

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

**Monday, March 28, 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 28, 2005, 1:00 – 4:00 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 conduct a consultation on the draft Project Work Plan for Revised Air Quality Criteria for Lead prepared by EPA’s National Center for Environmental Assessment, Research Triangle Park, NC (NCEA-RTP).

Attendees: Chair: Dr. Rogene Henderson

CASAC Members: Dr. Ellis Cowling  
Dr. James Crapo  
Dr. Philip Hopke  
Dr. Frederick Miller  
Mr. Rich Poirot  
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: Les Grant, ORD, NCEA-RTP  
Jim Brown, ORD, NCEA-RTP  
Rob Elias, ORD, NCEA-RTP  
Brooke Hemming, ORD, NCEA-RTP  
Jee-Young Kim, ORD, NCEA-RTP  
Dennis Kotchmar, ORD, NCEA-RTP  
Anu Mudipalli, ORD, NCEA-RTP  
Sri Nadadur, ORD, NCEA-RTP  
David Orlin, OGC, ARLO  
Zachary Pekar, OAR, OAQPS  
Paul Reinhart, ORD, NCEA-RTP  
Lori White, ORD, NCEA-RTP

## Teleconference Meeting Summary

The discussion followed the issues and general timing as presented in the teleconference meeting agenda (Appendix B).

### **MONDAY, MARCH 28, 2005**

#### Convene 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](http://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 the members of the CASAC for taking part in this teleconference meeting, and also thanked Dr. Les Grant of ORD.

#### Purpose of Meeting

Dr. Rogene Henderson, CASAC Chair, briefly stated the purpose of the meeting, which was for the CASAC to conduct a consultation on the Agency's draft Project Work Plan for the Revised Air Quality Criteria Document (AQCD) for Lead.

#### Overview and Summary of Agency's Draft Lead AQCD Project Work Plan

Dr. Les Grant, Director, NCEA-RTP, gave a summary presentation on the draft Lead AQCD Project Work Plan. This 39-page (including appendices) document may be accessed via the following URL: <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=113963>.

#### Public Comment Period

There were no public commenters during this teleconference meeting.

#### Overview of CASAC Members' Discussions and Deliberations

Dr. Henderson led the CASAC's discussion on the Agency's draft Project Work Plan for the Revised Air Quality Criteria for Lead (Lead AQCD Work Plan), following the charge questions which NCEA-RTP had provided to the Subcommittee (attached as Appendix C).

### Question 1: “Introduction”

The general consensus among CASAC members was that this Lead AQCD Work Plan was overall well-written and clear. One member commented that, in this round of periodic review of the AQCD for Lead as part of the five-year national ambient air quality standards (NAAQS) review required by the Clean Air Act, the Committee should give consideration to removing lead (Pb) as a criteria air pollutant. The Committee also discussed with Dr. Grant the history of what had transpired since the Agency last promulgated primary and secondary NAAQS for Lead in October 1978 (which is also found in the “Regulatory Background” [pp. 2-4] of the Lead AQCD Work Plan).

### Question 2: “Scientific Background and Key Issues”

The CASAC recommended modifying Figure 1 — “Principal pathways of lead from the environment to human consumption” — found on page 7 of the document. One member cautioned that the interpretation concerning an overall increase in the Nation’s Intelligence Quotient (IQ) was not straightforward, and in fact was confounded by an overall increase in IQ in the U.S. population as a whole since the 1970s. The members also noted the need for broad “rules” to limit the number of scientific studies to be included in this update to the AQCD for Pb.

Another member commented that he favored increased emphasis on ecosystems, and asked when it was appropriate for the secondary (environmental or welfare) standard — which for lead (as with ozone) is the same as the primary (human health) standard — to be different in form. Dr. Grant mentioned that NCEA-RTP was willing to entertain a clarification on this, but that any discussion of potential primary or secondary standards would likely be more appropriate in the forthcoming Pb Staff Paper. In any event, he noted that decisions regarding the form and level of the standard are made on a case-by-case basis in view of the specific criteria air pollutant and its associated adverse human health or environmental effects. Finally, another member remarked that the Pb AQCD should discuss the major sources of lead exposure for humans.

### Question 3: “Organizational Structure and Preparation/Review Process”

One Committee member suggested that a specific area on which the Agency should focus was the large reservoir of lead laid-down along roadsides from passing vehicular traffic, especially in urban areas. In other words, that the Pb AQCD was an appropriate document to discuss micro-modeling emissions characteristics. Another member mentioned “housing stock,” *i.e.*, lead paints in old structures and soils resulting from renovations and demolitions. Dr. Grant noted that one of his staff members was working on this with the U.S. Office of Housing and Urban Development (HUD).

Still another member commented on the need for proportionality in chapter summarization, as discussed under the “Approach” section found on page 17 of the Lead AQCD Work Plan — which Dr. Grant noted was quite desirable. A fourth member asked about lead deposition on the forest floor, a question relating to the concept of “critical loads.”

Dr. Grant provided an update on the litigation in the State of Missouri which led to EPA’s review of the Lead AQCD. In response to a question from one of the CASAC members concerning how the appendices (or annexes) to the AQCD for Pb would appear, Dr. Grant commented that these would be handled similarly to the Ozone AQCD. In other words, information contained in the

previous AQCD will be briefly summarized at the beginning of the chapters, while the remainder of each chapter will be devoted to new information that has been acquired since the last air quality criteria document. This approach allows the main part of each of the chapters in the AQCD to focus on integrating study results around major issues related to adverse pollutant effects on public health and the environment, with detailed supporting information placed in the annexes.

**Action Items:**

- None.

Respectfully Submitted:

Certified as True:

/s/

/s/

*Fred A. Butterfield, III*

*Rogene Henderson, Ph.D.*

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Fred A. Butterfield, III  
CASAC DFO

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Rogene Henderson, Ph.D.  
CASAC Chair

Date: July 5, 2005

## **APPENDICES**

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- Appendix A: Roster of the Clean Air Scientific Advisory Committee
- Appendix B: Teleconference Meeting Agenda
- Appendix C: NCEA-RTP Charge to CASAC for Consultation on Agency's Draft Project Work Plan for Revised Air Quality Criteria for Lead

## Appendix A – Roster of the Clean Air Scientific Advisory Committee

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### 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](mailto: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**

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

**Public Teleconference  
Monday, March 28, 2005 – 1:00 to 4:00 pm Eastern Time**

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

**CASAC Consultation on Draft Project Work Plan for  
Revised Air Quality Criteria for Lead**

**Final Meeting Agenda**

**Monday, March 28, 2005**

1:00 pm	<b>Convene Teleconference; Call Attendance; Introductions and Administration</b>	Mr. Fred Butterfield, CASAC DFO
1:10 pm	<b>Purpose of Meeting</b>	Dr. Rogene Henderson, Chair
1:15 pm	<b>Summary Presentation on EPA's Draft Work Plan for Revised Air Quality for Lead</b>	Dr. Les Grant, Director, National Center for Environmental Assessment (NCEA-RTP)
1:45 pm	<b>Public Comment Period</b>	Mr. Butterfield (Facilitator)
2:05 pm	<b>Members' Discussion and Deliberation</b>	CASAC Members
3:45 pm	<b>Summary and Next Steps</b>	Dr. Henderson
4:00 pm	<b>Adjourn Meeting</b>	Mr. Butterfield

## **Appendix C – NCEA-RTP Charge to CASAC for Consultation on Agency’s Draft Project Work Plan for Revised Air Quality Criteria for Lead**

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The purpose of the March 28, 2005 teleconference meeting of the Clean Air Scientific Advisory Committee (CASAC) was for the Committee to conduct a consultation on the draft Project Work Plan for Revised Air Quality Criteria for Lead. EPA’s National Center for Environmental Assessment, Research Triangle Park, NC (NCEA-RTP), which prepared this document, requested that the CASAC provide expert advice and recommendations on the following charge questions, grouped in the following three main topical areas:

### **INTRODUCTION**

1. Is the concisely-presented information on legislative requirements, regulatory background and projected schedule both clear and sufficient for present purposes? If not, what else may specifically need to be added?

### **SCIENTIFIC BACKGROUND AND KEY ISSUES**

2. Are the issues identified under the following three (3) sections sufficiently clear, and are there any other important issues that need to be added?
  - a. Lead as a Multimedia Environmental Contaminant
  - b. Health Effects of Exposure to Lead
  - c. Ecological Effects of Exposure to Lead

### **ORGANIZATIONAL STRUCTURE AND PREPARATION/REVIEW PROCESS**

3. Are there any useful modifications that might be made to the projected organizational structure and content of the revised Pb [Lead] AQCD?
4. Are the methods and procedures for document preparation/review and the projected roles and personnel assignments sufficiently clear?