

**Summary Minutes of the
U.S. Environmental Protection Agency
Science Advisory Board
Risk and Technology Review (RTR) Methods Review Panel
Public Meeting, December 5, 2017**

Date and Time: Tuesday December 5, 2017 from 11:00 AM to 3:00 PM (Eastern Time).

Location: Conducted via public teleconference

Purpose: To conduct a review of the draft panel report entitled *11-20-17 Draft Review of EPA's Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study Analysis*

Participants:

Risk and Technology Review Methods Review Panel (See Roster for full panel):

Dr. Jay Turner, Chair

Dr. Tami Bond

Dr. Charles T. Driscoll, Jr.

Dr. David Eastmond

Dr. Gary Ginsberg

Dr. Dale Hattis

Mr. Stanley Hayes

Dr. Abby A. Li

Dr. Slawo Lomnicki

Dr. Sidney Marlborough

Dr. P. Barry Ryan

Dr. James Sadd

Dr. Veronica Vieira

EPA SAB Staff:

Dr. Bryan J. Bloomer, Designated Federal Official, SAB Staff Office

EPA Staff:

Mr. Chris Sarsony, US EPA Office of Air and Radiation, Office of Air Quality Planning and Standards

Ms. Kelly Rimer, US EPA Office of Air and Radiation, Office of Air Quality Planning and Standards

Other Attendees: A list of persons who requested information on accessing the teleconference line, or who noted via email or notified the DFO via telephone that they participated in the teleconference is provided in Attachment A.

Materials Available: The agenda, charge questions, review documents and other meeting materials listed below are available on the SAB website (www.epa.gov/sab) at the following SAB Risk and Technology Review (RTR) Methods Review Panel December 5, 2017 public meeting webpage:

<https://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/64ce76e2636ebdc3852581a00065cca3!OpenDocument&Date=2017-12-05>

- Federal Register Notice announcing the public meeting (Vol 82 Number 199 Pages 48227-48228)
- Agenda
- Agency Charge

- Agency-provided Background Material
 - Confirmation of the average percent of facilities screened out of RTR analyses by tier discussed during the December 5 teleconference
- Agency Comment
 - Agency Comments on the 11-20-17 Draft Panel Report
- Committee Members' Comments
 - Stan Hayes comments on 11-20-17 Draft Panel Report
 - Gary Ginsberg comments on 11-20-17 Draft Panel Report
 - Dale Hattis comments on 11-20-17 Draft Panel Report.
 - Compilation of Panelist comments on SAB Draft RTR Methods Review Report

Meeting Summary

The public meeting was announced in the Federal Register and was conducted according to the meeting agenda. A summary of matters that were discussed and conclusions reached at the meeting is presented below.

December 5, 2017

Opening Statements

Dr. Bryan Bloomer, Designated Federal Officer (DFO) for the SAB RTR Methods Panel convened the meeting at 11:00 a.m. (Eastern Time) with a statement reminding the audience that the panel operates under the auspices of the Federal Advisory Committee Act (FACA). Dr. Bloomer then called the roll. He also reviewed the meeting materials posted to the meeting website, which had been provided to the panel and noted that a complete set of materials will remain available at the meeting website for reference purposes. He reminded everyone that panel deliberations are public and that any contacts among panelists or between panelists and the EPA or public are required to include the DFO. He noted that all panel members were appointed to provide individual expertise and advice, not to represent any organization. He stated that the SAB Staff Office had identified no financial conflicts of interest or appearance of a loss of impartiality for any panel member for this review. He also noted that minutes of the meeting were being taken to summarize discussions and action items in accordance with the requirements of FACA. He described the process for completing a final report to be sent to the Administrator, including the production of a public draft for review and approval by the Chartered Science Advisory Board (SAB).

Dr. Jay Turner, chair, reviewed the agenda for the meeting and no changes were made. He also summarized the objective of the meeting to review the draft panel report in response to the panel charge to peer review the draft EPA report, *Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study analysis (External Review Draft May, 2017)*.

Presentation by EPA: Mr. Chris Sarsony, EPA OAQPS, presented the Agency comments on the 11-20-17 draft report.

Public Comments: Dr. Bloomer noted that no written public comments were received and that no requests for presenting oral public comments during the teleconference were made.

Discussion of Draft Panel Report

The discussions occurred amongst panel members led by the panel chair. The chair indicated that editorial comments submitted prior to the teleconference as indicated in the Committee Members' Comments, or as identified going forward, were going to be corrected and included in the final draft. All panel members present agreed. The chair then indicated that discussion of the report's technical content would start with charge question 1 and that it was likely to be the longest discussion, with the most substantial issues to address and that after conclusion of that discussion it was likely the rest of the questions and issues would be resolved relatively quickly. Upon conclusion of the discussion of individual questions the panel would address the executive summary and the draft letter to the Administrator, in that order. The panelists present were in general agreement with the approach and discussion proceeded.

Charge Question 1, the three-tiered multipathway screening approach used in the RTR analyses

The panel discussed charge question 1 on the topic of the three-tiered multipathway screening approach used in the RTR analyses (see Agency Charge). The discussion was led by the panel chair and covered the following issues: screening analysis and probabilistic approaches; success of tiered approach for screening; field measurements and "ground truth-ing"; acknowledgement of progress since 2009 board review; fish consumption assumptions and data; and data accuracy issues.

Sensitivity analysis and probabilistic approaches were discussed. The panel discussed the Agency-provided Background Material. The panel decided that given this information it did not make sense for the panel to call for a full probabilistic approach to the tier 1 screening method and that the significant investment of Agency resources likely to be needed was not warranted at this time. The panel did agree the Agency should explore the use of probabilistic approaches for higher-level tiers.

The panel discussed data availability and a desire to have data presented in the RTR methodology report where such data are available. The panel agreed that they were not asking for the Agency to undertake new, extensive data collection efforts but to ensure that the text reflects a best practice to put forward such data where it exists.

The panel agreed the Agency should provide in future reports documentation of the Agency's systematic analysis of the approach including why certain methodological decisions were made. This pertains in particular to the use of data and its impact on screening method performance. The Agency should not be asked, for example, to forecast land use for the next 50 years but should be able to rely on existing data to support the screening methodology.

The panel indicated that data similar to the data presented in the email should be included in future RTR methodology reports. It might be useful to provide such data broken down as well, by industry analyzed or source category, for example.

The panel agreed to restructure the key recommendations section recommending to strike headers and to change the bullet items into paragraphs to ensure consistency with the rest of the report.

The panel report should remove any "color commentary" and focus on answering the questions. In particular, the discussion related to improvement since the 2009 review, the panel should make a simple statement acknowledging the progress since 2009.

Fish consumption assumptions were discussed. These discussions related to charge question 3 as well and were resolved as indicated below under that charge question.

Data accuracy issues were raised and discussed by a panelist. The panel agreed to incorporate specific suggestions at an appropriate level of discussion in the panel report. Overall the panel was appreciative of the Agency efforts to improve data accuracy in specific RTR analyses performed and encourages the Agency to continue the efforts going forward.

Charge Question 2, the risk equivalency factor methodology

The panel agreed that no changes were needed to the write up in response to charge question 2.

Charge Question 3, fishing and lake and pond assumptions

The panel discussed charge question three. The initial discussion revolved around the tone set by the term “highly unlikely” and the panel agreed to remove the term. The panel reemphasized that this methodology is intended to act as a screen and reminded themselves of the performance of the screening as indicated by the Agency at the face to face panel meeting in June and as documented in the email of November 9th (posted to the meeting website as a meeting material.)

The panel discussed the issue of partitioning to sediments versus pelagic species. They also discussed which fish carry highest chemical burdens and discussed the EPA assumptions put forward in the Agency report. The panel agreed to rephrase to specifically mention the 80/20 split and to ask the Agency to clarify the selection of this split and to consider geographic diversity and whether the split may need to vary, given that this is a screening analysis. Panelists were to provide additional references for consideration, specifically on erosion, contaminants and flow.

The panel agreed that it was appropriate to remove the mention of a “systematic review” on Page 23 because this was out of scope for the screening methodology and to reframe the approach suggested in the paragraph to use sensitivity analysis to identify most sensitive parameters.

The panel discussed fish consumption assumptions and agreed that panelists would provide a draft paragraph to the panel chair for consideration and inclusion.

Charge Question 4, lake data, plume rise, and meteorological data

The panel discussed charge question 4 and concluded that the discussion was satisfactory in the draft panel report.

Charge Question 5, the gardener scenario

The panel discussed charge question 5 and concluded that the discussion was satisfactory in the draft panel report.

Charge Question 6, the environmental risk screening approach

The panel discussed charge question 6. The panel chair indicated that additional clarification was desired regarding the statement on page 29 lines 31 and 32. The panel chair indicated that the best panelist to work with on that was not present on the call and the panel agreed the chair would work with

that panelist off-line to clarify the panel’s position on what analysis elements would be most helpful and to be more specific in the recommendation to the Agency in this report.

Charge Question 7, modeling approaches for urban/rural assessment

The panel agreed that the approach should answer the question “where are the people?” and the lead author and the panel chair would work together to adjust the panel report text to reflect this position. The panel agreed to replace the sentence on page 33 line 42 to reflect this and additional discussion occurred amongst the panelists regarding the reproducibility of approaches and the reliance on expert opinion, especially when different choices are made regarding classifications of urban and rural. The panel agreed the tool should be transparent and reproducible. Ideally the tool should provide a method that documents in a defensible way the Agency decision including if an analyst subjectively applies evaluations to inform the final results. The panel agreed the panel chair should modify the response to reflect these positions in the final draft SAB report.

Charge Question 8, the census block receptor check tool

The panel discussed charge question 8 and agreed to the panel lead writer to work with the panel chair to harmonize this response with the opinions arrived at during the discussion of charge question 7.

Executive Summary and Letter to the Administrator:

The panel empowered the chair to adjust the executive summary and the draft letter to the Administrator to reflect the discussion and agreement of the panel to be reviewed when the draft is sent out for concurrence by the panelists.

Clarifying Comments from Members of the Public: The DFO indicated that no requests to provide clarifying comments or questions from the public were submitted for the panel.

Summary and Next Steps:

After the deliberations on the charge questions concluded, the Chair mentioned that next steps are forthcoming in an email to the panelists from the DFO. The DFO indicated the report would be written over the next few months and will be sent out for “concurrence” or “non-concurrence” or “concurrence with comment” to all panelists. The report is likely to be submitted for quality review sometime in the upcoming spring time frame. The Designated Federal Officer adjourned the meeting at 2:58 pm ET.

Respectfully Submitted:

Certified as Accurate:

/s/
Bryan Bloomer, Ph.D.
Designated Federal Official

/s/
Dr. Jay R. Turner, Chair
SAB Risk and Technology Review (RTR)
Methods Review Panel

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 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 or teleconferences and approved by the Chartered SAB.

ATTACHMENT A

Other Attendees

**List of Members of the Public Who Participated On the Teleconference or Who Requested
Information on Accessing the Teleconference Line:
December 5th, 2017**

First Name	Last Name	Organization
Alexandra	Hamilton	Hunton and Williams
Amy	Lamson	EPA
Bradford	Frisby	National Lime Association
Cathe	Kalisz	American Petroleum Institute
Chris	Holder	ICF Inc.
Chris	Sarsony	EPA
Clint	Woods	Association of Air Pollution Control Agencies
Michael	Honeycutt	Texas Commission on Environmental Quality
Greg	Carter	ICF Inc.
Jeff	Novotny	AEP
Jonathan	De'Ath	National Lime Association
Im	Wilson	NY SOAG
Mel	Peppers	EPA
Margaret	McVey	ICF Inc.
Melissa	Fortenberry	Mississippi Department of the Environment
Sean	Reilly	E&E News
Sharon	Cooperstein	EPA
Stuart	Parker	IWP News
Thomas	Carpenter	EPA