

**U.S. Environmental Protection Agency
Science Advisory Board
Ecological Processes and Effects Committee Augmented for Review of the
Ecological Assessment Action Plan**

Summary Minutes

Date and Time: May 16, 2012, 12:00 – 3:00 p.m. (Eastern Time)

Location: By teleconference

Purpose: The purpose of the teleconference was to discuss the Committee's draft report, *SAB Review of the EPA's Ecological Assessment Action Plan*

Attendance:

Members of the EPA Science Advisory Board (SAB) Ecological Processes and Effects Committee Augmented for Review of the Ecological Assessment Action Plan:

Dr. Ingrid Burke
Dr. Ernest F. Benfield
Dr. Gregory Biddinger
Dr. G. Allen Burton
Dr. Peter Chapman
Dr. Loveday Conquest
Dr. Richard Di Giulio
Dr. Robert Diaz
Dr. Thomas W. La Point
Dr. Wayne Landis
Dr. Judith L. Meyer
Dr. Amanda Rodewald

SAB Staff:

Thomas Armitage, Designated Federal Officer

EPA Representatives (EPA speakers and other individuals who requested access to the teleconference):

Mace Barron, Office of Research and Development
Lawrence Martin, Office of the Science Advisor
Edward Ohanian, Office of Water
Glenn Suter, Office of Research and Development

Public (individuals who requested access to the teleconference):

Maria Hegstad, Risk Policy Report
Casey Deitrich, CQ Transcriptions
Daniel Perkins, Global Regulatory Sciences, FMC Agricultural Products
Linda Wilson, New York State Office of the Attorney General

Teleconference Summary:

Convene the meeting

Dr. Thomas Armitage, Designated Federal Officer (DFO) for the Ecological Processes and Effects Committee, convened the teleconference at 12:00 p.m. Eastern Time. He stated that the Committee was meeting by teleconference to discuss its draft report on EPA's Ecological Assessment Action Plan and he identified the Committee members who were on the call. He stated that the EPA Science Advisory Board (SAB) was a chartered federal advisory committee and he reviewed Federal advisory Committee Act (FACA) requirements. He stated that summary minutes of the teleconference would be prepared and certified by the Chair. He noted the Panel's compliance with ethics requirements. Dr. Armitage indicated that the meeting materials were available on the SAB website (these materials included: the Federal Register Notice announcing the teleconference¹, teleconference agenda², two drafts of the Committee's report³, and a summary of Committee members' comments on the report⁴). He noted that no written comments or requests to provide oral comments had been received from the public.

Review of Agenda and Purpose of the Meeting

Dr. Ingrid Burke, Chair of the SAB Ecological Processes and Effects Committee, reviewed the teleconference objectives and agenda. She indicated that the purpose of the teleconference was to discuss the Committee's draft report on EPA's Ecological Assessment Action Plan. She noted that the Committee would discuss each section of the report, focusing on any issues that lacked consensus, were inaccurate or problematic, needed additional explanation or context, or needed to be added to the report. She indicated that on the call she wanted the Committee to reach agreement on any changes needed in the report.

Dr. Burke reviewed the teleconference agenda. She stated that the Committee would first hear remarks from EPA and then discuss sections 3.1 through 3.7 of the report (these sections address each of EPA's charge questions), the executive summary, and the letter to the EPA Administrator. She indicated that the primary authors of each section would lead the discussion of their sections. Dr. Burke stated that, if the Committee reached agreement on the report, she would work with the DFO to incorporate necessary revisions and the report would be sent to the Committee for concurrence before it was transmitted to the chartered SAB for quality review.

EPA Remarks

Dr. Burke called upon EPA staff to provide remarks to the Committee. Dr. Edward Ohanian, Chair of the EPA Risk Assessment Forum thanked the Committee for its draft report. He noted that it was helpful to hear that EPA's draft action plan was responsive to previous SAB advice and was a good starting point for EPA's efforts to integrate ecological risk assessment and decision-making. He indicated that Dr. Glenn Suter, Chairman of the Ecological Oversight Committee of the EPA Risk Assessment Forum, would provide additional remarks. Dr. Burke thanked Dr. Ohanian and called upon Dr. Suter for his remarks.

Dr. Glenn Suter thanked the Committee for its draft report and provided remarks.

- He indicated that the Ecological Assessment Action Plan was intended to be a strategic plan, and that EPA would provide more detail as it developed individual project plans.
- He noted that although the Committee had found the Plan to be "EPA-centric," EPA was collaborating with other agencies.
- He noted that the Committee had provided recommendations concerning the issue of environmental justice. He indicated this was an important issue to EPA but it was not specifically addressed the Plan because environmental justice was the focus of work in other parts of the agency.
- He noted that the Committee had recommended peer review at the problem formulation stage of ecological risk assessments and asked the Committee to clarify whether it was recommending that EPA routinely conduct such peer reviews.
- He noted that the Committee had recommended expansion of the Risk Assessment Forum's communication project. He indicated that this expansion appeared to be beyond the scope of what could likely be accomplished without additional resources. He asked the Committee to clarify whether it recommended abandoning the project if the broader goals outlined in the SAB report could not be achieved.
- Dr. Suter also provided an update on the status of projects described in the Plan

Dr. Burke thanked Dr. Suter for his remarks and indicated that they would be considered as the Committee discussed the draft report.

Committee Discussion

Dr. Burke then called for discussion of sections 3.1-3.7 of the draft report. She asked Committee members to raise any substantive issues that required discussion. The Committee agreed on revisions provided by members in their individual comments (included in the May 9th draft report posted on the SAB website) and also discussed incorporating some additional changes (listed below). The Chair made follow-up assignments to incorporate these additional changes into the report.

Discussion of Section 3.1

Dr. Di Giulio led the discussion of Section 3.1. The following changes were discussed:

- Including text in the report to note that: 1) the Plan was brief due to imposed page limits, and 2) EPA intended to provide more detailed information in individual project plans.
- Including text in the report to note that EPA should be cognizant of related activities occurring in other countries.
- Recommending that in the Plan, EPA could highlight the ways that ecological risk assessments can support EPA priorities related to environmental justice.
- Revising text concerning the effectiveness of guidance documents.
- Revising text referring to the use of point estimates in probabilistic quantitative approaches.
- Revising text concerning peer review at the problem formulation stage.
- Revising text referring to ecosystem health.

Discussion of Section 3.2

Dr. Chapman led the discussion of Section 3.2. The following change was discussed:

- Revising the report to indicate that climate change must be considered in the risk assessment and adaptive management framework.

Discussion of Section 3.3

Dr. Chapman led the discussion of Section 3.3. The following changes were discussed:

- Including additional text and references to indicate that weight-of-evidence evaluation can encompass quantitative approaches such as meta-analysis.
- Including editorial changes to make text in some parts of the section more concise.

Discussion of Section 3.4

Dr. Biddinger led the discussion of Section 3.4. The following changes were discussed:

- Revising the report to: 1) commend EPA for undertaking risk communication project and, 2) note the limited scope of the project.
- Revising the report to: 1) indicate that EPA's proposed project could lead to short-term improvements, and 2) recommend that the project be used as the basis for a broader long-term initiative to improve communication at all steps of the risk assessment and management process.
- Strengthening the recommendation that EPA take advantage of survey data that have been collected in an SAB science integration project.
- Revising the report to clarify a vessel ballast water example that was included to illustrate limited use of ecological risk assessment.

Discussion of Section 3.5

Dr. Meyer led the discussion of Section 3.5. The following changes were discussed:

- Including a literature citation to support statements concerning the value of the world's ecosystem services.
- Revising several of the edits that had been suggested in individual comments.

Discussion of Section 3.6

Dr. Benfield led the discussion of Section 3.6. The Committee agreed that no changes were needed in this section, other than several editorial revisions that had been suggested by individual members.

Discussion of Section 3.7

Dr. La Point led the discussion of Section 3.7. The following changes were discussed:

- Revising the text to indicate that EPA should articulate and elucidate its ecological protection goals.
- Including a citation to support the estimated value of ecosystem services lost due to hypoxia.
- Revising the text to indicate that many of the ecological risk assessment recommendations previously provided by the SAB would lead to the development of stronger ecological protection goals and bring about stronger protection of ecosystem structure and function.

Discussion of Executive Summary and Letter to the Administrator

Dr. Burke then called for discussion of the Executive Summary and letter to the Administrator.

Committee members did not request specific changes in the Executive Summary but noted that it should be consistent with other parts of the report. Dr. Burke indicated that she would work with the DFO to revise the Executive Summary to reflect the changes made in other parts of the report.

The Committee discussed the letter to the Administrator and agreed that some of the recommendations should be reordered and the letter should be shorter. Dr. Burke indicated that she would work with the DFO to revise the letter as discussed.

Action Items and Next Steps

Dr. Burke asked for additional comments on the report. There were no additional comments so she thanked members for their input. She indicated that the DFO would send members a list of follow-up assignments to revise the report as discussed. She indicated that she would work with the DFO to incorporate these changes and noted that the revised report would then be sent to the Committee for concurrence to transmit it to the chartered Science Advisory Board for quality review. The DFO stated that there were

no additional items to be discussed on the call. He then thanked Panel members for calling and adjourned the teleconference

Respectfully Submitted:

Certified as Accurate:

/Signed/

/Signed/

Dr. Thomas Armitage
Designated Federal Officer

Dr. Ingrid Burke, Chair
SAB Ecological Processes and
Effects Committee

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by Panel members during the course of deliberations within the meeting. Such ideas, suggestions and deliberations do not necessarily reflect consensus advice from Panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters or reports prepared and transmitted to the EPA Administrator following the public meetings.

ATTACHMENT A: COMMITTEE ROSTER

U.S. Environmental Protection Agency Science Advisory Board (SAB) Ecological Processes and Effects Committee (EPEC) Augmented for Review of the Ecological Assessment Action Plan

CHAIR

Dr. Ingrid Burke, Director, Haub School and Ruckelshaus Institute of Environment and Natural Resources, University of Wyoming, Laramie, WY

OTHER SAB MEMBERS

Dr. Judith L. Meyer, Professor Emeritus, Odum School of Ecology, University of Georgia, Lopez Island, WA

Dr. Amanda Rodewald, Professor of Wildlife Ecology, School of Environment and Natural Resources, The Ohio State University, Columbus, OH

EPEC MEMBERS

Dr. Ernest F. Benfield, Professor of Ecology, Department of Biological Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA

Dr. Peter Chapman, Principal and Senior Environmental Scientist, Environmental Sciences Group, Golder Associates Ltd, Burnaby, BC, Canada

Dr. Loveday Conquest, Professor, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA

Dr. Richard Di Giulio, Professor, Nicholas School of the Environment, Duke University, Durham, NC

Dr. Robert Diaz, Professor, Department of Biological Sciences, Virginia Institute of Marine Science, College of William and Mary, Gloucester Pt., VA

Dr. Lucinda Johnson, Center Director, Center for Water and the Environment, Natural Resources Research Institute, University of Minnesota Duluth, Duluth, MN

Dr. Thomas W. La Point, Professor, Department of Biological Sciences, University of North Texas, Denton, TX

Dr. William Stubblefield, Senior Research Professor, Department of Molecular and Environmental Toxicology, Oregon State University, Corvallis, OR

CONSULTANTS

Dr. Gregory Biddinger, Managing Director, Natural Land Management, Houston, TX

Dr. G. Allen Burton, Professor and Director, Cooperative Institute for Limnology and Ecosystems Research, School of Natural Resources and Environment, University of Michigan, Ann Arbor, MI

Dr. Wayne Landis, Professor and Director, Department of Environmental Toxicology, Institute of Environmental Toxicology, Huxley College of the Environment, Western Washington University, Bellingham, WA

SCIENCE ADVISORY BOARD STAFF

Dr. Thomas Armitage, Designated Federal Officer, U.S. Environmental Protection Agency, Washington, DC

Materials Cited

The following meeting materials are available on the SAB website, <http://www.epa.gov/sab>, at the May 16, 2012 Ecological Processes and Effects Committee meeting page:

<http://yosemite.epa.gov/sab/sabproduct.nsf/MeetingCal/49BFAE2C9A6261D1852579BA006DDF65?OpenDocument>

¹ Federal Register Notice

² Agenda

³ Committee's Draft Reports

⁴ Committee Members' Comments on the Report