

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY**

HEARING CHARTER

*Strengthening Transparency and Accountability
within the Environmental Protection Agency*

Thursday, November 14, 2013
10:00 a.m. to 1:00 p.m.
2318 Rayburn House Office Building

PURPOSE

On Thursday, November 14, 2013 at 10:00 a.m. the House Committee on Science, Space, and Technology will hold a hearing to review science and technology activities at the Environmental Protection Agency (EPA) including: agency-wide policies and practices related to the development and use of science in regulatory decisions; the role of independent scientific advisory bodies such as the EPA Science Advisory Board and the EPA Clean Air Scientific Advisory Committee; and the importance of transparency and integrity in the Agency's science activities.

WITNESS LIST

The Honorable Gina McCarthy, Administrator, U.S. Environmental Protection Agency

BACKGROUND

Science has been central to EPA's mission and functions since its establishment in 1970. In his message to Congress regarding the creation of EPA, President Nixon stated that a principal role of the agency should be "[t]he conduct of research on the adverse effects of pollution and on methods and equipment for controlling it, the gathering of information on pollution, and the use of this information in strengthening environmental protection programs and recommending policy changes."¹

Today, with significantly expanded regulatory authorities and a budget over \$8 billion, science remains an important component of the agency's mission and core activities. EPA's policy on scientific integrity states:

"Science is the backbone of the EPA's decision-making. The Agency's ability to pursue its mission to protect human health and the environment depends upon the integrity of the science on which it relies. The environmental policies, decisions, guidance, and regulations that impact the lives of all Americans every day must be grounded, at a most fundamental level, in sound, high quality science."²

¹ <http://www.epa.gov/aboutepa/history/org/origins/reorg.html>

² http://www.epa.gov/osa/pdfs/epa_scientific_integrity_policy_20120115.pdf

EPA Administrator Gina McCarthy echoed this priority in her confirmation hearing, stating that “The rule of law, along with sound science and transparency, is one of EPA’s core values and, if I am confirmed, it will continue to guide all EPA actions.”³ Similarly, she stated that, “EPA is committed to transparency with regard to the scientific bases of agency decision making.”⁴

Overview of EPA Science Activities and Organization

EPA’s science-related authorities and activities are derived from a number of statutes. The Environmental Research, Development, and Demonstration Authorization Act (ERDDA) authorizes agency research and science activities broadly, and created the Office of Research and Development (ORD) and Science Advisory Board (SAB).

In addition to ERDDAA, EPA also derives authority for R&D activities through other major environmental statutes. For example, under the Clean Air Act, the EPA Administrator must issue air quality criteria that “shall accurately reflect the latest scientific knowledge useful in indicating the kind of extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air.”⁵ Through the Safe Drinking Water Act, EPA sets standards based on “the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices.”⁶ Similarly, the Clean Water Act requires EPA to publish water quality information “accurately reflecting the latest scientific knowledge.”⁷

The science enterprise at EPA is spread across program offices and regions. ORD is organized into three national labs comprised of 18 separate labs and four national centers with 19 divisions. In addition to 18 labs within ORD, there are nine labs split among several program offices and each of EPA’s ten regions across the nation has its own lab.

In a 2012 report, the SAB and EPA’s Board of Scientific Counselors (BOSC) stated: “Over 6,000 EPA employees are involved in scientific assessments, research, and related activities, with approximately 1,300 full-time scientific staff in the Office of Research and Development (ORD) and approximately 4,700 full-time scientific staff in program and regional offices.”⁸

The fragmented, disparate nature of EPA R&D presents a challenge to manage and coordinate, and has complicated efforts to evaluate the effectiveness of these activities. Numerous studies conducted by the Office of Inspector General (OIG), the Government Accountability Office (GAO), the National Academies of Science (NAS) and other outside

³ http://www.epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_id=d71fd4b6-ce77-3a98-46a0-fb02b0cae0ed

⁴ Ibid.

⁵ 42 U.S.C. §7408 (a)(2) (2000).

⁶ 42 U.S.C. §300g-1(b)(3)(A)(i).

⁷ 33 U.S.C. §1314 (a)(1).

⁸ EPA Science Advisory Board and Board of Scientific Counselors, *Science Integration for Decision Making at the U.S. EPA*, July 6, 2012.

groups over the years have cited significant concerns with the EPA's SAB and the difficulties in evaluating the usefulness of the science to program needs.

ISSUES FOR CONSIDERATION

Through the years, a series of reports have documented problems with science at EPA, including a lack of uniformity of the peer-review process, not evaluating impacts of regulations and a lack of transparency. In 1992, an independent panel stated, "Currently, EPA science is of uneven quality, and the Agency's policies and regulations are frequently perceived as lacking a strong scientific foundation."⁹ Beyond the actual science conducted at the Agency, and used to generate regulations, the perception of the public is that EPA does not use science in an effective manner. "A perception exists that regulation based on unsound science have led to unneeded economic and social burdens, and that unsound science has sometimes led to decisions that expose people and ecosystems to avoidable risks."¹⁰

Regulatory Science

Science plays a foundational but not necessarily determinative role in support of EPA's mission to protect human health and the environment. EPA states that "the role and use of science at EPA are determined by the nature of the scientific information and how it fits with the context of Agency decision-making."¹¹ This role is further elaborated upon as follows:

Science does not drive EPA's policy and regulatory decisions, but rather, along with other relevant factors, informs and supports those decisions. Implementation costs and technological feasibility, local autonomy versus federal control, and justice and equity--all of which impact our quality of life and standard of living--are among the considerations that need to be factored into EPA's decisions without compromising scientific integrity, the Agency's mission, or statutory mandates. The impacts or limitations of these non-science factors, as well as the current state-of-the-science, will influence how scientific considerations are brought to bear on a particular environmental problem facing the Agency.¹²

Numerous entities have raised concerns regarding possible shortcomings in the quality and use of science at the agency. The FY2013 Annual Plan of the EPA's OIG raises concerns about science and technology activities at the Agency, stating that "[q]uestions exist as to whether EPA is collecting the right data, of sufficient quality, and is making that data available."¹³ In terms of EPA's regulatory process, the OIG further stated that "[m]any policies are out of date or are based on outdated science and technology."¹⁴ More broadly, the chair of a 2009 National Academy of Sciences panel on ways to improve the Agency's risk assessment process told the EPA's SAB and BOSC earlier this year that the "The sleeping giant is that EPA

⁹ EPA, *Safeguarding the Future: Credible Science, Credible Decisions*, 1992.

¹⁰ Ibid.

¹¹ <http://www.epa.gov/epahome/science.htm>

¹² Ibid.

¹³ EPA Inspector General (IG), "FY 2013 Annual Plan," January 2013, http://www.epa.gov/oig/reports/2013/EPA_OIG_FY_2013_Annual_Plan.pdf

¹⁴ Ibid.

science is on the rocks,” and that risk assessment process was the Agency’s “Achilles heel.”¹⁵ Their final report found that, “There is a critical need for more high quality assessments translating existing science on a broad range of topics important to decision making at the EPA,” and “narrow interpretations of legislative mandates and the organizational structure of EPA’s regulatory programs often have posed barriers to innovation and cross-program solving.”¹⁶

Peer Review and Advisory Panels

EPA’s Peer Review Handbook provides guidance to the agency regarding use of peer review to enhance the quality and objectivity of scientific or technical work products. Specifically, EPA’s peer review policy “encourages and expects peer review of all scientific and technical information that is intended to inform or support Agency decisions and notes that influential scientific information, including highly influential scientific assessments, should be peer reviewed in accordance with this Handbook.”¹⁷

The EPA OIG released the report “*Procedural Review of EPA’s Greenhouse Gases Endangerment Finding Data Quality Processes*,” which raised a number of concerns about how the Agency classifies scientific assessments and information, as well as the quality of peer review that EPA science undergoes. In reviewing EPA’s Technical Support Document (TSD) in support of the Endangerment Finding, the OIG found that:

“EPA’s peer review did not meet all OMB [Office of Management and Budget] requirements for such documents. EPA had the TSD reviewed by a panel of 12 federal climate change scientists. However, the panel’s findings and EPA’s disposition of the findings were not made available to the public as would be required for reviews of highly influential scientific assessments. Also, this panel did not fully meet the independence requirements for reviews of highly influential scientific assessments because one of the panelists was an EPA employee.”¹⁸

With respect to advisory panels, concerns have been raised regarding the make-up, transparency, and rigor provided by EPA advisory panels such as SAB and CASAC. Despite the requirement under the Federal Advisory Committee Act that panels be “fairly balanced in terms of points of view presented and the functions to be performed by the advisory committee,”¹⁹ GAO has found that “[m]any advisory committee members are not appropriately screened for potential conflicts of interest or points of view.”²⁰

¹⁵ *Inside EPA*, “Key Adviser Warns EPA to Improve Agency Science Or Face A ‘Crisis’,” July 6, 2011.

¹⁶ EPA Science Advisory Board and Board of Scientific Counselors, *Science Integration for Decision Making at the U.S. EPA*, July 6, 2012.

¹⁷ http://www.epa.gov/peerreview/pdfs/peer_review_handbook_2006.pdf

¹⁸ EPA IG, “Procedural Review of EPA’s Greenhouse Gases Endangerment Finding Data Quality Processes,” Report No. 11-P-0702, September 26, 2011, <http://www.epa.gov/oig/reports/2011/20110926-11-P-0702.pdf>.

¹⁹ 5 U.S.C. App

²⁰ GAO, “Ensuring Sound Science.” See also: John Stephenson, GAO, Testimony before the Committee on Environment and Public Works, U.S. Senate, “SCIENTIFIC INTEGRITY: EPA’s Efforts to Enhance the Credibility and Transparency of Its Scientific Processes,” June 9, 2009, <http://www.gao.gov/products/GAO-09-773T>.

Cost-Benefit Analysis

EPA regulations are playing a greater role in the overall costs and benefits to the American economy. In its *Draft 2013 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*,²¹ the Office of Information and Regulatory Affairs notes the prominence of EPA Clean Air Act rules in the overall regulatory apparatus, saying that EPA rules represent 58 to 80 percent of the agency-estimated monetized benefits and 44 to 54 percent of the monetized costs of all federal regulations.

Risk Assessment and Communication

Another major EPA responsibility within the Science, Space, and Technology Committee's jurisdiction is the conduct of risk assessments. EPA efforts in risk assessment aim to "characterize the nature and magnitude of health risks to humans (e.g., residents, workers, recreational visitors) and ecological receptors (e.g., birds, fish, wildlife) from chemical contaminants and other stressors that may be present in the environment."²² EPA's primary program for assessing human health risks is known as the Integrated Risk Information System (IRIS).

The National Research Council (NRC) recently noted that as the science of risk assessment has become more complex, "improved analytical techniques have produced more data that lead to question about how to address issues of, for example, multiple chemical exposures, multiple risks and susceptibility in populations."²³ Despite understanding the increasing complexity and greater need for data and information, chemical risk assessment at EPA remains on GAO's High-Risk Program and was targeted for reform in the Consolidated Appropriations Act of 2012. Additionally, a 2011 NRC report made specific recommendations to EPA regarding how best to improve the IRIS process:²⁴

²¹ http://www.whitehouse.gov/sites/default/files/omb/inforeg/2013_cb/draft_2013_cost_benefit_report.pdf.

²² <http://epa.gov/riskassessment/basicinformation.htm#arisk>

²³ NRC, *Science and Decisions: Advancing Risk Assessment*, 2009

²⁴ http://www.nap.edu/catalog.php?record_id=13142