



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

OFFICE OF THE ADMINISTRATOR
SCIENCE ADVISORY BOARD

June 21, 2018

EPA-SAB-18-001

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 Spring 2017 Unified Agenda of Regulatory and Deregulatory Actions 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 Spring 2017 Unified Agenda of Regulatory and Deregulatory Actions. The EPA Office of Policy provided notice of the release of this information on July 20, 2017. 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 meeting](#) held on May 31, 2018.

The SAB focused its attention on 12 major planned actions identified by the EPA Office of Policy and 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 SAB¹. At the public meeting, the SAB discussed the Work Group's findings and decided to undertake review of the science supporting three of the actions in the semi-annual regulatory agenda at this time. The SAB also identified two actions for which insufficient information was available and deferred a determination until such information is available. The list of actions considered is enclosed.

¹ Memorandum: Preparations for Chartered Science Advisory Board (SAB) Discussions of EPA Planned Agency Actions and their Supporting Science in the Spring 2017 Regulatory Agenda
[https://yosemite.epa.gov/sab/sabproduct.nsf/A4070377D540D61B8525827F0075E673/\\$File/SABWkGrpSpring2017Att+ABC.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/A4070377D540D61B8525827F0075E673/$File/SABWkGrpSpring2017Att+ABC.pdf)

The SAB notes that nine 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 the option to defer a decision on whether the planned action merits further review until sufficient information is available.

EPA Planned Actions that Merit SAB Review

Review of the 2016 Oil and Gas New Source Performance Standards for New, Reconstructed, and Modified Sources (RIN 2060-AT54): This planned action merits review by the SAB. The SAB has considered two previous actions regarding Oil and Gas New Source Performance Standards: 1) *Oil and Natural Gas Sector: Reconsideration of Remaining Provisions of New Source Performance Standards (RIN 2060-AS30)*; and 2) *Guidelines for the Existing Oil and Natural Gas Sector (RIN 2060-AT29)*. The SAB found that the EPA sought out expert review and public input and determined that the *Remaining Provisions to the NSPS (RIN 2060-AS30)* did not merit further review² stating that further SAB input was likely to provide marginal benefits to the Agency’s expert input processes. The SAB deferred consideration of a related rule, the *Emission Guidelines for the Existing Oil and Natural Gas Sector (RIN 2060-AT29)* noting there was insufficient information to review the planned action and the SAB requested the agency provide more information about the scientific and technical basis. The Agency informed the SAB that the Guideline rule (2060-AT29) withdraws the 2016 Information Collection Request (ICR) from the oil and gas industry and no further activity is anticipated. Thus, this action is currently listed as completed in the Spring 2017 Regulatory agenda.

The EPA has made a broad commitment to reviewing the information in the original rule setting the NSPS promulgated in 2016³ and evaluating the information submitted by commenters on the current action (RIN 2060-AT54). The EPA states that, at this time, they do not anticipate using new Influential Scientific Information (ISI) during the reconsideration of additional requirements. However, the scientific and technical basis for identifying and evaluating measures being reconsidered for methods to reduce emissions of greenhouse gases, including methane, and volatile organic compounds (VOCs) in the oil and natural gas industry was not provided. Given that some time has elapsed since the rule-making processes for the 2016 Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources was finalized, information regarding the scientific and technical basis for identifying alternative measures applicable to individual power plants may have changed. Therefore, the SAB recommends a review of any new ISI that would change the prior justification for the rule.

² Preparations for Chartered SAB Discussions of EPA Planned Actions and Their Supporting Science in the Fall 2014 Regulatory Agenda (Attachment B and C) available at: [https://yosemite.epa.gov/sab/sabproduct.nsf/8D67738EFAF3C69385257E3500532AF6/\\$File/Work+Group+Memorandum+Fall+2014+Reg+Rev+posted.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/8D67738EFAF3C69385257E3500532AF6/$File/Work+Group+Memorandum+Fall+2014+Reg+Rev+posted.pdf)

³ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources ([Federal Register 81 35824-35942](#)) 40 CFR part 60, subpart OOOOa

Review of the Clean Power Plan (RIN 2060-AT55): This action also merits review by the SAB. The review of the Clean Power Plan (CPP) pertains to a scope of scientific and technical issues that should be considered and subjected to peer review. Limited information was available to the SAB about this planned action. The scientific and technical basis for identifying and evaluating measures including heat rate improvement, and other options that are applicable to individual plants, is not specified in the announcements of the planned action. The identification and use of ISI or Highly Influential Scientific Information (HISI) is not explained or defined. In the SAB Work Group’s fact-finding, the EPA was asked to provide further details regarding what specific sources of new information will be used and how ISI or HISI will be properly vetted through a rigorous peer review process (See Attachment C of the Work Group memorandum⁴). The Agency replied that public comments were being solicited on “whether there are additional control measures and information beyond what was included in the original Clean Power Plan.” The response did not address whether the EPA would seek updated information on measures that were included in the original CPP, or whether such information would be considered ISI or HISI, or, the nature of peer review procedures planned for any ISI or HISI.

In the absence of information from the EPA, a presumption could be made that there have been updates to scientific and technical information for control measures that were included in the original CPP. Given the potential significance of the CPP with regard to addressing GHG emissions that endanger public health and welfare, and the myriad of potential best systems of emissions reductions, further SAB review of this matter is warranted to ensure the soundness of the scientific and technical basis for the action.

Review of the Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Generating Units (RIN 2060-AT56): This planned action merits review by the SAB. In its *Federal Register* notice the EPA stated that the Agency “will review whether this Rule or alternative approaches appropriately maintain the diversity of reliable energy resources and encourage the production of domestic energy sources to achieve energy independence and security.” This statement implies that scientific questions and new analyses may arise regarding diversity of energy sources, reliability of energy sources, or capabilities to recover or utilize energy resources domestically. These analyses may be novel and require review or development of methodology and collection and evaluation of data. The specific scope of technical issues to be addressed is not provided, such as regarding what fuels, co-firing, firing, gasification, control, steam cycle, sequestration, and other options might form the basis of determination of best systems of emissions reduction. There is further complexity since this rule covers new, modified, and reconstructed facilities. The applicable range of options may differ depending on these stages of the plant life cycle. Based on a fact-finding query, the EPA indicated that it “plans to issue a proposed revision to the final NSPS and will consider comments it receives on that proposal.” However, no further details were provided. (See Attachment C of the Work Group Memorandum⁵).

Given the potential significance of the Rule with regard to addressing GHG emissions that endanger public health and welfare, and the myriad of potential best systems of emissions

⁴ Ibid.

⁵ Ibid.

reductions, further SAB review of this matter is warranted to ensure the soundness of the scientific and technical basis for the action.

The full SAB overwhelmingly voted to categorize these three activities as meriting further review, rather than deferring them until additional information is available, in part for expediency. If the EPA ultimately provides the SAB with supporting scientific and technical information demonstrating that the activities do not use new ISI or HISI, the SAB will not review them.

EPA Planned Actions Awaiting Further Information for SAB Review

Two separate planned actions consider the recodification of the Waters of the United States. *Definition of "Waters of the United States" – Recodification of Preexisting Rules (RIN 2040-AF74)*: This planned action does not merit further SAB consideration. It redefines WOTUS from the current 2015 rule to the definition in place before 2015. The goal of this first step is to provide stability in the regulation of the Clean Water Act pursuant to a decision issued by the U.S. Court of Appeals for the Sixth Circuit staying the 2015 WOTUS definition, a decision that is under review by the Supreme Court.

Second Action: Definition of "Waters of the U.S." (RIN 2040-AF75): The SAB will defer a decision on reviewing this planned action until reviewable supporting documents or draft rule language are available. A significant amount of time and effort has gone into determining the connectivity of different water bodies to downstream navigable waters. The science related to that connectivity has been well documented by well over hundreds of journal articles and technical reports. The SAB has reviewed EPA's September 2013 scientific report and synthesis that documented this extensive literature.

In 2014, the SAB provided a report to the EPA Administrator and recommended that the interpretation of connectivity be revised from a binary, categorical distinction (connected versus not connected) to a gradient that is a function of the frequency, duration, magnitude, predictability, and consequences of physical, chemical, and biological connections. The SAB also commented on approaches to measuring or otherwise quantifying connectivity.

The SAB reviewed the proposed rule "Definition of 'Waters of the United States' Under the Clean Water Act"⁶ and provided advice and comments⁷ related to that proposal. The SAB found that the available science provides an adequate scientific basis for the key components of the proposed rule.

EPA's Office of Water stated it does not intend to develop any new work products to support *Definition of "Waters of the U.S." (RIN 2040-AF75)*, yet it is unclear how any development of new boundaries can be justified without new scientific analysis and further review by the SAB.

⁶ Definition of "Waters of the United States" Under the Clean Water Act RIN 2040-AF30 ([FR 79 22188-22274](#))

⁷ Science Advisory Board (SAB) Consideration of the Adequacy of the Scientific and Technical Basis of the EPA's Proposed Rule titled "Definition of Waters of the United States under the Clean Water Act" available at: [https://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/518D4909D94CB6E585257D6300767DD6/\\$File/EPA-SAB-14-007+unsigned.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/518D4909D94CB6E585257D6300767DD6/$File/EPA-SAB-14-007+unsigned.pdf)

The SAB should evaluate the science that would support any decision about bright-line boundaries for WOTUS jurisdiction. The SAB requests that the EPA provide briefings on the science that would underlie the Agency's selection of these boundaries and justify what is and is not jurisdictional under the revised WOTUS rule.

The SAB found that at present there is insufficient information to make a determination as to whether a review of *Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h) (RIN 2070-AK34)* will be warranted. At this time, it is not known what information base is available for the five chemical compounds, the particulars of the peer review process, or whether the individual chemical assessments will be brought back to the SAB or the Scientific Advisory Committee on Chemicals. The EPA is developing a plan and has indicated that letter peer review will be used. Due to the timeframes established by the statute, and the need to determine the likelihood of exposure, the EPA plans to use reasonably available information to complete exposure and use assessments. Depending on the available information base, these assessments may be qualitative or quantitative. The assessments are intended to support rulemaking under TSCA section 6(h) in order to reduce exposure to the extent practicable. The SAB has previously reviewed planned actions for specific TSCA chemical assessments and urged the EPA to continue this level of robust transparent peer review. A final recommendation on further SAB review will await the provision of updated information about these scientific and technical issues.

EPA Planned Actions Not Meriting Further SAB Review

National Primary Drinking Water Regulations: Finished Water Storage Facility Inspection Requirements Addendum to the Revised Total Coliform Rule (RIN2040-AF37): This action does not merit further SAB consideration. The SAB notes that the Safe Drinking Water Act requires EPA to request comments from the Board prior to proposal of a maximum contaminant level goal and national primary drinking water regulation. Thus, EPA may bring this action to the SAB in the future.

Clean Water Act Hazardous Substances Spill Prevention (RIN2050-AG87): This action does not merit further SAB consideration. EPA states that no scientific work products are being developed and standard methods for regulatory impact and economic analyses are being used. Data from the National Response Center will be surveyed from 2007 through 2016, and impacts will be assessed with information from National Toxic Substance Incident Program. While the environmental risks are high and uncertainties growing, especially given the recent decision to open more off shore drilling across the US Coasts, there is no scientific work to be analyzed and evaluated by SAB.

Review of the Primary National Ambient Air Quality Standards for Nitrogen Dioxide (RIN2060-AR57): This action does not merit further SAB consideration. This action will undergo a multi-year detailed review process by the EPA Clean Air Scientific Advisory Committee and its Nitrogen Oxides Review Panel. CASAC is a FACA committee. The NOx Review Panel will be specifically constituted, in terms of independent scientific expertise, to review this proposed action. CASAC has a statutory mandate under the Clean Air Act to advise the Administrator regarding National Ambient Air Quality Standards (NAAQS).

The SAB finds that two actions regarding the eight-year review of National Emissions Standards for Hazardous Air Pollutants (NESHAPs) do not merit further SAB consideration. They are the risk and technology review (RTR) for the *National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries (RIN 2060-AT30)* and *National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing Residual Risk and Technology Review (RIN 2060-AT34)* While the details of each RTR are unique to the sources and pollutants being evaluated, the general approaches and methodologies employed in EPA RTRs have become standardized, have been employed in numerous previous RTRs, and have been subject to multiple peer reviews over the past 17 years. As EPA's RTR methodologies are refined and revised over time, there is a need for periodic peer reviews of the changing methods. In addition, the SAB just completed the review of recent revisions to the screening methodologies used to support RTR reviews. Given the extensive past and currently ongoing peer reviews that have been conducted on RTR methodologies, the SAB finds that review is not warranted for these specific RTRs at this time.

Review of Pesticides; Certification of Pesticide Applicators (RIN 2070-AK37) In the current context this action does not merit further SAB consideration. If EPA identifies a need for changes to the certification rule, SAB review may be warranted. In a related planned action (RIN 2070-AJ20), EPA's FIFRA Science Advisory Panel considered whether to review certification for pesticide applicators and waived its review of the proposed rule on September 4, 2014, and the final rule on August 15, 2016, because the proposed revisions were administrative in nature and did not contain scientific issues that required the SAP's consideration.

SAB Requests Improvements in the Descriptions of EPA Planned Actions

The SAB thanks the EPA for providing information for consideration but emphasizes that more complete and timely information is required from the Agency to make recommendations and decisions regarding the science supporting planned actions. To improve the process for future review of the semi-annual regulatory agenda, the SAB strongly recommends that the EPA enhance descriptions of future planned actions by providing specific information on the peer review associated with the science basis for actions and more robust descriptions of the scientific and technical bases for the actions. In reviewing the Spring 2017 Regulatory Agenda, there were several cases where key information about the planned action, its supporting science and peer review were provided only after specific SAB Work Group requests. The SAB finds that the EPA's written responses to fact finding questions were not comprehensive and participation in the fact-finding teleconference was limited.

Effective SAB evaluation of planned actions requires the Agency to characterize the following elements in the initial descriptions provided to the work group:

- All relevant key information associated with the planned action.
- The science supporting the regulatory action. If there is new science to be used, provide a description of what is being developed. If the EPA is relying on existing science, provide a short description.

- The nature of planned or completed peer review. To the extent possible, provide information about the type of peer review, the charge questions provided to the reviewers, how relevant peer review comments were integrated into the planned action, and information about the qualifications of the reviewer(s).

Despite the SAB making several of these recommendations in previous reviews, less information is being provided. We request that the Agency provide more complete information to support future SAB decisions about the adequacy of the science supporting actions in future regulatory agendas.

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. Michael Honeycutt, Chair
Science Advisory Board

Enclosure

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

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 Spring 2017 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		
RIN¹	Planned Action Title	Recommendation
<u>2060-AT54</u>	Review of the 2016 Oil and Gas New Source Performance Standards for New, Reconstructed, and Modified Sources	Merits review by the SAB.
<u>2060-AT55</u>	Review of the Clean Power Plan	Merits review by the SAB
<u>2060-AT56</u>	Review of the Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Generating Units	Merits review by the SAB
<u>2040-AF75</u>	Second Action: Definition of "Waters of the U.S."	Defer a determination until sufficient information is available
<u>2070-AK34</u>	Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h)	Defer a determination until sufficient information is available
<u>2040-AF37</u>	National Primary Drinking Water Regulations: Finished Water Storage Facility Inspection Requirements Addendum to the Revised Total Coliform Rule	No further SAB consideration is merited.
<u>2040-AF74</u>	Definition of "Waters of the United States" – Recodification of Preexisting Rules	No further SAB consideration is merited.
<u>2050-AG87</u>	Clean Water Act Hazardous Substances Spill Prevention	No further SAB consideration is merited.
<u>2060-AR57</u>	Review of the Primary National Ambient Air Quality Standards for Nitrogen Dioxide	No further SAB consideration is merited.

Proposed actions in the Spring 2017 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

RIN¹	Planned Action Title	Recommendation
2060-AT30	National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries	No further SAB consideration is merited.
2060-AT34	National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing Residual Risk and Technology Review	No further SAB consideration is merited.
2070-AK37	Review of Pesticides; Certification of Pesticide Applicators	No further SAB consideration is merited.

¹The 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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