



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF THE ADMINISTRATOR  
SCIENCE ADVISORY BOARD

May 11, 2007

**MEMORANDUM**

**SUBJECT:** U.S. EPA Science Advisory Board (SAB) Panel for the Review of EPA's 2007 Report on the Environment (ROE-07 Review Panel) – Determination of Panel Membership

**FROM:** Thomas M. Armitage, Ph.D. */Signed/*  
Designated Federal Officers  
EPA Science Advisory Board Staff Office (1400F)

**THRU:** Anthony F. Maciorowski, Ph.D. */Signed/*  
Deputy Director  
EPA Science Advisory Board Staff Office (1400F)

**TO:** Vanessa Vu, Ph.D.  
Director  
EPA Science Advisory Board Staff Office (1400F)

This memorandum documents the process and addresses the set of determinations used in forming this Science Advisory Board Panel. It provides background information on the subject SAB activity and addresses:

1. The general charge developed for the Panel;
2. The type of panel that will be used to conduct the review, the name of the Panel, and identification of the types of expertise needed to address the charge;
3. How individuals were placed on the "short list" of candidates for the Panel;
4. Identification of parties who are potentially interested in or may be affected by the topic to be reviewed;
5. Whether the charge involves a particular matter and how conflict of interest regulations apply to members of the panel; and
6. Selection of Panel membership.

## **A. Background**

EPA's Report on the Environment 2007 (ROE-07) was developed to answer key policy-relevant scientific questions about the current status of, and trends in, the condition of the environment and human health. Twenty-six questions relevant to EPA's current regulatory and programmatic activities and mission are addressed in the ROE-07. These questions have been answered in the ROE-07 using a suite of environmental and human health indicators that, in EPA's judgment, provide the most reliable available data and information. EPA intends to use the ROE-07 to help frame strategic planning discussions about future Agency program directions and activities.

In 2003, EPA released its first draft Report on the Environment. The 2003 report was reviewed by the Science Advisory Board (the SAB review of that report is available at: [http://www.epa.gov/sab/pdf/sab\\_05\\_004.pdf](http://www.epa.gov/sab/pdf/sab_05_004.pdf)). EPA has used advice provided by the Science Advisory Board on the 2003 report, as well as extensive comments from the public and other stakeholders, to develop an improved and updated ROE-07. Improvements that have been incorporated into the ROE-07 include an updated set of national and regional indicators selected on the basis of revised definitions and criteria.

The ROE-07 is organized into five chapters: Air, Water, Land, Human Health, and Ecological Condition. The Air, Water, and Land chapters focus on trends in these environmental media and their effects on human health and ecological systems. The Human Health and Ecological condition chapters follow with information on overall trends in human health and ecological systems. The ROE-07 consists of a Technical Document containing the scientific underpinnings the report, a Public Document written for concerned citizens, and an "e-ROE" that provides electronic access to materials in the report. EPA's Office of Research and Development has requested that the Science Advisory Board review the ROE-07 technical document.

## **B. Determinations**

### **1) The general charge to the Panel:**

The SAB has been asked to comment on: the adequacy of the formulation and scope of the questions, the appropriateness of the indicators in answering the questions, the accuracy of the characterization of gaps and limitations, the degree to which the gaps and limitations of the indicators limit the ability to answer the questions, the appropriateness of regionalization of national indicators, the utility of regional indicators in the report, and the overall quality of the report with respect to technical accuracy, clarity, and appropriateness of the level of communication.

### **2) Type of panel that will be used to conduct the review, the types of expertise needed to address the charge, and the name of the panel:**

The advisory activity will be conducted by an EPA Science Advisory Board *Ad Hoc* Panel. The SAB Staff Office announced to the public through a *Federal Register* notice on May 25,

2006 that it was soliciting nominations of nationally recognized scientists with expertise in the following areas to serve on the panel: designing, implementing, and applying indicator information and data at regional and national scales to evaluate the condition of air, water, and land environments, as well as human health and ecological condition. The name of the panel is the “SAB Expert Panel for the review of EPA’s 2007 Report on the Environment” (ROE-07 Review Panel).

### **3) How individuals were placed on the “short list”:**

The SAB Staff Office identified 35 experts to be considered for the Panel. On July 31, 2006 the SAB Staff Office posted a notice on the SAB website inviting public comments on the “short list” of candidates for the Panel. In particular, the notice stated that the Staff Office would welcome any information pertinent to the candidate’s potential service on the Panel and/or expert workgroups of the panel, and asked that they be submitted no later than August 21, 2006. *The SAB Staff Office received 19 comments on the “short list” of candidates for the ROE-07 Review Panel from individuals and/or organizations (see attachment for the list of commenters).*

### **4) Identification of parties who are potentially interested in or may be affected by the topic to be reviewed:**

Potentially interested parties may include: 1) federal, state, and local government agencies; 2) non-governmental organizations that focus on environmental policy development; 3) A broad range of academic and industry researchers; or academic, industry, and government sponsored research institutes addressing environmental indicators and national environmental trends.

### **5) Whether the charge involves a particular matter and how conflict of interest regulations apply to members of the panel:**

18 U.S.C 208 provision states that:

“An employee is prohibited from participating personally and 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.”

For a conflict of interest to be present, all elements in the above provision must be present. If an element is missing, the issue does not involve a formal conflict of interest. However, the general provisions in the “appearance of a lack of impartiality guidelines” may still apply and need to be considered.

#### **Personal and Substantial Participation:**

Participating personally means participating directly. Participating substantially refers to involvement that is of significance to the matter [5C.F.R. 2640.103(a)(2)]. For this advisory activity, panel members will be participating personally in the matter through attendance at meetings, teleconferences and other means.

### Direct and Predictable Effect:

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 and any expected effect of the matter on the financial interest...A particular matter does not have a direct effect...if the chain of causation is attenuated or is contingent upon the occurrence of events that are speculative or that are independent of, and unrelated to, the matter. 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)(i)]. A predictable effect exists if, "...there is an actual, as opposed to a speculative, possibility that the matter will affect the financial interest." [5 C.F.R. 2640.103(a)(ii)].

### Particular Matter:

A "particular matter" refers to matters that "...will involve deliberations, decision, or action that is focused upon the interests 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 divers group of people." [5 C.F.R. 2640.103 (a)(1)].

The ROE-07 Review Panel's activity in addressing EPA's 2007 report on the Environment charge does not constitute a particular matter because it does not include matters that involve deliberation, decision or action that is focused upon the interest of specific people, or a discrete and identifiable class of people. The SAB Panel's activity does not include matters which involve formal parties or extend to legislation or policy-making that is narrowly focused upon the interests of a discrete and identifiable class of persons. The ROE-07 is concerned with reporting a variety of environmental indicators for public information purposes and tracking environmental progress in a number of areas. As such, this is something that is directed to the interests of a large and diverse group of people and is a matter of general applicability. Thus, the criterion for particular matter concerning specific parties is not met and no financial conflict of interest as defined in 18 USC 208 exists.

### Appearance of a Lack of Impartiality Considerations:

The Code of Federal Regulations [5 C.F.R. 2635.502(a)] states that:

"Where an employee knows that a particular matter involving specific parties is likely to have a direct and predictable effect on the financial interest of a member of his household, or knows that a person with who he has a covered relationship is or represents a party to such matter, and where the person determines that the circumstances would cause a reasonable person with knowledge of the relevant facts to question his impartiality in the matter, the employee should not participate in the matter unless he has informed the agency designee of the appearance problem and received authorization from the agency designee."

Further, 5 C.F.R. 2635.502(a)(2) states that:

“An employee who is concerned that circumstances other than those specifically described in this section would raise a question regarding his impartiality should use the process described in this section to determine whether he should or should not participate in a particular matter.”

Candidates were evaluated against the 5 C.F.R. 2635(a)(2) general requirements for considering an appearance of a lack of impartiality. Information used in this evaluation has come from information provided by potential advisory panel members (including, but not limited to, EPA 3110-48 confidential financial disclosure forms) and public comment as well as their responses to the following questions:

1. Do you know of any reason why you might be unable to provide impartial advice on EPA’s draft Report on the Environment – 2007 or any reason why your impartiality in the matter might be questioned?
2. Have you had any previous involvement with EPA’s draft Report on the Environment – 2007 including authorship, collaboration with authors, or previous review functions? If so, identify those activities.
3. Have you served on previous advisory panels or committees that addressed EPA’s draft Report on the Environment – 2007? If so identify those activities.
4. Have you made any public statements (written or oral) or taken a position on the subject of EPA’s draft Report on the Environment – 2007? If so, please identify those statements.

As a result of a review of all relevant information including financial disclosure, the responses to the four questions above, and public comments, the Deputy Ethics Official of the Science Advisory Board, in consultation with the SAB Ethics and FACA Policy Officer, has determined that there are no conflicts of interest or appearances of a lack of impartiality for the members of this panel.

#### **6) Selection of Panel membership:**

The SAB Staff Director makes the decision about who serves on the ROE-07 Review Panel. For the SAB Staff Office, a balanced committee or panel is characterized by inclusion of candidates who possess the necessary domains of knowledge, the relevant scientific perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the charge. Specific criteria to be used in evaluating an individual Panel member include: (a) scientific and/or technical expertise, knowledge, and experience (primary factors); (b) availability and willingness to serve; (c) absence of financial conflicts of interest; (d) absence of an appearance of a lack of impartiality; and (e) skills working in committees, subcommittees and advisory panels; and, for the Panel as a whole, (f) diversity of, and balance among, scientific expertise, viewpoints, etc. The final panel was selected from candidates on the “Short List” and appointed members of the SAB. The membership of the Panel includes the following individuals:

1. Dr. Deborah Swackhamer, University of Minnesota (MN) (Chair)
2. Dr. Henry Anderson, Wisconsin Division of Public Health (WI)
3. Dr. Fred Benfield, Virginia Polytechnic Institute and State University (VA)
4. Dr. Mark Borchardt, Marshfield Clinic Research Foundation (WI)
5. Dr. Timothy Buckley, The Ohio State University (OH)
6. Dr. Aaron Cohen, Health Effects Institute (MA)
7. Dr. David Dzombak, Carnegie Mellon University (PA)
8. Dr. Dennis Grossman, Abt Associates (MD)
9. Dr. Phillip Hopke, Clarkson University (NY)
10. Dr. George Lambert, Robert Wood Johnson Medical School, UMDNJ (NJ)
11. Dr. Allan Legge, Biosphere Solutions, (Canada)
12. Dr. Maria Morandi, University of Texas at Houston (TX)
13. Dr. Deborah Neher, University of Vermont (VT)
14. Dr. Duncan Patten, Montana State University (MT)
15. Dr. Ramesh Reddy, University of Florida (FL)
16. Dr. Gary Sayler, University of Tennessee (TN)
17. Dr. Alan Steinman, Grand Valley State University (MI)
18. Dr. John Suen, California State University, Fresno (CA)
19. Dr. Robert Twiss, University of California, Berkeley (CA)
20. Dr. Judith Weis, Rutgers University (NJ)
21. Dr. Barry Wilson, University of California, Davis (CA)

Concurred,

*/Signed/*

May 14, 2007

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Vanessa Vu, Ph.D.  
Director  
EPA Science Advisory Board Staff Office (1400F)

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Date

## Attachment

### List of Commenters on “short list” candidates for the ROE-07 Review Panel

1. Apter, Arthur, City University of New York – email dated 8/23/06
2. Benes, Sharon, E. California State University, Fresno, email dated 8/22/06
3. Davis, Grant, The Bay Institute, email dated 8/30/06
4. Frey, Frederick, Massachusetts Institute of Technology, email dated 8/23/06
5. Goettel, Kenneth, Goettel and Associates, Inc, email dated 8/22/06
6. Hallowell, Coke, email dated 8/24/06
7. Haze, Steve, Millerton Area Watershed Coalition, email dated 8/22/0
8. Johnson, Christopher, Technical Resource Council, email dated 8/22/06
9. Longley, Karl, California State University, Fresno, email dated 8/22/06
10. Mortyn, Graham, Universitat Autònoma de Barcelona, email dated 8/24/06
11. Obata, Masaaki, Kyoto University, email dated 8/23/06
12. Putirka, Keith, California State University, Fresno, email dated 8/22/06
13. Pyle, Barbara, email dated 8/23/06
14. Sangster, Janet, Fresno County Democratic Women’s Club, email dated 8/23/06
15. Sullivan, Terrence, M. Brookhaven National Laboratory, email dated 8/24/06
16. Temple, Gary L., Sierra and Foothill Citizens Alliance, email dated 8/22/06
17. Thompson, Eldon, W. the Western Mav’rick, email dated 8/22/06
18. Wang, Zhi, California State University, Fresno, email dated 8/23/06
19. Warnke, Detlef, California State University, East Bay, email dated 8/22/06