

**PARTICULATE MATTER AND OZONE (AIR)
MID-CYCLE SUBCOMMITTEE**

**Conference Call Summary
Thursday, September 6, 2007
1:00 p.m. – 3:00 p.m. Eastern Time**

Opening and FACA Overview

Mr. Lawrence Martin, U.S. Environmental Protection Agency (EPA)/Office of Research and Development (ORD), Subcommittee Designated Federal Officer (DFO)

Ms. Lawrence Martin, DFO for the Particulate Matter (PM) and Ozone Subcommittee, called the meeting to order at 1:07 p.m. He welcomed the members to the call and reviewed the Federal Advisory Committee Act (FACA) procedures that are required for all U.S. Environmental Protection Agency (EPA) Board of Scientific Counselors (BOSC) Subcommittee meetings. As the DFO for the PM/Ozone (Air) Subcommittee, Mr. Martin serves as the liaison between the Subcommittee, the public, and EPA and ensures that all FACA requirements are met.

A notetaker is recording the minutes of the call, and the summary will be made available to the public after certification by the Subcommittee Chair. The Chair must certify the summary within 90 days of the call. The summary then will be posted on the BOSC Web Site (<http://www.epa.gov/osp/bosc>). An electronic docket has been established for this Subcommittee via the federal docket management system (<http://www.regulations.gov>; Docket ID EPA-HQ-ORD-2007-0700).

All meetings and conference calls involving substantive issues, whether in person, by phone, or by e-mail, that include one-half or more of the Subcommittee members must be open to the public and a notice must be placed in the *Federal Register* at least 15 calendar days prior to the call or meeting. All documents must be made public as well.

Regarding financial conflict of interest, Mr. Martin is working with EPA officials to ensure that all appropriate ethics regulations are satisfied. Each Subcommittee member must file a standard government financial disclosure report and complete ethics training. Subcommittee members must notify Mr. Martin if there is a potential conflict of interest with any of the topics being discussed as the Subcommittee performs its work.

This conference call is for the members to discuss the upcoming face-to-face meeting on September 18, 2007, in Washington, DC. All members should have received the background documents for the meeting, including the Multi-Year Plan (MYP), 2005 BOSC PM Program Review Report and the Office of Research and Development's (ORD) response, and the ORD Mid-Cycle Progress Report. These documents will be made available to the public on September 10, 2007, on the electronic docket.

No requests for public comment were submitted prior to the call, but the agenda allows time for public comment at 2:20 p.m. Mr. Martin will call for public comments at that time, and each comment must be limited to 3 minutes.

Welcome, Questions, and Discussion of Charge

Dr. Rogene Henderson, Lovelace Respiratory Research Institute, Subcommittee Chair

Dr. Rogene Henderson explained that the purpose of this conference call is to allow personnel of EPA's Air research program to present background material and allow Subcommittee members to ask clarifying questions. She thanked Dr. Dan Costa, National Program Director (NPD) for Air Research, for the helpful packet of background materials that he provided to the Subcommittee.

Mid-Cycle Materials and September 18 Meeting Presentation Overview

Dr. Dan Costa, EPA/ORD, NPD for Air Research

Dr. Costa thanked the Subcommittee members for their willingness to consider the addition of an extra point to the charge. The program is working to determine performance measures that will provide useful information; the current challenge is how to implement these measures. The program has been expanded to include PM, ozone, and air toxics, including nitroaromatic compound (NAAQS) pollutants. An attempt is being made to provide a comprehensive view of these topics while leveraging program activities. The 2005 BOSC Review provided advice on reformatting the two proposed Long-Term Goals (LTGs). The LTGs have been updated as a result of this advice, and additional comments regarding the changes from the Mid-Cycle Subcommittee are welcomed.

Dr. Costa provided an overview of the background materials that the members received, including a chart of Annual Performance Goals (APGs) and the annual client survey. More background information will be provided at the face-to-face meeting. The MYP is considered a "living document." The completion of the MYP was a challenge, but an integrated program has been developed as best as possible despite the time constraints. A draft of the revised MYP will be provided to the Subcommittee members early next week. By the end of next week, members will receive an updated bibliometric analysis and PowerPoint presentations for the face-to-face meeting.

Dr. Costa will only be able to attend the face-to-face meeting via teleconference; Mr. Tim Watkins, Deputy Director of the Human Exposure and Atmospheric Sciences Division, will be present in his place. A vision of the Air Program will be presented at the meeting, including an outlook of the program's direction through the next 5 years.

The transition to a multipollutant program is underway. Originally, the program was 80 percent focused on specific pollutants and 20 percent on multipollutants. Currently, the plans increase the focus on multipollutants to 60 percent. This new focus is based on the source-to-outcome paradigm, including adoption of the near roadway issue, which is important to EPA's Office of Transportation and Air Quality, EPA regions, and states. Currently, a collaboration with the Federal Highway Administration is underway, and one is being pursued with the National Institute of Environmental Health Sciences (NIEHS).

The program also is interested in implementing a single set of performance measures that will be useful for the Office of Management and Budget (OMB), the BOSC, and ORD to assess the progress and performance of the program.

Dr. Henderson asked if lead is a substance being investigated in the near roadway research. Dr. Costa confirmed this but noted that a collaboration with NIEHS could expand lead research to include health outcomes.

Dr. Christian Seigneur asked for clarification that the program is planning to expand to include air toxics although funding currently is undetermined. Dr. Costa confirmed this. A budget decision had to be made about which research area to emphasize and which to de-emphasize. The choice was to continue the emphasis on PM, but because they did not want to close air toxic research completely, program leadership

chose to add it to the PM/Ozone Program. By utilizing the source-to-outcome paradigm, research on health topics can be leveraged to provide more data and information, including about the health effects of air toxics.

Dr. Seigneur asked what information is provided by the bibliometric analysis. Dr. Costa replied that the bibliometric analysis reports on the quality of publications by identifying those EPA papers across a variety of disciplines that are in the top 1 and 10 percent in terms of citation rates.

Dr. Henderson asked how much effort should be spent on the 2003 MYPs that were included in the information packet. Dr. Costa responded that very little effort should be spent as these are being replaced with the revised MYP that the Subcommittee members will be receiving shortly. The seven laboratory and center output-oriented LTGs of the 2003 MYP have been combined into two outcome-oriented LTGs. The program has been restructured and now integrates public health outcomes with environmental research.

Dr. Ken Demerjian asked if the new MYP integrates PM, ozone, and air toxics. Dr. Costa responded that it did.

Dr. Henderson commented that she was pleased to see that the program had implemented a survey of clients and stakeholders in response to the 2005 BOSC recommendation. She asked why OMB did not appear to accept the survey as a performance measure tool. Dr. Costa responded that Mr. Phillip Juengst could address this during his talk.

Dr. Henderson asked how the program fits into the new NACs review program and if the program is participating in the EPA project involving a new electronic database. Dr. Costa explained that the program is contributing to the new Integrated Science Assessment for PM with science products (e.g., papers, reports). The Integrated Science Assessment for PM takes an interpretative approach; it attempts to gather new science and interpret it in the context of old science to give an accurate view of the bigger picture.

Rating Program Performance, Summary of Air Research Program Metrics

Mr. Phillip Juengst, EPA/ORD/Office of Resource Management Administration

Mr. Juengst explained that one of the primary performance drivers for the federal government is the Government Performance and Results Act of 1993, which requires programs to develop annual and long-term performance measures that determine outputs and outcomes and report their progress annually to Congress as part of the budget process. Another driver is the Research and Development Investment Criteria developed by the White House Office of Science and Technology Policy. Three criteria are considered particularly critical: (1) quality of research, (2) relevance to decisionmakers, and (3) impact of research on decisions and performance.

In terms of performance measures, the Agency's two primary goals are to: (1) develop performance measures that communicate the effectiveness of EPA research programs, and (2) develop a variety of measures that are useful to EPA to manage and improve its programs. In developing these types of tools, a bias toward quantitative measures emerges because these measures are useful for setting clear targets for improvement and tracking progress over time. Historically, ORD programs developed output measures (e.g., papers, reports) and, more recently, efficiency measures. However ORD struggled to develop long-term measures of outcome. As a result, ORD worked with the BOSC and OMB to identify methods by which to measure the long-term outcomes of its programs.

A workgroup developed a qualitative measure that relies on well-defined rating adjectives to provide accurate measurements that are consistent across time and from review to review. The BOSC agreed to implement the new ratings in 2007. This rating is intended to be an added component to the BOSC

review process; it is not meant as a replacement for any part of the BOSC review format. The rating should be a summation of everything that the Subcommittee has examined, not a separate element.

The mid-cycle rating should reflect the quality, timeliness, and impact of expected progress being made. The science itself will be evaluated in 2 years during the full BOSC review. The assessment of progress will be accomplished via examination of steps being taken, including the MYP; research performance (i.e., the quality, relevance, and impact of research conducted in the last 2 years) is not included in this assessment. The rating is intended to determine where the program is currently and whether it has improved since the previous full BOSC review. The Mid-Cycle Review summary should include advice on how to further improve the program. This review is a tool used by ORD senior leadership to manage programs more effectively over time.

Dr. Peipei Ping asked how the productivity of the research is evaluated and if publications are counted as a product. Mr. Juengst explained that this is not a full program review, so the background materials do not provide a great amount of detail about the scientific research taking place and its impact on regulatory decisions. The Subcommittee should assess progress by examining the strategic and managerial responses to the last review. The rating is based on the progress of the program; its integration of PM, ozone, and air toxics; and the development of an MYP that adequately addresses all three research areas.

Dr. Henderson asked why OMB does not accept the client survey. Mr. Juengst responded that OMB views the client survey as an important tool but is concerned about the ability of the survey data to measure performance accurately and consistently, something that would be necessary to rely on the survey as a formal performance metric. ORD currently is implementing a revised survey instrument that will be useful evidence for the next, full program review. However, ORD and OMB agreed that other, annual performance measures would be more appropriate for reporting annually to Congress.

Subcommittee Discussion, Questions and Answers, Identification of Additional Information Needs

Dr. Rogene Henderson, Subcommittee Chair

Dr. Henderson explained that there would be a lot of discussion about the rating at the face-to-face meeting. Presentations will take place in the morning; Subcommittee discussion is scheduled for the afternoon.

Dr. Demerjian asked for clarification of the information contained in Tabs K and L of the Subcommittee materials notebook. Mr. Juengst explained that this information captures performance measures that are being used and reported in the Program Assessment Rating Tool (PART) review as well as budget and accountability documents. Dr. Demerjian asked if these are measures that examine the endpoint of a strategic plan. Mr. Juengst replied that these are annual measures. They provide information for budget and management decisions and include the bibliometric analysis and the tracking of APG completion. Additionally, the program has developed a preliminary efficiency measure.

Dr. Henderson asked about the method by which annual output numbers are derived. Mr. Juengst responded that it is a summary of a range of measurements the program is using. There is more detail available in the PART documents, which can be provided at the Subcommittee's request. Dr. Costa added that this measure evolved as the changes in PART measuring and scoring also were evolving. Some measurements that the PART examiner was not completely satisfied with were collapsed; the original plan to address 70 percent of sources that impact human health (e.g., coal, diesel, oil, wood combustion, gasoline) within the next 5 to 6 years was too ambitious. Progress can be made in the human health topic area but not under the current format. BOSC input and feedback on how to progress from this point would be very helpful so that leadership can move the program into the next phase. The program is looking for suggestions on how it might implement a measurement that is useful from the standpoint of a scientific program review as well as OMB's examination from a public perspective.

Dr. Demerjian stated that definition of sources is the primary issue and suggested that the program implement broad categories that represent the major contributions of total tonnage and cover the bulk of the major exposures that are of interest.

Dr. Costa commented that the source-to-health-outcome paradigm is only one dimension of a three-dimensional project. He explained that the program also is trying to transition the program to include the issue of source transformation (i.e., photochemical and health interactions and reactions) utilizing the in-house photochemistry laboratory and biogenics research. The method by which this research can be added to the paradigm and the transition of source-to-health considerations are the challenges. The program is interested in BOSC input regarding this matter. Dr. Henderson commented that this issue had been added to the new charge questions, which Dr. Costa confirmed. With the major transition that is occurring, program leadership would like to receive as much input as possible to make the greatest improvement in the timeliest manner. Dr. Henderson commented that the transition to a multipollutant focus cannot occur overnight. There is a limited number of major sources of air pollution, but it would be interesting to determine what will happen when these sources change.

Public Comment

Mr. Martin offered members of the public the opportunity to comment at 2:20 p.m. No comments were offered.

Mr. Martin adjourned the meeting at 2:20 p.m.

Action Items

- ✧ Dr. Costa will provide the revised MYP by the early part of next week.
- ✧ Dr. Costa will provide the bibliographic analysis and PowerPoint presentations for the face-to-face meeting by the end of next week.

PARTICIPANTS LIST

Subcommittee Members

Rogene F. Henderson, Ph.D., DABT, Chair

Scientist Emeritus
Lovelace Respiratory Research Institute
2425 Ridgecrest Drive, SE
Albuquerque, NM 87108
Phone: 505-348-9464
E-mail: rhenders@lrri.org

Bart Croes, P.E.

Chief, Research Division
California Air Resources Board
P.O. Box 2815 or 2020 L Street
Sacramento, CA 95814
Phone: 916-323-4519
E-mail: bcroes@arb.ca.gov

Kenneth Demerjian, Ph.D.

Director, Atmospheric Sciences Research Center
State University of New York
251 Fuller Road
Albany, NY 12203
Phone: 518-437-8711
E-mail: kld@asrc.cestm.albany.edu

Peipei Ping, Ph.D.

Director, Proteomic Laboratory
University of California at Los Angeles
School of Medicine
Cardiovascular Research Laboratory
MRL Building, Suite 1609
675 Charles Young Drive
Los Angeles, CA 90095
Phone: 310-267-5623
E-mail: peipeiping@earthlink.net

Christian Seigneur, Ph.D.

Vice President of Air Quality Studies
Atmospheric and Environment Research, Inc.
2682 Bishop Drive, Suite 120
San Ramon, CA 94583
Phone: 925-244-7121
E-mail: cseigneu@aer.com

Designated Federal Officer

Lawrence Martin

U.S. Environmental Protection Agency
Office of Research and Development
Office of Science Policy
Ariel Rios Building (8104R)
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Phone: 202-564-6497
E-mail: martin.lawrence@epamail.epa.gov

EPA Participants

Dan Costa, Sc.D.

U.S. Environmental Protection Agency
Office of Research and Development
National Health and Environmental Effects
Research Laboratory (E205-09)
Research Triangle Park, NC 27711
Phone: 919-541-2532
E-mail: costa.dan@epa.gov

Phillip Juengst

U.S. Environmental Protection Agency
Office of Research and Development
Office of Resources Management
Administration
Ariel Rios Building (8102R)
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Phone: 202-564-2645
E-mail: juengst.phillip@epa.gov

Laurel Schultz

U.S. Environmental Protection Agency
Office of Research and Development
National Health and Environmental Effects
Research Laboratory (E205-09)
Research Triangle Park, NC 27711
Phone: 919-541-1949
E-mail: schultz.laurel@epa.gov

Tim Watkins

U.S. Environmental Protection Agency
Office of Research and Development
National Health and Environmental Effects
Research Laboratory (E205-01)
Research Triangle Park, NC 27711
Phone: 919-541-2451
E-mail: watkins.tim@epa.gov

Contractor Support

Kristen LeBaron

The Scientific Consulting Group, Inc.
656 Quince Orchard Road, Suite 210
Gaithersburg, MD 20878
Phone: 301-670-4990
E-mail: klebaron@scgcorp.com



APPENDIX A: Teleconference Agenda

PARTICULATE MATTER AND OZONE (AIR) MID-CYCLE SUBCOMMITTEE TELECONFERENCE MEETING AGENDA

**September 6, 2007
1:00 p.m. – 3:00 p.m.**

**CALL IN NUMBER: 866-299-3188
PASSCODE: 2025646497#**

Thursday, September 6, 2007

1:00 p.m.-10:10 a.m.	Opening FACA Overview	Mr. Lawrence Martin (EPA) DFO, Air Mid-Cycle Subcommittee
1:10 p.m.-1:30 p.m.	Welcome Questions, and Discussion of Charge	Dr. Rogene Henderson, Chair Air Mid-Cycle Subcommittee
1:30 p.m.-1:45 p.m.	Rating Program Performance Summary of Air Research Program Metrics	Mr. Phillip Juengst (EPA) ORD/ORMA
1:45 p.m. - 2:20 p.m.	Mid-Cycle Materials, and 9/18 Mtg. Presentation Preview	Dr. Dan Costa (EPA) ORD, National Program Director for Air Research
2:20 p.m. - 2:30 p.m.	Public Comment	
2:30 p.m. - 3:00 p.m.	Subcommittee Discussion Questions and Answers Identify Additional Information	Dr. Rogene Henderson, Chair Air Mid-Cycle Subcommittee
3:00 p.m.	Adjourn	