

**United States Environmental Protection Agency (U.S. EPA)
Science Advisory Board (SAB)/Board of Scientific Counselors (BOSC)
Teleconference for the Chemical Safety for Sustainability Breakout Group
July 3, 2014
Meeting Minutes**

Date and Time: July 3, 2014, 1:30 a.m. – 3:00 p.m. Eastern Time

Location: By telephone.

Purpose: To: (1) provide SAB and BOSC members with a briefing on the EPA Office of Research and Development's (ORD's) Chemical Safety for Sustainability (CSS) Program and ORD's initial thinking regarding its 2016-2019 Strategic Research Action Plan and (2) allow members to discuss ORD's charge to their committees and preparations for the SAB-BOSC face-to-face meeting on July 24–25, 2014.

Meeting Participants:

SAB/BOSC Members (See rosters for the SAB¹ and BOSC Executive Committees²)

Dr. Elaine Faustman, Breakout Group Chair
Dr. Thomas Burbacher
Dr. Edward Carney
Dr. George Daston

Dr. Michael Dourson
Dr. Gina Solomon
Dr. Ponisseril Somasunderan
Dr. John Vena

SAB Staff:

Dr. Angela Nugent, SAB Staff Office, Designated Federal Officer (DFO)
Dr. Suhair Shallal, DFO for the CSS Breakout Group

Other Attendees:

Dr. Tina Bahadori, National Program Director for CSS
Attachment A lists members of the public who requested the call-in information for this meeting.

Meeting Materials:

<http://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/652cb2b7e6f2fddb85257cf2006f9422!OpenDocument&Date=2014-07-03>

Meeting Summary:

Convene the meeting

Dr. Angela Nugent, Designated Federal Officer (DFO), formally opened the teleconference and noted that this federal advisory committee meeting of the SAB had been announced in the Federal Register on June 18, 2014 (79 FR 34738-34739). She noted that the meeting had been announced as a briefing/planning meeting so that members of the SAB and BOSC could prepare for a July 24-25, 2014 meeting in Washington, DC to develop advice for the EPA on strategic

research directions. The SAB and BOSC has established an SAB/BOSC Breakout Group to focus particularly on ORD's Chemical Safety for Sustainability (CSS) research programs.

Dr. Nugent noted that the EPA SAB is an independent, expert federal advisory committee chartered under the authority of the Federal Advisory Committee Act (FACA). The SAB is empowered by law - the Environmental Research, Development, and Demonstration Authorization Act (ERDDAA) - to provide advice to the EPA Administrator on scientific and technical issues that inform EPA's decisions. The BOSC is a separately chartered committee established to provide ORD with advice on technical and management issues associated with its research programs. The DFO noted that the Federal Register notice announcing the meeting had provided the public with an opportunity to provide written and oral comment. There were no advance requests for oral comment and no written comments submitted in advance of the meeting.

Goals and agenda for the meeting

Dr. Elaine Faustman welcomed the group and commended ORD for requesting SAB and BOSC advice prior to development of its Strategic Research Action Plans (StRAPs). She briefly summarized the purpose of the call, to prepare for more extensive discussions on July 24-25, 2014 about ORD's strategic plans for CSS research.

Presentation on the Chemical Safety for Sustainability Program

Dr. Tina Bahadori, National Program Director for the CSS Research Program, began her discussion by thanking members for their service. She gave a slide presentation³ with an overview that: (1) framed the problem statement, vision and overarching priorities of the CSS program; (2) described the major activities of the program (building knowledge infrastructure; developing tools for chemical evaluation; promoting complex systems understanding; and translating and actively delivering CSS science and tools); and (3) depicted how the CSS program works with ORD and with partners and stakeholders both inside and outside the agency; resource trends.

She then described the purpose of the StRAP and how the CSS StRAP focused themes and project areas on integrated, transdisciplinary and high impact activities. Three of the four research topics focus on system science and tools (i.e., chemical evaluation, complex systems, and life cycle analytics) and one topic involved translation of science (i.e., "solutions-based translation and knowledge delivery. She noted that the last topic was integral to developing solutions to meet the needs of partners and stakeholders. She identified a central challenge for CSS as anticipating the potential for adverse impacts on human health or wildlife populations based on knowledge from data-rich chemicals. To meet that challenge, the draft StRAP emphasizes the importance of the Adverse Outcomes Framework; taking a complex systems approach; accounting for exposure information; using a life-cycle perspective; focusing on developmental health and vulnerable and susceptible populations; and exploring higher throughput approaches to cover more chemical and biological information needs. She emphasized the amount of conscious effort invested in integration within the CSS program activities and within ORD. She provided examples of the systems approach for bench to application translation, mentioning the example of the use of CSS information in the Endocrine Disruption Screening Program and its use in high-throughput toxicity values. She described efforts to incorporate stakeholder feedback to enhance transparency, address critical weaknesses

and move toward validation of CSS research results. She spoke of the importance of strategic partnerships and evaluation efforts and identified anticipated research accomplishments.

Informational questions from the Breakout Group members

In response to questions from breakout group members, Dr. Bahadori provided the following information and:

- Committed to providing additional information, including references, for mixtures of chemicals and nano particles.
- Confirmed that ORD is considering use of the Federal Technology Transfer Act to help enable translation and usability of ORD's research.
- Agreed to provide a list of themes and projects supporting the statistics on Slide 13 showing that "8 themes reduced to 4 Research Topics" and "21 Projects reduced to 9 project areas" showing what was dropped, what was saved, and what was consolidated.
- Agreed to provide additional, more specific examples of how different programs are using outputs from the CSS program.
- Agreed to identify two or three areas that ORD considers as top challenges to increasing confidence in CSS outputs.
- Clarified that the CSS program is supplementing high throughput assays with short-term *in vivo* assays. In 2015, ORD is focusing on how the CSS program can be functionalized and provide a pipeline of research results.
- Emphasized that Slide 9 depicted a process of intensive listening to a spectrum of agency partners, "from political appointees to workers at the project level," and to states with delegated programs.
- Agreed to provide a more detailed slide than Figure 2 in the StRAP which shows the process of translation of fit-for-purpose research to its use. A member asked for an example of such a translation at a greater level of detail.
- Agreed to provide more specific information on who ORD engages as stakeholders and how representative the stakeholders are.
- Agreed to provide more specific information about the training provided to EPA staff to upgrade their ability to use outputs from the CSS program.

The DFO asked that Dr. Bahadori provide this information early enough so that members could review it and use the information to inform their individual preliminary draft responses, due on July 21, 2014. Dr. Bahadori agreed to provide the information within that timeframe.

Discussion of ORD's Charge to the SAB and BOSC and preparations for the face-to-face meeting

Dr. Faustman reviewed the CSS charge questions relevant to the Breakout Group discussion on July 24, 2014. The relevant charge questions are 2a, 2b, 2c, 6a, 6b, and 6c. She asked whether breakout group members desired additional material beyond the briefing, StRAP, and materials Dr. Bahadori had committed to provide. Members did not identify any additional needs

The DFO closed the meeting by thanking breakout group members, representatives of the agency, and members of the public for participating.

The teleconference was adjourned at 3:00 p.m.

Respectfully Submitted,

Certified as Accurate,

Dr. Angela Nugent
SAB Designated Federal Officer

Dr. Elaine Faustman
Acting Breakout Group Chair

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by committee members during the course of deliberations within the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect definitive consensus advice from the 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: Members of the public attending the public teleconference:

Dan Costa, EPA
Casey Dietrich, CQ Transcriptions
Annette Guiseppi-Elie, DuPont Engineering, Corporate Remediation Group
Maria Hegstad, Inside EPA
Elaine Hubal, EPA
Robert Kavlock, EPA
John Kenneke, EPA
Jennifer McPartland, EDF
Sam Pearson, EE News
Paul Price, Dow
Dave Reynolds, Inside EPA
Pat Rizzuto, BNA
LaCresha X. Styles, EPA
Rusty Thomas, EPA
Lila Thornton, EPA Student Contractor

Materials Cited

The following meeting materials are available on the SAB website,
<http://www.epa.gov/sab>, at the page for the [July 3, 2014 teleconference](#) :
<http://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/acc702c6861a07f85257cf200718624!OpenDocument&Date=2014-07-03>

¹ Roster for the Chartered SAB

² Roster for the BOSC Executive Committee

³ Chemical Safety for Sustainability Research Program, Presentation by Tina Bahadori