digestion. There was discussion regarding making it performance-based as opposed to specifying particular extraction methods. However, there was concern raised about the burden this would be on state agencies to have to demonstrate method performance as opposed to just adopting the method specified in the FRM.

For Charge Question 2, there was general agreement that ICP-MS was excellent, but several members would like to see other methods included such as graphite furnace, XRF, and the current AAS.

For Charge Question 3, there was general agreement that the evaluation criteria were not very stringent and that it needed to be tightened up. There was concern that the existing method was not built into the validation.

For Charge Question 4, there was a question whether the performance would be based on average or individual observations. It was clarified that it would be based on individual observations. There was a suggestion for an improvement in the statistical design of the evaluation approach by splitting each pair of filter strips between the two extraction procedures, as was done by Long et al. (1979). Regarding the acceptable level of inter-laboratory variability, much of that would be determined by EPA's data quality objectives (DQOs).

Dr. Russell discussed next steps and action items.

With the business concluded, the Designated Federal Officer adjourned the meeting at 12:05 PM ET.

Respectfully Submitted:

/SIGNED/

Mr. Aaron Yeow
Designated Federal Officer
EPA SAB Staff Office

Certified as True:

/SIGNED/

Dr. Armistead (Ted) Russell
Chair
CASAC AAMMS

Materials Cited

The following meeting materials are available on the CASAC website:

<http://www.epa.gov/casac>, at the [September 15, 2010 CASAC AAMMS Meeting page](#):

¹ Federal Register Notice Announcing the Meeting

² PDF for White Paper on the Approach for the Development of a New Federal Reference Method (FRM) for Pb in Total Suspended Particulates (TSP)

³ Agency presentation entitled, "Review of Approach for Development of New Federal Reference Method (FRM) for Pb-TSP"

⁴ Charge Questions for the Clean Air Scientific Advisory Committee's (CASAC) Ambient Air Monitoring & Methods Subcommittee

ATTACHMENT A - ROSTER

U.S. Environmental Protection Agency Clean Air Scientific Advisory Committee (CASAC) Ambient Air Monitoring and Methods Subcommittee (AAMMS)

CHAIR

Dr. Armistead (Ted) Russell, Professor, Department of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, GA

MEMBERS

Mr. George A. Allen, Senior Scientist, Northeast States for Coordinated Air Use Management (NESCAUM), Boston, MA

Dr. Judith Chow, Research Professor, Desert Research Institute, Air Resources Laboratory, University of Nevada, Reno, NV

Mr. Bart Croes, Chief, Research Division, California Air Resources Board, Sacramento, CA

Dr. Kenneth Demerjian, Professor and Director, Atmospheric Sciences Research Center, State University of New York, Albany, NY

Dr. Delbert Eatough, Professor of Chemistry, Department of Chemistry and Biochemistry, Brigham Young University, Provo, UT

Dr. Eric Edgerton*, President, Atmospheric Research & Analysis, Inc., Cary, NC

Mr. Henry (Dirk) Felton, Research Scientist, Division of Air Resources, Bureau of Air Quality Surveillance, New York State Department of Environmental Conservation, Albany, NY

Dr. Philip Hopke, Bayard D. Clarkson Distinguished Professor, Department of Chemical and Biomolecular Engineering, Clarkson University, Potsdam, NY

Dr. Rudolf Husar, Professor, Mechanical Engineering, Engineering and Applied Science, Washington University, St. Louis, MO

Dr. Kazuhiko Ito*, Assistant Professor, Department of Environmental Medicine, School of Medicine, New York University, Tuxedo, NY

Dr. Donna Kenski*, Data Analysis Director, Lake Michigan Air Directors Consortium, Rosemont, IL

Dr. Thomas Lumley*, Associate Professor, Biostatistics, School of Public Health and Community Medicine, University of Washington, Seattle , WA

Dr. Peter H. McMurry, Professor, Department of Mechanical Engineering, University of Minnesota, Minneapolis, MN

Mr. Richard L. Poirot, Environmental Analyst, Air Pollution Control Division, Department of Environmental Conservation, Vermont Agency of Natural Resources, Waterbury, VT

Dr. Kimberly A. Prather*, Professor, Department of Chemistry and Biochemistry, University of California, San Diego, La Jolla, CA

Dr. Jay Turner, Associate Professor, Environmental & Chemical Engineering, Campus Box 1180 , Washington University , St Louis, MO

Dr. Warren H. White, Research Professor, Crocker Nuclear Laboratory, University of California - Davis, Davis, CA

Dr. Yousheng Zeng, Air Quality Services Director, Providence Engineering & Environmental Group LLC, Baton Rouge, LA

Dr. Barbara Zielinska*, Research Professor, Division of Atmospheric Sciences, Desert Research Institute, Reno, NV

SCIENCE ADVISORY BOARD STAFF

Mr. Aaron Yeow, Designated Federal Officer, United States Environmental Protection Agency, Washington DC

* Did not participate in the September 15, 2010 teleconference.

**ATTACHMENT B – Other Attendees
CASAC AAMMS Public Meeting**

The following individuals either pre-registered for the call or indicated that they were on the call.

Name	Affiliation
Bradham, Karen	USEPA
Davis, Molly	Inside EPA
Hoyer, Marion	USEPA
Kovalcik, Kasey	USEPA
Livengood, Ryan	LSI Corporation
Vanderpool, Robert	USEPA