

**Summary Minutes of the
U.S. Environmental Protection Agency (EPA)
Science Advisory Board (SAB)
Panel for the Review of EPA's 2007 Report on the Environment
Teleconference, December 10, 2007**

Panel Members: See Panel Roster – Appendix A

Date and Time: Monday, December 10, 2007, 1:00 – 4:00 p.m. Eastern Time

Location: By telephone only

Purpose: The purpose of this teleconference was to discuss the Panel's draft report (dated 11-30-07).

Attendees: Panel Chair: Dr. Deborah Swackhamer

Panel Members: Dr. Henry Anderson
Dr. Fred Benfield
Dr. Timothy Buckley
Dr. Aaron Cohen
Dr. David Dzombak
Dr. Dennis Grossman
Dr. Philip Hopke
Dr. George Lambert
Dr. Allan Legge
Dr. Maria Morandi
Dr. Deborah Neher
Dr. Duncan Patten
Dr. Gary Sayler
Dr. Alan Steinman
Dr. C. John Suen
Dr. Robert Twiss
Dr. Judith Weis

EPA SAB Staff: Thomas Armitage, Designated Federal Officer

EPA Staff: Ethan McMahon, EPA/OEI
Jay Messer, EPA/ORD
Pat Murphy, EPA/ORD

Denice Shaw, EPA/ORD

Others Present: Linda Aller, Bennett and Williams
Robert Griffin, Little Hocking Water Association
Dan Watts, New Jersey Institute of Technology

Meeting Summary

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

Convene Teleconference

Dr. Thomas Armitage, Designated Federal Officer (DFO) convened the teleconference at 1:00 p.m. He stated that teleconference was being held in accordance with Federal Advisory Committee Act (FACA) procedures. He stated that summary minutes of the teleconference meeting would be prepared and certified by the Chair. He noted that time had been reserved on the teleconference agenda for public comments.

Purpose of the Call and Review of the Agenda

Dr. Deborah Swackhamer, Panel Chair, thanked the members for participating in the call. She reviewed the purpose of the call and agenda. She stated that the purpose of the call was to discuss the Panel's draft advisory report (dated 11-30-07). She stated that the call would focus on discussion of changes needed in the report before it is sent to the Panel for final concurrence.

Remarks from EPA and Public Comments

Dr. Swackhamer asked Denice Shaw of EPA's Office of Research and Development whether she wished to offer remarks before the Panel discussed the draft report. Dr. Shaw thanked the Panel for its work to develop the advisory report. She stated that EPA was reviewing the report and had begun thinking about how to address the specific findings and recommendations in the draft. Dr. Swackhamer thanked Dr. Shaw for her statement and asked whether any public participants on the call wished to offer comments. No public comments were offered.

Discussion of the Executive Summary and Letter to the Administrator

Dr. Swackhamer called for Panel discussion of the executive summary and letter to the Administrator in the draft advisory report.

Executive Summary

A panel member stated that the advisory report should indicate that, although the Report on the Environment – 2007 Science Report (ROE 2007) provides status data for many indicators and could provide benchmarks for analysis of future trends, it does not include much long term trend information. Another panelist agreed, noting that Panel members serving on National Advisory Council on Environmental Policy and Technology workgroup reviewing the ROE Highlights document had emphasized this point in their deliberation. Another member stated that the introduction of the Panel’s report should indicate that the current draft of the ROE does not provide much trend information, and recommend that this be clearly stated in the ROE. Other Panelists agreed and a member offered to provide text to be included in the advisory report.

The panel discussed whether to revise the recommendation in the advisory report calling for future analysis of data using geographic units rather than EPA administrative regions. Several panelists expressed support for the current language in the 11-30-07 draft of the advisory report. There was general agreement that the current language in the report captured the sentiment of the Panel. A member stated that he was not enthusiastic about the use of regional indicators as substitutes for national data and questioned whether the language in the report calling for the use of regional indicators reflected the views of panel members. A member noted that the Panel’s report stated that regional indicators were useful in the absence of good national data. Another member stated that the way the advisory report currently handled the issue was effective because it provided suggested criteria that could be used to identify and apply good regional examples.

A member stated that the advisory report should clearly indicate that rigid use of the indicator selection criteria had resulted in exclusion of important indicators, and that additional regional indicators could provide useful information when no national data were available. Other members stated that this language captured the sentiment of the Panel and members agreed to include it in the executive summary. It was also decided that the following sentence in the executive summary should be bolded, “Regional data are not a substitute for national or even representative national data.” In addition, it was agreed that bolding should be removed from the sentence that followed.

A member noted that the sentence on page vii, line 42 of the 11-30-07 draft should refer to ‘human health’ and “ecological condition.” Other members supported this change. The Panel also discussed revising the sentence in the executive summary referring to use of the document for strategic planning. A member suggested that this sentence be revised as follows. “While the report may help inform strategic planning and priority setting, it is limited because it contains little data interpretation and no conclusions supported by statistical analysis.” Other Panel members agreed to this change but one member suggested using the words “severely limited.” Several members disagreed with this suggestion noting that the ROE provides useful information.

A panel member noted that, in a number of places the advisory report provides somewhat positive statements such as “in general, the questions in the ROE are appropriate” followed by recommendations for improvement. He questioned whether the positive statements were consistent with the recommendations for improvements. Other members stated that they thought that the language in the report was appropriate. They noted that some questions in the ROE were generally appropriate and critical data gaps were identified, but there was a need for improvement. They stated that a conceptual framework was needed to develop the questions. Other members stated that the current language in the advisory report captured this sentiment.

The Panel discussed whether to recommend changing the title of the ROE because it did not address long term trends and the science underlying them. A member noted that language currently in the advisory report suggested that the title could be changed. Other members stated that the language currently included in the advisory report was appropriate.

Transmittal Letter

The Panel discussed several possible editorial changes in the letter. A member suggested that the letter might state that the ROE could be improved through better grounding in a conceptual framework. The Panel discussed the need for additional language in the letter clearly indicating the need for integration. The Chair stated that the letter should be short but convey important points in the advisory report. A member stated that the letter should reflect the need to strengthen the science in the ROE. Another member stated that use of the words “strengthened science” was vague. Another member noted that the letter should contain a sentence indicating that the Panel had provided recommendations to improve the final 2007 report as well as future reports on the environment. The Chair stated that she would revise the letter to incorporate points discussed. She then called for discussion of the appendices in the advisory report.

Discussion of Appendices in the Advisory Report

A member stated that the conceptual framework diagram in Appendix C should be revised to change the label of the “fresh water” box to “surface water.” This change was important in order to make sure that the marine environment was considered. The Chair agreed with this suggestion.

A member stated that Appendix C should more specifically indicate how conceptual ideas should be folded into the ROE. The Chair responded that the advisory report currently stated that a conceptual diagram, such as the example provided, should be included at the beginning of the ROE. She further noted that it was recommended that appropriate parts of the framework be referenced in each chapter of the ROE. Several specific editorial changes were discussed to clarify the text in Appendix C.

A member noted that the example diagram in Appendix C was generalized. He noted that it would be difficult to show detail without a much more complex diagram or

possibly multiple diagrams accompanied by additional explanatory text. The Chair stated that she did not think the more detail should be included in diagram in the advisory report. She noted that the diagram was provided only as an example and this could be clearly stated in the text of Appendix C. A member stated that the SAB Panel that reviewed EPA's 2004 ROE had provided a conceptual framework diagram for the ecosystem condition chapter but it was not incorporated into the ROE 2007. Other members stated that the example in the advisory report was useful and that a more detailed one was not needed.

Staff from EPA's Office of Research and Development commented that they found the diagram in the SAB review of the 2004 ROE to be useful. They also noted that the diagram in the current draft of the advisory report was very helpful. Staff agreed that a more complex graphic would be needed if relationships among media and indicators were to be illustrated in more detail.

The Panel discussed the text on pages C2 – C3 (example indicator description). The Chair asked members whether the example was helpful. A member stated that the text was useful but it should be reformatted to make it easier to understand. The Panel discussed whether it would be worthwhile to develop separate diagrams to show relationships between indicators. Several members stated that this level of detail was not needed. The Chair stated that she thought the example in advisory report was useful and that it could be reformatted to clarify the description. A member stated that the indicator description should be moved into a separate appendix. The Chair agreed with this suggestion.

The Panel discussed Appendix D. Members stated that the appendix was useful and should be retained in the report. A member requested that a sentence in the appendix be revised as follows: "These administrative regions often do not represent boundaries of resources to be protected..." The Chair agreed with this change.

The Panel discussed Appendix E. The Chair asked whether it was useful to keep the tables of recommendations in this appendix the advisory report. Members expressed support for keeping these tables in the report. Several changes were discussed. It was recommended that the bolding be removed from the tables and that the recommendations for future recommendations be moved into a separate appendix G. The Chair stated that the Appendices would be revised as discussed. She then called for discussion of any other changes needed in the advisory report

Changes in Other Sections of the Advisory Report

The Panel discussed several changes in other sections of the report. A member stated that the bolding of the recommendations in the report should be revised to place more emphasis on most important points. The Chair agreed and asked members to submit suggested changes in the bolded text to the DFO. A member requested a change in a sentence on page 27 that addressed algal blooms. The member stated that the sentence should be revised to mention blooms of *Karina brevis* on the west coast of Florida.

Another member requested clarification of a sentence on page 28 in the water section of the advisory report. The member suggested that the sentence be revised as follows: “In contrast, other complex processes that affect water resources, such as the behavior of population groups are more difficult to incorporate into quantitative models.”

Discussion of Next Steps

The Chair thanked the Panelists for their comments on the draft advisory report and stated that, with the changes agreed upon on the teleconference, she concluded that the Panel had reached consensus on all of the findings and recommendations in 11-30-07 draft of the advisory report. She asked the Panel if there were any objections to this conclusion. There were no objections. The Chair then asked panelists to send any remaining editorial comments to the DFO. She stated that all changes agreed upon on the call as well as remaining editorial comments would be incorporated into the advisory report and it would be sent to the Panel in January with a request for concurrence to send it to the chartered Science Advisory Board for final approval. Following approval by the Chartered SAB, the final report would be transmitted to the EPA Administrator. The Chair then adjourned the teleconference.

Respectfully Submitted:

Certified as True:

/Signed/

/Signed/

Dr. Thomas Armitage
Designated Federal Officer

Dr. Deborah Swackhamer, Chair
SAB Panel for the Review of EPA’s
2007 Report on the Environment

APPENDICES

Appendix A: Panel Roster

Appendix B: Teleconference Agenda

Appendix A – Panel Roster

U.S. Environmental Protection Agency Science Advisory Board Panel for the Review of EPA's 2007 Report on the Environment

CHAIR

Dr. Deborah Swackhamer, Interim Director and Professor, Institute on the Environment, University of Minnesota, Minneapolis, MN

MEMBERS

Dr. Henry Anderson, Chief Medical Officer, Division of Public Health, Wisconsin Division of Public Health, Madison, WI

Dr. Fred Benfield, Professor of Ecology, Department of Biological Sciences, Virginia Tech, Blacksburg, VA

Dr. Mark Borchardt, Director, Public Health Microbiology Laboratory, Marshfield Clinic Research Foundation, Marshfield, WI

Dr. Timothy Buckley, Associate Professor and Chair, Division of Environmental Health Sciences, School of Public Health, The Ohio State University, Columbus, OH

Dr. Aaron Cohen, Principal Scientist, Health Effects Institute, Boston, MA

Dr. David A. Dzombak, Walter J. Blenko Sr. Professor of Environmental Engineering and Faculty Director, Steinbrenner Institute for Environmental Education and Research, Carnegie Mellon University, Pittsburgh, PA

Dr. Dennis Grossman, Principal Associate - Biodiversity Protection and Conservation Planning, Environmental and Natural Resources Department, Abt Associates Inc., Bethesda, MD

Dr. Philip Hopke, Bayard D. Clarkson Distinguished Professor, Department of Chemical Engineering, Clarkson University, Potsdam, NY

Dr. George Lambert, Associate Professor of Pediatrics, Director, Center for Childhood Neurotoxicology, Robert Wood Johnson Medical School-UMDNJ, Belle Mead, NJ

Dr. Allan Legge, President, Biosphere Solutions, Calgary, Alberta, CANADA

Dr. Maria Morandi, Assistant Professor, Division of Environmental and Occupational Health, School of Public Health, University of Texas, Houston, TX

Dr. Deborah Neher, Associate Professor and Chair, Plant and Soil Science, College of Agriculture and Life Sciences, University of Vermont, Burlington, VT

Dr. Duncan Patten, Research Professor, Land Resources and Environmental Sciences Department, Montana State University, Bozeman, MT, USA

Dr. Ramesh Reddy, Graduate Research Professor and Chair, Soil and Water Science Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL, USA

Dr. Gary Saylor, Beaman Distinguished Professor, Joint Institute for Biological Sciences, Oak Ridge National Laboratory, University of Tennessee, Knoxville, TN

Dr. Alan Steinman, Director, Annis Water Resources Institute, Grand Valley State University, Muskegon, MI

Dr. C. John Suen, Professor, Earth and Environmental Sciences, College of Science and Mathematics, California State University, Fresno, Fresno, CA, USA

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

Dr. Judith S. Weis, Professor, Department of Biological Sciences, Rutgers University, Newark, NJ

Dr. Barry Wilson, Professor, Animal Science and Environmental Toxicology, College of Agriculture and Environmental Science, University of California, Davis, CA

SCIENCE ADVISORY BOARD STAFF

Dr. Thomas Armitage, U.S. Environmental Protection Agency, Washington, D.C.

Appendix B – Teleconference Agenda

SCIENCE ADVISORY BOARD
Panel for the Review of EPA’s 2007 Report on the Environment
Public Teleconference
December 10, 2007, 1:00 p.m. – 4:00 p.m. (Eastern Time)

Agenda

1:00 p.m.	Convene Meeting	Dr. Thomas Armitage Designated Federal Officer EPA Science Advisory Board
1:10 p.m.	Purpose of the Call and Review of the Agenda	Dr. Deborah Swackhamer, Chair
1:15 p.m.	Remarks from EPA	Dr. Denice Shaw, EPA Office of Research and Development
1:25 p.m.	Public Comments	Dr. Thomas Armitage Designated Federal Officer
1:40 p.m.	Discussion of draft SAB ROE Panel Report Executive Summary and Letter to the Administrator	Dr. Deborah Swackhamer and Panel
2:30 p.m.	Discussion of Example Conceptual Framework, Example Indicator Description, and use of Ecoregionally Derived Indicator information (Appendices C and D)	Dr. Deborah Swackhamer and Panel
3:00 p.m.	Discussion of Other Revisions (Sections 5-10 and Appendix E)	Dr. Deborah Swackhamer and Panel
3:45 p.m.	Summary and Discussion of Next Steps	Dr. Deborah Swackhamer,
4:00 p.m.	Adjourn	