UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR
SCIENCE ADVISORY BOARD

July 25, 2017

EPA-SAB-17-007

The Honorable E. Scott Pruitt
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Subject: Science Advisory Board (SAB) Consideration of EPA Planned Actions in the Fall 2016 Unified (Regulatory) Agenda and their Supporting Science

Dear Administrator Pruitt:

As part of its statutory duties, the EPA's Science Advisory Board recently concluded discussions about possible review of the science supporting major EPA planned actions associated with the Fall 2016 Unified (Regulatory) Agenda and Regulatory Plan. The EPA Office of Policy provided notice of the release of this information on November 17, 2016. The SAB discussed whether to review the science supporting any of the planned regulatory actions in that agenda in order to provide advice and comment on the adequacy of the science, as authorized by section (c) of the Environmental Research, Development and Demonstration Authorization Act, during a public teleconference[1] held on June 29, 2017.

The SAB focused its attention on 14 major planned actions identified by the EPA Office of Policy but not yet proposed as of the date the Regulatory Agenda was published in the *Federal Register*. The SAB convened a Work Group to review the planned actions, conduct fact-finding, and develop recommendations for further consideration by the chartered SAB. At the public meeting, the SAB discussed the Work Group's findings and decided to not undertake review of the science supporting 12 of the actions in the semi-annual regulatory agenda at this time. The list of actions considered is enclosed.

[1] Chartered SAB Screening Review of EPA Planned Actions in the Fall 2016 Semi-Annual Regulatory Agenda. Available at: https://yosemite.epa.gov/sab/sabproduct.nsf//MeetingCalBOARD/AD66390A4CDC244A852581140051F55C?OpenDocument

The SAB notes that 11 of the planned actions were listed as long-term actions. The Office of Management and Budget defines long term actions as planned actions "under development but for which the agency does not expect to have a regulatory action within the 12 months after publication of this edition of the Unified Agenda" and notes that some long term actions may only have abbreviated information. The SAB considered the stage of rulemaking of the planned actions and notes that the Board has previously deferred the decision on whether the planned action merits further review until sufficient information is available.

One action in the Fall 2016 Regulatory Agenda, *Renewable Fuel Volume Standards (RFVS) for 2018 and Biomass Based Diesel Volume (BBD) for 2019 (2060 AT04)*, is a statutorily mandated annual rulemaking. The renewable fuel standards (RFS) program is a routine action that relies on the same approach and sources of data that were used in the rules establishing required standards in past years. The analytical work underlying the RFS annual rules is based on historical data regarding renewable fuel production, imports, distribution, and use. The EPA does "not currently expect to incorporate new methodological approaches that would rely on any new scientific data or touch upon novel issues" to determine the renewable fuel volume standards for 2018 and the biomass based diesel volume (BBD) for 2019. Therefore, this action does not merit further SAB consideration.

Two actions in the Agenda, *Procedures for Evaluating Existing Chemical Risks Under the Toxic Substances Control Act (2070-AK20)* and *Procedures for Prioritization of Chemicals for Risk Evaluation Under the Toxic Substances Control Act (2070-AK23)*, were developed in parallel under TSCA as amended on June 22, 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act. This act sets i) mandatory requirements for the EPA to evaluate existing chemicals with clear and enforceable deadlines, ii) new risk-based safety standards, iii) increased public transparency for chemical information, and iv) a consistent source of funding for EPA to carry out the responsibilities under the new law. The actions were proposed on January 19, 2017, and promulgated on June 22, 2017.

The *Federal Register* Notices for the proposed rules identified the steps in the prioritization and risk evaluation under the amended TSCA for chemical substances, using existing methods and the weight of evidence approach that has been applied consistently by the Agency in the past. In previous reviews[2] of the regulatory agenda, the SAB found these proposed methods for evaluation and peer review to be scientifically sound and did not recommend further review. Therefore, the SAB finds that these two actions do not merit further review. However, the SAB urges EPA to retain and improve the transparent peer review process used for specific chemicals evaluated under TSCA, and encourages the EPA to continue assessing the adequacy of guidance documents and improving the processes related to TSCA risk evaluations with input from the SAB or Science Advisory Committee on Chemicals.

The Endangerment Finding for Lead Emissions from Piston-Engine Aircraft Using Leaded Aviation Gasoline (2060-AT10) is a long-term action that requires the EPA to evaluate whether

[2] SAB Discussions about EPA Planned Actions in the Spring 2015 Unified Agenda and their Supporting Science available at: https://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/0e748503053ede6285257e6e0069bc5c!OpenDocument&TableRow=2.3#2.

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.*Control of Air Pollution from Aircraft and Aircraft Engines: Proposed GHG Emissions Standards and Test Procedures (2060-AT26)* is listed as a long-term action, with a notice of proposed rulemaking due January 2018, and a final rule due December 2018. The SAB previously reviewed the *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[3] Regulatory Agenda, and found that subsequent steps in the regulatory process will involve substantive scientific issues that may warrant SAB consideration.

The SAB sought additional information regarding the planned peer review schedule and notes that the peer reviews of the science supporting the rulemaking have not been initiated as of June 2017. The SAB finds that this planned action (2060-AT26) is significant and would benefit from SAB advice and comment. The SAB notes that there are time constraints on completing the rulemaking and recommends the SAB provide advice on this issue, or at a minimum, that the EPA conduct a panel peer review rather than separate letter reviews of the technical support documents. Panel peer review will allow communication across the two proposed peer reviews in order to encourage a synergistic understanding among the disciplines involved and provide the most useful advice to the agency.

The SAB finds the control of greenhouse gas emissions is an important topic and asks 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.

The Emission Guidelines for the Existing Oil and Natural Gas Sector (2060–AT29) is a long-term action that was triggered when the EPA established Emission Standards for New and Modified Sources in the Oil and Natural Gas Sector (2060-AS30) The Emission Guidelines for the Existing Oil and Gas Sector is in the early stages of development, and the SAB 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 requests that the agency provide the SAB with more information about the scientific basis for this action as soon

[3] SAB Discussions about EPA Planned Actions in the Fall 2014 Unified Agenda and their Supporting Science https://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/d789240481a106d085257dc4005dcef6!OpenDocument

as that information becomes available. At that time, the SAB will determine whether it wishes to offer advice and comment to the Administrator.

The SAB notes that eight actions in the Fall 2016 semi-annual regulatory agenda are Risk and Technology Reviews (RTRs) for National Emissions Standards for Hazardous Air Pollutants (NESHAPs) required by the Clean Air Act (see the summary of planned actions). For each RTR, EPA must assess the control technology and the residual risk that remains after the technology is applied. This assessment is used 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 characterizes residual risk using methodologies for which EPA received SAB advice via consultations, advisories, and peer reviews as the methodology was enhanced over time (SAB 1999, 2000, 2006, and 2010). The SAB also notes that an *ad-hoc* panel convened under the Board's auspices is currently reviewing the *Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study Analysis* (2017). The 2017 report describes enhanced screening methods used to estimate potential human health risks from industrial sources of HAPs. EPA uses these screens to quickly identify those facilities, in particular stationary source categories, that have little potential for human health or environmental risk, while also identifying those facilities where a refined risk assessment might be needed and for which a revised standard may need to be developed. The SAB finds that using and improving a standard screening methodology is appropriate and encourages the agency to incorporate the forthcoming recommendations into guidance for future RTR screening evaluations.

The SAB further finds that how the agency conducts the technology review is an equally important component of the RTRs for NESHAPs. The SAB has requested more information on how the EPA evaluated developments in practices, processes, and control technologies in previous reviews of planned RTRs[4]. The *Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study Analysis* focuses on exposure, residual risk, and including a margin of safety and provides little information on the technology review.

The SAB finds that there are many different sectors that use the RTR methodology. These different sectors incorporate and use data and information that are appropriate to that sector. We note that the agency descriptions of RTRs for NESHAPs rely almost entirely on the screening method and there is insufficient information provided for the technology evaluation component of the RTRs. While these eight actions do not merit further review by the SAB, the agency may benefit from SAB advice when new science or technologies are part of a planned action for specific sectors. The SAB encourages the agency to provide as much sector specific information as available to assist the Board in conducting the screening review of future regulatory agendas and expand on the information provided for the technology evaluation component of the RTRs. The SAB asks that the agency provide additional briefings on the EPA's process to evaluate available technologies and achievable emissions at a future meeting.

[4] Preparations for Chartered Science Advisory Board (SAB) Discussions of EPA Planned Agency Actions and their Supporting Science in the Spring 2016 Regulatory Agenda (See Attachment B). Available at:https://yosemite.epa.gov/sab/sabproduct.nsf/B96699B3E1506C19852580600070EE2B/$File/Spring+2016+Reg+Rev+Memo.pdf

The SAB appreciates the information provided by the EPA Office of Policy and the EPA program offices describing the planned actions. The Work Group recommendations, written information provided by the agency and the results of fact-finding discussions with EPA Staff are available on the SAB website[5].

On behalf of the SAB, I thank you for the opportunity to support EPA through consideration of the science supporting actions in the agency's regulatory agenda.

Sincerely,

/s/

Dr. Peter S. Thorne, Chair
Science Advisory Board

Enclosure
(1) Summary of Proposed Actions Considered
(2) Roster of SAB Members

[5] Preparations for Chartered Science Advisory Board (SAB) Discussions of EPA Planned Agency Actions and their Supporting Science in the Fall 2016 Regulatory Agendahttps://yosemite.epa.gov/sab/sabproduct.nsf/A7AF0E701F6208ED8525813E00662D84/$File/Fall+2016+WkGrp+Memo+attAB.pdf

NOTICE

This report has been written as part of the activities of the EPA Science Advisory Board (SAB), a public advisory group providing extramural scientific information and advice to the Administrator and other officials of the Environmental Protection Agency. The SAB is structured to provide balanced, expert assessment of scientific matters related to problems facing the Agency. This report has not been reviewed for approval by the Agency and, hence, the contents of this report do not necessarily represent the views and policies of the Environmental Protection Agency, nor of other agencies in the Executive Branch of the Federal government, nor does mention of trade names of commercial products constitute a recommendation for use. Reports of the SAB are posted on the EPA Web site at http://www.epa.gov/sab.

Summary of Proposed Actions Considered

Proposed actions in the Fall 2016 Unified (Regulatory) Agenda and Regulatory Plan considered by the Science Advisory Board and whether to provide advice and comment on the adequacy of the science supporting the action		
RIN[1]	**Planned Action Title**	**Recommendation**
2060-AT04	Renewable Fuel Volume Standards (RFVS) for 2018 and Biomass Based Diesel Volume (BBD) for 2019	No further SAB consideration is merited.
2070-AK20	Procedures for Evaluating Existing Chemical Risks Under the Toxic Substances Control Act	No further SAB consideration is merited
2070-AK23	Procedures for Prioritization of Chemicals for Risk Evaluation Under the Toxic Substances Control Act	No further SAB consideration is merited
2060-AT10	Endangerment Finding for Lead Emissions from Piston-Engine Aircraft Using Leaded Aviation Gasoline	No further SAB consideration is merited
2060-AT26	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
2060-AT29	Emission Guidelines for the Existing Oil and Natural Gas Sector	The Chartered SAB should evaluate whether to provide advice when more information is available.
2060-AT00	Stationary Combustion Turbine, National Emission Standard Hazardous Air Pollutant (NESHAP) Residual Risk and Technology Review (RTR)	No further SAB consideration is merited.
2060-AT01	Engine Test Cells National Emission Standard for Hazardous Air Pollutants (NESHAP) RTR	No further SAB consideration is merited.
2060-AT02	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.

Proposed actions in the Fall 2016 Unified (Regulatory) Agenda and Regulatory Plan considered by the Science Advisory Board and whether to provide advice and comment on the adequacy of the science supporting the action		
RIN[1]	**Planned Action Title**	**Recommendation**
2060-AT03	National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities RTR	No further SAB consideration is merited.
2060-AT05	National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing RTR	No further SAB consideration is merited.
2060-AT07	Rubber Tire Manufacturing RTR	No further SAB consideration is merited.
2060-AT08	Lime Manufacturing RTR	No further SAB consideration is merited.
2060-AT12	National Emission Standard for Hazardous Air Pollutants (NESHAP) RTR: Reinforced Plastics Composites and Boat Manufacturing	No further SAB consideration is merited.

[1]The Regulatory Identification Number provides a hyperlink to the Office of Management and Budget's webpage and information on the planned action provided in the Unified Regulatory Agenda on the OMB website http://www.reginfo.gov/

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Science Advisory Board
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