



SCIENCE ADVISORY BOARD

A Federal Advisory Committee to the U.S. Environmental Protection Agency

August 10, 2023

EPA-SAB-23-006

The Honorable Michael S. Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Subject: Science Advisory Board (SAB) Consideration of Nineteen Planned Regulatory Actions Listed on EPA's 2022 Fall Regulatory Agenda and Discussed During the Chartered SAB Meeting on June 23, 2023

Dear Administrator Regan,

The Environmental Protection Agency's (EPA) Science Advisory Board (SAB) met on June 23, 2023, to decide whether to review the adequacy of the scientific and technical basis of nineteen EPA planned regulatory actions made available by the Agency as required by statute. The SAB decided to review the adequacy of the scientific and technical basis of the following two proposed rules: (1) *New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule* (RIN 2060-AV09); and (2) *Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems* (RIN 2060-AV83). The SAB found that seventeen of EPA's planned actions do not merit further review by the SAB.

The Environmental Research, Development, and Demonstration Authorization Act (ERDDAA) requires the EPA to make available to the SAB proposed criteria documents, standards, limitations, and relevant supporting scientific and technical information when provided to any other federal agency for formal review and comment. The SAB may, within the time specified by the Administrator, make available advice and comments on the adequacy of the scientific and technical basis of the proposed actions. To fulfill ERDDAA requirements, the Associate Administrator for the Office of Policy, the Deputy Assistant Administrator for Science Policy in the Office of Research and Development, and the Director of the Science Advisory Board Staff Office on February 28, 2022, clarified the process for Review of Science Supporting EPA Decisions. Under this process, the SAB Work Group for the Review of Science Supporting EPA Decisions holds monthly meetings to examine planned actions sent to the SAB Office.

On January 27, February 24, March 31, April 28, and May 26, 2023, the SAB Work Group for the Review of Science Supporting EPA Decisions met to review planned actions listed on EPA's 2022

Fall Regulatory Agenda and consider whether the science supporting these actions should be reviewed by the SAB. The EPA provided additional information on some of these rules. The Work Group recommended that the SAB review the adequacy of the scientific and technical basis of two proposed rules and found that seventeen EPA planned actions did not merit SAB review.¹

The chartered SAB met on June 23, 2023, and discussed the Work Group recommendations. The chartered SAB agreed that the SAB should review the adequacy of the scientific and technical basis of the following two proposed rules: (1) *New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule* (RIN 2060-AV09 and RIN 2060-AV10); and (2) *Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems* (RIN 2060-AV83). A summary of the SAB findings regarding these two actions is provided in Attachment A. The SAB also agreed that the following seventeen planned EPA actions do not merit further review by the SAB (a summary of the SAB findings regarding these seventeen actions is provided in Attachment B).

1. Federal Baseline Water Quality Standards for Indian Reservations (RIN 2040-AF62)
2. Revisions to Regulations on Persistent, Bioaccumulative, and Toxic (PBT) Chemicals Subject to TSCA Section 6(h) (RIN 2070-AL02)
3. Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium Duty Vehicles (RIN 2060-AV49)
4. State Implementation Plans: Findings of Substantial Inadequacy and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction (RIN 2060-AV79)
5. Revisions and Confidentiality Determinations for Data Elements Under the Greenhouse Gas Reporting Rule (RIN 2060-AU35)
6. National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review (RIN 2060-AV53)
7. Perchloroethylene; Rulemaking Under Section 6(a) of the Toxic Substances Control Act (TSCA) (RIN 2070-AK84)
8. Greenhouse Gas Emissions Standards for Heavy-Duty Engines and Vehicles – Phase 3 (RIN 2060-AV50)
9. Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy Surface Impoundments (RIN 2050-AH14)

¹ Recommendations of the SAB Work Group for Review of Science Supporting EPA Decisions Regarding Planned EPA Regulatory Actions [Memorandum], June 5, 2023. Available at: https://sab.epa.gov/ords/sab/r/sab_apex/sab/meeting?p19_id=1003&clear=19&session=6289449567262#materials

10. Reconsideration of the Dust-Lead Hazard Standards and Dust-lead Post-Abatement (RIN 2070-AK91)
11. Clean Water Act Section 404 Tribal and State Program Regulation (RIN 2040-AF83)
12. Agricultural Worker Protection Standard; Reconsideration of the Application Exclusion Zone Amendments (2070-AK92)
13. Alternate PCB Extraction Methods and Amendments to PCB Cleanup and Disposal Regulations (RIN 2050-AH08)
14. Federal Implementation Plan for Oil and Natural Gas Sources; Uintah and Ouray Indian Reservation in Utah (RIN 2008-AA03)
15. Emergency Release Notification Requirements for Animal Waste Air Emissions under the Emergency Planning and Community Right-to-Know Act (EPCRA) Regulations (RIN 2050-AH28)
16. Revisions to the Air Emissions Reporting Requirements (RIN 2060-AV41)
17. Listing of Specific PFAS as RCRA Hazardous Constituents (RIN 2050-AH26)

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

Sincerely,

/s/

Alison C. Cullen, Sc.D.
Chair, EPA Science Advisory Board

Attachments

NOTICE

This report has been written as part of the activities of the EPA Science Advisory Board, a public advisory committee providing extramural scientific information and advice to the Administrator and other officials of the Environmental Protection Agency. The Board 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 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 or commercial products constitute a recommendation for use. Reports of the EPA Science Advisory Board are posted on the EPA website at <https://sab.epa.gov>.

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Dr. June Weintraub, Senior Epidemiologist and Manager of Water and Noise Regulatory Programs, San Francisco Department of Public Health, San Francisco, CA

Dr. Sacoby Wilson, Professor and Director of the Center for Community Engagement, Environmental Justice, and Health (CEEJH), Maryland Institute for Applied Environmental Health, School of Public Health, University of Maryland-College Park, College Park, MD

Dr. Dominique van der Mensbrugghe, Research Professor and Director of the Center for Global Trade Analysis, Department of Agricultural Economics, Purdue University, West Lafayette, IN

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Dr. Thomas Armitage, Designated Federal Officer, U.S. Environmental Protection Agency, Washington, DC

Attachment A. Proposed Actions that Merit SAB Review

- 1) *New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule (RIN 2060-AV09)*

The EPA is proposing revised new source performance standards (NSPS), first for greenhouse gas emissions from new fossil fuel-fired stationary combustion turbine electric generating units (EGUs) and second for greenhouse gas emissions from fossil fuel-fired steam generating units that undertake a large modification, based upon the 8-year review required by the Clean Air Act. Third, the EPA is proposing emission guidelines for greenhouse gas emissions from existing fossil fuel-fired steam generating EGUs, which include both coal-fired and oil/gas-fired steam generating EGUs. Fourth, the EPA is proposing emission guidelines for greenhouse gas emissions from the largest, most frequently operated existing stationary combustion turbines and is soliciting comment on approaches for emission guidelines for greenhouse gas emissions for the remainder of the existing combustion turbine category. Finally, the EPA is proposing to repeal the Affordable Clean Energy (ACE) Rule.

The SAB Work Group for Review of Science Supporting EPA Decisions received a briefing from EPA's Office of Air and Radiation on this proposed action on May 26, 2023, and also reviewed additional information. The Work Group recommended that the chartered SAB review the adequacy of the scientific and technical basis of this rule. In particular, the Work Group recommended that the chartered SAB review the potential effects of fugitive emissions of hydrogen to be used in the proposed best system of emission reduction. At the chartered SAB meeting on June 23, 2023, the SAB agreed with the Work Group recommendation and decided to review the adequacy of the scientific and technical basis of the proposed rule.

- 2) *Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems (RIN 2060-AV83).*

The Inflation Reduction Act of 2022 added section 136, "Methane Emissions and Waste Reduction Incentive Program" to title I of the Clean Air Act. Section 136(c) directs the Administrator to impose and collect a charge for excess methane emissions from applicable facilities that report to the Greenhouse Gas Reporting Program (petroleum and natural gas systems source category) and that exceed statutorily specified waste emissions thresholds.

The EPA is proposing to amend requirements that apply to the petroleum and natural gas systems source category of the Greenhouse Gas Reporting Rule to ensure that reporting is based on empirical data, accurately reflects total methane emissions and waste emissions from applicable facilities, and allows owners and operators of applicable facilities to submit empirical emissions data that appropriately demonstrate the extent to which a charge is owed.

The SAB Work Group for Review of Science Supporting EPA Decisions recommended that the chartered SAB review the adequacy of the scientific and technical basis of this rule because it addresses a range of scientific and technical issues concerning identification of methane emission sources, including large release events, and reporting methane emissions.

At the chartered SAB meeting on June 23, 2023, the SAB agreed with the work group recommendation and decided to review the adequacy of the scientific and technical basis of the proposed rule.

Attachment B. Summary of Proposed EPA Actions that Do Not Merit SAB Review

RIN	Proposed Action Title	SAB Determination
RIN 2040-AF62	Federal Baseline Water Quality Standards for Indian Reservations (88 FR 29496)	This planned action does not warrant further review because the EPA has neither developed nor relied upon new science for this rulemaking effort.
RIN 2070-AL02	Revisions to Regulations on Persistent, Bioaccumulative, and Toxic (PBT) Chemicals Subject to TSCA Section 6(h)	This planned action does not warrant further review because materials supporting the current version of the rule are being peer reviewed or have been peer reviewed, and the analytical methods used to develop the rule are not new to the Agency.
RIN 2060-AV49	Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium Duty Vehicles (88 FR 29184)	This planned action does not warrant further review because materials supporting the current version of the rule are being peer reviewed or have been peer reviewed. Furthermore, the analytical methods used to develop the rule have been applied in other actions and are not new to the Agency.
RIN 2060-AV79	State Implementation Plans: Findings of Substantial Inadequacy and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction (88 FR 11842)	This planned action does not warrant further review because it does not involve new science or new scientific approaches.
RIN 2060-AU35	Revisions and Confidentiality Determinations for Data Elements Under the Greenhouse Gas Reporting Rule (88 FR 32852)	This planned action does not warrant further review because it is primarily administrative.

RIN	Proposed Action Title	SAB Determination
RIN 2060-AV53	National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review (88 FR 24854)	This planned action does not warrant further review. The proposed rule appears to be based on sound science and the EPA has justified its approach of imposing regulations with the goal of reducing the emissions from the worst performing facilities and eventually reaching zero particulate matter (PM) emissions.
RIN 2070-AK84	Perchloroethylene; Rulemaking Under Section 6(a) of the Toxic Substances Control Act (TSCA) (88 FR 39652)	This planned action does not warrant further review because the supporting science has been reviewed by the Toxic Substances Control Act (TSCA) Science Advisory Committee on Chemicals.
RIN 2060-AV50	Greenhouse Gas Emissions Standards for Heavy-Duty Engines and Vehicles – Phase 3 (88 FR 25926)	This planned action does not warrant further review. It is supported by information from literature reviews and established analytical processes. The EPA considered greenhouse gas and non-greenhouse gas emissions using the well-established MOtor Vehicle Emission Simulator (MOVES) model, with updated emission rates used for this proposal. The EPA conducted a peer review of updates of emission rates for the MOVES model.
RIN 2050-AH14	Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy Surface Impoundments (88 FR 31982)	This planned action does not warrant further review because the EPA has not developed or relied upon new scientific or technical work products to support the rule.

RIN	Proposed Action Title	SAB Determination
RIN 2070-AK91	Reconsideration of the Dust-Lead Hazard Standards and Dust-lead Post-Abatement Clearance Levels (EPA Pre-publication Notice)	This planned action does not warrant further review because the influential, novel, and controversial science employed in the modeling approaches supporting the proposed rule have already been peer-reviewed. Therefore, no additional peer review is needed.
RIN 2040-AF83	Clean Water Act Section 404 Tribal and State Program Regulation	This planned action does not warrant further review because there are no science or technical questions being addressed in the proposal. The proposed rulemaking does not include an associated technical support document or supporting scientific analyses.
RIN 2070-AK92	Agricultural Worker Protection Standard; Reconsideration of the Application Exclusion Zone Amendments (88 FR 15346)	This planned action does not warrant further review because it does not involve new science or new scientific approaches. The proposed rulemaking was submitted to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel for review. The FIFRA Science Advisory Panel waived review because it determined that the rule did not contain scientific issues that warranted review.
RIN 2050-AH08	Alternate PCB Extraction Methods and Amendments to PCB Cleanup and Disposal Regulations (86 FR 58730)	This planned action does not warrant further review because it does not involve new or controversial scientific or technical issues.

RIN	Proposed Action Title	SAB Determination
RIN 2008-AA03	Federal Implementation Plan for Oil and Natural Gas Sources; Uintah and Ouray Indian Reservation in Utah (87 FR 75334)	This planned action does not warrant further review because does not involve new scientific or technical work products.
RIN 2050-AH28	Emergency Release Notification Requirements for Animal Waste Air Emissions under the Emergency Planning and Community Right-to-Know Act (EPCRA) Regulation	This planned action does not warrant further review because the proposed rule would be a reinstatement of requirements for reporting animal waste air emissions from farms and the EPA is not developing new scientific or technical work products in support of the proposal.
RIN 2060-AV41	Revisions to the Air Emissions Reporting Requirements	This planned action does not warrant further review. The planned action focuses primarily on air emission data reporting requirements and, although it is supported by analyses to develop data reporting thresholds, the rule does not involve new science.
RIN 2050-AH26	Listing of Specific PFAS as RCRA Hazardous Constituents	This planned action does not warrant further review. A review of the key toxicity and health effects assessments is being performed by EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) for selected per- and polyfluoroalkyl substances (PFAS) to demonstrate that these PFAS chemicals have toxic and adverse health effects, but the EPA is not developing any new scientific or technical basis for the proposed rule.