



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR  
SCIENCE ADVISORY BOARD

February 16, 2012

**MEMORANDUM**

**SUBJECT:** Addendum to Formation of Science Advisory Board Animal Feeding Operations Emission Review Panel

**FROM:** Edward Hanlon */Signed/*  
Designated Federal Officer (DFO)  
EPA Science Advisory Board Staff Office (1400R)

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

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

On the basis of the need for additional expertise, the members of the SAB Animal Feeding Operations Emission Review Panel are as follows:

**Dr. David T. Allen**, University of Texas (TX), **CHAIR**  
**Dr. Viney Aneja**, North Carolina State University (NC)  
**Dr. Brent Auvermann**, Texas A&M University (TX)  
**Dr. Peter Bloomfield**, North Carolina State University (NC)  
**Dr. Alicia Carriquiry**, Iowa State University Ames (IA)  
**Dr. Nichole Embertson**, Whatcom Conservation District (WA)  
**Dr. William Faulkner**, Texas A&M University (TX)  
**Dr. Robert Hagevoort**, New Mexico State University (NM)  
**Dr. Richard Kohn**, University of Maryland (MD)  
**Dr. April Leytem**, U.S. Department of Agriculture-Agricultural Research Service (ID)  
**Dr. Ronaldo Maghirang**, Kansas State University (KS)  
**Dr. Deanne Meyer**, University of California, Davis (CA)  
**Dr. David B. Parker**, U.S. Department of Agriculture-Agricultural Research Service (NE)





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR  
SCIENCE ADVISORY BOARD

February 9, 2012

**MEMORANDUM**

**SUBJECT:** Formation of Science Advisory Board Animal Feeding Operations Emission Review Panel

**FROM:** Edward Hanlon */Signed/*  
Designated Federal Officer (DFO)  
EPA Science Advisory Board Staff Office (1400F)

**THRU:** Wanda Bright */Signed/*  
Ethics Officer  
EPA Science Advisory Board (1400F)

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

EPA's Office of Air and Radiation (OAR) developed draft methodologies for estimating air emissions from animal feeding operations (AFOs) to address requirements of a voluntary air compliance consent agreement signed in 2005 between EPA and AFOs representing facilities that included broiler, dairy, egg layer, and swine AFO operations. OAR has requested that the SAB review the draft methodologies.

This memorandum addresses the set of determinations that were necessary for forming the SAB Animal Feeding Operations Emission Review Panel, including:

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

An *ad hoc* panel, composed of subject matter experts, will be formed under the auspices of the SAB to provide advice and recommendations to EPA through the chartered SAB on the scientific and technical soundness of EPA’s draft methodologies for estimating air emissions from AFOs.

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

The SAB Staff Office sought in a *Federal Register* Notice (Volume 76, Number 70, Pages 54466-54467) published on September 1, 2011 public nominations of nationally recognized and qualified experts in one or more of the following areas related to AFO air emission estimation methods: air emissions from broiler, dairy, egg layer, and/or swine production animal feeding operations; air monitoring and detection methods; exposure assessment; environmental statistics; emission and statistical modeling; and uncertainty analysis.

The SAB Staff Office identified 67 candidates based on their relevant expertise and willingness to serve. On October 21, 2011, the SAB Staff Office posted a notice on the SAB website inviting public comments by November 15, 2011 on the List of Candidates for the Panel. The SAB Staff Office received 53 comments on the candidate list. The commenters and their affiliations are listed below:

Colleen B. (Coke) Anderson	Self
Jeffrey D. Armstrong	California Polytechnic State University
Amon Baer	Self
Bill Battye	EC/R Incorporated
Mike Boerboom	Self
Robert Burns	U.S. Department of Agriculture Agricultural Air Quality Task Force
J.P. Cativiela	Dairy Cares
N. Andy Cole	U.S. Department of Agriculture-Agriculture Research Service
Roger G. Crickenberger	North Carolina Agricultural Research Service
Tim Cross	University of Tennessee
Wayne T. Davis	University of Tennessee
David Elbel	Feather Crest Farms, Inc.

Stephen E. Fienberg	Carnegie Mellon University
Michael Formica	National Pork Producers Council
H. Christopher Frey	North Carolina State University
Chad Gregory	United Egg Producers
George D. Greig	State of Pennsylvania
Jay D. Harmon	Iowa State University
Richard Hegg	U.S. Department of Agriculture-National Institute of Food and Agriculture
Greg Herbruck	Herbrucks Poultry Ranch
Maynard G. Hogberg	Iowa State University
Kevin J. Igli	Tyson Foods Inc.
Raymond Knighton	U.S. Department of Agriculture
John D. Lawrence	Iowa State University
Allen S. Levine	University of Minnesota
Ryke Longest	Duke University School of Law
Michael Marsh	Western United Dairymen
C.V. Mathai	Air & Waste Management Association
Jay D. Moore	Self
Bob Naerebout	Idaho Dairymen's Association
Ken Nobis	Michigan Milk Producers Association
A.M. Oberbauer	University of California – Davis
Duane E. Olsen	Briarwood Farms
Jean Public	Self
Shri Ramaswamy	University of Minnesota
Jennifer Reed-Harry	PennAg Industries Association
Walter Robinson	North Carolina State University
William Roenigk	National Chicken Council
Mark Rood	University of Illinois
William Schlessenger	Cary Institute of Ecosystem Studies
Amy Millmier Schmidt	Mississippi State University
Sally Shaver	U.S. Department of Agriculture Agricultural Air Quality Task Force
Rep. Mike Simpson	Member of U.S. House of Representatives
W. David Smith	North Carolina Agricultural Research Service
B.A. Stewart	West Texas A&M University
Tamara McCann Theis	National Cattlemen's Beef Association
Ilda de Fátima Ferreira Tinôco	Federal University of Viçosa – Brazil
Tony Veiga	Western States Dairy Producers Trade Association
Christopher Wathes	The Royal Veterinary College, United Kingdom
Ben Weinheimer	Texas Cattle Feeders Association
C.M. (Mike) Williams	North Carolina State University
Wendy Wintersteen	Iowa State University
Johnny C. Wynne	North Carolina State University

(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: The principal interested and potentially affected parties for this topic may include: (1) federal, state, and local government agencies, elected officials, and non-government organizations involved in the implementation of the Clean Air Act (CAA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Emergency Planning and Community Right-to-Know Act (EPCRA) to address air emissions from AFOs; and 2) private companies, or public or private organizations and landowners who may be affected by regulatory activities or policies or regulations developed by EPA that address air emissions from AFOs.

(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 SAB AFO Emissions Review 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)]. Additionally, 5CFR 2637.102(a)(7) defines a particular matter involving specific parties to mean any judicial or other proceeding, application, request for ruling or other determination, contract, claim, controversy, investigation, change, 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.

In providing advice on the scientific and technical soundness of EPA’s draft methodologies for estimating air emissions from AFOs, the Review Panel’s activity will qualify as a *particular matter of general applicability* because the resulting advice will be part of a deliberation, and under certain circumstances the advice could involve the interests of a discrete and identifiable class of people but does not involve specific parties. That class of people constitutes those who are involved with private or public

organizations facing regulatory decisions related to air emissions from AFOs, and those who are associated or involved with the potentially interested or affected parties, as identified in Section (C)(a) above.

(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 Panel members *will be participating personally in the matter*. Panel members will provide EPA with advice on draft methodologies for estimating air emissions from AFOs, and such advice is expected to directly influence the Agency's approach for developing the methodologies. *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 included: responses to the following questions (see below), and to EPA 3110-48 confidential financial disclosure forms, and public comment.

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 (including financial conflicts)?
2. Have you had any previous involvement with the EPA staff who are working on the project 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 emission estimating methodologies for animal feeding operations? If so, please identify those activities.
4. Have you made any public statements (written or oral), including expert testimony (public hearing, litigation), concerning emission estimating methodologies for animal feeding operations that would indicate to an observer that you have taken a position on the issue under consideration? If so, please identify those statements.
5. Have you received compensation for any work related to the broiler, dairy, egg layer, and swine animal feeding operations industry? If yes, please identify the sources of the funding.

(E) The selection of Panel members

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

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.

