

**Summary Minutes of the United States Environmental Protection Agency (U.S. EPA)  
Science Advisory Board (SAB) Committee on Science Integration for Decision Making  
Teleconference – January 31, 2012**

SAB Committee on Science Integration for Decision Making:      See Roster<sup>1</sup>

Date and Time:            January 31, 2012

Location:                By telephone only

Purpose:                    to discuss a draft report<sup>2</sup> based on fact-finding activities conducted as part  
of a study of science integration supporting EPA decision making

SAB Committee on Science Integration Participants:

Dr. Thomas Burke, Chair	Dr. Rogene Henderson
Dr. Gregory Biddinger	Dr. James H. Johnson
Dr. James Bus	Dr. Jill Lipoti
Dr. Deborah Cory-Slechta	Dr. Wayne Landis
Dr. Terry Daniel	Dr. Gary Saylor
Dr. Penelope Fenner-Crisp	Dr. Thomas Theis
	Dr. Lauren Zeise

SAB Staff Office Participants

Dr. Angela Nugent, Designated Federal Officer (DFO)

Other Participants – See Attachment A

Meeting Summary:

The committee discussion at the meeting followed the issues and timing as presented in the agenda.<sup>3</sup>

Convene Meeting

Dr. Angela Nugent, SAB DFO, convened the teleconference and welcomed the group. She noted that there had been no request for oral comment and that two sets of written public comments had been received prior to the meeting and posted on the SAB website<sup>4,5</sup>. She noted that committee member comments<sup>6</sup> had been posted on the SAB website.

Purpose and Review of the Agenda

Dr. Thomas Burke, the SAB committee Chair, reviewed the agenda. He thanked members for the vast amount of “field work” required to gather data for the report. He noted that the report is in its final phase at a time of change and focus on EPA science. Since written comments from committee members showed general support for the report, he suggested that the teleconference focus on remaining substantive issues most important for discussion. He committed to following up with the DFO on editorial suggestions provided by individual committee members. It will be

important to finalize the report and transmit it to the EPA so that the report can have an impact on agency science. He suggested that the committee discuss in turn the draft letter to the Administrator and individual components of the report to address major substantive issues and changes that need to be made. The committee accepted this general approach for the discussion.

#### Discussion of draft letter to the Administrator

The committee agreed on the following changes

- Provide a definition of “science integration” that would be consistent with a definition to be inserted after the long quote from the 2000 SAB report provided on page 1 of the report.
  - Definition would include drawing science from many different scientific and technical fields and input from across the Agency, the public, and stakeholders
  - Definition would note that environmental issues increasingly call for science that is multidisciplinary and complex. This report should call on EPA to integrate this science in a more consistent, transparent way to address the needs identified in problem formulation so it will be clearer how science is interpreted for quality decisions.
  - Definition could include references to transparency and characterization of uncertainty.
- Letter will introduce major findings and recommendations discussed in the report more clearly.

#### Discussion of draft report

The committee agreed on the following changes

- Move Figure 1 to page 2, immediately following the long quote from the 2000 SAB report.
- Restructure the “Findings”
  - Move the italicized text on page 3, line 14 “Science integration practices vary across the agency” to be topic sentence and italicized finding for the paragraph beginning on page 3, line 24.
  - Create a new finding to head the paragraph beginning on page 3, line 14., with text such as “Agency staff and managers view science and science assessment as an important component of decision making because EPA is both a scientific and regulatory Agency.
  - Replace text at page 6, line 1, “Science assessment is a critical function at the EPA because the EPA is both a scientific and regulatory agency” with text such as “EPA programs and regions need broad and rich capabilities in science assessment to fulfill their role in regulations and other environmental decision making “
- Clarify language on page 4 to convey that a website for sharing information is not science integration but can be a communication tool that facilitates integration
- Explore ways to strengthen language regarding “time and resource constraints.”
- Edits to paragraph starting on page 7, line 22:
  - Line 22. Change topic sentence and finding to read “The EPA needs scientific leadership and capacity in EPA regions and programs, as well as ORD.”
  - Revise lines 27-30 and adjust citations and language to highlight the need to meet regional and program needs, rather than call for a top science official or central responsibility for Agency science.

- Possibly develop a new finding related to text beginning on line 30 to call for efforts to address human resources related to EPA’s scientific workforce, especially outside ORD.
- Page 8, insert short transitional paragraph introducing findings as consistent and clear messages heard in interviews for strengthening science integration.
- Page 8, line 32, replace first sentence “Strengthen management oversight” with “Strengthen management engagement and accountability.”
- Page 8, line 36 – explore ways to provide some additional information about Attachment C.
- Page 9, line 27, add to references: NRC Silver Book, SAB report, *Valuing the Protection of Ecological Systems and Services*, and ORD research on reverse storm water auctions discussed identified through Science Integration interviews.
- Page 9, add fourth recommendation regarding recruitment and development of the next generation of scientists with strong capability for science integration for decision making.
- Revise final paragraph to remove the phrase “like fostering sustainability” on line 34.
- Specify in the conclusion (page 9, line 36) that recommendations principally pertain to changes needed in program and regional offices.
- Conclude the letter with a focus on science integration. Remove the reference to sustainability. Use language like “the SAB views science integration as essential to achieving EPA’s goal of delivering science-informed decision making.”
- Appendix C – Change title to refer to “Management engagement and accountability.
- Explore the possibility of bringing suggestion 11 in Appendix C forward.

The committee considered the two sets of written comments provided by the public. The committee agreed to add language emphasizing the importance of decision makers’ considering an appropriate balance of public and stakeholder involvement and the need to communicate clearly the process for addressing stakeholder input. The committee will consider citing the NRC Orange Book and the 2001 SAB Report *Improved Science-Based Environmental Stakeholder Processes*.

The DFO and Chair then briefly discussed next steps for completing the committee’s draft. The DFO and Chair will provide a revised draft for committee concurrence by mid-February with the goal of delivering the draft report to the chartered SAB for quality review in late March. This timetable was acceptable to the committee members.

The Designated Federal Officer adjourned the meeting at 3:50 p.m.

Respectfully Submitted:

Certified as Accurate:

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Dr. Angela Nugent  
SAB DFO

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Dr. Thomas Burke  
Chair, SAB Committee on Science  
Integration for Decision Making

**Attachment A: Members of the Public Who Indicated Participation on the  
January 31, 2012 Teleconference**

Nancy Beck, American Chemistry Council

Carole Braverman, EPA

David Bussard, EPA

Alan Carpenter, American Water Works Association

Jamie Conrad, Conrad Law & Policy Counsel

Steve Gouze, Air Resources Board

Maria Hegstad, Inside EPA

Robert Hillger, EPA

Rick Linthurst, EPA

Roseanne Lorenzana, EPA

Jeremy Martinich, EPA

Resha M. Putzrath, Navy and Marine Corps Public Health Center

Alan Roberson, American Water Works Association

Marilyn Buchholtz EPA

Pat Rizzuto, BNA

Patti Tyler, EPA

Ann Williamson, EPA

Linda M. Wilson, NYS Office of the Attorney General

## Materials Cited

The following meeting materials are available on the SAB Web site, <http://www.epa.gov/sab>, at the page for the January 31, 2012 teleconference: <http://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/4bfc731ae89270458525797b005d5eb7!OpenDocument&Date=2012-01-31>

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<sup>1</sup> Roster of the SAB Committee on Science Integration for Decision Making

<sup>2</sup> Science Integration for Decision Making at the U.S. Environmental Protection Agency (EPA) (draft January 5, 2012)

<sup>3</sup> Agenda

<sup>4</sup> Comments from James Conrad, Conrad Law & Policy Counsel.

<sup>5</sup> Comments from Rena Steinzor and Matthew Shudtz, Center for Progressive Reform.

<sup>6</sup> Comments from Dr. Barton J. Thompson; Comments from Dr. Gregory Biddinger; Compilation of member comments as of 1/26/2012; In-line comments from Dr. John Giesy; In-line comments from Dr. Penny Fenner-Crisp.; In-line comments received from Dr. James Bus