



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR  
SCIENCE ADVISORY BOARD

**MEMORANDUM**

July 5, 2011

**SUBJECT:** Formation of SAB Radiation Advisory Committee (RAC) Augmented with Additional Experts for Providing Advice on the Proposed Revisions to the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)

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**THRU:** Wanda Bright /S/  
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**TO:** Vanessa T. Vu, Ph.D  
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The EPA's Office of Radiation and Indoor Air (ORIA), on behalf of the Multi-Agency Federal MARSSIM Workgroup, which is composed of the four federal agencies having authority and control over radioactive materials (the U.S.EPA, U.S. Nuclear Regulatory Commission, U.S. Department of Energy, and U.S. Department of Defense), is requesting that the Science Advisory Board provide independent advice on proposed changes to the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). The MARSSIM is the official multi-agency consensus document on planning, coordinating, evaluating and documenting environmental radiological surveys prepared by those federal agencies having authority and control over radioactive materials. Specifically, the MARSSIM provides federal consensus information on planning, conducting, evaluating, and documenting building surface and surface soil final status radiological surveys for demonstrating compliance with dose or risk-based regulations or standards. This effort reflects an extension and continuance of the multi-agency initiative to provide consistent federal consensus guidance on clean up of radioactively-contaminated sites.

This memorandum addresses the set of determinations that were necessary to form an SAB panel for providing advice on revisions to MARSSIM, including:

- (A) The type of review body that will be used to provide advice, and the nature of the review;

- (B) The list of candidates to be considered for the panel;
- (C) Financial conflict of interest considerations, including identification of parties who are potentially interested in or may be affected by the topic to be reviewed;
- (D) How regulations concerning “appearance of a lack of impartiality,” pursuant to 5 C.F.R. § 2635.502, apply to members of the Panel; and
- (E) The selection of Panel members.

**DETERMINATIONS:**

- (A) The type of review body that will be used to conduct the review, and the nature of this review.

The SAB Radiation Advisory Committee (RAC) will be augmented with additional experts to provide advice on proposed revisions that may be needed to update the current MARSSIM.

- (B) The list of candidates to be considered for the Panel.

The SAB Staff Office requested public nominations of experts in a *Federal Register* notice (75FR 65014) dated October 21, 2010 to augment expertise to the Radiation Advisory Committee (RAC) to form an SAB panel to provide advice on the revision of MARSSIM according to the SAB process for panel formation described in the *Overview of the Panel Formation Process at the Environmental Protection Agency Science Advisory Board*, which can be found on the SAB’s Web site at: <http://www.epa.gov/sab/pdf/ec0210.pdf>. To augment expertise on the RAC, the SAB Staff Office was seeking nominations of nationally and internationally recognized scientists and engineers with demonstrated expertise and experience in one or more of the following areas: environmental monitoring and sampling, geology, hydrogeology, measurement protocols for radionuclides, metrology, radiation science and statistics.

The SAB Staff Office identified 12 experts to be considered to augment the Radiation Advisory Committee (RAC) for this advisory activity. On May 5, 2011, the SAB Staff Office posted a notice on the SAB Web site inviting public comments on members of the RAC and the List of Candidates for the Panel by May 26, 2011. The SAB Staff Office received no comments.

- (C) Financial conflict of interest considerations, including identification of parties who are potentially interested in or may be affected by the topic to be reviewed.

(a) Identification of parties who are potentially interested in or may be affected by the topic to be reviewed: Potentially interested and affected parties include federal agencies and all other parties having radionuclides present on their site, including states, site owners, contractors and private entities that use the MARSSIM as a federal consensus guidance.

- (b) 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 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. 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.

- (i) Does the general charge to the Panel 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)]. A particular matter of general applicability means a particular matter that is focused on the interests of a discrete and identifiable class of persons, but does not involve specific parties [5 C.F.R. § 2640.102(m)].

The SAB advice on the revisions to MARSSIM does not qualify as 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. Further, it does not include matters which involve formal parties, nor does it extend to legislation or policy-making that is narrowly focused upon the interests of a discrete and identifiable class of persons. The MARSSIM is a broad-based and all-inclusive manual which provides guidance to all federal agencies, states, site owners, contractors, and other private entities on how to demonstrate that their site is in compliance with a radiation dose or risk-based regulation, otherwise known as a release criterion. Thus, MARSSIM affects anyone with a site with a potential for a radiation dose (utilities, hospitals, waste disposal facilities, mining operations, etc.) and does not focus on a discrete and identifiable class.

- (ii) Will there be personal and substantial participation on the part of the Panel 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)]. For this review, the SAB Staff Office has determined that the *SAB Panel members will be participating personally in the matter through attendance at meetings, teleconferences and other means*. Panel members will be providing the Agency with consultative advice and individual recommendations on suggested revisions to the MARSSIM and such advice is expected to directly and substantially influence the Agency’s and the multi-agency Workgroup decisions pertaining this multi-agency activity. *Therefore, participation in this review also will be substantial.*

- (iii) Will there be a direct and predictable effect on a Panel member's financial interest? 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 speculative, possibility that the matter will affect the financial interest." [[5 C.F.R. § 2640.103(a)(ii)]

Candidates for the Panel were evaluated against the requirements of 5 C.F.R. § 2640.101(a), using each candidate's confidential financial disclosure form (EPA Form 3110-48), to determine whether the work of the Panel will have a direct and predictable effect on his or her financial interests.

- (D) How regulations concerning "appearance of a lack of impartiality," pursuant to 5 C.F.R. § 2635.502, apply to members of the Panel

The Code of Federal Regulations at 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 has received authorization from the agency designee." Further, § 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 for the Panel 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 committee members (including, but not limited to, EPA 3110-48 confidential financial disclosure forms) and public comment as well as their responses to the following supplemental questions (included on the EPA 3110-48 confidential financial disclosure form):

1. 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?
2. Have you had any 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.

3. Have you served on previous advisory panels, committees or subcommittees that have addressed the topic under consideration? If so, please identify those activities.
4. 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.

(E) The selection of Panel members

The SAB Staff Office Director makes the final decision about who serves on panels, based on all relevant information. This includes a review of the member's confidential financial disclosure form (EPA Form 3110-48) and an evaluation of an appearance of a lack of impartiality, and application of criteria to ensure a balanced panel.

As a result of a review of all relevant information including each candidate's confidential financial disclosure form (EPA Form 3110-48), the responses to the four questions above, and relevant information gathered by staff, the SAB Staff Office has determined that there are no conflicts of interest or appearances of a lack of impartiality for the members of this 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 general charge. Specific criteria to be used in evaluating an individual committee 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; (e) skills working in committees, subcommittees and advisory panels; and, for the committee as a whole, (f) diversity of scientific expertise, and viewpoints.

On the basis of the above-specified criteria, the advisory Panel includes the following:

RAC Members:

**Chair: Dr. Bernd Kahn**, Georgia Institute of Technology (GA)

**Dr. Susan M. Bailey**, Colorado State University (CO)

**Dr. Thomas B. Borak**, Colorado State University (CO)

**Dr. Shih-Yew Chen**, Argonne National Laboratory, Argonne (IL)

**Dr. Faith G. Davis**, University of Illinois (IL)

**Dr. R. William Field**, University of Iowa (IA)

**Dr. Jonathan M. Links**, The Johns Hopkins University (MD)

