

**Summary Minutes of the Clean Air Scientific Advisory Committee (CASAC)
Public Teleconference**

Monday, March 21, 2005

**EPA Science Advisory Board (SAB) Staff Office
1025 F St., N.W., Washington, DC**

Panel Members: See Panel Roster – Appendix A

Dates & Times: Monday, March 21, 2005, 1:00 – 3:00 PM Eastern Time

Location: SAB Staff Office, 1025 F St., N.W., Washington, DC

Purpose: The purpose of this teleconference meeting was for the Clean Air Scientific Advisory Committee (CASAC) to review and approve the advisory report of the CASAC Ambient Air Monitoring and Methods (AAMM) Subcommittee (Subcommittee) regarding EPA's implementation plans for the Agency's National Ambient Air Monitoring Strategy (NAAMS).

Attendees:

Chair:	Dr. Rogene Henderson
CASAC Members:	Dr. Ellis Cowling Dr. James Crapo Dr. Philip Hopke Dr. Frederick Miller Dr. Frank Speizer Dr. Barbara Zielinska
EPA SAB Staff:	Mr. Fred Butterfield, CASAC Designated Federal Officer (DFO) Dr. Vanessa Vu, SAB Staff Office Director
Other EPA Staff:	Phil Lorang, OAR, OAQPS
Other participants:	George Allen, Northeast States for Coordinated Air Use Management (NESCAUM) Judith Chow, Desert Research Institute (DRI) Dirk Felton, New York State Department of Environmental Conservation Will Ollison, American Petroleum Institute (API) Tamara Thies, National Cattlemen's Beef Association (NCBA) Wes Younger, Georgia Tech

Teleconference Meeting Summary

The discussion followed the issues and general timing as presented in the teleconference meeting agenda (Appendix B), with the exception that the teleconference adjourned approximately 45 minutes ahead of schedule.

MONDAY, MARCH 21, 2005Convene Teleconference Meeting, Call Attendance, Introduction and Administration

Mr. Fred Butterfield, Designated Federal Officer (DFO) for the CASAC, opened the teleconference, called attendance, and welcomed all attendees. He noted that the CASAC is a Federal advisory committee chartered under the Federal Advisory Committee Act (FACA) to provide advice and recommendations to the EPA Administrator. Consistent with FACA regulations, its deliberations are held as public meetings and teleconferences for which advance notice is given in the *Federal Register*. The DFO is present at all such meetings to assure compliance with FACA requirements. Meeting minutes were taken (by the DFO) for this teleconference. The minutes will be certified by the CASAC Chair and made available on the SAB Web site (www.epa.gov/sab). All CASAC members have earlier submitted documentation with respect to possible financial conflicts-of-interest, which was reviewed by a SAB staff member prior to the meeting and found to be satisfactory.

Dr. Vanessa Vu, SAB Staff Office Director, thanked the Chair and members of the CASAC for taking part in this teleconference meeting.

Purpose of Meeting

Dr. Rogene Henderson, CASAC Chair, briefly stated the purpose of the meeting, which was for the CASAC to review and approve the advisory report of the CASAC AAMM Subcommittee (Subcommittee) regarding implementation aspects of the EPA's Final Draft NAAMS.

Overview and Summary of Draft CASAC AAMM Subcommittee Report

Dr. Phil Hopke, CASAC AAMM Subcommittee Chair, gave a brief overview of the Agency's efforts leading to the development of the National Ambient Air Monitoring Strategy, including a review by the CASAC's former NAAMS Subcommittee in July 2003, followed by a summary of the proposed draft advisory report from the CASAC AAMM Subcommittee on implementation aspects of the Agency's Final Draft NAAMS.

Public Comment Period

There were no public commenters during this teleconference meeting.

Overview of CASAC Members' Discussions and Deliberations

Dr. Henderson led the discussion on the CASAC AAMM Subcommittee's draft report, following the four charge questions which EPA's Office of Air Quality Planning and Standards (OAQPS) had been provided to the Subcommittee (attached as Appendix C).

Question 1:

Several CASAC members mentioned that there needed to be a more explicit statement in the report concerning the issue of resource allocation as the redeployment of monitoring resources

was implemented, including both financial and human resources that will be allocated for data analyses and interpretation activities. CASAC strongly recommends that the Agency give greater consideration to identification of the amounts of financial and human resources that will be allocated for data analyses and interpretation activities. It was agreed to insert a statement to this effect toward the beginning of the report. One Committee member also noted that there was currently no budget for the National Core Monitoring Network (NCORE) Level 1 (L1) sites at all; nevertheless, there is a declaration in the report that the Subcommittee continues to support the need for L1 sites as a means for testing of new ambient air monitoring technologies and implementing these for “routine use.”

Question 2:

The CASAC was general satisfied with the Subcommittee’s response to this charge question.

Question 3:

Committee members discussed technical details concerning sampling and associated laboratory and sample/sampler-related issues, including the comparability of samples analyzed by a single laboratory, as well as the vulnerabilities presented by reliance on a single sampling laboratory. There was also discussion on the differences in the respective missions of the Interagency Monitoring of Protected Visual Environments (IMPROVE) program versus the Speciation Trends Network (STN) speciation sites. One member commented on the need to emphasize “harmonization” in the final paragraph of the report’s response to this charge question.

Question 4:

The Committee indicated that there needed to be a stronger statement concerning the role of the CASAC AAMM Subcommittee in continuing to provide ongoing review and assessment of the Agency’s air quality monitoring program which was added in the closing paragraph of the report.

The Committee approved the report from the CASAC AAMM Subcommittee with the proviso that minor clarifications and additions would be made. The teleconference adjourned at 2:15 PM, approximate 45 minutes earlier than planned.

Action Items:

- Committee members were requested to send any additional review comments on the draft CASAC AAMM Subcommittee report to Dr. Hopke and Mr. Butterfield as soon as possible. [Completed]
- Dr. Hopke was to revise and circulate a proposed final report from the Committee and Subcommittee on this meeting within one week of the date of this teleconference. [Completed; the report from the CASAC AAMM Subcommittee’s December 15, 2004 meeting (EPA-SAB-CASAC-05-006, dated April 20, 2005) can be found on the EPA Web Site at: <http://www.epa.gov/sab/fiscal05.htm>.]

Respectfully Submitted:

Certified as True:

/s/

/s/

Fred A. Butterfield, III

Rogene Henderson, Ph.D.

Fred A. Butterfield, III
CASAC DFO

Rogene Henderson, Ph.D.
CASAC Chair

Date: June 21, 2005

APPENDICES

- Appendix A: Roster of the Clean Air Scientific Advisory Committee
- Appendix B: Teleconference Meeting Agenda
- Appendix C: Agency Charge to CASAC AAMM Subcommittee on Implementation Aspects of the Agency's Final Draft NAAMS

Appendix A – Roster of the Clean Air Scientific Advisory Committee

U.S. Environmental Protection Agency EPA Science Advisory Board (SAB) Staff Office Clean Air Scientific Advisory Committee*

CHAIR

Dr. Rogene Henderson, Scientist Emeritus, Lovelace Respiratory Research Institute, Albuquerque, NM

MEMBERS

Dr. Ellis Cowling, University Distinguished Professor-at-Large, North Carolina State University, Colleges of Natural Resources and Agriculture and Life Sciences, North Carolina State University, Raleigh, NC

Dr. James D. Crapo, Professor, Department of Medicine, Biomedical Research and Patient Care, National Jewish Medical and Research Center, Denver, CO

Dr. Philip Hopke (Immediate Past CASAC Chair), Bayard D. Clarkson Distinguished Professor, Department of Chemical Engineering, Clarkson University, Potsdam, NY

Dr. Frederick J. Miller, Consultant, Cary, NC

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

Dr. Frank Speizer, Edward Kass Professor of Medicine, Channing Laboratory, Harvard Medical School, Boston, MA

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

SCIENCE ADVISORY BOARD STAFF

Mr. Fred Butterfield, CASAC Designated Federal Officer, 1200 Pennsylvania Avenue, N.W., Washington, DC, 20460, Phone: 202-343-9994, Fax: 202-233-0643 (butterfield.fred@epa.gov) [Physical/Courier/FedEx Address: Fred A. Butterfield, III, EPA Science Advisory Board Staff Office (Mail Code 1400F), Woodies Building, 1025 F Street, N.W., Room 3604, Washington, DC 20004, Telephone: 202-343-9994]

* Members of the statutory Clean Air Scientific Advisory Committee are appointed to the CASAC by the EPA Administrator.

Appendix B – Teleconference Meeting Agenda

U.S. Environmental Protection Agency Clean Air Scientific Advisory Committee (CASAC)

**Public Teleconference
Monday, March 21, 2005 – 1:00 to 3:00 pm Eastern Time**

**EPA Science Advisory Board (SAB) Staff Office
1025 F. Street, N.W., Washington, DC 20004**

CASAC Review and Approval of the Advisory Report of the CASAC Ambient Air Monitoring & Methods (AAMM) Subcommittee re: Implementation Plans for EPA’s Final Draft National Ambient Air Monitoring Strategy (NAAMS)

Final Meeting Agenda

Monday, March 21, 2005

1:00 pm	Convene Teleconference; Call Attendance; Introductions and Administration	Mr. Fred Butterfield, CASAC DFO
1:10 pm	Purpose of Meeting	Dr. Rogene Henderson, Chair
1:15 pm	Overview and Summary of CASAC AAMM Subcommittee Report	Dr. Phil Hopke, CASAC AAMM Chair
1:30 pm	Members’ Discussion and Deliberation	CASAC Members*
2:00 pm	Public Comment Period	Mr. Butterfield (Facilitator)
2:15 pm	Members’ Discussion and Deliberation (Continued)	CASAC Members*
2:55 pm	Summary and Next Steps	Dr. Henderson and Mr. Butterfield
3:00 pm	Adjourn Meeting	Mr. Butterfield

*This portion of the teleconference will be chaired by Dr. Henderson, and those CASAC Members who are also AAMM Subcommittee Members will recuse themselves from the deliberations concerning the Subcommittee’s report.

Appendix C – Agency Charge to CASAC AAMM Subcommittee on Implementation Aspects of the Agency’s Final Draft NAAMS

The purpose of the December 15, 2004 meeting of the CASAC Ambient Air Monitoring and Methods (AAMM) Subcommittee (Subcommittee) was to conduct an advisory on progress toward implementation of the Agency’s Final Draft Agency’s National Ambient Air Monitoring Strategy (NAAMS). EPA’s Office of Air Quality Planning and Standards (OAQPS) requested that the Subcommittee provide expert advice and recommendations on the following charge questions, which focus on key implementation issues:

1. The CASAC has expressed its support for the Agency’s proposal to redesign the routine PM monitoring network to support PM precursor gas measurements (CO, SO₂, NO/NO_x, NH₃, HNO₃) at NCore Level II multiple-pollutant sites, and for air quality management decisions and to obtain relevant exposure data for research programs. Given limited budgetary resources, does this represent both an appropriate and adequate balance, as reflected by the relative resource allocations provided in Section 11, “Draft Implementation Plan,” of the Final Draft NAAMS Document? In addition, are the relative adjustments in the training and guidance approaches proposed in the draft implementation plan consistent with the overall objectives of the Strategy?
2. The implementation plan proposes a series of communication actions to advance the NCore Level 2 network, in order to more directly support long-term health effects research and provide better support to ecosystem assessments through an increased level of coordination. Does the CASAC AAMM Subcommittee have additional suggestions for addressing this need for integration and communication to the broader community of “users,” including scientific researchers (*i.e.*, human health, atmospheric, ecological) and State, local and Tribal (SLT) Agency representatives? More specifically, what is the most effective manner for EPA both to reach-out to this broad user community and, where appropriate, to incorporate their feedback and design input on such issues as monitoring site locations and parameters?
3. One of the remaining technical issues relates to harmonizing rural- and urban-based PM_{2.5} chemical speciation networks such that both categories of networks utilize consistent sampling and analysis protocols. For example, EPA is considering converting all of the Speciation Trends Network (STN) speciation sites to Interagency Monitoring of Protected Visual Environments (IMPROVE) samplers and IMPROVE laboratory and sample handling protocols. What are strengths and weaknesses of this approach?
4. As EPA implements the National Ambient Air Monitoring Strategy to address multiple monitoring objectives, it will be looking to spatially *optimize* the ambient monitoring networks. This may mean that some redundant monitors in adjacent, but separate, geopolitical areas (*e.g.*, neighboring counties) are “divested” from a given network. Although technically sound, these divestments could result in data gaps which might, in turn, adversely impact regulatory decision-making. The Agency is willing to adopt alternative approaches for assessing regulatory issues such as non-attainment

designations, so long as such approaches are scientifically justifiable; hence, the rationale for initiating discussion of these issues with the CASAC. Is it scientifically acceptable to generate isopleths of airborne species concentrations through *modeled* observations and/or *integrated predictive/observational* fields that would be of appropriate uncertainty for use in the regulatory decision-making process?