

PUBLIC PROTECTIONS UNDER THREAT AT THE EPA

Examining Safeguards and Programs That Would Have Been Blocked by H.R. 1430



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The Environmental Data & Governance Initiative (EDGI) is an organization comprised of academics and non-profit employees that promotes open and accessible government data and information along with evidence-based policy making.

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Introduction

To develop safeguards and programs that protect human health and the environment, the Environmental Protection Agency (EPA) must be able to rely on all available validated scientific evidence as part of its transparent and deliberative decision-making process. The proposed Honest and Open New EPA Science Treatment Act of 2017 (H.R. 1430) would curtail the EPA's ability to rely on the many studies that it needs to make the best decisions for human health and the environment. This paper presents analysis and research conducted by the Environmental Data & Governance Initiative (EDGI) on H.R. 1430 and concludes that the bill, if enacted, would obstruct the EPA's use of important scientific studies in essential agency work. EDGI members, as researchers invested in robust environmental data governance, are concerned that this legislation would force the EPA to make determinations without access to entire categories of research that are essential to sound decision-making.

This document describes a set of examples from the long list of important protections and programs that could not have been issued had H.R. 1430 been in place. Rules and plans protecting first responders from chemical explosions, safeguarding children from lead paint ingestion, enabling oil spill cleanups, and protecting drinking water from radioactive contaminants rely on studies that the EPA could not use under H.R. 1430 provisions.

H.R. 1430 is just the latest iteration of past bills pledging to "prohibit the Environmental Protection Agency from proposing, finalizing, or disseminating regulations or assessments based upon science that is not transparent or reproducible." Proponents claim that H.R. 1430 would improve transparency in the EPA's scientific decision-making and improve public data accessibility. Although EDGI supports transparency in the EPA's use of scientific studies and champions public data accessibility, EDGI's analysis reveals that H.R. 1430 would not promote transparency in the EPA's use of scientific evidence at all. Instead, this bill would inhibit the EPA's use of important scientific data, preventing the EPA from being best able to protect public health and the environment.

Background: The Secret Science Reform Acts

H.R. 1430 is the third attempt in recent years to pass legislation that would limit the EPA's use of particular kinds of scientific studies in developing rules and programs. Prior legislation includes the Secret Science Reform Acts of 2014 and 2015, which were almost identical to H.R. 1430. Both of those bills were sponsored by Representative Lamar Smith (R-TX), an opponent of EPA protections, who stated at his "Making EPA Great Again" hearing on February 7, 2017, that the EPA issued "expensive, expansive, and ineffective" regulations and argued that the agency had "relied on questionable science based on nonpublic information that could not be reproduced, a basic requirement of the scientific method." The 2015 version of the Secret Science Reform Act was accompanied by a bill to overhaul the EPA's Science Advisory Board, which was created under the Environmental Research, Development, and Demonstration Authorization Act of 1978 (ERDDAA), the same law that these bills sought to amend. (Not coincidentally, H.R. 1430 is also accompanied by a bill to overhaul the Science Advisory Board, which is not discussed further in this document Here are summaries of both Secret Science Reform Acts and their legislative histories:

H.R. 4012 (113th Congress) - Secret Science Reform Act of 2014⁵

• **Summary**: H.R. 4012 amends the ERDDAA, a law that allocated funds for environmental research and development and established the EPA's Science Advisory Board. The changes would prohibit the EPA from proposing, finalizing, or disseminating any "risk, exposure, or hazard assessment, criteria document, standard, limitation, regulation, regulatory impact analysis, or guidance" unless all scientific and technical information in support of the action is both "specifically identified" (clear of information that needed redactions or otherwise privileged or confidential) and publicly available online in a manner sufficient for independent analysis and substantial reproduction of research results. This version of the proposed law contained a protective provision ensuring that "Nothing in the subsection shall be construed as requiring the public dissemination of information

¹ Chelsea Harvey, *The hearing was titled, 'Making EPA great again.' Scientists are afraid the opposite will happen*, Feb. 7, 2017,

https://www.washingtonpost.com/news/energy-environment/wp/2017/02/07/the-hearing-was-titled-making-epa-great-again-scientists-are-afraid-the-opposite-will-happen.

² The EPA Science Advisory Board Reform Act, H.R. 1029, 114th Cong., https://www.congress.gov/bill/114th-congress/house-bill/1029. (2015).

³ Environmental Research, Development, and Demonstration Authorization Act of 1978, 42 U.S.C. 300j-3a, 4361 et. seq (42 U.S.C. 4365(a) establishes the Science Advisory Board).

⁴ EPA Science Advisory Board Reform Act of 2017, H.R. 1431, 115th Cong. (2017), https://www.congress.gov/bill/115th-congress/house-bill/1431/text.

⁵ Secret Science Reform Act of 2014, H.R. 4012, 113th Cong. (2014), https://www.congress.gov/bill/113th-congress/house-bill/4012.

⁶ Environmental Research, Development, and Demonstration Authorization Act of 1978, 42 U.S.C. §§ 300j-3a, 4361a et. seq.

- the disclosure of which is prohibited by law." Opponents of the bill testified that the bill would not ensure scientific openness and would in fact limit the EPA's ability to protect public health and the environment.⁷
- **Legislative History**: The 2014 bill ultimately did not pass in the Senate. There were several House debates regarding particular issues of the bill. For instance, on November 19, 2014, there was a motion to amend the bill to exempt regulation protecting communities in emergencies, such as pandemic outbreaks, toxic chemical releases, and nuclear, biological, or terrorist attacks.⁸ Ultimately, the Act passed the House in a vote of 237 190.⁹ On November 20, the bill was introduced in the Senate¹⁰ and referred to the Committee on Environment and Public Works. The bill never made it out of that Committee.

H.R. 1030 (114th Congress) - Secret Science Reform Act of 2015:¹¹

- **Summary**: The 2015 iteration of the Secret Science Reform Act was very similar to the 2014 version but had a few important alterations. It also amended the ERDDAA and required the same "covered actions" (EPA activities covered by the proposed law) to rely only on scientific and technical information that was "specifically identified" and "publicly available online in a manner that is sufficient for independent analysis and substantial reproduction of research results." The bill did not require the data to be disseminated publicly online or otherwise, in contrast to the 2014 bill. However, the 2015 bill did require the data to be the "best available science," a phrase that lacks a clear scientific or legal definition and is open to disparate interpretations. It also placed a \$1,000,000 cap on the EPA to carry out its obligations as specified in this bill. The CBO estimated the actual costs of carrying out the bill's provisions at \$250 million annually.¹²
- **Legislative History**: Like the prior bill, H.R. 1030 passed the House but ultimately did not become law.¹³ It was received by the Senate on February 24, 2015. On June 22, 2015, Senator Inhofe from the Committee on Environment and Public Works submitted a report on the bill containing overview, analysis, and arguments in

⁷ https://www.congress.gov/113/crpt/hrpt619/CRPT-113hrpt619.pdf.

⁸ This motion ultimately failed. (Roll Call Tally on Motion to Recommit with Instructions: http://clerk.house.gov/evs/2014/roll527.xml.)

⁹ Roll Call Tally for H.R. 4012: http://clerk.house.gov/evs/2014/roll528.xml.

¹⁰ Secret Science Reform Act of 2014, S. 2613, 113th Cong.,

https://www.congress.gov/bill/113th-congress/senate-bill/2613/related-bills. (2014).

¹¹ Secret Science Reform Act of 2015, H.R. 1030, 114th Cong. (2015), https://www.congress.gov/bill/114th-congress/house-bill/1030/text.

¹² Congressional Budget Office, H.R. 1030, Secret Science Reform Act of 2015, https://www.cbo.gov/publication/50025.

¹³ Roll Call Tally for H.R. 1030: http://clerk.house.gov/evs/2015/roll125.xml. The House Committee on Science, Space, and Technology submitted H. R. Rep. No. 114-34, https://www.congress.gov/congressional-report/114th-congress/house-report/34.

support and opposition to the bill,¹⁴ which was the last action taken on the bill during that legislative session.

Both bills were the subject of vehement debate. In the House debates over the 2014 iteration of the Secret Science Reform Act, Congresswoman Eddie Bernice Johnson (D-TX) called the bill "an insidious attack on EPA's ability to use the best science to protect public health."¹⁵ Representative Johnson said that the bill was a culmination of partisan anti-science and anti-health campaigns to discredit several air pollution studies and harass the EPA. Legislators trying to get the raw data from two air pollution studies for the purpose of casting doubt on the "conclusion that air pollution is bad for the health of Americans"¹⁶ discovered that some studies were not fully releasable because they included sensitive health information from hundreds of thousands of volunteers. Because the raw data contained confidential information, it was partially protected from release to the general public. The EPA did release "de-identified" data, which Johnson described as "hundreds of pages of data rolled in like a grocery cart." According to Johnson, the legislators remained unsatisfied and pursued this bill as a measure to block the EPA from using studies like these in the future. She observed that the bill ran contrary to both scientific and governmental best practices, which, in contrast to this Act, do not "paint scientists or the EPA into a corner and tell them that the only way their research can be used or considered is if all of that data is available in a form--let me quote from the bill--'that is sufficient for independent analysis and substantial reproduction."¹⁸ H. R. 1430 is almost identical to the 2015 Secret Science Reform Act, and its opponents have shared many of the same concerns that Representative Johnson raised in 2015.

Understanding H.R. 1430

In 2017, with a new president in Washington, the Secret Science Reform Act has been reintroduced as H.R. 1430 with a new name: The Honest and Open New EPA Science Treatment Act of 2017. The 2017 iteration of the bill is very similar to the Secret Science Reform Act of 2015, seeking, as its predecessor did, "To prohibit the Environmental Protection Agency from proposing, finalizing, or disseminating regulations or assessments based upon science that is not transparent or reproducible." The two bills share the ambiguous mandate in subsection (b)(1)(A) that decision-making by the EPA must use "the

https://www.congress.gov/congressional-report/114th-congress/senate-report/69.

https://www.congress.gov/congressional-report/114th-congress/house-report/34. ¹⁶ Ibid.

https://www.congress.gov/bill/115th-congress/house-bill/1430?r=61.

¹⁴ S. Rep. No. 114-69

¹⁵ H.R. Rep. No. 114-34, at 16 (March 2, 2015),

¹⁷ 142 Cong. Rec. H8087 at H8088 (November 9, 2014) (Statement of Rep. Eddie Bernice Johnson), https://www.congress.gov/congressional-record/2014/11/19/house-section/article/H8087-1.

¹⁸ Ibid.

¹⁹ HONEST Act, H.R. 1430, 115th Cong. (2017),

best available science,"²⁰ a phrase that has no clear scientific or legal definition and that could be interpreted differently depending on who is reading the bill and on the type of study and scientific field being considered. The bills also share the requirement in subsection (b)(1)(C) that all data used must be "publicly available online in a manner that is sufficient for independent analysis and substantial reproduction of research results."²¹

H.R. 1430 differs from Secret Science Reform Act of 2015 only in the addition of a few statements related to the requirement that documents be publicly available online and to the applicability of the new law to regulations already in place. An exemption in subsection (1)(C) to the mandate that documents be publicly available online states that "personally identifiable information, trade secrets, or commercial or financial information obtained from a person and privileged or confidential, shall be redacted prior to public availability."²² The 2017 Act says in subsection (2) that such information "shall be disclosed to a person only after such person signs a written confidentiality agreement" with the EPA Administrator and that the agreement will be "subject to guidance to be developed by the Administrator,"²³ an ambiguous provision that gives no direction for how the Administrator might deal with important legal prohibitions on disclosure. Subsection (3)(C) of H.R. 1430 also specifies a new provision clarifying that this new law would not require "the Administrator to repeal, reissue, or modify a regulation in effect" on the date of the law's enactment.²⁴

Federal law prohibits the release of various types of information to the general public, including personally identifiable information, trade secrets, and other privileged and confidential information submitted to the EPA by third parties, regardless of any conflicting confidentiality agreements. Subsection (3)(B) clarifies that no statements in the bill should be construed as "superseding any nondiscretionary statutory requirement."²⁵ It follows then that the EPA cannot issue confidentiality agreements on behalf of third-party researchers, meaning any studies containing this kind of information or data, including human health studies based on confidential medical records, would be unusable by the agency. H.R. 1430 would thus inhibit the EPA's ability to use these important scientific studies, despite the confidentiality agreement provision in subsection (2).

Similarly, the prohibition in H.R. 1430 against basing decision-making on science that is not reproducible would also prevent the EPA from using important scientific studies and data. This would include longitudinal datasets collected over decades, assessments of chronic effects of exposure to toxic substances, and studies based on natural and human-caused

²⁰ HONEST Act, H.R. 1430 § (b)(1)(A), 115th Cong. (2017), https://www.congress.gov/bill/115th-congress/house-bill/1430/text?r=61.

²¹ Ibid., § (b)(1)(C).

²² Ibid.

²³ Ibid., § (b)(2).

²⁴ Ibid., § (b)(3)(C).

²⁵ Ibid., § (b)(3)(B).

catastrophes. Blocking the EPA from using studies that are hard to reproduce impedes the EPA's ability to make use of important evidence of public health risks and to protect the public from future health hazards.

Interpreting the Effects of H.R. 1430

The practical effect of H.R. 1430 would be to prevent the EPA from relying on many crucial scientific studies in its decision-making processes. Subsection (4)(A) clarifies that the bill covers a wide range of agency actions, applying to each "risk, exposure, or hazard assessment, criteria document, standard, limitation, regulation, regulatory impact analysis, or guidance."²⁶ As a consequence, the bill's passage would greatly impede the EPA's ability to use scientific data across most of its actions and programs.²⁷

Proponents of the bill claim that the EPA does not provide enough transparency with respect to the scientific data upon which the agency relies. Recognizing that science is crucial to EPA decision-making, the House Report on the bill notes that "Efforts to encourage and guarantee open scientific research and assessment at the EPA are based in a number of historical, legal, and administrative origins."²⁸ H.R. 1430's supporters focus on a 2013 effort to obtain raw data from several studies linking air pollution to disease. The bill's supporters claim that "some outside researchers have sought the scientific data behind these regulations and have been denied access,"29 while opponents of the law in the House explain that the unreleased data contained private, sensitive medical information.³⁰ The bill's supporters characterize the EPA's refusal to hand over the data as untoward.³¹ This conclusion is misleading, however, as it ignores the fact that the EPA cannot force third parties, including the institutions housing the data, to turn over their sensitive materials to Congress in response to a subpoena issued to the EPA.³² The bill's supporters contend that this personal information is "scientific information," without which "the public is required to blindly trust the EPA's scientific findings that are the basis of some of the most costly regulations in history,"³³ a characterization that ignores the extensive deliberative process that the EPA already has in place, 34 while seeking to override legal privacy protections to expose studies as they see fit.

²⁶ HONEST Act, H.R. 1430 § (b)(4)(A), 115th Cong. (2017),

https://www.congress.gov/bill/115th-congress/house-bill/1430/text?r=61.

²⁷ Ibid.

²⁸ H.R. Rep. No. 114-34, at 2 (March 2, 2015),

https://www.congress.gov/congressional-report/114th-congress/house-report/34.

²⁹ Ibid., p. 4.

³⁰ Ibid.

³¹ Ibid.

³² Kelly Servick, *In Battle Over EPA Subpoena, Privacy Remains Sticking Point*, Science, September 5, 2013.

³³ H.R. Rep. No. 114-34, at 4 (March 2, 2015),

https://www.congress.gov/congressional-report/114th-congress/house-report/34.

³⁴ National Research Council, Science and Decisions: Advancing Risk Assessment. Washington, D.C: National Academies Press, 2009.

On its own, despite their ambiguities, the stated purpose of portions of subsections (1) and (2) of this bill—to make data that the EPA relies on accessible online and available to the public—might genuinely promote transparency and enable citizens to better understand and critique the scientific studies used by the EPA. Implementation of such a requirement, however, would not be straightforward. A public platform for accessing and using complex scientific data would be challenging and costly to establish, requiring a sizable staff with technical expertise and access to computational resources. Providing scientific and legal context for the data being used in EPA rulemaking would also be necessary if the intent is for the public to benefit from access to the data and for the online data not to simply serve to benefit corporations and individuals with the financial means to comb through it.

In fact, the CBO had estimated that the Secret Science Act of 2015, whose stated goal was to establish a similar system, would have cost the EPA up to \$250 million annually to implement these required data access provisions.³⁵ The requirement in subsection (5) of the current bill, that "The Administrator shall carry out this subsection in a manner that does not exceed \$1,000,000 per fiscal year,"³⁶ makes clear that the intention of this bill is not to set up an appropriate platform for this data. This enormous discrepancy is just one more indicator that the intent of H.R. 1430, rather than of encouraging the public availability of data, is to curb the EPA's ability to issue public protections by preventing scientific data from entering into the EPA's rulemaking process.

This analysis of H.R. 1430 provides a contrasting perspective on the current state of the EPA's data transparency practices and the potential impacts of H.R. 1430 to the views the bill's proponents. While EDGI supports improvements to transparency in the EPA's scientific decision-making processes and recognizes the importance of public data accessibility, it also recognizes that the EPA already has processes in place to ensure the quality and relevance of data used in decision-making, including internal and external peer review and review by scientific advisory boards.³⁷ EDGI's analysis shows that H.R. 1430 ultimately places much of the science necessary for thorough evidence-based decision-making off limits to the EPA, which will impede its mission of protecting public health and the environment.

³⁵ Congressional Budget Office, H.R. 1030, Secret Science Reform Act of 2015, https://www.cbo.gov/publication/50025.

³⁶ HONEST Act, H.R. 1430 § (b)(5), 115th Cong. (2017), https://www.congress.gov/bill/115th-congress/house-bill/1430?r=6.

³⁷ National Research Council, Science and Decisions: Advancing Risk Assessment. Washington, D.C: National Academies Press, 2009.

Public Protections That Would Have Been Blocked by H.R. 1430

Categories of Studies and Data:

This list contains categories of studies and data that the EPA would not have been able to use in support of a new EPA rule or program under H.R. 1430:

- 1. Studies of natural or human-caused disasters and their effects that would be impossible to reproduce
- 2. Studies conducted over long periods of time or that cannot be reproduced because the cohort being studied was exposed to harms we could not ethically replicate
- 3. Studies that utilize trade secrets, other protected industry information, or the intellectual property of scientific researchers
- 4. Studies that rely on people's private medical records

This section compiles seven important rules and programs that would have been blocked by H.R. 1430 had it been in place when each was originally issued. These rules and programs are representative examples from a long list of rules that would have been targeted by the legislation. Each of these rules and programs serves an important purpose in safeguarding the general public or the environment.

1. Lead; Identification of Dangerous Levels of Lead (Category 2)

Final Rule: <u>66 Fed. Reg. 1206</u>, published January 5, 2001, effective March 6, 2001, amending EPA Rule <u>40 CFR Part 745</u> (View the rule listing in the Unified Agenda <u>here.</u>)

- **Purpose of this protection or program:** The 1976 Toxic Substances Control Act (TSCA)³⁸ and the 1992 Residential Lead-Based Paint Hazard Reduction Act³⁹ (also known as Title X) authorize the EPA to establish standards for lead-based paint hazards in most pre-1978 housing and child-occupied facilities. Title X also created a broad federal program to reduce lead-based hazards. The 2001 lead rule supports the enactment of requirements within Title X, implements new requirements, such as worker training, required lead hazard disclosure, and guidelines for lead cleanup, and supports federal grants to local jurisdictions to perform lead hazard control.
- Why this protection or program would have been blocked by H.R. 1430: The rule is based on several risk analysis assessments⁴⁰ from 1998 and 2000 conducted by the EPA, which relied on epidemiological studies correlating childhood blood lead

³⁸ The EPA's summary of the Toxic Substances Control Act (15 U.S.C. § 2601 et seq.): https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act.

³⁹ The EPA's website for the Residential Lead-Based Paint Hazard Reduction Act of 1992: https://www.epa.gov/lead/residential-lead-based-paint-hazard-reduction-act-1992-title-x.

⁴⁰ For example, the EPA's 2000 *Risk Analysis to Support Standards for Lead in Paint, Dust, and Soil* can be found at: https://www.epa.gov/lead/hazard-standard-risk-analysis-supplement-tsca-section-403 The 1998 version can be found at:

https://www.epa.gov/lead/hazard-standard-risk-analysis-tsca-section-403.

levels to "neuropsychologic deficits."⁴¹ Because regulatory action reducing lead in gasoline, paint, and water pipes has reduced blood lead levels drastically across U.S. populations, the specific conditions to create such a cohort no longer exist, and it would not be ethical to expose children to the levels of lead required to recreate the original research conditions. Therefore, this type of study is not reproducible. In addition, the Port Pirie Cohort Study was central to the creation of this regulation.⁴² This study is based on a 13-year longitudinal study of the association between lead exposure and decreased developmental status from a population that lived in a lead smelting town beginning in 1979. This study cannot be reproduced, because it would be unethical to recreate the specific lead exposure conditions from the smelting town.

- Negative consequences had this rule been blocked: The neurotoxic effects of lead are one of the most rigorously studied phenomena in the environmental health science field, and there is no dispute of these findings. Enormous amounts of city, state, and federal prevention practices have been based on such research, resulting in a dramatic decrease in lead exposures. Lead is especially toxic to young children, particularly affecting brain and nervous system development. According to the World Health Organization, there is no level of lead exposure considered safe for children.⁴³ Lead regulation as implemented by the EPA through this rule was essential in helping to reduce lead poisoning among children under the age of six.
- **2. National Primary Drinking Water Regulations; Radionuclides** (Categories **1**, **2** and **4**) Final Rule: <u>65 Fed. Reg. 76708</u>, published December 7, 2000, effective December 8, 2003, amending EPA Rule 40 CFR Parts 9, 141, and 142
 - **Purpose of this protection or program:** The <u>Safe Drinking Water Act (SDWA)</u>⁴⁴ established the EPA's authority to set standards limiting the amount of certain contaminants in water systems that would compromise public health.⁴⁵ The EPA is required to review and update safe drinking water standards periodically, based on comprehensive quantitative assessments of water contaminants and their corresponding public health and environmental effects. On December 7, 2000, the EPA revised the radionuclides regulation, which had been in effect since 1977,

Lanphear, B.P. et al. (1996). "Lead-contaminated house dust and urban children's blood lead levels." *American Journal of Public Health, 86, 1416–1421,* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1380653/.

⁴¹ Needleman, H. et al. (1979). "Deficits in Psychologic and Classroom Performance of Children with Elevated Dentine Lead Levels." *New England Journal of Medicine,* 300, 689-695, http://www.nejm.org/doi/full/10.1056/NEJM197903293001301.

⁴² Baghurst, P.A. et al. (1992). "Environmental exposure to lead and children's intelligence at the age of seven years. The Port Pirie Cohort Study." *New England Journal of Medicine*, 327, 1279-84, https://www.ncbi.nlm.nih.gov/pubmed/1383818.

⁴³ World Health Organization, "Lead Poisoning and Health" Fact Sheet. Last reviewed September, 2016. http://www.who.int/mediacentre/factsheets/fs379/en/.

⁴⁴ Link to the EPA's Summary of SDWA: https://www.epa.gov/sdwa (42 U.S.C. § 300f et seq.)

⁴⁵ The EPA's website for Drinking Water Contaminants - Standards and Regulations: https://www.epa.gov/dwstandardsregulations.

- setting new monitoring requirements for community water systems.⁴⁶ The 2000 rule also established standards for uranium, which had not yet been regulated, and revised the monitoring requirements for several other radionuclides, including combined radium-226 and radium-228, gross alpha particle radioactivity, and beta particle and photon radioactivity.⁴⁷
- Why this protection or program would have been blocked by H.R. 1430: These revised standards were based on a series of EPA reports on radiogenic cancer risks⁴⁸ and several long-term epidemiological studies of cohorts of Hiroshima and Nagasaki atomic bomb survivors, uranium miners, cancer patients, and workers exposed to radionuclides.⁴⁹ These studies, which establish the basis for understanding the age-and gender-specific effects of radiation exposure, rely on confidential patient information and could not be used under H.R. 1430.⁵⁰ Moreover, studies that followed from catastrophic disasters and long-term epidemiological studies conducted on these cohorts cannot be reproduced, which would bar the studies from being used and would have prevented this protection from being issued.
- Negative consequences had this rule been blocked: Exposure to radionuclides is a well-documented risk factor for cancer. The Safe Drinking Water Act was designed to protect community water sources from dangerous levels of nuclear carcinogens.
 H.R. 1430 would hamper the National Primary Drinking Water standards, pertaining

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⁴⁶ The EPA's website for the Radionuclides Rule: https://www.epa.gov/dwreginfo/radionuclides-rule.

⁴⁷ EPA Rule 40 CFR Parts 9, 141, and 142, *National Primary Drinking Water Regulations; Radionuclides*: https://www.regulations.gov/document?D=EPA-HQ-OW-2004-0040-0001.

⁴⁸ The EPA's website on Estimating Radiogenic Cancer Risks:

https://www.epa.gov/radiation/estimating-radiogenic-cancer-risks; EPA, Cancer Risk Coefficients for Environmental Exposure to Radionuclides, Federal Guidance Report no. 13 (September 1999): https://www.epa.gov/sites/production/files/2015-05/documents/402-r-99-001.pdf.

⁴⁹ T. Straume, S. D. Egbert, W. A. Woolson, R. C. Finkel, P. W. Kubik, H. E. Gove, P. Sharma, and M. Hoshi (1992). "Neutron Discrepancies in the DS86 Hiroshima Dosimetry System", Health Phys. 63, 421-426. https://www.ncbi.nlm.nih.gov/pubmed/1526783; NRC (1991). "Chapter 3: Late Somatic Effects", In: S. Abrahamson, M. A. Bender, B. B. Boecker, E. S. Gilbert, and B. R. Scott. Health Effects Models for Nuclear Power Plant Accident Consequence Analysis. Modifications of Models Resulting from Recent Reports on Health Effects of Ionizing Radiation, Low LET Radiation, Part II: Scientific Basis for Health Effects Models, NUREG/CR-4214, Rev. 1, Part II, Addendum 1, LMF-132, (U.S. Nuclear Regulatory Commission, Washington, DC); Y. Shimizu, H. Kato, W. J. Schull, D. L. Preston, S. Fujita, and D. A. Pierce (1989). "Studies of the Mortality of A-Bomb Survivors: 9. Mortality, 1950-1985: Comparison of Risk Coefficients for Site-Specific Cancer Mortality Based on the DS86 and T65DR Shielded Kerma and Organ Doses", Radiat. Res. 118, 502-524; Little, M., Hawkins, M., Shore, R., Charles, M., & Hildreth. N. (1991). Time Variations in the Risk of Cancer Following Irradiation in Childhood. Radiation Research, 126(3), 304-316; Howe, G. (1995). Lung Cancer Mortality between 1950 and 1987 after Exposure to Fractionated Moderate-Dose-Rate Ionizing Radiation in the Canadian Fluoroscopy Cohort Study and a Comparison with Lung Cancer Mortality in the Atomic Bomb Survivors Study. Radiation Research, 142(3), 295-304; Tokunaga M, CE Land, S Tukoka, I Nishimori, M Soda and S Akiba. Incidence of female breast cancer among atomic bomb survivors, 1950-1985. Radiat Res 138, 209-223, 1994; ICRP, 1997. Individual Monitoring for Internal Exposure of Workers. ICRP Publication 78. Ann. ICRP 27 (3-4); NAS (National Academy of Sciences). Health Risks of Radon and Other Internally Deposited Alpha-Emitters (BEIR IV). National Academy Press, Washington, D.C., 1988. ⁵⁰ https://epa-prgs.ornl.gov/radionuclides/SlopesandDosesFinal.pdf.

to radionuclides and a host of other hazardous water contaminants, since the process relies on anonymized data and studies that cannot realistically or ethically be reproduced.

3. Accidental Release Prevention Requirements: Risk Management Programs under the Clean Air Act (Category 1)

Final Rule: <u>82 Fed. Reg. 4594</u>, published January 13, 2017, and effective March 14, 2017, amending EPA Rule <u>40 CFR Part 68</u> (View the rulemaking docket <u>here</u>.)

- Purpose of this protection or program: The Clean Air Act authorizes the EPA to establish Risk Management Program regulations to improve safety protocols that protect workers, first responders, and those who live near facilities that use and distribute hazardous chemicals. Since 1996, facilities have been required to develop a Risk Management Plan, submitting revised versions to the EPA every five years.⁵¹ This information helps first responders prepare for and respond to emergencies, enables accident prevention, and strengthens emergency response practices.⁵² In 2016, as a result of the West Fertilizer Company facility accident in West, Texas, on April 17, 2013, which killed 15 people, and the subsequent Executive Order 13650 (August 1, 2013), "Improving Chemical Facility Safety and Security," the EPA enhanced the Risk Management Program's emergency response requirements.⁵³
- Why this protection or program would have been blocked by H.R. 1430: The EPA established new Accidental Release Prevention Requirements for Risk Management Programs in 2016 based on the devastating consequences of a series of catastrophic equipment failures from 1997 to 2013 that killed 45 workers, first responders, and nearby residents, injuring over 15,300 people. Following each explosion, cracked pipe, fire, and spillage, the EPA issued comprehensive accident investigation reports identifying root causes, recurring risks, and human errors that contributed to these events. Under H.R. 1430, the unique nature of disasters like

⁵¹ The EPA's website for the Risk Management Plan Rule: https://www.epa.gov/rmp.

⁵² The EPA's website for the Risk Management Plan Rule Overview: https://www.epa.gov/rmp/risk-management-plan-rmp-rule-overview.

⁵³ EPA Rule 40 CFR Part 68, *Accidental Release Prevention Requirements: Risk Management Programs under the Clean Air Act.* https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0635.

⁵⁴ September 10, 1997: explosion in a resins production unit at Georgia-Pacific Resins, Inc. in Columbus, Ohio. June 22, 1997: structural failure at a Shell olefins plant. April 8, 1998: gas and liquid spillage at a Morton International chemical plant. April 23, 2004: explosion and fire at the Formosa Plastics Corporation, Illiopolis, Illinois. March 23, 2005: fires and explosions at the BP Texas City Refinery in Texas City, Texas. August 23, 2010: approximately 32,000 pounds of anhydrous ammonia released from a cracked pipe at the Millard Refrigerated Service warehouse in Theodore, Alabama. April 2, 2010: explosion and fire at the Tesoro Refinery in Anacortes, Washington. August 6, 2012: fire at the Chevron Refinery in Richmond, California. June 13, 201: fire and explosion at Williams Olefins in Geismar, Louisiana. EPA Rule 40 CFR Part 68, *Accidental Release Prevention Requirements: Risk Management Programs under the Clean Air Act*.

https://www.gpo.gov/fdsys/pkg/FR-2016-03-14/pdf/2016-05191.pdf.

⁵⁵ EPA, Office of Solid Waste and Emergency Response. August 1999. How to Prevent Runaway Reactions, Case Study: Phenol-Formaldehyde Reaction Hazards. EPA 550–F99–004. http://archive.epa.gov/emergencies/docs/chem/web/pdf/gpcasstd.pdf; Belke, James C (EPA). 1997.

- the West Fertilizer Company explosion and the subsequent studies of those disasters, which cannot realistically or ethically be reproduced, would have prevented this public protection from being issued.
- **Negative consequences had this rule been blocked:** As this series of accidents makes plain, without risk management regulations, American workers, first responders, and local communities can face serious danger. However, as the EPA's incident reports show, such accidents, injuries, and loss of life can be curtailed, perhaps even prevented, through adherence to robust safety and security standards. H.R. 1430 would hamper the Risk Management Program, because improvements to the process rely on anonymized data and studies that cannot be reproduced.

4. Prince William Sound and Gulf of Alaska; Restoration Work Plan and Program (Category 1)

EPA Notice of Intent to Prepare and Propose a 1991 Restoration Program <u>55 Fed.</u> Reg. 48160-01, published November 19, 1990

• **Purpose of this protection or program:** In 1990, following the Exxon Valdez oil spill, the EPA and the Alaska Department of Fish and Game prepared a draft restoration plan⁵⁶ that then informed the official "1990 State/Federal Natural Resource Damage Assessment and Restoration Plans for the Exxon Valdez Oil Spill" and similar plans and assessments for subsequent years.⁵⁷ The Clean Water Act⁵⁸ and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)⁵⁹ give the EPA and other Federal and State agencies the authority to pursue damages for injury, loss, or destruction of resources. Both laws are

Recurring Causes of Recent Chemical Accidents.

http://psc.che.tamu.edu/wp-content/uploads/recurring-causes-of-recent-chemical-accidents.pdf; EPA and OSHA. June 1998. EPA/OSHA Joint Chemical Accident Investigation Report, Shell Chemical Company, Deer Park, TX. EPA 550–R–98–005. http://rsem.com.br/V1/?wpfb_dl=29; CSB. 2000. Investigation Digest: Morton International Explosion, Paterson, NJ, April 8, 1998. http://www.csb.gov/assets/1/19/Morton_Digest.pdf; CSB. March 2007. Investigation Report: VCM Explosion, Formosa Plastics Corp., Illiopolis, Illinois, April 23, 2004. Report No. 2004–10–I-L. http://www.csb.gov/assets/1/19/Formosa_IL_Report.pdf; CSB. March 2007. Investigation Report: Refinery Explosion and Fire, BP, Texas City, Texas, March 23, 2005. Report No. 2005–04–I-TX. http://www.csb.gov/assets/1/19/CSBFinalReportBP.pdf.

https://cfpub.epa.gov/ols/catalog/advanced_brief_record.cfm?&FIELD1=SUBJECT&INPUT1=Sound&T YPE1=EXACT&LOGIC1=AND&COLL=&SORT_TYPE=MTIC&item_count=1002&item_accn=144319;

The 1991 State/Federal Natural Resource Damage Assessment I and Restoration Plan for the Exxon Valdez Oil Spill Trustee Council, 1991, http://www.arlis.org/docs/vol1/23487838.pdf.

https://www.epa.gov/laws-regulations/summary-clean-water-act (33 U.S.C. § 1251 et seq.)

⁵⁶ Prince William Sound and Gulf of Alaska; Restoration Work Plan and Program. Environmental Protection Agency and Alaska Department of Fish and Game. 55 FR 48160-01, 1990 WL 347996(F.R.) Monday, November 19, 1990.

⁵⁷ The 1990 state/federal natural resource damage assessment and restoration plan for the Exxon Valdez oil spill. Trustee Council, 1990. Link to citation in EPA library catalog:

⁵⁸ Link to the EPA's Summary of the Clean Water Act:

⁵⁹ Link to the EPA's Summary of CERCLA: https://www.epa.gov/superfund/superfund-cercla-overview (42 U.S.C. § 9601 et seq.)

- supplemented by the National Contingency Plan (<u>40 CFR Part 300</u>) and regulations of the Natural Resource Damage Assessment (NRDA) (<u>43 CFR Part 11</u>).
- Why this protection or program would have been blocked by H.R. 1430: The spill response was directed by scientific studies that began directly after the oil spill to assess the amount and types of damage, including the effects of petroleum on a range of ecosystem components and the feasibility of reestablishing ecological diversity across the affected area. The research and response plans were also based on previous scientific studies that monitored recovery of other oil spills from around the world, including the 1978 Amoco Cadiz spill. Both the studies in Prince William Sound and the historical studies cited were field studies in the context of disaster situations, meaning their precise environmental factors can never be entirely replicated, and therefore the studies cannot be reproduced.
- **Negative consequences had this rule been blocked:** The Exxon Valdez spill was, at the time, the largest oil spill in U.S. history, and in order to respond, federal and state agencies required scientifically grounded information to initiate the most effective responses. Without access to studies such as those based on the Amoco Cadiz spill, the most effective damage assessment and restoration work would not have been possible.

5. Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants; States' Compliance - Revision of Polychlorinated Biphenyls (PCBs) Criteria (Categories 2 and 4)

Final Rule: <u>64 Fed. Reg. 61182</u>, published November 9, 1999, effective December 9, 1999, amending EPA Rule <u>40 CFR Part 131</u> (View the rulemaking docket <u>here</u>.)

• **Purpose of this protection or program:** The Clean Water Act established the EPA's authority to regulate the discharge of toxic pollutants into U.S. waters in 1972.⁶² In accordance with the Clean Water Act, the 1992 National Toxics Rule⁶³ set water quality standards for toxic pollutants, including a single standard for all

https://www.epa.gov/laws-regulations/history-clean-water-act (33 U.S.C. § 1251 et seq.).

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⁶⁰ Wolfe, D.A. (1996). Fate and toxicity of spilled oil from the Exxon Valdez. Subtidal study number 4. Exxon Valdez oil spill, state/federal natural resource damage assessment final report. United States, https://www.osti.gov/scitech/biblio/426717.

Varanasi, U., Collier, T.K., Krone, C.A., Krahn, M.M., & Johnson, L.L. (1995). Assessment of oil spill impacts on fishery resources: Measurement of hydrocarbons and their metabolites, and their effects, in important species. NRDA project subtidal 7. Exxon Valdez oil spill state/federal natural resource damage assessment final report. United States, https://www.osti.gov/scitech/biblio/426711.

⁶¹ Gundlach, E.R., Boehm, P.D., Marchand, M, Atlas, R.M. Ward, D.M., Wolfe, D.A. (1983). "The Fate of *Amoco Cadiz* Oil." *Science* Jul 1983: 122-129, http://science.sciencemag.org/content/221/4606/122. Dibble, J.T., Bartha, R. "Rehabilitation of Oil-Inundated Agricultural Land: A Case History." *Soil Science* 1979: vol 128, Issue 1,

http://journals.lww.com/soilsci/Abstract/1979/07000/Rehabilitation of Oil Inundated Agricultural L and .9.aspx.

⁶² Link to the EPA's summary of the Clean Water Act:

⁶³ Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants; States' Compliance; Final Rule. 40 CFR Part 131. *Federal Register* Vol. 57, No. 246. Tuesday. December 22, 1992, https://www.epa.gov/sites/production/files/2015-09/documents/ntr_final_12.22.92.pdf.

polychlorinated biphenyls (PCBs). In 1999 this regulation was revised, prompted in part by a lawsuit by General Electric and American Forest and Paper Association, who objected to the EPA's use of a single standard across multiple kinds of PCBs and for human and non-human cancer risks. As a result, this revision identifies multiple types of hazardous PCBs and provides multiple standards for several kinds of PCBs, and it includes epidemiological data on cancer risks for humans.⁶⁴

- Why this protection or program would have been blocked by H.R. 1430: The revised regulation was based on a 1996 reassessment of cancer risk from PCB exposure that considered information on toxicity in conjunction with environmental methods to evaluate health risks. 65 Although the report was based on studies in rats, in order to project the probabilities of cancer in humans, it relied on several long-term studies of cancer incidence in workers who had unknowingly been exposed to PCBs. 66 Other studies followed the results of accidental high-dose or cumulative low-dose ingestion, 67 which relied on long-term and transgenerational epidemiological data and therefore on confidential patient information. These studies cannot realistically or ethically be reproduced they derive from a unique cohort studied over a long period of time and it would be unethical to expose people to occupational or ingested carcinogens.
- Negative consequences had this rule been blocked: PCBs are not naturally occurring in the environment, and their manufacture and most uses were banned by Congress in 1979. ⁶⁸ However, PCBs persist long after release and bioaccumulate throughout the food chain. Without the Clean Water Act, the National Toxics Rule, and the 1999 revision, there would be a higher incidence of PCBs in the environment. Indeed, PCBs were one of the only 5 toxicants, or groups of toxicants, that were ever banned by the Toxics Substances Control Act. It took considerable evidence to carry out such a ban. In addition, the 1999 revision lowered the effective

⁶⁴ Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants; States' Compliance—Revision of Polychlorinated Biphenyls (PCBs) Criteria." 40 CFR Part 131 *Federal Register* Vol. 64, No. 216. Tuesday, November 9, 1999,

https://www.regulations.gov/document?D=EPA-HQ-OW-2005-0010-0001.

⁶⁵ PCBs: Cancer Dose-Response Assessment and Application to Environmental Mixtures. National Center for Environmental Assessment Office of Research and Development; U.S. Environmental Protection Agency. September 1996. EP A/600/P–96/001F,

https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=12486.

⁶⁶ Sinks, T., Steel, G., Smith, A.B., Watkins, K., Shults, R.A. (1992) "Mortality among workers exposed to polychlorinated biphenyls." *American Journal of Epidemiology*, 136(4), 389-398, https://academic.oup.com/aje/article-abstract/136/4/389/164686/Mortality-among-Workers-Exposed-to-Polychlorinated.

Bertazzi, P.A., Riboldi, L., Pesatori, A., Radice, L., Zocchetti, C. (1987) "Cancer mortality of capacitor manufacturing workers." *American Journal of Industrial Medicine*, 11, 165–176, https://www.ncbi.nlm.nih.gov/pubmed/3103429.

⁶⁷ Dewailly, É., Ryan, J.J., Laliberté, C., Bruneau, S., Weber, J.-P., Gingras, S., Carrier, G. (1994) "Exposure of remote maritime populations to coplanar PCBs." *Environmental Health Perspectives*, 102(Suppl. 1), 205–209, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1566874/.

⁶⁸ EPA Press Release, April 19, 1979. "EPA Bans PCB Manufacture; Phases Out Uses," https://archive.epa.gov/epa/aboutepa/epa-bans-pcb-manufacture-phases-out-uses.html.

standard for human health from an original 7.7 dose-response factor per mg/k-d to 2 per mg/k-d for human exposure and made those standards more specific. Legislation such as H.R. 1430 could hamper the future ability of the EPA to propose regulation updates based on new data and more modern technology.

- **6. National Ambient Air Quality Standards for Particulate Matter** (Categories **2** and **4**) Final Rule: <u>78 Fed. Reg. 3085</u>, published January 15, 2013, effective March 18, 2013, amending EPA Rule <u>40 CFR Parts 50, 51, 52, 53 and 58</u> (View the rulemaking docket <u>here</u>.)
 - **Purpose of this protection or program:** The Clean Air Act established the EPA's authority to set national air quality standards for particulate matter (PM) and other pollutants, including ozone, nitrogen oxides, carbon monoxide, sulfur dioxide, and lead. FPA is required to review and update NAAQS standards periodically, based on comprehensive quantitative assessments of recent air quality conditions and their corresponding public health and environmental effects. FPA rule in 1971, there have been four reassessments of PM standards. Most recently, in 2013, the EPA lowered the standard annual level of fine particle exposure from 15.0 to 12.0 micrograms per cubic meter.
 - Why this protection or program would have been blocked by H.R. 1430: The 2013 review and revision of NAAQS standards was based on a wide array of peer-reviewed studies, from long-term comparative analyses of 112 U.S. cities to the effects of dust storms on mortality rates. The EPA also relies on state and county medical data for comparative analyses of hospitalization and mortality rates in regions with disproportionately high rates of PMs due to industrial production, freeway concentration, and extraction processes, among other sources. Reports that were particularly persuasive relied on the confidential medical data of children, women, and Medicare patients who experienced compromised lung function and growth, cardiovascular events, cancer, low birth weight, and death related to chronic exposure to air pollution. The use of data with confidential information and the

⁶⁹ https://www.epa.gov/criteria-air-pollutants.

⁷⁰ https://www.epa.gov/criteria-air-pollutants/process-reviewing-national-ambient-air-quality-standards.

⁷¹ https://www.regulations.gov/document?D=EPA-HQ-OAR-2007-0492-10110.

⁷² Zanobetti A; Schwartz J (2009). The effect of fine and coarse particulate air pollution on mortality: A national analysis. Environ Health Perspect, 117: 898-903; Middleton N; Yiallouros P; Kleanthous S; Kolokotroni O; Schwartz J; Dockery DW; Demokritou P; Koutrakis P (2008). A 10-year time-series analysis of respiratory and cardiovascular morbidity in Nicosia, Cyprus: The effect of short-term changes in air pollution and dust storms. Environ Health, 7: 39.

⁷³ U.S. EPA (2011a). Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA 452/R-11-003. April 2011. http://www.epa.gov/ttn/naags/standards/pm/s pm 2007 pa.html.

⁷⁴ Gauderman WJ; McConnell R; Gilliland F; London S; Thomas D; Avol E; Vora H; Berhane K; Rappaport EB; Lurmann F; Margolis HG; Peters J (2000). Association between air pollution and lung function growth in southern California children. *Am J Respir Crit Care Med*, 162: 1383-1390; Eftim SE.,

- unique nature of these studies due to their long duration, such that they would not be possible to reproduce, means that this protection could not have been issued had H.R. 1430 been in place.
- Negative consequences had this rule been blocked: PMs are inhalable pollutant particles that can cause major health problems, especially for vulnerable populations: people with heart or lung diseases, children, and older adults. PMs also exert detrimental effects as a pollutant haze, reducing visibility and seeping into dispersed ecosystems, soils, and water sources. Limiting exposure through NAAQS standards is an environmental and public health imperative. H.R. 1430 would hamper the NAAQS standard review process, since it relies on anonymized data and studies that cannot be reproduced.
- **7. Control of Hazardous Air Pollutants From Mobile Sources**⁷⁵ (Categories **2** and **4**) Final Rule: <u>72 Fed. Reg. 8428</u>, published February 26, 2007, effective April 27, 2007, amending 40 CFR Parts <u>59</u>, <u>80</u>, <u>85</u> and <u>86</u> (View the rulemaking docket <u>here</u>.)
 - **Purpose of this protection or program:** Several sections of the Clean Air Act of 1970 authorize the EPA to control motor vehicle emissions and fuels in order to protect human health from air pollution. The rule puts controls on gasoline composition and passenger vehicle fuel systems to reduce emissions of hazardous air pollutants, primarily benzene.
 - Why this protection or program would have been blocked by H.R. 1430:

 Benzene was established as a carcinogen by the EPA in a 1998 report entitled
 "Carcinogenic Effects of Benzene: An Update,"⁷⁶ which added new scientific developments to the original 1985 estimates of benzene carcinogenicity.⁷⁷ The 1998 report is based on a combination of rat studies and long-term cohort studies of

https://www.gpo.gov/fdsys/pkg/FR-2007-02-26/pdf/E7-2667.pdf.

Samet JM, Janes H, McDermott A, Dominici F (2008). Fine Particulate Matter and Mortality: A Comparison of the Six Cities and American Cancer Society Cohorts With a Medicare Cohort. *Epidemiology*, 19: 209- 216; Zeger S; Dominici F; McDermott A; Samet J (2008). Mortality in the Medicare population and chronic exposure to fine particulate air pollution in urban centers (2000-2005). *Environ Health Perspect*, 116: 1614; Miller KA; Siscovick DS; Sheppard L; Shepherd K; Sullivan JH; Anderson GL; Kaufman JD (2007). Long-term exposure to air pollution and incidence of cardiovascular events in women. *N Engl J Med*, 356: 447-458; Bell ML, Ebisu K, Peng R, Samet J, Dominici F (2009b). Hospital Admissions and Chemical Composition of Fine Particle Air Pollution. *Am J Respir Crit Care Med*, 179: 1115-1120; Bell ML, Ebisu K, Belanger K (2007). Ambient air pollution and low birth weight in Connecticut and Massachusetts. *Environ Health Perspect*, 115: 1118-24.

Register Vol. 72, No. 37 Monday, February 26, 2007,

⁷⁶ US. EPA. (1998). Carcinogenic Effects of Benzene: An Update.U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment, Washington Office, Washington, DC, EPA/600/P-97/001F, https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=2806.

⁷⁷ U.S. Environmental Protection Agency. (1985, Feb. 15) Interim quantitative cancer unit risk estimates due to inhalation of benzene. Prepared by the Carcinogen Assessment Group, Office of Research and Development, Washington, DC. EPA/600/X-85-022.

workers exposed to a range of benzene levels.⁷⁸ One particular study of rubber workers in Ohio is considered the most reliable because it has the lowest reported co-exposures.⁷⁹ Although workers continue to be exposed to benzene, the current allowable levels are much lower than those in the previous long-term studies, and it would be unethical to expose workers to comparably high benzene levels. Furthermore, it would be impossible to repeat the precise air quality conditions because they rely on a host of environmental factors. The regulation also relies on the National-Scale Air Toxics Assessment (NATA) of 1999,⁸⁰ which reflects the state of U.S. air before subsequent pollution reductions took place. Though the NATA is repeated every three years, the original 1999 data showing how benzene and other air toxics travel cannot realistically or ethically be reproduced.

• Negative consequences had this rule been blocked: Benzene is a known human carcinogen with particularly strong links to forms of leukemia and is the most significant contributor to cancer risk of all outdoor air toxics. As a result of the rule, the EPA estimates that, by 2030, passenger vehicles will emit 45% less benzene and gasoline will have 38% less benzene.⁸¹ This means that highway vehicle contribution to benzene cancer risk will be reduced by 43% on average across the U.S.. It will also reduce ozone and PM2.5, which is an important associated benefit.

⁷⁸ Rothman, N, Smith, MT, Hayes, RB, et al. (1996a) "An epidemiologic study of benzene's early biologic effects in heavily exposed workers in Shanghai, China." *Environmental Health Perspectives*, 104(suppl 6), 1365-1370, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1469765/.

⁷⁹ Rinsky, RA, Smith, AB, Hornung, R, et al. (1987) "Benzene and leukemia: an epidemiologic risk assessment." *New England Journal of Medicine*, 316, 1044-1050, https://www.ncbi.nlm.nih.gov/pubmed/3561457.

⁸⁰ U.S. EPA. 1999. "1999 National-Scale Air Toxics Assessment," https://archive.epa.gov/airtoxics/nata1999/web/html/index.html.

⁸¹ Control of Hazardous Air Pollutants From Mobile Sources. 40 CFR Parts 59, 80, 85, and 86. *Federal Register* Vol. 72, No. 37 Monday, February 26, 2007, https://www.gpo.gov/fdsys/pkg/FR-2007-02-26/pdf/E7-2667.pdf.

Conclusions: The Harms of H.R. 1430 and Moving Forward

Protecting safe drinking water and healthy air and safeguarding first-responders and children is the crucial work of the protections and programs listed in this document. These protections and programs depend on the EPA's ability to rely on all available validated evidence across scientific fields of study. Prohibiting the EPA from being able to incorporate important scientific studies into its extensive deliberative process for drafting risk assessments and public protections puts the health and safety of citizens at risk. The restrictions that this bill would put into place go against widely accepted guidelines for scientific research into environmental exposures and their health effects. The scientific and epidemiological studies that have led to important EPA safeguards, as well as the EPA's own research and its extramural grants for toxics reduction and pollution prevention, come from a variety of validated, well-established sources and methods.

A bill that provided genuine provisions for public data access and usability, and did not focus on mandating the reproducibility of studies and on prohibiting the use of any data that could not be divulged to the general public in its entirety, would not be expected to hamper the EPA in a significant way. EDGI's analysis of H.R. 1430 shows that it does not achieve its stated goals. Instead, our research shows that H.R. 1430 would not promote transparency and that its passage would instead block the EPA from using the data it needs to fulfill its mission of protecting public health and the environment.