

Calendar No. 124

114TH CONGRESS }
1st Session }

SENATE

{ REPORT
114-69

SECRET SCIENCE REFORM ACT OF 2015

JUNE 22, 2015.—Ordered to be printed

Mr. INHOFE, from the Committee on Environment and Public Works, submitted the following

R E P O R T

together with

MINORITY VIEWS

[To accompany S. 544]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred a bill (S. 544) to prohibit the Environmental Protection Agency from proposing, finalizing, or disseminating regulations or assessments based upon science that is not transparent or reproducible, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

GENERAL STATEMENT AND BACKGROUND

Current law does not guarantee that Environmental Protection Agency (EPA) regulatory actions are based on the best available science, nor does it ensure the science used is transparent or independently verifiable. While numerous Administration policies and guidance recommend such safeguards, they fall short of meeting the open access and integrity standards for sound science.

Aside from EPA-generated science, the Agency primarily relies on studies that have been conducted outside the Agency and peer reviewed. However, in many cases peer reviewers do not have access to underlying data and therefore cannot verify the findings of the studies under review. In 2014, a survey of experts in risk analysis and toxicology released by George Mason University found

that only 16% of those surveyed said peer reviewers often or always have access to underlying data from critical studies. Moreover, peer review alone is not a sufficient check on science. In 2002, the National Research Council explained “peer review alone does not detect fraud, validate factual findings . . . or substitute for the judgments of the scientific community as a whole.” Further, in 2014 *The Economist* reported “[m]odern scientists are doing too much trusting and not enough verifying—to the detriment of the whole of science, and of humanity. Too many of the findings that fill the academic ether are the result of shoddy experiments or poor analysis.”¹

EPA also has a record of relying on science conducted outside the Agency that is not available to the public—or to the EPA—and therefore cannot be replicated or verified by independent researchers. For example, virtually all Clean Air Act regulations under the Obama Administration have been justified by data sets collected by two non-governmental institutions over 30 years ago, which have been withheld from the public and cannot be replicated. In 2014, Congress learned this data either no longer exists, is of such poor quality that modeling results cannot be replicated, or has not been coded to facilitate independent analysis. However, EPA continues to rely on this data to support major regulations.

Open access to data is consistent with requirements of major scientific journals, as well as the academic and scientific community. For example, *Nature Partner Journal (NPG)* states: “NPG has consistently been an early mover in embracing [open access] as a natural consequence of new technologies . . . As of 2015, we publish 74 journals with an open access option, and 44 percent of the research articles we published in 2014 were open access.”² The following journals are fully open access: *Nature Communications*, *Nature Partner Journals*, *Scientific Reports*, *Scientific Data*, and 20 society and academic journals.³ Dr. John Graham, Dean, Indiana University, and former Administrator of the Office for Information and Regulatory Affairs stated in testimony before the House Committee on Science, Space and Technology in February 2014: “Once environmental scientists have published their work in the peer-reviewed scientific community, it is already common practice for them to share their data with other scientists who have an interest in their research.” In 2009, the Bipartisan Policy Center’s Science for Policy Project recommended: “Studies used in the formulation of regulation should be subject to data access requirements equivalent under the Data Access Act (Shelby Amendment) and its implementing circular regardless of who funded the study.” In June 2013, the Administrative Conference of the U.S., an independent federal agency that provides expert advice and recommendations for improvement of federal agency procedures encouraged “the disclosure of data, including both privately-funded and federally-funded research that an agency is considering.” Accordingly, it is time for the EPA to use science that follows this practice.

Ensuring EPA action is based on technical and scientific information that is publicly available provides the much needed trans-

¹<http://www.economist.com/news/leaders/21588069-scientific-research-has-changed-world-now-it-needs-change-itself-how-science-goes-wrong>

²http://www.nature.com/authors/open_access/about_open_access.html

³http://www.nature.com/authors/open_access/about_open_access.html

parency and opportunity for verification to ensure public confidence in EPA action. Above all, independent verification and transparency improves the credibility of the science, which leads to better decision making at EPA and greater public health protection. As new datasets are made public, greater collaboration among public health experts could lead to more rapid advances in science that could save lives and lead to breakthroughs in new areas. Thus, in the spirit of advancing science and creating well-informed public policy at the EPA, S. 544 is necessary to achieve these goals.

OBJECTIVES OF THE LEGISLATION

The purpose of S. 544, the “Secret Science Reform Act of 2015,” is to prohibit the Environmental Protection Agency Administrator from finalizing, proposing, or disseminating a covered action unless all scientific and technical information relied on to support the covered action is the best available science, specifically identified, and publicly available in a manner that is sufficient for independent analysis and substantial reproduction of research results.

SECTION-BY-SECTION ANALYSIS

Section 1. Short Title

This Act may be cited as the “Secret Science Reform Act of 2015.”

Sec. 2. Data Transparency

Section 2 amends section 6(b) of the Environmental Research, Development, and Demonstration Authorization Act of 1978 by striking and replacing the existing text.

Paragraph (1) prohibits the Environmental Protection Agency (EPA) from taking a covered action unless the scientific and technical information relied on to support the covered action is the best available science, is specifically identified, and is publicly available online in a manner that is sufficient for independent analysis and substantial reproduction.

The Committee does not intend for EPA to duplicate public access to scientific data that is already provided by others. For example, ClinicalTrials.gov currently lists 189,951 studies. Similarly, the National Center for Biotechnology Information, a division of the National Library of Medicine at the National Institutes of Health (NIH) hosts 40 online literature and molecular biology databases. Most scientific journals are available online directly or through one of these databases. Moreover, if scientific or technical information is federally funded, the Data Access Act, Pub. L. No. 105–277, tit. III, 112 Stat. 2681, 2681–495 (1998), and subsequent guidance in the Office of Management and Budget’s Circular A–110, require such information to be “made available to the public through the procedures established under [the Freedom of Information Act]” if it is “used by the federal government in developing an agency action.”⁴ Circular A–110 is clear that data access provisions applied even to mixed private/public funded research, stating “the amended Circular shall apply to all Federally-funded research, regardless of the level of funding or whether the award recipient is also using

⁴ OMB Circular A–110, “Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations,” 2 C.F.R. 215.36(d).

non-Federal funds.”⁵ Experts have suggested that at least half the studies used by EPA are based on at least minimal federal funding, which would trigger the data access requirements under Circular A-110.

The Committee also does not intend for EPA to duplicate standards establishing sufficiency for independent analysis and substantial reproduction. As noted by Dr. Francis Collins and Dr. Lawrence Tabak in a comment on NIH plans to enhance reproducibility, published in *Nature* in January 2014, human clinical trials do not present a reproducibility problem due to stringent regulation of such trials.⁶ Accordingly, the Committee deems human clinical trials that meet current regulations applicable to such trials to meet the standards set forth in paragraph (1). Reproducibility has been an issue for preclinical research. To address this issue, NIH has adopted “Principles and Guidelines for Reporting Preclinical Research.”⁷ Included in those guidelines is a requirement that “all datasets on which the conclusions of the paper rely must be made available upon request (where ethically appropriate) during consideration of the manuscript (by editors and reviewers) and upon reasonable request immediately upon publication.” The Committee deems any information and technical information published in a journal or other publication under conditions that meet NIH’s Principles and Guidelines to be information that is sufficient for independent analysis and substantial reproduction.

S. 544 would not require EPA to collect, host, reanalyze, reproduce, disseminate, or otherwise make publicly available any scientific or technical information as defined in the bill. Rather, S. 544 would require EPA to base covered actions on scientific and technical information that is otherwise publicly available in a manner sufficient for independent analysis and substantial reproduction of research results. This provision would not significantly diminish the studies used by EPA for several reasons, including: electronic data has become a standard for scientific research in the digital age, many scientific journals publishing such studies require full transparency to verify research results, federal agencies including the EPA are already required to provide public access to data based on any federal funding, and certain federal agencies host existing data repositories that would meet the publicly available provision of this bill. Accordingly, this provision dramatically shifts any burden away from EPA.

Insofar as the EPA seeks to rely on information that is not deemed to be sufficient for independent analysis and substantial reproduction as described above, the Committee expects agency officials to ask the researcher to make the scientific or technical information publicly available in a manner sufficient for independent analysis and substantial reproduction of research results. This type of communication and interaction between EPA and researchers is a common practice at the Agency. For instance, during the recent development of the National Ambient Air Quality Standards for Ozone, the online rulemaking docket reveals examples of EPA offi-

⁵ 64 Fed. Reg. 5,684, 5,684 (Feb. 4, 1999).

⁶ Collins, F. and Labak, L, NIH Plans to enhance reproducibility, *Nature*, Vol. 505, p. 612, Jan. 30, 2014, available at <http://www.nature.com/news/policy-nih-plans-to-enhance-reproducibility-1.14586>

⁷ <http://www.nih.gov/about/reporting-preclinical-research.htm>

cials engaging with researchers asking for clarification or access to data.⁸ If the researcher informs EPA the scientific or technical information is not public and EPA wants to rely on their study for a covered action then EPA, similar to the policies of the National Science Foundation (NSF), NIH, and the National Aeronautics and Space Administration (NASA), could encourage the researcher to share the information through existing repositories.⁹

Paragraph (2) clarifies that nothing in the section requires EPA to disseminate scientific and technical information, nor does the section supersede any nondiscretionary statutory requirements.

The Committee does not expect EPA to itself collect or disseminate any information. As discussed above, there are ample venues for such dissemination. Nothing in this bill amends existing laws that protect confidential business information, trade secrets and other intellectual property from public disclosure. In addition, the Committee expects EPA to protect personnel and confidential information, as required by law. The National Academy of Sciences has confirmed that transparency and reproducibility in science is possible without any risks to confidentiality or privacy. In 2005, the Panel on Data Access for Research Purposes of the National Research Council stated in its report on *Expanding Access to Research Data: Reconciling Risks and Opportunities*: “Nothing in the past suggest that increasing access to research data without damage to privacy and confidentiality rights is beyond scientific reach.”¹⁰ The House of Representatives Committee on Science, Space and Technology received a letter of support for a similar House bill in the 113th Congress from more than 80 scientists, experts, and doctors, including two former EPA officials and two former chairs of EPA science committees, which stated that “complying with [the Secret Science Reform Act] can be accomplished without imposing unnecessary burdens, discouraging research, or raising confidentiality concerns. Across different disciplines, numerous statistical and technical approaches exist to protect any sensitive information.”¹¹

Paragraph (3) defines the terms covered actions and scientific and technical information.

Paragraph (4) requires EPA to carry out this subsection in a manner that does not exceed \$1 million a year. Based on the fact that EPA itself will not be collecting or disseminating information, but instead will rely on other entities and repositories, the Committee believes that EPA can easily carry out its duties under this Act for \$1 million a year.

Sec. 3. Preventing Censorship of Publicly Funded Science

Section 3 states that the Act does not limit the ability of federal employees or agencies to use in official documents or presentations terms common in the peer-reviewed scientific literature, including terms relevant to climate change, pollution, toxic substance exposure or other risks.

⁸ <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2008-0699-0399>;

<http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2008-0699-0407>;

<http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2008-0699-0110>.

⁹ http://www.crs.gov/pages/Reports.aspx?PRODCODE=R42983#_Toc350167909

¹⁰ <http://www.nap.edu/catalog/11434/expanding-access-to-research-data-reconciling-risks-and-opportunities>

¹¹ <http://science.house.gov/sites/republicans.science.house.gov/files/documents/Letter%20of%20Support%20for%20HR%204012%20-%2087%20Experts.pdf>

LEGISLATIVE HISTORY

On February 24, 2015, S. 544, “The Secret Science Reform Act of 2015” was introduced by Senator Barrasso along with seven co-sponsors in the Senate. On April 28, 2015, the Senate Committee on Environment and Public Works met to consider S. 544. An amendment was offered by Senators Boxer and Markey and passed by a unanimous vote of 20 Ayes. The bill, as amended, was approved on April 28, 2015, by a vote of 11 Ayes and 9 Nays.

In the 113th Congress, S. 2613, “The Secret Science Reform Act of 2014” was introduced by Senator Barrasso along with seven co-sponsors in the Senate and referred to the Senate Committee on Environment and Public Works on July 16, 2014.

On March 18, 2015, H.R. 1030, “The Secret Science Reform Act of 2015” passed the House of Representatives by a vote of 241 Ayes and 175 Nays. In the 113th Congress, H.R. 4012, “The Secret Science Reform Act of 2014” passed the House of Representatives by a vote of 237 Ayes and 190 Nays, on November 19, 2014.

HEARINGS

The Senate Committee on Environment and Public Works did not hold any hearings on S. 544, “The Secret Science Reform Act of 2015.” However, the House of Representatives held hearings in the 113th Congress regarding a House companion bill, H.R. 4012, “The Secret Science Reform Act of 2014.”¹²

ROLLCALL VOTES

The Committee on Environment and Public Works met to consider S. 544 on April 28, 2015. An amendment was adopted by roll call vote. Two amendments were rejected by roll call vote. The bill was ordered favorably reported, as amended, by roll call vote.

Amendment approved

1. Amendment that would prevent censorship of terms used in peer-reviewed scientific literature from official federal documents or presentations (offered by Senators Boxer and Markey) (adopted by voice vote).

Amendments rejected

A total of two additional amendments to the bill were offered and not approved by the Committee, as follows:

1. Amendment that would strike requirement for scientific and technical information to be made publicly available and replace with requirement that the funding sources of scientific and technical information be made publicly available (offered by Senators Markey and Boxer) (rejected by a roll call vote of 9 yeas, 11 nays).

2. Amendment that would allow use of peer-reviewed science, even if based on data that is prohibited from public disclosure (offered by Senators Markey and Boxer) (rejected by a roll call vote of 9 yeas, 11 nays).

¹² On February 11, 2014, the House of Representatives, Committee on Science, Space and Technology, Subcommittee on Environment, held a hearing on “The Secret Science Reform Act” and *Ensuring Open Science* at EPA. On November 14, 2013, the House of Representatives, Committee on Science, Space and Technology held a hearing *Strengthening Transparency and Accountability within the Environmental Protection Agency*.

Final Committee vote to report

S. 544, as amended by the Boxer/Markey amendment, was approved and ordered to be reported to the full Senate. The roll call vote to report the bill was 11 to 9 in favor (Senators Inhofe, Vitter, Barrasso, Capito, Crapo, Boozman, Sessions, Wicker, Fischer, Rounds, and Sullivan voted yea, and Senators Boxer, Carper, Cardin, Sanders, Whitehouse, Merkley, Gillibrand, Booker, and Markey voted nay).

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee on Environment and Public Works finds that S. 544 does not create any additional regulatory burdens, nor will it cause any adverse impact on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with Section 423 of the Congressional Budget and Impoundment Control Act (as amended by Section 101(a)(2) of the Unfunded Mandate Reform Act, P.L. 10404), the Committee on Environment and Public Works has received a letter from the Congressional Budget Office included herein.

COST OF LEGISLATION

JUNE 5, 2015.

Hon. JIM INHOFE,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 544, the Secret Science Reform Act of 2015.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susanne S. Mehlman.

Sincerely,

KEITH HALL.

Enclosure.

S. 544—Secret Science Reform Act of 2015

Summary: S. 544 would amend the Environmental Research, Development, and Demonstration Authorization Act of 1978 to prohibit the Environmental Protection Agency (EPA) from proposing, finalizing, or disseminating a “covered action” unless all scientific and technical information used to support that action is publicly available online in a manner that is sufficient for independent analysis and substantial reproduction of research results. Covered actions would include assessments of risks, exposure, or hazards; documents specifying criteria, guidance, standards, or limitations; and regulations and regulatory impact statements.

Although S. 544 would not require EPA to disseminate any scientific or technical information that it relies on to support covered actions, the bill would not prohibit EPA from doing so. Based on information from EPA, CBO expects that EPA would spend \$250 million annually over the next few years to ensure the trans-

parency of information and data supporting some covered actions, assuming the availability of appropriated funds.

Enacting S. 544 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. S. 544 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would not affect the budgets of state, local, or tribal governments.

Estimated cost to the Federal Government: This legislation would direct EPA to implement S. 544 using up to \$1 million a year from amounts authorized to be appropriated for other activities under current law. Although S. 544 would not authorize additional appropriations to implement the requirements of the bill, CBO estimates that implementing S. 544 would cost about \$250 million a year for the next few years, subject to appropriation of the necessary amounts. Costs in later years would probably decline gradually from that level. The additional discretionary spending would cover EPA's costs of ensuring that the data underpinning the studies used to support EPA's regulations and other regulatory activities are accessible to the public in a format that enables independent analysis and reproduction of the results.

Basis of estimate: Under current law, EPA typically spends about \$500 million each year to support research and development activities, including assessments to determine the potential risk to public health from environmental contaminants. The number of studies involved in supporting covered actions depends on the complexity of the issue being addressed. For example, when addressing a recent issue with flaring at petroleum refineries, EPA relied on a dozen scientific studies. In contrast, when reviewing the National Ambient Air Quality Standards, the agency relied on thousands of scientific studies. In total, the agency relies on about 50,000 scientific studies annually to perform its mission—although some of those studies are used more than once from year to year.

Although EPA provides some access to the scientific and technical information it uses when issuing regulations and performing other related activities, enacting this bill would require EPA to provide a greater degree of transparency. Based on information from EPA, CBO estimates that the agency would spend, on average, \$10,000 per scientific study for activities to meet the bill's requirements. Specifically, such funding would cover the costs of obtaining all of the underlying data used in a study, reviewing the data to address any confidentially concerns, formatting the data for public access, providing access to the computer codes and models used in the study's analysis, and providing descriptions and documentation on how to access the data. Such activities could entail correspondence and negotiations with study authors and publishers and computer processing services to construct and maintain data bases to store study-related information.

The costs of implementing S. 544 are uncertain because it is not clear how EPA would meet the bill's requirements. If EPA continued to rely on as many scientific studies as it has used in recent years, and worked to make all of the technical information used in such studies available to the public as directed by S. 544, then implementing the bill would cost at least several hundred million dollars a year. However, EPA could instead rely on significantly fewer studies each year in support of its mission, and limit its spending

on increased transparency to a relatively small expansion of existing study-related activity; in that scenario, implementing the bill would be much less costly.

Thus, the costs of implementing S. 544 would ultimately depend on how EPA adapts to the bill's requirements. (It would also depend on the availability of appropriated funds to obtain access to all data underlying the scientific studies it uses and prepare it for use by the public.) CBO expects that EPA would modify its practices, at least to some extent, and would base its future work on fewer scientific studies, especially those studies that have easily accessible or transparent data. Any such modification of EPA practices would also have to take into consideration the concern that the quality of the agency's work could be compromised if that work relies on a significantly smaller collection of scientific studies; we expect that the agency would seek to reduce its reliance on numerous studies without sacrificing the quality of the agency's covered actions related to research and development.

On balance—recognizing the significant uncertainty regarding EPA's potential actions under the bill—CBO expects that the agency would probably cut the number of studies it relies on by about one-half and that the agency would aim to limit the costs of the new activities required by the bill. As a result, CBO estimates the incremental costs to the agency would be around \$250 million a year initially, subject to appropriation of the necessary amounts. In our assessment that figure lies near the middle of a broad range of possible outcomes under S. 544. CBO expects that the additional costs to implement the legislation would decline over time as EPA became more adept and efficient at working with authors and researchers to ensure that the data used to support studies are provided in a standardized and replicable form.

Pay-As-You-Go Considerations: None.

Intergovernmental and private-sector impact: S. 544 contains no intergovernmental or private-sector mandates as defined in UMRA and would not affect the budgets of state, local, or tribal governments.

Previous CBO estimate: On March 11, 2015, CBO transmitted a cost estimate for H.R. 1030, the Secret Science Reform Act of 2015, as ordered reported by the House Committee on Science, Space, and Technology on March 3, 2015. S. 544 and H.R. 1030 are similar and the CBO cost estimates for each bill are the same.

Estimate prepared by: Federal costs: Susanne S. Mehlman; Impact on state, local, and tribal governments: Jon Sperl; Impact on the private sector: Amy Petz.

Estimate approved by: Theresa Gullo, Assistant Director for Budget Analysis.

MINORITY VIEWS OF BOXER, CARPER, CARDIN, SANDERS,
WHITEHOUSE, MERKLEY, GILLIBRAND, BOOKER, AND
MARKEY ON S. 544, AS REPORTED BY THE EPW COM-
MITTEE

The “Secret Science Reform Act of 2015” is an attempt to stifle the use of good science under the guise of ‘good governance’. It would result in a reduction in the scientific and technical information available to the EPA to inform decisions on covered actions, thus diminishing the Agency’s ability to protect public health and welfare.

There are several major concerns with this bill.

By requiring all data used by EPA in covered actions to be made publicly available by the scientist or journal in an online repository, the bill prevents EPA from using sound science from many sources on which it currently relies. Forcing scientists to make their intellectual property publicly available in order to be used to support covered actions by the EPA would have a chilling effect on research efforts, because safeguarding intellectual property is a critical driver for innovation. In addition, the human health studies available to the EPA would be vastly restricted due to medical records privacy laws that would preclude the publication of the data used therein online. The bill’s ‘data transparency’ provision would therefore severely decrease the number of studies the EPA could use, reduce the overall quantity of scientific information that could be relied upon to inform and support EPA covered actions, and discourage the scientific community from pursuing research in critically important environmental and health fields.

The bill also leads to delays in the availability of scientific information to EPA because peer-reviewed studies typically cannot be made immediately available online. Most journals have embargo periods within which the content of the articles they publish cannot be released to the public. This would introduce delays between when a finding is accepted by peer-reviewed publications and when it could be used by the EPA to inform a covered action. This is another way in which the bill aims to stall and limit the EPA’s ability to protect human health and the environment. Once a scientific or technical finding has been peer-reviewed, it should be made available to the EPA for prompt consideration, especially when it pertains to urgent and important public health and environmental matters.

The bill also requires that the data EPA uses to support covered actions be reproducible, which precludes the use of studies related to one-time events and longitudinal studies. Longitudinal studies, such as a 40-year epidemiological study that follows patients throughout their lives, are often used in public health research, but would not be considered to be ‘reproducible’ under this bill. Research on one-time events, like the Deepwater Horizon oil spill, can

provide very valuable insights, furthering the understanding of physical and biological processes and systems, but would also not qualify as ‘reproducible’ under this bill.

In addition, requiring scientific and technical information be made public would introduce significant administrative costs. The Congressional Budget Office estimated that the annual implementation costs of S. 544 would amount to over \$250 million. Yet S. 544 provides only \$1 million for this purpose.

The White House issued a Statement of Administrative Policy (SAP) recommending a veto threat before the House of Representatives reported out a similar bill. The SAP explains, “The bill would impose arbitrary, unnecessary, and expensive requirements that would seriously impede the Environmental Protection Agency’s (EPA’s) ability to use science to protect public health and the environment, as required under an array of environmental laws, while increasing uncertainty for businesses and States.”¹

Health and scientific organizations have also expressed serious concerns about the legislation.² According to the American Lung Association and American Thoracic Association, “the legislation [H.R. 1030] . . . will compel the U.S. Environmental Protection Agency to either ignore the best science by prohibiting the agency from considering peer-reviewed research that is based on confidential patient information or force EPA to publically release confidential patient information, which would violate federal law. This is an untenable outcome that would completely undermine the ability of the EPA to perform its responsibilities under the Clean Air Act and myriad other federal laws. The legislation will not improve EPA’s actions; rather it will stifle public health protections.” In a letter to the Senate EPW Committee, the American Association for the Advancement of Science wrote, “while transparency and reproducibility are of utmost importance to the scientific community, this mandate [S. 544] is overly broad and will have severe unintended consequences.”

During markup, the Committee considered three amendments as described in the *Rollcall Votes* section above. Passed by voice vote was a Boxer-Markey amendment preventing the censorship of scientists and their use of common scientific terms. Following several high profile instances of state government censorship of scientists, the amendment would ensure that EPA, federal officials or employees, or federal agencies are not censored when discussing peer-reviewed science.³ It would clarify that federal officials and employees can use terms that are common in peer-reviewed scientific literature, including terms related to climate change, air and water pollution impacts, and exposure to toxic chemicals.

Two Markey-Boxer Amendments were rejected. The first one required that the funding sources of scientific and technical informa-

¹ https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/114/saphr1030r_20150303.pdf.

² Numerous scientific societies, research universities, and public health and environmental organizations oppose the legislation including: American Association for the Advancement of Science, American Lung Association, American Thoracic Society, American Statistical Association, American Association for Justice, American Public Health Association, Union of Concerned Scientists, National Physicians Alliance and the International Society for Environmental Epidemiology.

³ See, “In Florida, officials ban term ‘climate change’” Miami Herald (March 8, 2015) available at <http://www.miamiherald.com/news/state/florida/article12983720.html>.

tion be made publicly available, since transparency is the stated goal of this bill. The funding source of a research study used in regulatory activities should not be a secret, to avoid potential conflicts of interest. The second Markey-Boxer amendment would have allowed the EPA to use peer-reviewed science even if it cannot be made publicly available. This amendment would protect the EPA from limitations on accessing the data it needs to protect public health and the environment regardless of barriers to making that data immediately available to the public.

In addition to issues with the bill itself, the Majority members of the Senate EPW Committee used an inadequate process to report S. 544 out of the Committee. Despite receiving a letter signed by all minority members of the EPW Committee asking to return to regular order by delaying the mark up of S. 544 until the Committee had the opportunity to hear witness testimony about the bill, the majority decided to reject this request and moved forward with the mark up.⁴ Historically, significant bills are moved through the Committee without first holding a legislative hearing only if they represent a bipartisan consensus work product or have been considered through regular order in the previous Congress. S. 544 met neither of these tests. The Senate has never held a hearing on any version of the “Secret Science Reform Act of 2015”. For this controversial, partisan legislation, the Committee should have held a legislative hearing to give all members the opportunity to understand the consequences of the bill.

BARBARA BOXER.
 THOMAS R. CARPER.
 BENJAMIN L. CARDIN.
 BERNARD SANDERS.
 SHELDON WHITEHOUSE.
 JEFF MERKLEY.
 KIRSTEN GILLIBRAND.
 CORY A. BOOKER.
 EDWARD MARKEY.

⁴Letter available at: http://www.epw.senate.gov/public/index.cfm?FuseAction=PressRoom.PressReleases&ContentRecord_id=d17ff777-da8b-d123-ee8a-0f508d5a365b.

CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in [black brackets], new matter is printed in italic, existing law in which no change is proposed is shown in roman:

* * * * *

**ENVIRONMENTAL RESEARCH, DEVELOPMENT, AND
DEMONSTRATION AUTHORIZATION ACT OF 1978**

* * * * *

[Sec. 6. **[**42 U.S.C. 4363 note**]** (a) The Administrator of the Environmental Protection Agency shall establish a separately identified program to conduct continuing and long-term environmental research and development. Unless otherwise specified by law, at least 15 per centum of any funds appropriated to the Administrator for environmental research and development under section 2(a) of this Act or under any other Act shall be allocated for long-term environmental research and development under this section.

[(b) The Administrator, after consultation with the Science Advisory Board, shall submit to the President and the Congress a report concerning the desirability and feasibility of establishing a national environmental laboratory, or a system of such laboratories, to assume or supplement the long-term environmental research functions created by subsection (a) of this section. Such report shall be submitted on or before March 31, 1978, and shall include findings and recommendations concerning—

[(1) specific types of research to be carried out by such laboratory or laboratories;

[(2) the coordination and integration of research to be conducted by such laboratory or laboratories with research conducted by existing Federal or other research facilities;

[(3) methods for assuring continuing long-range funding for such laboratory or laboratories; and

[(4) other administrative or legislative actions necessary to facilitate the establishment of such laboratory or laboratories.**]**

(b)(1) The Administrator shall not propose, finalize, or disseminate a covered action unless all scientific and technical information relied on to support such covered action is—

(A) the best available science;

(B) specifically identified; and

(C) publicly available online in a manner that is sufficient for independent analysis and substantial reproduction of research results.

(2) Nothing in the subsection shall be construed as—

(A) requiring the Administrator to disseminate scientific and technical information; or

(B) superseding any nondiscretionary statutory requirement.

(3) In this subsection—

(A) the term ‘covered action’ means a risk, exposure, or hazard assessment, criteria document, standard, limitation, regulation, regulatory impact analysis, or guidance; and

(B) the term ‘scientific and technical information’ includes—

- (i) materials, data, and associated protocols necessary to understand, assess, and extend conclusions;*
- (ii) computer codes and models involved in the creation and analysis of such information;*
- (iii) recorded factual materials; and*
- (iv) detailed descriptions of how to access and use such information.*

(4) The Administrator shall carry out this subsection in a manner that does not exceed \$1,000,000 per fiscal year, to be derived from amounts otherwise authorized to be appropriated.

