US Environmental Protection Agency
EPA Science Advisory Board
Summary Meeting Minutes of a Public Telephone Conference Meeting
1:00 pm - 4:00 pm & 1:00 - 3:00 pm (Eastern Time)
September 21 & 22, 2006

Committee: U.S. Environmental Protection Agency's Science Advisory Board (SAB-The Board). (See Roster - Attachment A.)

Date and Time: Thursday and Friday, September 21, 22, 2006; 1:00 – 4:00 pm and 1:00 – 3:00 pm (see *Federal Register* Notice – Attachment B)

Location: Participation By Telephone Conference Only

Purpose: To review three SAB Panel draft reports: Second generation Model, All-Ages Lead Model, and RadNet (See Meeting Agenda - Attachment C.)

Attendees: Committee Members Participating are noted in Attachment A. EPA and public participants were not surveyed in the interest of time.

Meeting Summary:

The meeting followed the issues and general timing as presented in the meeting Agenda, except where otherwise noted (see Meeting Agenda - Attachment C). There were no written comments submitted to the Committee by the public, nor were there any requests made to present public comments during the meeting.

a. Opening Statement of the DFO: Mr. Miller convened the meeting and noted that he was the Designated Federal Officer for the EPA Science Advisory Board. He stated that the teleconference was a meeting of the Chartered Science Advisory Board. The purpose of the meeting was to review, and approve, several draft reports from SAB Review Panels.

Mr. Miller noted that the meeting was an official, noticed, meeting of the SAB within the requirements of the Federal Advisory Committee Act (FACA) and EPA policy for expert advisory committees. The SAB members participating in this meeting have submitted updates to their confidential statements on their financial interests and the Deputy Ethics Official for the SAB Staff Office has determined that they do not have "conflict of interest" or "appearance of impartiality" issues within the meaning of the relevant ethics and conflict of interest requirements that apply to this advisory issue.

Mr. Miller stated that the responsibility of the Board for the meeting was to determine if the draft SAB Panel reports (see Attachment D for the quality review charge):

i) adequately address the Agency charge questions;
ii) are clear and logical; and
iii) whether conclusions and recommendations in the reports are supported by the information in the reports.

SAB proceedings provide for public observation and participation through the acceptance of written comments and presentation of brief oral statements during public meetings. No member of the public has requested time to present an oral statement during today's meeting.

Mr. Miller apologized in advance for the length of the phone call meeting as scheduled and the need for the Board to break periodically during the call. Mr. Miller also advised the Board that there will be another telephone conference scheduled soon to review a draft panel report on organic and inorganic arsenic. Dr. Angela Nugent will arrange that call and serve as the DFO throughout the Board review.

b. Welcome by the SAB Chair: Dr. Genevieve Matanoski, Acting Chair SAB, welcomed members and initiated the first review of the day by introducing Dr. Meryl Karol, Panel Chair of the All-Ages Lead Model review.

c. Discussion of the Draft Report *EPA Science Advisory Board (SAB) Ad Hoc All Ages Lead Model Review Panel's Peer Review of the 'All-Ages Lead Model (AALM) Version 1.05 (External Review Draft)'* (see Attachment E)

Dr. Meryl Karol, Chair of the Review Panel, introduced the draft report with a few summary remarks on the model itself, the Panel's review, and the Panel's major conclusions. She indicated that the Board comments in writing have been helpful in showing the edits that should be made to the draft. The draft letter will be split between a Letter to the Administrator (first two pages or so) and an Executive Summary (remaining pages in the current letter).

Dr. Matanoski asked Members for their comments on the draft report. Dr. Rogene Henderson briefly highlighted several of her comments (see Attachment F) including the need to add the advice that the model is "not ready for deployment" to the Executive Summary and the need to move that statement up front in the letter. Dr. Parkin emphasized several of her written comments, including the need to clarify that certain issues are child-specific, and the effect of specification of certain parameters and their relationship to uncertainty. (Note: Dr. Morgan took over the Chair for the telephone conference during these discussions).

Dr. Morgan noted the need to clarify which uncertainties are of most concern. Dr. Theis noted that as with many of the "modeling" efforts the Board has reviewed this one also seemed to ignore the agency Regulatory Evaluation Modeling (REM) guidance (EPA-SAB-05-009, August 22, 2006 commented on REM). The Board should ensure that this message is delivered and at least ensure that it consistently is itself aware of and considers REM guidance as it reviews EPA

modeling efforts. Dr. Thomas noted the Letter to the Administrator's "general support" is inconsistent with the "not ready" bottom line that is stated later. The general support suggested only minor changes needed to be made. Dr. Matanoski noted that the criticism of EPA's use of old "biokinetic parameters" as warranting inclusion with the letter (perhaps along with others in a list). The same issue is repeated frequently as an example and this could lead one to conclude that it is the only problem. More examples need to be added.

Dr. Karol agreed to these changes as well as to make additional editorial changes as noted in the written comments as appropriate.

In response to Dr. Morgan's invitation for EPA to make a statement, Dr. Les Grant stated that the comments, both in the Panel meeting and in the draft – including during this telephone conference, were clear and that the Agency would take them into account.

> **Motion:** Dr. Morgan called for a motion on disposition for the report.
> It was moved that the report be approved subject to the condition that this day's discussions, and the comments provided in writing, be incorporated as appropriate. The revised report will be returned to the Lead Reviewers for a final review prior to being sent to the Administrator.
>
> **Action:** Dr. Morgan asked the Board to vote on the motion by indicating any dissent from the motion. No dissent was forthcoming and the report was approved subject to the conditions noted above.

d. <u>SAB Planning for December 2006</u>: Dr. Morgan reminded the Board Members of the upcoming meeting from December 12-13, 2006. The Board will also consider whether to extend this meeting to two and one-half days. The meeting is intended to focus on informational briefings on lessons learned and preparations for natural and other disasters in the building, chemical, and transportation sectors at a minimum. Lessons learned from EPA's response to Katrina may also be on the schedule. Dr. Morgan noted that he and Dr. Fischhoff were currently developing the meeting content and he asked that Drs. Biddinger, Bus, and Lipoti join in that planning activity to ensure broader Board input to the plans. He invited others on the Board to join them, but none so volunteered.

e. <u>Letter on GIS-Based/Other Regional Modeling Efforts</u>: Dr. Ken Dickson briefed the Board on the status of the Letter to the Administrator to convey broad advice to EPA on its frequent GIS-based, and other, modeling efforts in support of Regional Offices. A revised draft has been prepared as a result of comments from members on a first draft. This will be circulated by the SAB DFO for further comment.

The Board took a brief break at this point.

f. <u>Discussion of the Draft Report</u> *Review of 2005 Agency Draft entitled 'Expansion and Upgrade of the RadNet Air Monitoring Network, Vol. 1 & 2, Concept and Plan'*(see Attachment G**)**

Dr. Jill Lipoti, SAB Radiation Advisory Committee Chair and Chair of the RadNet Review Panel, introduced the panel's report with a few summary remarks on the nature of the review and the Panel's major concerns (monitors vs. modeling, the number of monitors, and communications strategies). She noted that the revisions to the draft as a result of the Board review will likely involve making advisory statements that were bolder based on the types of advice that the Board members have provided in their written comments (see Attachment F). Dr. Morgan then asked Board reviewers for comments.

Dr. Genevieve Matanoski emphasized the issues of population based monitoring (not reasonable), the importance of redeployment (bring up more of the pros in the report up front), the need to clarify who volunteers for deployment would be, and clarification of how EPA is to train a changing cast of local leaders, etc. Also, Dr. Matanoski pointed out that large quantities of data bring with it large questions about what to do with it. The report might say more on this. [Note: Dr. Morgan departed and Dr. Matanoski took over the Chair for the telephone conference during this discussion.]

Dr. Jana Milford stated that the report was well done but that there is a need to clarify the report discussions on monitoring needs, especially with respect to "re-siting" of monitors. Dr. Morgan agreed and also noted the need to empirically test communications messages prior to events to ensure something is ready for use in an emergency. Waiting until an event occurs will not contribute to success. Dr. Cory-Slechta noted the large number of recommendations from the Panel and asked if they could be prioritized. She also noted the need to convey the sense of urgency earlier in the letter instead of waiting until the end. Dr. Fischhoff suggested that issues in this report were similar to the letter written to the Administrator by the Homeland Security Committee. This might be mentioned in the letter or that report might be attached to this report. Dr. Henderson noted problems with using terms that imply zero radiation levels. Dr. Parkin noted the need to say more in the communications area especially in the area of who has the lead for communications (EPA or other) and giving advice on who should have a lead role (EPA).

Dr. Matanoski asked if EPA representatives had any comments. Mary Clark, ORIA, thanked the Board for its help and stated that the advice and comments are clear and in many cases mirror their own. They will be very useful.

Dr. Lipoti agreed to make changes in the areas discussed, as well as to make appropriate additional editorial changes as noted in the written comments.

Motion: Dr. Matanoski called for a motion on disposition of the report.
It was moved that the report be approved subject to the condition that this day's discussions, and the comments provided in writing, be incorporated as appropriate. The

revised report will be returned to the Lead Reviewers for a final review prior to being sent to the Administrator.

Action: Dr. Matanoski asked the Board to vote on the motion by indicating any dissent from the motion. No dissent was forthcoming and the report was approved subject to the conditions noted above in these minutes.

The Board took a brief break at this point.

g. Discussion of the Draft Report: *SAB Advisory on EPA's Second Generation Model* (see Attachment H).

Dr. Matanoski introduced Dr. Larry Goulder, Chair of the Review Panel, who gave a brief overview of the Panel's effort and report. He thanked Members for their comments. He also noted that the report was different from many others in that the Panel, with EPA's agreement, decided to not respond directly to each charge question in turn. Rather the Panel offered comments that should improve the model once they are implemented.

Dr. Matanoski asked Board members to raise any issues they wanted to discuss. A compilation of written comments from Board members is in Attachment G)

Dr. Maureen Cropper noted that the report was excellent and that it was an important project for the SAB. She also noted that the draft report addressed the specific charge in an indirect manner. She suggested the need for additional discussion of performance standards, cap and trade approaches, and technology change and noted that a one page summary stating how the charge questions were answered, as well as their overall EPA context, might be helpful to a non-technical audience. Some of the questions are implicitly answered. Dr. Goulder agreed that this might be useful.

Dr. Cathy Kling applauded the report as well and deferred to her written comments which were mostly editorial. She emphasized that the statements regarding the use of funds had a tone that suggested the EPA dump the model. Dr. Goulder responded that the funds statement reflected the recognition of tight resources and the need to decide where best to place funds that are to be available. He noted that a clarification would be made and that the Panel did not intend to suggest that EPA dump the model.

Dr. Kathleen Segerson noted that the report did not make it clear if such things as electricity generating sector was to be in the model. She also asked about disaggregating agriculture and forestry and the difficulty of including short term issues in a long term model. Dr. Goulder agreed to clarify.

Dr. Henderson noted that as a reader from outside the discipline she also perceived that the report's tone suggested that EPA not go forward with the model. Several other Board Members agreed with that impression. Dr. Goulder reiterated that it was not the Panel's intent to dump the model and that most members thought that the model in its present state generates results that they would not be confident with; however, they thought that with sufficient funds it could be improved to become an excellent policy support tool. He will clarify the message.

Dr. Matanoski asked others if they wished to emphasize any of the points made in their written comments or if they had other issues to raise. None were forthcoming.

Alan Fawcett of EPA thanked the Panel and noted that the Agency was happy with the report and the issues discussed on the call.

Motion: Dr. Matanoski asked for a motion on disposition for the draft report. A motion was made to accept the report conditioned upon the edits in the written comments be considered and applied as appropriate, and the agreements of today being implemented through report revisions/clarifications. The report is to be returned to the Lead Reviewers for a final view of the revisions. It will then be transmitted to the Administrator.

Action item: Dr. Matanoski asked the Board members to vote by registering their dissent from the motion if such existed. No Member dissented from the motion and it was passed.

The DFO adjourned the meeting at 3:30 p.m.

Respectfully Submitted:

/ signed /

Thomas O. Miller
Designated Federal Official
EPA Science Advisory Board

Certified as True:

/ signed /

Dr. M. Granger Morgan
Chair
EPA Science Advisory Board

Certified as True:

/ signed /

Dr. Genevieve Matanoski
Acting Chair
EPA Science Advisory Board

List of Attachments

A SAB Roster
B FR Notice (71 FR 50411)
(http://www.epa.gov/fedrgstr/EPA-SAB/2006/August/Day-25/sab14166.htm)
C Meeting Agenda
(http://www.epa.gov/sab/06agendas/sab_09-21_and_09-22-06_agenda.pdf)
D QR Charge to the SAB (physical file only)
E *EPA Science Advisory Board (SAB) Ad Hoc All Ages Lead Model Review Panel's Peer Review of the 'All-Ages Lead Model (AALM) Version 1.05 (External Review Draft)*
(http://www.epa.gov/sab/pdf/aalm_rev3_08-23-06_draft.pdf)
F Compilation of Member Comments
(http://www.epa.gov/sab/pdf/sab_member_comments_09212006.pdf)
G *Review of 2005 Agency Draft entitled 'Expansion and Upgrade of the RadNet Air Monitoring Network, Vol. 1 & 2, Concept and Plan'*
http://www.epa.gov/sab/pdf/radnet_final_qual_rev_draft_08-17-06.pdf
H Draft *SAB Advisory on EPA's Second Generation Model*
http://www.epa.gov/sab/pdf/sgm_rev3_07-17-06_draft.pdf

ATTACHMENT A

Roster
U.S. Environmental Protection Agency
Science Advisory Board
September 21, 22, 2006 Telephone Conference Meeting

CHAIR
***Dr. M. Granger Morgan**, Professor and Head, Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA,

SAB MEMBERS
Dr. James Bus, Director of External Technology, Toxicology and Environmental Research and Consulting, The Dow Chemical Company, Mildland, MI

***Dr. Trudy Ann Cameron**, Raymond F. Mikesell Professor of Environmental and Resource Economics, Department of Economics, Eugene, OR

***Dr. Deborah Cory-Slechta**, Director, Environmental and Occupational Health Sciences Institute, Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey and Rutgers State University, Piscataway, NJ

Dr. Virginia Dale, Corporate Fellow, Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN

***Dr. Kenneth Dickson**, Professor, Institute of Applied Sciences, University of North Texas, PO Denton, TX

***Dr. Baruch Fischhoff**, Howard Heinz University Professor, Department of Social and Decision Sciences, Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA

***Dr. Rogene Henderson**, Scientist Emeritus, Lovelace Respiratory Research Institute, Albuquerque, NM. Aso Chair: CASAC

Dr. James H. Johnson, Dean, College of Engineering, Architecture & Computer Sciences, Howard University, Washington, DC. Also Chair: Board of Scientific Counselors

***Dr. Meryl Karol**, Associate Dean for Academic Affairs, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA

***Dr. Catherine Kling**, Professor, Department of Economics, Iowa State University, Ames, IA

Dr. George Lambert, Associate Professor and Director, Center for Child and Reproductive Environmental Health and Pediatric Clinical Research, Department of Pediatrics, UMDNJ-Robert Wood Johnson Medical School/University of Medicine and Dentistry of New Jersey, New Brunswick, NJ

***Dr. Jill Lipoti**, Director, Division of Environmental Safety and Health, New Jersey Department of Environmental Protection, Trenton, NJ

***Dr. Genevieve Matanoski**, Professor, Department of Epidemiology, Johns Hopkins University, Baltimore, MD

***Dr. Jana Milford**, Associate Professor, Department of Mechanical Engineering, University of Colorado, Boulder, CO

Mr. David Rejeski, Foresight and Governance Project Director, Woodrow Wilson International Center for Scholars, Washington, DC

***Dr. Joan B. Rose**, Professor and Homer Nowlin Chair for Water Research, Department of Fisheries and Wildlife, Michigan State University, E. Lansing, MI

Dr. Kristin Shrader-Frechette, O'Neil Professor of Philosophy- Concurrent Professor of Biological Sciences-and Director of the Center for Environmental Justice and Children's Health, Department of Biological Sciences and Philosophy Department., University of Notre Dame, Notre Dame, IN

***Dr. Deborah Swackhamer**, Professor, Division of Environmental Health Sciences, School of Public Health, University of Minnesota, Minneapolis, MN

***Dr. Thomas L. Theis**, Professor, Director, Institute for Environmental Science and Policy, University of Illinois at Chicago, Chicago, IL

***Dr. Valerie Thomas**, Anderson Interface Associate Professor of Natural Systems, School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA

Dr. Robert Twiss, Professor, University of California-Berkeley, Ross, CA

Dr. Terry F. Young, Consultant, Environmental Defense, Oakland, CA

Dr. Lauren Zeise, Chief, Reproductive and Cancer Hazard Assessment Section, California Environmental Protection Agency, Oakland, CA

LIAISONS TO THE SAB

a) **FIFRA Scientific Advisory Panel (FIFRA SAP)**

***Dr. Steven Heeringa,** Research Scientist and Director, Statistical Design Group, Institute for Social Research (ISR), University of Michigan, Ann Arbor, MI,

SCIENCE ADVISORY BOARD STAFF
Mr. Thomas Miller, Designated Federal Officer, Washington, DC

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* Members Participating in the call and/or by providing written comments are noted by asterisk.

ATTACHMENT C

US Environmental Protection Agency
Science Advisory Board Meeting
Public Teleconference Meeting
September 21, 2006; 1:00 pm – 4:00 pm Eastern Time
September 22, 2006; 1:00 pm – 3:00 pm Eastern Time (if necessary)
Meeting Location: Via Telephone Only

Thursday, September 21, 2006

1:00 p.m.	**Convene the Teleconference Meeting** Announcements, Summarize Agenda, Take Attendance	Thomas O. Miller Designated Federal Officer US EPA SAB
	Introductory Remarks of the Chair - Today's Business - Status of Planning for the December 12-13, 2006 SAB Meeting - Status of the Letter to the Administrator on Regional Modeling	Dr. M. Granger Morgan Chair, EPA SAB
1:30 p.m.	a) **Review of the draft SAB Report:** *EPA Science Advisory Board (SAB) Ad Hoc All Ages Lead Model Review Panel's Peer Review of the 'All-Ages Lead Model (AALM) Version 1.05 (External Review Draft)'*	The Board
	Intorductory remarks by the All-Ages Lead Model Review Panel Chair	Dr. Meryl Karol, Chair of the Panel
	Reviewer Comments	1. Dr. Rogene Henderson 2. Dr. Rebecca Parkin 3. Other Board Members
	SAB Disposition of the Report	The Board
2:15 p.m.	b) **Review of the draft SAB Report:** *Review of 2005 Agency Draft entitled 'Expansion and Upgrade of the RadNet Air Monitoring Network, Vol. 1 & 2, Concept and Plan'*	The Board

	Intorductory remarks by the RadNet Panel Chair	Dr. Jill Lipoti, US EPA SAB RAC
	Reviewer Comments	1. Dr. Gene Matanoski 2. Dr. Jana Milford 3. Dr. Deborah Cory-Slechta 4. Other Board Members
	SAB Disposition of the Report	The Board
3:00 p.m.	c) **<u>Review of the draft SAB Report</u>:** *SAB Advisory on EPA's Second Generation Model*	The Board
	Introductory remarks by the Second Generation Model Review Panel Chair	Dr. Larry Goulder
	Reviewer Comments	1. Dr. Maureen Cropper 2. Dr. Cathy Kling 3. Dr. Kathleen Segerson 4. Dr. Trudy Cameron 5. Other Board Members
	SAB Disposition of the Report	The Board
3:30 pm	**Adjourn for the Day (time approximate)**	

ATTACHMENT D

. CHARGE TO THE SCIENCE ADVISORY BOARD FOR REVIEWING DRAFT SAB PANEL REPORTS

The quality review process for draft SAB reports is intended to carry out the Board's required review and approval function for all SAB reports to the Administrator as addressed by FACA, EPA policies, and the SAB Charter. It ensures that specific SAB Committee/Panel reports are clear and not ambiguous or inconsistent. The Board review is **not a re-review** of the issues discussed by the expert committee/panel that conducted the review and drafted the report. Substantive issues in draft and final reports are the purview of the experts who conducted the SAB's specific review and authored the draft report. However, the exposition of the expert conclusions conveyed in the final SAB report is a primary concern of the Board, as is the content of the jointly authored Letter to the Administrator. The Charge to the Board in reviewing the draft is to determine whether:

a) the original charge questions to the SAB Standing or Ad Hoc Committee/Panel were adequately addressed in the draft report;

b) the draft report is clear and logical; and

c) the conclusions drawn, and/or recommendations made, are supported by information in the body of the draft SAB report.

Those conducting quality reviews are also asked to be alert to technical errors, or omissions, that they note during their review; however, Board Members are not responsible for identifying all errors and omissions that might exist and their ultimate approval does not certify that a report contains no such issues.

The outcome of a quality review is a final disposition decision on a draft SAB report. That decision is reflected in the minutes of the public quality review of the report and that record becomes guidance for any final edits or revisions needed in the draft report. Revisions are the responsibility of the Chair of the drafting panel/committee and final approval is conveyed by the SAB Chair's authorization to sign the report's transmittal letter to the Administrator. On occasion, one or more Board vettors may be assigned to assist the SAB Chair, and the Expert Panel Chair, in the final edits and conditions of the Board are met by the final report to the Administrator.

September 21, 2005