



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

February 17, 2004

**OFFICE OF THE ADMINISTRATOR  
EPA SCIENCE ADVISORY BOARD**

MEMORANDUM

**SUBJECT:** U.S. EPA Science Advisory Board (SAB) Advisory Panel on EPA's Report on the Environment (ROE) - Panel Determination Memorandum

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This memorandum addresses the set of determinations that were necessary for forming a Science Advisory Board Panel. It provides background information on the subject SAB activity and addresses:

- 1) the 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 Panel Chair; the types of expertise needed to address the charge;
- 3) identification of parties who are potentially interested in or may be affected by the topic to be reviewed;
- 4) Conflict of Interest Considerations (whether the charge involves a Particular Matter and how conflict of interest regulations under 18 U.S.C. 208 apply to members of the panel;
- 5) how regulations concerning "appearance of lack of impartiality, under 5 C.F.R. 2635.502 apply to members of the panel;
- 6) how individuals were placed on the "Short List" posted on the SAB website as candidates for the panel; and.
- 7) how individuals were placed on the final panel.

## A. Background

The Agency is seeking the Science Advisory Board's (SAB) advice in the development of the Agency's Report on the Environment. EPA's "Environmental Indicators Initiative" will improve the Agency's ability to report on the status of and trends in environmental conditions and their impacts on human health and the nation's natural resources. Background materials are provided on the EPA website at <http://www.epa.gov/indicators>. Using available data and indicators, EPA has published a draft "Report on the Environment" (ROE) that addresses many of the public's frequently-asked questions and documents the progress that the United States is making in meeting our national environmental and health protection goals. The ROE analyzes and describes current national environmental trends using existing data, identifies data gaps and research needs, and discusses the challenges faced in filling those gaps.

## B. Determinations

- 1) The Charge to the Panel: The SAB Staff Office and the Agency negotiated the following charge in consultation with the Advisory Panel:

The US Environmental Protection Agency (EPA)'s Draft Report on the Environment 2003 (ROE) describes for the first time what EPA knows and does not know about the current state of the environment at the national level and how the environment is changing. The ROE is presented in two volumes: a detailed *Technical Document*, and a shorter general *Public Report*.

To develop the ROE, EPA framed environmental quality issues by: 1) identifying key questions; 2) identifying an initial set of indicators; and 3) reviewing and selecting the indicators and supporting data to be included in the report. Historically, EPA has used a set of indicators to measure progress in reducing environmental pollution through its major regulatory programs. These traditional measures for air, water and land are discussed in Chapters 1, 2, and 3 of the *Technical Document* and the *Public Report*, respectively. The Agency, together with its Federal, state and tribal partners are also moving toward supplementing these traditional measures with indicators that provide a better understanding of trends in human health and environmental condition. Chapter 4 of the *Technical Document* and the *Public Report* presents key elements that begin to establish the basis for developing and using environmental public health indicators, and Chapter 5 does the same for essential ecological attributes related to ecological condition. Chapter 6 of the *Public Report* identifies key challenges in the development and implementation of better indicators of human health and environmental condition.

**Question 1.** Please comment on the approaches, processes, or frameworks used in describing the environmental status and trends and how to measure and manage for environmental results. Do you have any suggestions to enhance the scientific analysis and presentation of the information?

**Question 2.** Do the discussions of indicators in the *Technical Document* accurately portray the current state-of- the-science? Are the conclusions supported by the scientific information provided given the existing data gaps and limitations?

**Question 3.** Conventional Agency practice has been to measure and reduce emissions and subsequent exposure to pollutants. Can you suggest how measurements for human health and ecological condition impacts resulting from environmental pollution could be more effectively addressed?

**Question 4.** The ROE focuses on indicators at the national scale. Regional indicators are highlighted in a few case studies. How useful are national indicators in presenting information on the quality of the environment? How much consistency is necessary in indicator measurements and data quality across the country? Should more detailed regional data and indicators be accommodated in a national overview of the environment, and how could this regional data be accommodated?

**Question 5.** The Public Report is intended to summarize the Technical Document for a broad, non-technical public audience. Does the Public Report accurately and adequately reflect the technical content, including the gaps and limitations, of the Technical Document?

- 2) Type of Panel That Will Be Used To Conduct The Review, The Name Of The Panel, And Identification Of The Panel Chair, And Types Of Expertise Needed To Address The Charge: The advisory will be conducted by an EPA Science Advisory Board *Ad Hoc* Panel. The panel is entitled, “Advisory Panel on EPA’s Report on the Environment”. An FR notice was published on June 17, 2003 (widecast) requesting nominations from which a “short list” was selected and posted on the SAB website on October 22, 2003 (Attachments 1, 2; [http://www.epa.gov/sab/pdf/roepanel\\_shortlist\\_bios.pdf](http://www.epa.gov/sab/pdf/roepanel_shortlist_bios.pdf)). The FR notice indicated the expertise areas that might be needed to form the panel: *epidemiology of environmental pollutants, human exposure to environmental pollutants, human health risk assessment of environmental pollutants, natural resources management, whole ecosystems research, ecological risk assessment, ecosystems sustainability, environmental indicators, water resources management, land use management, waste management, emergency response and preparedness, and air quality.*
- 3) Identification Of Parties Who Are Potentially Interested In Or May Be Affected By The Topic To Be Reviewed: Potentially interested parties include federal, state and local government agencies, elected officials, and non-government organizations that focus on environmental policy development. In addition, a broad range of academic/industry researchers or academic/industry/government sponsored research institutes addressing environmental indicators and national environmental trends would be interested in in this topic.
- 4) Conflict Of Interest Considerations: For Financial Conflict of Interest (COI) issues, the basic 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 [emphasis added].” 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 impartiality guidelines must still apply and need to be considered.

- a) Does the charge involve a Specific Party Particular Matter? A “**particular matter**” refers to matters that “...will involve deliberation, 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 diverse group of people.” [5 C.F.R. 2640.103 (a)(1)]

The SAB Panel’s activity in addressing the EPA’s Report on the Environment charge does not constitute a particular matter in that 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 persons. 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 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 criteria for particular matter concerning specific parties is not met and no financial conflict of interest as defined in 18 USC 208 exists.

- b) Additional Elements In The Conflict Of Interest Determination: Because this does not constitute a particular matter involving specific parties, the chain of elements leading to a determination that a conflict of interest exists is broken and no such conflict exists. There is no need to pursue the additional elements in determining the existence of a conflict of interest (i.e., Personal and Substantial Participation; Direct and Predictable Effect on Members Financial Interest).

- 5) How Will Regulations Concerning “Appearance Of Lack Of Impartiality” Under 5 C.F.R. 2635.502, And Other Ethics Factors, Apply To Members Of The Panel: 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 whom 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.”

There are some individuals who serve on this panel who have in place, or are applying for, EPA grants, cooperative agreements and contracts broadly within a few of the data needs areas covered only in a very general way by the ROE. However, the chain of events that would lead to a finding of a financial conflict of interest for a grant/cooperative agreement or contract is attenuated by the fact that the ROE constitutes a matter of general applicability and not a particular matter effecting specific parties. As a matter of general applicability, grants/cooperative agreements and contracts do not constitute an “appearance of a lack of impartiality” as there is no direct and predictable effect expected on future ROE related work as a result of the review. Therefore, any effect on future work is likely to be speculative in nature. Thus, the criterion at 5 CFR 263.502 (a) is not met. Cooperative agreements and contracts may present a different situations and each member was evaluated to determine whether their financial interest in existing cooperative agreements and contracts constitutes an “appearance of a lack of impartiality.”

To ascertain whether there was any potentially-disqualifying involvement with the topic of the ROE advisory, which would indicate an appearance of a lack of impartiality, the following five (5) questions were posed to all candidates for the ROE review:

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

Both the ROE DFO, the SAB Ethics and FACA Policy Officer and the SAB Deputy Ethics Official (who also serves as the Director of the Science Advisory Board) have reviewed the response to the above (5) questions provided by each candidate for the ROE Panel and, in consultation with the Alternate Agency Ethics Official, have determined that there is no appearance of a lack of impartiality on the part of the selectees for the ROE Panel.

- 6) How Individuals Were Placed On The “Short List: Seventy-four (74) individuals were nominated for membership on the ROE Panel. On the basis of the candidates’ qualifications, the SAB Staff Office made the decision to put 55 nominees on the “short list”. On October 22, 2003, the SAB Staff Office posted a notice on the SAB Web site inviting public comments on the “short list” of 55 prospective candidates for the Panel. That notice stated that SAB staff reviewed the nominations for the Panel, and identified a “short list” of 55

based on the qualifications and interest of the nominees.

The SAB Staff Office requested public comments on the list of the ROE Panel candidates. 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 on the “Short List”, and 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 12, 2003. *The SAB Staff Office received no comments on any “short list” candidate for the ROE Panel.*

#### 7) How Individuals Were Selected For The Final Panel

The SAB Staff Office Director—in consultation with SAB Staff and the ROE Panel Chair—makes the final decision about who serves on the Review Panel during the “Panel Selection” phase. Selection criteria included: scientific and technical credentials and expertise; the need to maintain a balance with respect to members’ qualifying expertise, background and perspectives; willingness to serve on the subcommittee, and availability to meet during the proposed time periods; and a candidate’s prior involvement with the topic under consideration. Selectees for the ROE Advisory Review Panel have backgrounds that include experience with academia, states, industry, non-Governmental organizations (NGOs) and consultant groups. The final panel was selected from candidates on the “Short List”. However, in order to provide additional expertise in the areas of public health, epidemiology, biomonitoring, and human exposure, Drs. Timothy Buckley, George Lambert, and Maria Morandi who are appointed members to the Board and SAB Committees were added to the panel.

*Accordingly, based on the above-specified criteria, a ROE Advisory Panel of the following twenty-two (22) experts was selected:*

1. Dr. Virginia Dale, Oak Ridge National Laboratories (TN) (Chair)
2. Dr Mark Bain, Cornell University (NY)
3. Dr. Phillip Bromberg, UNC Chapel Hill (NC)
4. Dr. Timothy Buckley, Johns Hopkins University (MD)
5. Dr. Joseph Bunnell, USGS (VA)
6. Dr. Anne Marie Gebhart, Underwriters Laboratories (IL)
7. Dr. Joseph Helble, University of Connecticut (CT)
8. Dr. Arturo Keller UC, Santa Barbara (CA)
9. Dr. Charles Kolb, Aerodyne Research Inc. (MA)
10. Dr. George Lambert, Robert Wood Johnson Medical School/ University of Medicine and Dentistry of New Jersey (NJ)
11. Mr. Norman LeBlanc, Hampton Roads Sanitation District (VA)
12. Dr. John McManus, University of Miami (FL)
13. Dr. Maria Morandi, University of Texas, Houston Health Sciences Center (TX)
14. Dr. David Ozonoff, Boston University (MA)
15. Dr. Kathryn Saterson, Duke University (NC)
16. Dr. Peter Scheff, University of Illinois, Chicago (IL)

17. Dr. Oswald Schmitz, Yale University (CT)
18. Dr. Mark Schwartz, University of California (CA)
19. Dr. Alan Steinman, Grand Valley State University (MI)
20. Dr. Stephen Trombulak, Middlebury College (VT)
21. Dr. Cynthia Warrick, University Texas Health Science Center, Houston (TX)
22. Dr. Barry Wilson, UC Davis (CA)

Concurred,

*/Signed/*

**2/17/04**

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Vanessa Vu, Ph.D.

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Date

Director

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