

**U.S. Environmental Protection Agency
Science Advisory Board
Public Teleconference
Meeting Minutes**

Date and Time: July 29, 2017, 1:00 p.m. to 5:00 p.m.

Location: Teleconference Only

Purpose: To discuss the information provided by the EPA on planned actions in the Fall 2016 semi-annual regulatory agenda and their supporting science and receive briefings on current SAB activities.

Meeting Participants:

SAB Members

Dr. Peter S. Thorne, Chair
Dr. Sylvie M. Brouder
Dr. Joel Burken
Dr. Janice Chambers
Sr. Alison Cullen
Dr. Otto Doering
Dr. Susan P. Felter
Dr. William Field
Dr. H. Christopher Frey
Dr. Joseph Gardella

Dr. Steven Hamburg
Dr. Kimberly L. Jones
Dr. Robert E. Mace
Dr. Mary Sue Marty
Dr. Denise Mauzerall*
Dr. Kristina D. Mena *
Dr. James Opaluch
Dr. Thomas F. Parkerton
Mr. Richard L. Poirot
Dr. Tara L. Sabo-Atwood

Dr. William Schlesinger
Dr. Gina Solomon,
Dr. Daniel O. Stram
Dr. Jay Turner
Dr. Jeanne M. VanBriesen
Dr. Charles Werth
Dr. Peter J. Wilcoxon
Dr. Robyn S. Wilson*

*Members on telephone
(For the full SAB see Roster¹)

SAB Staff:

Mr. Thomas Carpenter, Designated Federal Officer (DFO), for the Chartered SAB
Mr. Christopher Zarba, SAB Staff Office Director

Other Attendees: Names of those who requested the teleconference call-in number are provided in Attachment A.

Meeting Summary:

Convene the meeting

Mr. Thomas Carpenter, Designated Federal Officer (DFO) for the chartered SAB, formally opened the meeting and noted that this federal advisory committee teleconference was announced in the Federal Register². The SAB is an independent, expert federal advisory committee chartered under the authority of the Federal Advisory Committee Act (FACA). The SAB is empowered by law, the Environmental Research, Development, and Demonstration Authorization Act (ERDDAA), to provide advice to the EPA Administrator on scientific and technical issues that support the EPA's decisions. The DFO noted that the Federal Register notice

announcing the meeting had provided the public with an opportunity to provide written and oral comment.

The DFO stated that the SAB consists entirely of special government employees (SGEs) appointed by EPA to their positions. As SGEs, chartered SAB members are subject to all applicable ethics laws and implementing regulations. EPA has determined that advisors participating in this meeting have no financial conflicts of interest or appearance of a loss of impartiality under ethic regulations specified in 5 CFR §2635 relating to the topic of this meeting. The DFO noted that Dr. Michael Dourson recused himself and will not attend the meeting.

Purpose of the teleconference and review of the agenda

The SAB Chair, Dr. Peter Thorne, stated the purposes for the SAB meeting was to discuss the information provided by the EPA on planned actions in the Fall 2016 semi-annual regulatory agenda and their supporting science and receive briefings on current SAB activities. He noted that no public speakers registered. Dr. Thorne reminded members that the purpose of the discussion is to identify proposed actions that merit further review by the SAB. He introduced Dr. Charles Wirth the Chair of the SAB Work Group on EPA Planned Actions for SAB Consideration of the Underlying Science.

This SAB Work Group w includes SAB members with broad expertise in scientific and technological issues related to the proposed actions. The Work Group consists of Drs. Charles J. Werth (chair), Alison Cullen, H. Christopher Frey, Steven Hamburg, Denise Mauzerall, Jay Turner, Jeanne VanBriesen, and Mr. Richard Poirot. The Work Group developed a memorandum³ discussing the information provided by the EPA. Table 1 summarizes the Work Groups recommendations. Dr. Werth discussed each action with the SAB.

Table 1: Summary of Proposed Actions that the SAB Work Group Considered for Additional SAB Comment on the Supporting Science		
RIN¹	Planned Action Title	Workgroup Recommendation
<u>2060-AT04</u>	Renewable Fuel Volume Standards (RFVS) for 2018 and Biomass Based Diesel Volume (BBD) for 2019	No further SAB consideration is merited.
<u>2070-AK20</u>	Procedures for Evaluating Existing Chemical Risks Under the Toxic Substances Control Act	No further SAB consideration is merited
<u>2070-AK23</u>	Procedures for Prioritization of Chemicals for Risk Evaluation Under the Toxic Substances Control Act	No further SAB consideration is merited
<u>2060-AT10</u>	Endangerment Finding for Lead Emissions from Piston-Engine Aircraft Using Leaded Aviation Gasoline	No further SAB consideration is merited

Table 1: Summary of Proposed Actions that the SAB Work Group Considered for Additional SAB Comment on the Supporting Science		
RIN¹	Planned Action Title	Workgroup Recommendation
<u>2060-AT26</u>	Control of Air Pollution from Aircraft and Aircraft Engines: Proposed GHG Emissions Standards and Test Procedures	The Chartered SAB should provide advice on this action
<u>2060-AT29</u>	Emission Guidelines for the Existing Oil and Natural Gas Sector	The Chartered SAB should evaluate whether to provide advice when more information is available.
<u>2060-AT00</u>	Stationary Combustion Turbine, National Emission Standard Hazardous Air Pollutant (NESHAP) Residual Risk and Technology Review (RTR)	No further SAB consideration is merited.
<u>2060-AT01</u>	Engine Test Cells National Emission Standard for Hazardous Air Pollutants (NESHAP) RTR	No further SAB consideration is merited.
<u>2060-AT02</u>	National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards--Ethylene Production (Subparts XX and YY)	No further SAB consideration is merited.
<u>2060-AT03</u>	National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities RTR	No further SAB consideration is merited.
<u>2060-AT05</u>	National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing RTR	No further SAB consideration is merited.
<u>2060-AT07</u>	Rubber Tire Manufacturing RTR	No further SAB consideration is merited.
<u>2060-AT08</u>	Lime Manufacturing RTR	No further SAB consideration is merited.
<u>2060-AT12</u>	National Emission Standard for Hazardous Air Pollutants (NESHAP) RTR: Reinforced Plastics Composites and Boat Manufacturing	No further SAB consideration is merited.

Renewable Fuel Volume Standards (RFVS) for 2018 and Biomass Based Diesel Volume (BBD) for 2019

Board members noted that the RFS is an annual proposal that follows a statutory analysis in developing the standards. Members agreed that the rule is not based on new or novel science and agreed with the Work Group.

Procedures for Evaluating Existing Chemical Risks Under the Toxic Substances Control Act
Procedures for Prioritization of Chemicals for Risk Evaluation Under the Toxic Substances Control Act

These two actions are part of the EPA response to the Toxic Substance Control Act amendments of 2016. Members discussed if the proposed rules would impact regulated chemicals and what types of information will be use (i.e., high through put analysis). Members also acknowledged the previous TSCA analysis and peer review conducted by EPA. Members agreed with the Work Group recommendation and suggested the letter to the Administrator emphasize that peer reviews should conducted with the same rigor and transparency of information made publicly available in previous reviews conducted by the SAB (see the Fall 2014 Regulatory Review).

Endangerment Finding for Lead Emissions from Piston-Engine Aircraft Using Leaded Aviation Gasoline

This is a long-term action that requires the EPA to evaluate whether lead emissions from aircraft operating on leaded aviation gasoline (“avgas”) cause or contribute to air pollution that may be reasonably anticipated to endanger public health. Lead is still used as an octane booster in avgas that is used in piston-engine aircraft, mostly for general aviation. EPA will use the National Emission Inventory of lead emissions from use of leaded avgas, demographic analysis of populations living or attending school near airports, surveillance monitoring data for 17 airports, and estimates of lead concentrations near airports. EPA plans to conduct a letter peer review of the nationwide analysis of lead concentrations in air at airports by five experts. EPA will provide responses to peer review comments and issue a final report. Because key elements of this action have already undergone, or will undergo, peer review, this action does not merit further review by the SAB. Dr. Turner is conducting studies of lead exposure in community around airports and described the sampling protocols, chemical analysis, and data evaluation available to the EPA. Board members agreed with the Work Group recommendations.

Control of Air Pollution from Aircraft and Aircraft Engines: Proposed GHG Emissions Standards and Test Procedures

The Work Group noted the SAB previously reviewed Proposed Finding that Greenhouse Gas Emissions from Aircraft Cause or Contribute to Air Pollution that May Reasonably be Anticipated to Endanger Public Health and Welfare and Advanced Notice of Proposed Rulemaking (2060-AS31) in the [Fall 2014 Regulatory Review](#) and found that subsequent steps in the regulatory process will involve substantive scientific issues that may warrant SAB consideration. The Work Group recommended that the SAB ask the agency to regularly inform the SAB about the status of subsequent steps on this topic and also asks the EPA to provide it with briefings on the science underlying agency approaches to address greenhouse gas emissions and related climate change actions. Board members were aware that the action must serially be promulgated by EPA, the Federal Aviation Administration before being presented to the International Civil Airline Organization. The SAB agreed with the Work Group recommendations.

Emission Guidelines for the Existing Oil and Natural Gas Sector

The proposed action is listed as is a long-term action, which was triggered when the EPA established New Source Performance Standards (NSPS) on new sources of emissions of greenhouse gases in the oil and gas sector. This action is in the early stages of development and the Work Group notes the agency has withdrawn the 2016 Information Collection Request (ICR)

from the oil and gas industry; as a result, there is insufficient information to review. The SAB should evaluate the science supporting the planned action when more information about the proposed rule and the science supporting it are made available. At that time, the SAB will determine whether it wishes to offer advice and comment to the Administrator.

NESHAP RTR Reviews

Eight of the actions discussed by the Board are reviews of the residual risk and determination of whether the EPA should lower the National Emission Standard for hazardous Air Pollutants. The Board discussed NESHAPS in general and then whether the specific sectors HAPs required special attention. The eight NESHAPS are:

- *Stationary Combustion Turbine, National Emission Standard Hazardous Air Pollutant (NESHAP) Residual Risk and Technology Review (RTR)*
- *Engine Test Cells National Emission Standard for Hazardous Air Pollutants (NESHAP) RTR*
- *National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards--Ethylene Production (Subparts XX and YY)*
- *National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities RTR*
- *National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing RTR*
- *Rubber Tire Manufacturing RTR*
- *Lime Manufacturing RTR*
- *National Emission Standard for Hazardous Air Pollutants (NESHAP) RTR: Reinforced Plastics Composites and Boat Manufacturing*

The SAB discussed the eight Risk and Technology Reviews (RTRs) for National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and Clean Air Act requirements. Within eight years of promulgation of emission standards, EPA must assess the technology and residual risk to determine whether additional standards are needed to provide an ample margin of safety to protect public health and prevent adverse environmental effects (taking into consideration costs, energy, safety, and other relevant factors). Each RTR analysis follows a consistent risk characterization approach using methodologies that have undergone consultations, advisories and peer reviews by the SAB as the methodology is enhanced (SAB 1999, 2000, 2006, and 2010). The Work Group also notes that the EPA and SAB are planning an additional review of Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study Analysis in 2017.

The Work Group found that there are many different sectors use the RTR methodology. These different sectors incorporate and use data and information that are appropriate to that sector. The Work Group finds that while these eight actions do not merit further review by the SAB, the agency may benefit from SAB advice when new novel science or technologies are part of a planned action for specific sectors. The Work Group recommended that the Agency provide as much sector specific information as available to assist the Board in conducting the screening review of future regulatory agendas. The Work Group also notes that the planned SAB review may provide recommendations for changes in the RTR methodology and encourages the agency to incorporate those recommendations into future RTRs. The SAB agreed with the Work Group recommendations

Updates on SAB Project: Peer Review of ETBE and tBA

Dr. Janice Chambers provided an update on the peer review for IRIS assessments of ETBE and tBA. The EPA National Center for Environmental Assessment in the Office of Research and Development drafted two toxicological assessments for inclusion in the EPA IRIS database. The assessments are for Ethyl Tertiary Butyl Ether (ETBE) and tert-Butyl Alcohol (tBA); an ETBE metabolite and requested a peer review.

An augmented Chemical Assessment Advisory Committee was assembled to peer review the after the publication of a Federal Register Notice (FRN) on 10/27/2016. Because the chemicals and the health effects are similar and related, the assessments for ETBE and tBA will be reviewed simultaneously, with one report prepared and submitted to the Board for quality review. The CAAC- augmented for ETBE/tBA will meet on July 11th for a teleconference (1 – 4 pm EST). The agenda includes an overview of the two assessment by agency staff, oral public comments, and the panels discussion nd clarification of the charge. The Augmented committee will meet in person from August 15-17, in Arlington, VA to discuss the assessments, develop responses to the Charge and hear additional public comments. Meeting information is on the SAB website

Dr. Thorne then turned to the DFO to adjourn the meeting. The DFO adjourned the meeting at p.m.

Respectfully Submitted and Certified as Accurate,

/signed/

Mr. Thomas Carpenter
SAB DFO

/signed/

Dr. Peter S. Thorne
SAB Chair

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by committee members during the course of deliberations within the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect definitive consensus advice from the panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters, or reports prepared and transmitted to the EPA Administrator following the public meetings.

Materials Cited

The following meeting materials are available on the SAB website,
<http://www.epa.gov/sab>, at the page for the June 29, 2017 meeting:

<https://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/ad66390a4cd-c244a852581140051f55c!OpenDocument&Date=2017-06-29>

¹ Roster of SAB members

² Federal Register published Vol. 82 No.107. Tuesday, June 6, 2017 (26085-26086)

³ Preparations for Chartered Science Advisory Board (SAB) Discussions of EPA Planned Agency Actions and their Supporting Science in the Fall 2016 Regulatory Agenda.

**Attachment A: Names and Affiliation of Those Who Requested the
Teleconference Call-In Number**

Tim Benner, US Environmental Protection Agency
Douglas B. Price, P.E., Tesoro Companies, Inc
Ruth Schenk, US EPA
Gary Cross, Dunaway & Cross
Pat McCullough, KCPS
Maria Hegstad, Inside EPA
Krista Maruca, OCP Research
Christopher Yarosh, American Chemical Society
Caryn Muellerleile, US EPA
Kathryn Boyle, US EPA,
Steve Gibb, Bloomberg BNA
Chava McKeel, Golf Course Superintendents Association of America
Janet Collins, CropLife America
Maria Geonczy, GA EPD Air Protection Branch
Kate Shenk, BIO
David Dunlap, KCPS
Lindsey Jones, TCEQ,