



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

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

**Conference Call Summary
Tuesday, October 30, 2007
1:00 p.m. – 2:00 p.m. Eastern Time**

DFO Welcome and Comments

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

Mr. Lawrence Martin, Designated Federal Officer (DFO) for the Particulate Matter and Ozone (Air) Subcommittee, called the meeting to order at 1:05 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 Subcommittee, Mr. Martin serves as the liaison between the Subcommittee, the public, and EPA and ensures that all FACA requirements are met.

A contractor, Beverly Campbell from SCG, is taking notes to capture the discussion, 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. No requests for public comment were submitted prior to the call, but the agenda allows time for public comment at 1:50 p.m. Mr. Martin will call for public comments at that time, and each comment must be limited to 3 minutes.

Regarding financial conflict of interest, Mr. Martin is working with EPA officials to ensure that all appropriate ethics regulations are satisfied. Each Subcommittee member has filed a standard government financial disclosure report and completed 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.

The purpose of this conference call is for the members to discuss and provide comments on the draft report that was prepared following the face-to-face meeting that was held September 18, 2007, in Washington, DC. All members should have received the draft report prior to this call. In closing his DFO remarks, Mr. Martin stated that it has been his pleasure to work with the Subcommittee on this review.

1 **Welcome and Opening Remarks**

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

3
4 Dr. Rogene Henderson, Chair of the Subcommittee, explained that she would provide an overview of the
5 report and then go through the response to each question. She confirmed that everyone had received the
6 draft report. Dr. Henderson stated that she had asked Mr. Martin to draft an introduction for the report
7 and it is included in this draft as the summary section. She realized last evening that the summary section
8 was incomplete so she prepared a draft that was distributed to the members late last night. Dr. Henderson
9 noted that Dr. Ping's section of the report had not been formatted because it was received later than the
10 other sections.

11
12 Dr. Henderson mentioned that there are only a few recommendations in the report because the
13 Subcommittee was quite satisfied with the progress of the program. She asked if anyone thought it
14 necessary to develop a separate list of recommendations for the summary section. Drs. Croes, Seigneur,
15 and Demerjian did not think a list of recommendations was needed.

16
17 Dr. Henderson asked if there were any comments on page 3, which is the introduction that was prepared
18 by Mr. Martin. No comments were offered. Dr. Henderson then went through the responses to each of
19 the charge questions.

20
21 **Responses to the Charge Questions**

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

23
24 Dr. Signeur prepared the response to Charge Question #1. Dr. Henderson said that she did not have any
25 comments on this response, but asked for comments from the other members.

26
27 Referring to the second paragraph of the response, Dr. Croes asked if the report should specify the
28 frequency of the "periodic formalized process for assessing primary stakeholders' perceptions of and
29 satisfaction with [the program's] role in the source-to-health-outcome process." For example, should we
30 recommend that the customer survey be issued every 2 or 3 years? Dr. Henderson noted that the
31 frequency was not specified in the 2005 program review. Dr. Croes asked if the program has plans to
32 conduct another survey. Dr. Costa responded that there are plans to change some of the measures,
33 including the survey. One option being considered by the program is to examine how the customers
34 (program offices) are citing the program's research in their products. Whatever the final measures
35 selected, the information will be collected on a regular basis. Dr. Croes indicated that Dr. Costa's reply
36 satisfied his concern and he did not think it was necessary to change the response.

37
38 The response to Charge Question #2 was prepared by Dr. Ping, who was not able to participate in this
39 call. Dr. Henderson reminded the members that Dr. Ping was enthusiastic about the program, particularly
40 the bibliometric analysis, which she rated as exceptional. Dr. Henderson pointed out that Dr. Ping
41 included the term "Exceptional" in section B of her response (page 6). Because the Subcommittee was to
42 assign a single rating for the overall program, which the members agreed was to be "Exceeds
43 Expectations," Dr. Henderson asked if the term in this section should be deleted or reworded to avoid
44 confusion. Dr. Croes did not think the term should be used in this section; he suggested substituting
45 another word such as "outstanding" to avoid any confusion. The members agreed with Dr. Croes'
46 suggestion.

47
48 Dr. Henderson asked if there were any additional comments on this response. Dr. Croes said he thought
49 the three examples provided in the second bullet on page 7 diluted the success of the program because so
50 much more has been accomplished. Dr. Henderson said she liked the examples and suggested stating that
51 these are a few examples among many program accomplishments. Dr. Demerjian said he thought they

1 should be deleted. Because Dr. Henderson did not feel strongly about retaining the examples, she agreed
2 that they should be deleted. There were no additional comments on the response to this charge question.
3

4 Dr. Croes prepared the response to Charge Question #3. Dr. Henderson suggested inserting a paragraph
5 break on the seventh line of the first paragraph following the words “other air quality management
6 activities.” She stated that it seems logical to start the BOSC’s findings in a new paragraph, given that the
7 preceding paragraph describes the purpose of the program and how it supports the Clear Air Act. Dr.
8 Croes agreed.
9

10 Dr. Signeur thought the word “robust” should be deleted from the third line of the paragraph beginning
11 with “EPA is also responsible for development” on page 9 of the report. He explained that he did not
12 think that robust models for PM_{2.5} have been developed yet. Dr. Croes agreed with the suggested
13 deletion.
14

15 Dr. Croes mentioned that there is repetitive text on the ozone program in several of the responses. Should
16 that text be consolidated to avoid redundancy? After quickly reviewing the different sections, Dr.
17 Henderson said she thought they all should remain because they are slightly different. The other
18 members agreed and concurred with this decision.
19

20 The response to Charge Question #4 was prepared by Dr. Demerjian. Several members noted the use of
21 the words “I believe they have addressed” in the last paragraph of this response (page 11). Dr. Demerjian
22 suggested that the sentence be reworded as follows: “The BOSC Subcommittee concluded that the
23 program has addressed the concerns...” The other members agreed with this revised wording.
24

25 A member suggested inserting the parenthetical phrase “(except in southern latitudes)” following the
26 words “limited secondary PM photo-production” in the second paragraph of the response on page 10.
27

28 Dr. Henderson drafted the response to Charge Question #5. She included paragraphs about the client
29 satisfaction survey and the use of external review bodies. She acknowledged that the response did not
30 include any suggestions for improving performance measures. Dr. Henderson asked the other members
31 had anything to add to this section. Dr. Demerjian stated that ORD is trying to figure out ways to
32 evaluate some of the fundamental processes in the models and how this information would translate to
33 outcomes. ORD has data on the changes in precursor concentrations over the past 10 years. These data
34 could be plugged into the models and ORD could determine if the models correctly predict the
35 incremental changes in ozone. If the predictions are not accurate, ORD could determine why. Dr.
36 Demerjian acknowledged that this would require a great deal of work. He mentioned that EPA is doing
37 such tests with the acid rain program, but acknowledged that doing this for the PM Program is more
38 difficult.
39

40 Dr. Henderson commented that she liked the program’s approach of identifying the first step as source to
41 air quality rather than taking the giant step from source to outcomes. Dr. Demerjian said that the program
42 could take a technological approach, decreasing emissions as much as possible because there is a known
43 relationship between source and outcomes. Dr. Costa stated that the Office of Management and Budget
44 (OMB) is asking ORD to measure the effectiveness of the research program in decreasing the public
45 health risk. ORD is using a hierarchy of sources as they relate to human health risk. Did the program
46 achieve a 30 percent reduction of the uncertainty in relating sources to health outcomes? ORD is moving
47 this measure back into the development role, pending the results of the BOSC mid-cycle review. Should
48 the program keep this measure? OMB wants the program to be able to measure some benefit (outcome)
49 for every dollar invested in the program. OMB also wants to know how much the uncertainty has been
50 reduced. Dr. Demerjian commented that ORD should be able to make the argument that the more it
51 knows about the air quality to health outcome relationship the better the Agency can reduce the risk. The
52 program should try to understand what component of PM is most toxic and its relationship to health
53 outcomes. Dr. Henderson thought that suggestion was covered in the second to the last paragraph in the

1 response to this charge question (page 13). Dr. Demerjian agreed that the paragraph noted by Dr.
2 Henderson captured his comments.
3

4 Dr. Henderson said she was impressed with the program's decision to break the source to health outcomes
5 paradigm into two steps, with air quality as the intermediate step. Dr. Costa stated that it is the most
6 reasonable way to demonstrate the program's progress—there are models for predicting source to air
7 quality and that information will feed into the understanding and interpretation of air quality to health
8 outcomes. He confirmed that there are tools to measure source to air quality progress.
9

10 Dr. Henderson asked if there were any additional comments on the response to Charge Question #5 and
11 there were none.
12

13 Charge Question #6 was prepared by Dr. Henderson. As was agreed by the members at the September
14 meeting, the response includes the rating of "Exceeds Expectations" for the program's progress since the
15 2005 program review. The section also notes that the bibliometric analysis was considered exceptional by
16 the Subcommittee. It mentions the expansion of the program to include air toxics and the three planned
17 hypothesis-driven studies to help develop metrics of outcomes of the research. The last sentence of the
18 response simply defines the "Exceeds Expectations" rating using the words of the rating tool.
19

20 Dr. Henderson asked if there were any comments on this section. Dr. Signeur said it looked fine to him.
21 Dr. Croes suggested highlighting the National Research Council (NRC) reports and the air quality
22 management PM research priorities. He also thought the response should mention the program's
23 collaboration with the Health Effects Institute, Coordinating Research Council, NARSTO, and others.
24 Dr. Henderson asked Dr. Croes to send her the wording he would like added to this section and Dr. Croes
25 agreed to do so.
26

27 **Path Forward to Finalize the Report**

28 *Dr. Rogene Henderson, Lovelace Respiratory Research Institute, Subcommittee Chair*
29

30 Dr. Henderson asked the members if they had reviewed the draft summary that she prepared last evening.
31 The members indicated that they had reviewed it and had no changes. Because the changes to the report
32 were minor, Dr. Henderson thought it would be possible to submit the revised report to Mr. Martin very
33 quickly. The report then will be submitted to the BOSC Executive Committee for review and approval.
34 Mr. Martin stated that the contractor will format and edit the report before it is submitted to the Executive
35 Committee for review at the January meeting.
36

37 Dr. Henderson thanked the Subcommittee members for their great work on the report. She also
38 commended the Air Program staff members for their tremendous efforts in supporting this review. Dr.
39 Costa thanked the Subcommittee for their input, stating that it was very much appreciated by ORD.
40

41 **Public Comments**

42 *Mr. Lawrence Martin, EPA/ ORD, Subcommittee DFO*
43

44 At 1:50 p.m., Mr. Martin called for public comments. Mr. Adam Sarvana from Inside EPA indicated that
45 he had a question for Dr. Costa concerning the measure to achieve a 30 percent reduction in uncertainty.
46 Mr. Martin said Mr. Sarvana's question was not appropriate for this call and that it would be best if he
47 contacted Dr. Costa following the call.
48

49 Mr. Martin thanked everyone for their participation and adjourned the call at 1:58 p.m.

1
2
3
4
5
6
7
8
9
10
11

Action Items

- ✧ Dr. Croes will send Dr. Henderson a sentence or two that acknowledges the program’s collaboration with others for insertion into the response to Charge Question #6.
- ✧ Dr. Henderson will insert the summary she drafted into the revised report.
- ✧ Dr. Henderson will revise the report to incorporate the changes discussed during this call. He will send the revised report to Mr. Martin.



PARTICIPANTS LIST

Subcommittee Members

Rogene F. Henderson, Ph.D., DABT, Chair
Scientist Emeritus
Lovelace Respiratory Research Institute

Bart Croes, P.E.
Chief, Research Division
California Air Resources Board

Kenneth Demerjian, Ph.D.
Director, Atmospheric Sciences Research Center
State University of New York

Peipei Ping, Ph.D. (not present)
Director, Proteomic Laboratory
University of California at Los Angeles
School of Medicine

Christian Seigneur, Ph.D.
Vice President of Air Quality Studies
Atmospheric and Environment Research, Inc.

Designated Federal Officer

Lawrence Martin
U.S. Environmental Protection Agency
Office of Research and Development
Office of Science Policy

EPA Participants

Dan Costa, Sc.D.
U.S. Environmental Protection Agency
Office of Research and Development
National Health and Environmental Effects
Research Laboratory

Laurel Schultz
U.S. Environmental Protection Agency
Office of Research and Development
National Health and Environmental Effects
Research Laboratory

Contractor Support

Beverly Campbell
The Scientific Consulting Group, Inc.

Other Participants

Adam Sarvana
Inside EPA



Teleconference Agenda

AIR RESEARCH MID-CYCLE REVIEW MEETING

Conference Call 866.299.3188, code is 2025646497#

Tuesday, October. 30, 2007

AGENDA

1:00 – 1:05 p.m.	DFO Welcome and Comment	Mr. Lawrence Martin (EPA)
1:05 – 1:10 p.m.	Welcome and Opening Remarks	Dr. Rogene Henderson Chair, Air Mid-Cycle Subcommittee
1:10 – 1:50 p.m.	- Review Outstanding Action Items - Discuss Draft Responses to the Charge Questions - Finalize the Subcommittee's Report	Dr. Rogene Henderson Chair, Air Mid-Cycle Subcommittee
1:50 – 2:00 p.m.	Public Comment	Public
2:00 p.m.	Adjourn	Dr. Rogene Henderson Chair, Air Mid-Cycle Subcommittee