



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR  
SCIENCE ADVISORY BOARD

June 26, 2017

**MEMORANDIUM**

**SUBJECT:** Addendum to March 28, 2017 Memorandum documenting the Determinations Associated with the Science Advisory Board (SAB) Review of EPA's Screening Methodologies to Support Risk and Technology Reviews (RTR)

**FROM:** Bryan Bloomer /s/  
Designated Federal Officer (DFO)  
EPA Science Advisory Board Staff Office (1400R)

**THRU:** Wanda Bright  
Ethics Officer  
EPA Science Advisory Board Staff Office (1400R)

**TO:** Christopher S. Zarba  
Director and Deputy Ethics Official  
EPA Science Advisory Board Staff Office (1400R)

The Director of the Science Advisory Board (SAB) Staff Office signed a memorandum dated March 28, 2017 that announced to the public the membership of EPA Science Advisory Board (SAB) Ad Hoc Risk and Technology Review Methods Panel (RTR Panel). The memorandum also documented the background information, and determinations that were used in selecting the members of the RTR Panel. Since that time additional information about the eligibility of a member has become available that impacts the final panel membership. On the basis of the documented criteria and the new information, the following candidates for the SAB Risk and Technology Review Methods Panel have been selected to participate in this review:

**SAB Risk and Technology Review Methods Panel:**

Dr. Jay Turner, Washington University (chair)  
Dr. Tami Bond, University of Illinois at Urbana-Champaign  
Dr. Tiffany Bredfeldt, Texas Commission on Environmental Quality  
Dr. Gregory Carmichael, University of Iowa  
Dr. Richard Di Giulio, Duke University  
Dr. Charles T. Driscoll, Jr., Syracuse University  
Dr. David Eastmond, University of California, Riverside  
Dr. Gary Ginsberg, Connecticut Department of Public Health  
Dr. Dale Hattis, Clark University





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March 28, 2017

**MEMORANDIUM**

**SUBJECT:** Determinations Associated with the Science Advisory Board (SAB)  
Review of EPA's Screening Methodologies to Support Risk and  
Technology Reviews (RTR)

**FROM:** Bryan Bloomer /s/  
Designated Federal Officer (DFO)  
EPA Science Advisory Board Staff Office (1400R)

**THRU:** Wanda Bright /s/  
Ethics Officer  
EPA Science Advisory Board Staff Office (1400R)

**TO:** Christopher S. Zarba  
Director and Deputy Ethics Official  
EPA Science Advisory Board Staff Office (1400R)

This memorandum documents the process and addresses the set of determinations that were used in forming the EPA Science Advisory Board (SAB) Ad Hoc Risk and Technology Review Methods Panel (RTR Panel). This memorandum provides background information, and addresses the set of determinations that were used in selecting the SAB Risk and Technology Review Methods Panel to conduct this review, including:

1. The type of review body that will be used to conduct the review, and the nature of the review;
2. The types of expertise needed to address the general charge;
3. Financial conflict of interest considerations, including identification of parties who are potentially interested in or may be affected by the topic to be reviewed;
4. How regulations concerning "appearance of a loss of impartiality" pursuant to 5 C.F.R. § 2635.502 apply to members of the committee;
5. Other considerations that might affect the objectivity of members of the committee; and
6. How individuals were selected for the committee.

## DETERMINATIONS:

1. The type of review body that will be used to conduct the review, and the nature of this review.

The EPA's Office of Air Quality Planning and Standards (OAQPS) recently developed its draft EPA report entitled "Screening Methodologies to Support Risk and Technology Reviews (RTR)." This draft report describes newly developed screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA's Maximum Available Control Technologies (MACT) standards. These include screening methods to estimate the potential for multi-pathway risks (e.g., ingestion, inhalation) from persistent and bioaccumulative HAPs, screening methods to estimate potential environmental risks, and recent enhancements to the EPA's inhalation risk assessment methodology. The peer review will be conducted by a SAB *Ad Hoc* Review Panel and will provide the EPA Administrator with advice and recommendations. This Panel, known as the Risk and Technology Review Methods Panel (RTR Methods Panel) will be composed of SAB members and invited outside experts.

2. The types of expertise needed to address the general charge.

A Federal Register notice was published on August 9, 2016 (Volume 81, Number 153, pages 52682-52684) requesting nominations of nationally and internationally recognized scientists with demonstrated expertise in the following disciplines: human health risk assessment, ecological risk assessment, exposure assessment, toxicology, ecology, aquatic toxicology, air toxics, and dispersion modeling.

3. Financial conflict of interest considerations, including identification of parties who are potentially interested in or may be affected by the topic reviewed.

- (a) Identification of parties (or class of parties) whose financial interests may be affected by the matter to be reviewed: The SAB review may affect EPA's broad guidance for the screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA's Maximum Available Control Technologies (MACT) standards. *However, the SAB review does not involve the interests of a discrete and identifiable class of parties, nor does it involve specific parties.*
- (b) Conflict of interest considerations: For Financial Conflict of Interest (COI) issues, the basic 18 U.S. Code § 208 provision states that: "An employee is prohibited from *participating personally or substantially* in an official capacity in any *particular matter* in which he, to his knowledge, or any person whose interests are imputed to him under this statute has a financial interest, if the particular matter will have a *direct and predictable effect* on that interest [emphasis added]." For a conflict of interest to be present, all elements in the above provision must be present.
  - (i) Does the general charge to the committee involve a particular matter? A "particular matter" refers to matters that "...will involve deliberation, decision, or action that is focused upon the interest of specific people, or a discrete and identifiable class of

people.” It does not refer to “...consideration or adoption of broad policy options directed to the interests of a large and diverse group of people.” [5 C.F.R. § 2640.103(a)(1)]. *The review of screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA’s Maximum Available Control Technologies (MACT) standards does not focus on the interests of specific parties or a discrete and identifiable class of parties. As such, the charge to the SAB RTR Methods Panel constitutes simply a matter, rather than a particular matter.*

(ii) Will there be personal and substantial participation on the part of the committee members?

Participating personally means direct participation in this review. Participating substantially refers to involvement that is of significance to the matter under consideration. [5 C.F.R. § 2640.103(a)(2)]. *The charge to the SAB RTR Methods Panel to review screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA’s Maximum Available Control Technologies (MACT) standards constitutes a matter, rather than a particular matter. When a charge is not a particular matter, then 18 U.S.C. 208 does not apply and a COI cannot arise.*

(iii) Will there be a direct and predictable effect on committee members’ financial interests? A direct effect on a participant’s financial interest exists if “... a close causal link exists between any decision or action to be taken in the matter on the financial interest...”. A particular matter that has an effect on a financial interest only as a consequence of its effects on the general economy is not considered to have a direct effect.” [5 C.F.R. § 2640.103(a)(ii)]. *The charge to the SAB RTR Methods Panel to review screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA’s Maximum Available Control Technologies (MACT) standards constitutes a matter, rather than a particular matter. When a charge is not a particular matter, then 18 U.S.C. 208 does not apply and a COI cannot arise.*

4. How regulations concerning “appearance of a loss of impartiality” pursuant to 5 C.F.R. § 2635.502 apply to members of the committee.

The Code of Federal Regulations at 5 C.F.R. 2635(a)(2) describes general requirements for considering an appearance of a loss of impartiality for employees of the Executive Branch (including Special Government Employees) participating in a *particular matter involving specific parties*. *The SAB Staff Office has determined that the charge to the SAB RTR Methods Panel to review the screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA’s Maximum Available Control Technologies (MACT) standards is not a particular matter involving specific parties; i.e., this matter does not involve “any judicial or other proceeding, application, request for a ruling or other determination, contract, claim, controversy, investigation, charge, accusation, arrest or other particular matter involving a specific party or*

*parties in which the United States is a party or has a direct and substantial interest” [5 C.F.R. 2637.102(a)(7)].*

5. Other considerations that might affect the objectivity of members of the committee.

Members of SAB committees and panels must be scientific and technical experts who are objective and open-minded, able to engage in deliberative discussions with scientists who may have disparate perspectives. To evaluate candidates, the SAB Staff Office considers information provided by the public in response to the invitation for public comment on the candidates, information provided by candidates (including on the EPA Form 3110-48), and information independently gathered by SAB staff.

As part of a determination that committee or panel members are objective and open-minded on the topic of the review, and consistent with the agency’s Peer Review Policy, the SAB Staff Office considers previous involvement in the matter before the committee or panel. This evaluation includes responses provided by candidates to the following supplemental questions contained in EPA Form 3110-48:

- (a) Do you know of any reason that you might be unable to provide impartial advice on the matter to come before the panel/committee/subcommittee or any reason that your impartiality in the matter might be questioned?
- (b) Have you had any current or previous involvement with the review document(s) under consideration including authorship, collaboration with the authors, or previous peer review functions? If so, please identify and describe that involvement.
- (c) Have you served on previous advisory panels, committees or subcommittees that have addressed the topic under consideration? If so, please identify those activities.
- (d) Have you made any public statements (written or oral) on the issue that would indicate to an observer that you have taken a position on the issue under consideration? If so, please identify those statements.

*The SAB Staff Office has determined that there is no reason to believe that participating members of the SAB Risk and Technology Review Methods Panel (RTR Methods Panel) would not be objective and open-minded and able to engage in deliberative discussions with scientists who may have disparate points of view on the matter before the Panel.*

6. How individuals were selected for the Risk and Technology Review Methods Review.

For the SAB and its standing committees, a balanced committee or panel is characterized by candidates who possess the necessary domains of scientific knowledge, relevant perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the general charge. Specific criteria to be used in evaluating an individual panel member include: (a) scientific and/or technical expertise, knowledge, and experience; (b) availability and willingness to serve; (c) absence of financial conflicts of interest; (d) absence of an appearance of a loss of impartiality pursuant to 5 C.F.R. § 2635.502; (e) skills working on advisory committees and panels (including objectivity and open-mindedness); and (f) for the committee as a whole, diversity of scientific expertise and viewpoints.

On the basis of the candidates' credentials and willingness to serve on the panel, the SAB Staff Office identified twenty-seven (27) nominees for the "List of Candidates". On November 3, 2016, the SAB Staff Office posted a notice on the SAB Web site inviting public comments on the prospective candidates being considered for the Panel. In particular, the notice on the Web site stated that the Staff Office would welcome any information, analysis or documentation that the SAB Staff Office should consider in evaluating the candidates. The notice also asked that any advice, observations or comments which would be helpful in selecting the final candidates be provided to the SAB Staff Office no later than November 28, 2016. The SAB Staff Office received one set of submissions with comments on the List of Candidates for the RTR Methods Review Panel.

The SAB Staff Office Director makes the final decision about who participates based on all of the relevant information, including a review of each member's confidential financial disclosure form (EPA Form 3110-48), the responses to the questions above, public comments, and information independently gathered by SAB Staff.

On the basis of the above-specified criteria, the following candidates for the SAB Risk and Technology Review Methods Panel have been selected to participate in the review of the screening methods designed to assess the risk to public health and the environment that would remain after stationary sources of hazardous air pollutants come into compliance with the EPA's Maximum Available Control Technologies (MACT) standards:

SAB Risk and Technology Review Methods Panel:

Dr. Jay Turner, Washington University (chair)  
Dr. Tami Bond, University of Illinois at Urbana-Champaign  
Dr. Tiffany Bredfeldt, Texas Commission on Environmental Quality  
Dr. Gregory Carmichael, University of Iowa  
Dr. Richard Di Giulio, Duke University  
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Dr. David Eastmond, University of California, Riverside  
Dr. Gary Ginsberg, Connecticut Department of Public Health  
Dr. Rolf Halden, Arizona State University  
Dr. Dale Hattis, Clark University  
Dr. Stanley Hayes, Ramboll Environmental  
Dr. Joseph Irudayaraj, Purdue University  
Dr. Abby A. Li, Exponent Incorporated  
Dr. Slawo Lomnicki, Louisiana State University  
Dr. Sidney Marlborough, Noble Energy, Inc  
Dr. P. Barry Ryan, Emory University  
Dr. James Sadd, Occidental College  
Dr. Veronica Vieira, University of California, Irvine

