CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE

March 29, 2017

H.R. 1430
Honest and Open New EPA Science Treatment (HONEST) Act of 2017

As passed by the U.S. House of Representatives on March 29, 2017

SUMMARY

H.R. 1430 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 relied on 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 H.R. 1430 would not require the EPA to disseminate any scientific or technical information that it relies on to support covered actions, the act would not prohibit the agency from doing so. Whether the EPA would choose to disseminate such information would determine the cost of implementing H.R. 1430.

Based on information from the EPA and other federal agencies, as well as organizations and researchers in the scientific community that publish in peer-reviewed journals, CBO estimates that the agency could spend between a few million dollars per year to more than one hundred million dollars per year over the 2018-2022 period to ensure that data and other information underlying studies are publicly available in a format sufficient to allow others to substantially reproduce the results of studies. That range reflects the uncertainty about the number of studies the EPA would choose to rely on to support covered actions, the extent to which the agency would invest in data infrastructure to make researchers' data and models available to others, and in the number of covered actions the agency would issue in future years. The range also reflects the uncertainty in the extent to which the research community would tailor their data management activities to comply with the requirements of the act and how quickly those changes might occur.

EPA officials have explained to CBO that the agency would implement H.R. 1430 with minimal funding and generally would not disseminate information for the scientific studies that it uses to support covered actions. That approach to implementing the legislation

would significantly reduce the number of studies that the agency relies on when issuing or proposing covered actions for the first few years following enactment of the legislation. In total, CBO estimates the EPA would spend about $5 million over the 2018-2022 period; such spending would be subject to the availability of appropriated funds.

Enacting H.R. 1430 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. CBO estimates that enacting the legislation would not increase net direct spending and on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

H.R. 1430 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

This legislation would direct the EPA to implement H.R. 1430 using up to $1 million a year from amounts authorized to be appropriated for other activities under current law. H.R. 1430 would not authorize additional appropriations to implement the requirements of the act, but CBO estimates that implementing the legislation would cost about $5 million over the 2018-2022 period.

BASIS OF ESTIMATE

Based on information from officials at the EPA about how the agency would implement the legislation, CBO expects that the agency would choose to rely only on studies that already meet the act's requirements at the outset of undertaking covered actions. That manner of implementing the act would significantly cut the number of studies used to support the EPA's actions for the first few years following enactment. Under such an approach, CBO expects that the agency would use existing data infrastructure and would incur small administrative costs to verify that the data of selected studies are publicly available, as required by the legislation.

Under current law, the 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, the 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

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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.

While the published manuscripts of scientific studies that the EPA cites to support covered actions are generally available online in publicly accessible journals, the availability of the underlying data, models, code, and other materials necessary for independent reproduction of results varies significantly in terms of quality, detail, and format. Many journals currently require authors to publish their data in online repositories or, at minimum, require that authors develop data management plans and agree to make their data available upon request. Compliance with those data management guidelines varies and enforcement is limited. Federal regulations require that all data from research funded by federal agencies be publicly available and stored in digital repositories. CBO estimates that the majority of the studies the EPA relies on each year comply with the data management requirements of their respective journals and repositories, but those requirements would not satisfy the level of detail specified by this legislation.

If the EPA continued to rely on as many scientific studies as it has used in recent years to support its covered actions, then CBO estimates that the agency would need to spend at least $100 million dollars per year to upgrade the format and availability of those studies' data to the level required by H.R. 1430. If the EPA chose to make the data available in the specified manner so as to enable the use of additional studies, CBO estimates that the agency would need to spend, on average, $10,000 per scientific study. That estimate is based on information from the EPA's Office of Research and Development and other federal agencies, as well as feedback from organizations and researchers in the scientific community that publish in peer-reviewed journals. Such spending 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. Activities could entail corresponding and negotiating with study authors and publishers and processing data to construct, maintain, and store study-related information.

PAY-AS-YOU-GO CONSIDERATIONS: None.

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting the legislation would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

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INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 1430 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments. Organizations, such as universities or research centers, that produce scientific studies used by the EPA to support covered actions might incur costs to make those studies, and underlying data, available to the public in an online format. However, those costs would result from participation in a voluntary federal program and would not stem from a mandate under UMRA. Researchers coordinating with the EPA could receive federal funds to defray the costs of making information publicly available.

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