

**Calendar No. 440**

117TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
117-129 }

TECHNOLOGICAL HAZARDS PREPAREDNESS  
AND TRAINING ACT OF 2022

—  
R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS  
UNITED STATES SENATE

TO ACCOMPANY

S. 4166

TO AUTHORIZE PREPAREDNESS PROGRAMS TO SUPPORT  
COMMUNITIES CONTAINING TECHNOLOGICAL HAZARDS  
AND EMERGING THREATS



JULY 12, 2022.—Ordered to be printed

—  
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TECHNOLOGICAL HAZARDS PREPAREDNESS AND  
TRAINING ACT OF 2022

JULY 12, 2022.—Ordered to be printed

Mr. PETERS, from the Committee on Homeland Security and  
Governmental Affairs, submitted the following

**R E P O R T**

[To accompany S. 4166]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 4166) to authorize preparedness programs to support communities containing technological hazards and emerging threats, having considered the same, reports favorably thereon with amendments and recommends that the bill, as amended, do pass.

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I. PURPOSE AND SUMMARY

S. 4166, the *Technological Hazards Preparedness and Training Act of 2022*, expands the Federal Emergency Management Agency’s (FEMA) preparedness programming capacity to help more communities address technological hazards, such as from radiological or chemical sources. The bill also requires FEMA to identify communities with the highest risk of and vulnerability to a technological hazard in each state, ensure state governments are aware of the threat and the availability of FEMA technical assistance and training to address this threat, and provide an annual report to Con-

gress on the activities taken to implement this bill. It provides FEMA an authorization of appropriations of \$20,000,000 for fiscal years 2023 through 2024.

## II. BACKGROUND AND NEED FOR THE LEGISLATION

Technological hazards are defined as materials created by humans that pose a unique threat to the general public and environment and include a chemical, biological, radiological, or nuclear (CBRN) hazard. For example, this can result from nuclear power plants, chemical manufacturing facilities, or nuclear fuel processing facilities. Potential exposures or harm may result from an accident, an emergency caused by another hazard, such as a natural disaster, or an intentional use of hazardous materials.<sup>1</sup> CBRN materials have become more common in our society, through their use in manufacturing, agriculture, and other industries.<sup>2</sup> One reason CBRN hazards are so dangerous to the health and safety of the surrounding community is that “[o]ften there is little or no advance warning to prepare and evacuate to safety.”<sup>3</sup>

Currently, FEMA’s Technological Hazards Division (THD) builds the emergency preparedness and response capabilities of communities surrounding nuclear power plants and U.S. Army chemical stockpile sites for both man-made and natural disasters.<sup>4</sup> Assistance can include emergency preparedness technical assistance, training, exercise guidance, and more.

While FEMA has long trained and assisted communities surrounding nuclear power plants and U.S. Army chemical stockpiles, other communities still lack access to such specialized, direct support when it comes to technological hazards.<sup>5</sup> Areas that could benefit from FEMA THD assistance if FEMA was given additional resources include communities that surround CBRN research facilities, nuclear enrichment facilities, or chemical manufacturing facilities.

This bill would close that gap by expanding THD’s scope so that this assistance and preparedness programming can reach additional local communities that face risks from technological hazards. These populations will benefit from THD’s existing support, training, CBRN data sharing network, interactive web tools, and hazard prediction models.<sup>6</sup>

This legislation addresses technological hazard risk by authorizing additional resources for FEMA’s THD and directly connecting state and local governments with expanded FEMA assistance and programming.<sup>7</sup> Specifically, it requires FEMA to identify the com-

<sup>1</sup>Technological Hazards Preparedness and Training Act of 2022 S. 4166, 117th Cong. (2022).

<sup>2</sup>City of Detroit, Detroit Office of Homeland Security and Emergency Management, *Hazard Mitigation Plan* at 80 (“As a result of the extensive use of chemicals in our society, all modes of transportation—highways, rail, air, marine, and pipeline—are carrying thousands of hazardous materials shipments daily through local communities.”)

<sup>3</sup>FEMA, Hazardous Response Capabilities (<https://www.fema.gov/emergency-managers/practitioners/hazardous-response-capabilities>) (accessed June 16, 2022).

<sup>4</sup>Federal Emergency Management Agency, Hazardous Response Capabilities ([www.fema.gov/emergency-managers/practitioners/hazardous-response-capabilities](http://www.fema.gov/emergency-managers/practitioners/hazardous-response-capabilities)) (accessed June 16, 2022).

<sup>5</sup>Federal Emergency Management Agency, National Preparedness (<https://www.fema.gov/about/offices/preparedness>) (accessed June 16, 2022); *Also see* Senators Rob Portman and Kyrsten Sinema: *Portman, Sinema Introduce Bipartisan Legislation to Expand FEMA’s Capacity to Help Communities Address Technological Hazards* (May 10, 2022).

<sup>6</sup>FEMA, Hazardous Response Capabilities (<https://www.fema.gov/emergency-managers/practitioners/hazardous-response-capabilities>) (accessed June 16, 2022).

<sup>7</sup>Senator Kyrsten Sinema: *Homeland Security Committee Clear Sinema’s Bipartisan Bill Improving America’s Disaster Preparedness* (June 6, 2022).

munities most vulnerable to technological hazards and inform states of their vulnerabilities and of FEMA’s respective ability to assist and address those vulnerabilities, report its progress to Congress, and includes an authorization of appropriations. Communities will be better positioned to build resilience and respond to CBRN hazards with these needed investments and assistance.<sup>8</sup>

### III. LEGISLATIVE HISTORY

Senators Rob Portman (R–OH) and Kyrsten Sinema (D–AZ) introduced S. 4166, the *Technological Hazards Preparedness and Training Act of 2022*, on May 10, 2022. The bill was referred to the Committee on Homeland Security and Governmental Affairs.

The Committee considered S. 4166 at a business meeting on May 25, 2022. During the business meeting, an amendment was offered by Senator Paul that made clear nothing in the bill shall diminish or divert resources away from the full completion of federally-led chemical material storage missions or chemical demilitarization missions, or related activities, currently being done by FEMA’s THD. The Paul Amendment was adopted by voice vote with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Portman, Lankford, Romney, Scott, and Hawley present.

Senator Scott offered a modified amendment that redirects \$20,000,000 of any remaining funds available through the American Rescue Plan Act to the FEMA Administrator to be used for the purposes of this bill. The Scott Amendment, as modified, was not adopted by voice vote with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Portman, Lankford, Romney, Scott, and Hawley present for the vote.

The Committee ordered the bill, as amended, reported favorably by voice vote *en bloc* with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Portman, Lankford, Romney, Scott, and Hawley present. Consistent with Committee Rule 3(G), the Committee reports the bill with a technical amendment by mutual agreement of the Chairman and Ranking Member.

### IV. SECTION-BY-SECTION ANALYSIS OF THE BILL, AS REPORTED

#### *Section 1. Short title*

This section designates the name of the bill as the “Technological Hazards Preparedness and Training Act of 2022.”

#### *Section 2. Definitions*

This section defines the terms “administrator,” “Indian tribal government,” “local government,” “state,” and “technological hazard and related emerging threat.”

#### *Section 3. Assistance and training for communities with technological hazards and related emerging threats*

Subsection (a) requires the FEMA Administrator to maintain state and local government technical assistance and other preparedness programs to build community resistance to technological hazards and related threats.

<sup>8</sup>Margaret A. Reams, et al., *Response, Recovery, and Resilience to Oil Spills and Environmental Disasters*, Journal of Environmental Health (Sept. 2017).

Subsection (b) delineates the legal authorities with which the Administrator must comport while carrying out the obligations of subsection (a).

Subsection (c) requires the FEMA Administrator to use any available and appropriate technology and information to identify the communities most threatened by technological hazards in each state. The subsection also requires the Administrator notify each state and tribal government of the communities identified as at-risk and of the tools available to address their vulnerability.

Subsection (d) requires the FEMA Administrator to report to relevant congressional committees the actions taken to implement this section and preparedness programs provided during the previous year.

Subsection (e) permits the Secretary of Homeland Security to seek continuing input from state, tribal, territorial, and local emergency services agencies, as well as private sector stakeholders, on technological hazards and related threats.

#### *Section 4. Authorization of appropriations*

This section authorizes \$20,000,000 to be carried out for each of fiscal years 2023 through 2024.

#### *Section 5. Savings provision*

This section clarifies that nothing in the bill diminishes or diverts resources from chemical cleanup and other projects by federal agencies underway when the bill is enacted.

### V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office's statement that the bill 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.

### VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, July 1, 2022.*

Hon. GARY PETERS,  
*Chairman, Committee on Homeland Security and Governmental Affairs,*  
*U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 4166, the Technological Hazards Preparedness and Training Act of 2022.

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

Sincerely,

PHILLIP L. SWAGEL,  
*Director.*

Enclosure.

<b>S. 4166, Technological Hazards Preparedness and Training Act of 2022</b>			
As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on May 25, 2022			
By Fiscal Year, Millions of Dollars	2022	2022-2027	2022-2032
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	0	40	40
Statutory pay-as-you-go procedures apply?	No	<b>Mandate Effects</b>	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2033?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

S. 4166 would require the Federal Emergency Management Administration (FEMA) to provide state, local, and tribal governments with technical assistance and training to prepare for technological hazards and related emerging threats. The bill defines technological hazards as materials created by humans that pose a threat to the public and the environment. S. 4166 would require FEMA to conduct risk assessments and mapping to identify communities with the highest risk and report annually to the Congress on assistance provided to state, local, and tribal governments.

S. 4166 would authorize the appropriation of \$20 million in each of fiscal years 2023 and 2024 for those purposes. Using historical spending patterns, CBO estimates that implementing the bill would cost \$40 million over the 2022–2027 period, assuming appropriation of the authorized amounts.

The costs of the legislation, detailed in Table 1, fall within budget function 450 (community and regional development).

TABLE 1.—ESTIMATED INCREASES IN SPENDING SUBJECT TO APPROPRIATION UNDER S. 4166

	By fiscal year, millions of dollars—						
	2022	2023	2024	2025	2026	2027	2022–2027
Authorization .....	0	20	20	0	0	0	40
Estimated Outlays .....	0	12	18	8	2	0	40

The CBO staff contact for this estimate is Madeleine Fox. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

This legislation would make no change in existing law, within the meaning of clauses (a) and (b) of subparagraph 12 of rule XXVI

of the Standing Rules of the Senate, because this legislation would not repeal or amend any provision of current law.

