



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

May 10, 2004

S. 994

Chemical Facilities Security Act of 2003

*As ordered reported by the Senate Committee on Environment and Public Works
on October 23, 2003*

SUMMARY

S. 994 would require the Department of Homeland Security (DHS) to develop regulations designed to increase security at facilities vulnerable to unauthorized releases of hazardous chemicals. The regulations would require owners and operators of those facilities to perform vulnerability assessments and to establish site security plans. DHS also would be responsible for reviewing such assessments and security plans and ensuring that they are in compliance with the regulations it establishes. In addition, DHS would be responsible for maintaining the site information it receives in a secure location. Finally, S. 994 would establish a grant program to improve the security of facilities at agricultural retail and production businesses that handle hazardous chemicals.

CBO estimates that implementing S. 994 would cost \$216 million over the next five years, assuming appropriation of the necessary amounts. Of this amount, we estimate that \$126 million would be used by DHS to develop the required regulations, maintain chemical facilities site information, and enforce the bill's new requirements; and that \$90 million would be used by DHS to provide grants to improve security at agricultural businesses that produce or sell hazardous chemicals (such as fertilizer). Enacting S. 994 could affect direct spending and receipts because the bill would provide for civil and criminal penalties against owners and operators of chemical facilities who fail to comply with the bill's requirements. However, CBO estimates that any collections for such civil and criminal penalties would not be significant.

Section 4 of the Unfunded Mandates Reform Act (UMRA) excludes from the application of that act any legislative provisions that are necessary for national security. CBO has determined that section 4(d) of the Chemical Security Act, which provides emergency authority to the Secretary of Homeland Security based on threat of a terrorist attack on a

chemical storage facility, falls under that exclusion and has not reviewed it for intergovernmental or private-sector mandates.

The remaining sections of S. 994 contain intergovernmental and private-sector mandates by requiring the owners and operators of certain facilities to undertake measures to protect against the unauthorized release of chemical substances. Because several of the mandates are dependent upon future actions of the Department of Homeland Security for which information currently is not available, CBO cannot determine whether the costs of those mandates will exceed the annual thresholds established in UMRA (\$60 million for intergovernmental mandates and \$120 million for private-sector mandates in 2004, adjusted annually for inflation).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of S. 994 is shown in the following table. For this estimate, CBO assumes that the necessary amounts will be appropriated for each year and that outlays will follow historical spending patterns for similar activities. The costs of this legislation fall within budget function 450 (community and regional development) and 750 (administration of justice).

BASIS OF ESTIMATE

For this estimate, CBO assumes that S. 994 will be enacted near the beginning of fiscal year 2005, and that amounts necessary to implement the bill will be provided for each year.

According to DHS, 4,000 chemical plants and storage sites handle hazardous chemicals that could be vulnerable to unauthorized releases of hazardous materials from terrorist attacks, and such sites would be covered under the bill's provisions. DHS has ongoing efforts to improve the safety and security of those chemical facilities. In 2004, about \$39 million was allocated for such activities, including developing guidelines for vulnerability assessments, conducting risk analyses at various sites, and providing training for preparing protection plans at high risk-sites.

	By Fiscal Year, in Millions of Dollars					
	2004	2005	2006	2007	2008	2009
SPENDING SUBJECT TO APPROPRIATION						
DHS Spending on Security at Chemical Sites						
Under Current Law						
Budget Authority ^a	39	0	0	0	0	0
Estimated Outlays	25	11	3	0	0	0
Proposed Changes						
Regulation Development, Review of Vulnerability Assessments and Site Security Plans						
Estimated Authorization Level	0	20	20	20	20	20
Estimated Outlays	0	18	20	20	20	20
Maintenance of Site Information						
Estimated Authorization Level	0	20	2	2	2	2
Estimated Outlays	0	13	8	3	2	2
Grants to Agricultural Businesses						
Estimated Authorization Level	0	20	20	20	20	20
Estimated Outlays	0	10	20	20	20	20
Total Proposed Changes						
Authorization Level	0	60	42	42	42	42
Estimated Outlays	0	41	48	43	42	42
DHS Spending on Security at Chemical Sites Under S. 994						
Estimated Authorization Level ^a	39	60	42	42	42	42
Estimated Outlays	25	52	45	43	42	42

a. The 2004 level is the amount appropriated for DHS to address security issues at chemical facilities in that year.

CBO expects that S. 994 would require DHS to more formally establish protocols for improving security and safety measures at chemical facilities by requiring the department to develop security regulations for chemical plants, review vulnerability assessments and site security plans prepared by plant operators, and maintain such information in a secure environment. CBO estimates that implementing those provisions would cost \$126 million over the 2005-2009 period, assuming the appropriation of the necessary amounts. Such spending would fund additional personnel, travel expenses, contract support services, and construction costs for a secure building to house site information. In addition, the bill would

authorize whatever amounts are necessary for grants to certain agricultural businesses to improve the security of hazardous chemicals produced or marketed by such businesses.

Based on information from DHS, CBO estimates that, over the next five years, efforts to support the development of regulations and review of vulnerability assessments and site security plans (which includes site visits) would require about 150 staff-years at a cost of about \$20 million each year. In addition, CBO estimates that DHS would require about \$20 million in 2005 to construct facilities to store the site information received in a secure environment and to provide funding for information technology and support services for tracking such information. In subsequent years, CBO estimates that DHS would require about \$2 million to provide ongoing support to maintaining the site information.

Because those prosecuted and convicted for violation of the provisions of S. 994 could be subject to criminal fines, the federal government might collect additional fines if the legislation is enacted. Collections of such fines are recorded in the budget as governmental receipts (revenues), which are deposited in the Crime Victims Fund and later spent. Civil penalties for violations could also be imposed under the bill, and such collections are recorded in the budget as governmental receipts. In recent years, the Environmental Protection Agency has imposed fines on firms handling hazardous chemicals for violations of the Clear Air Act totaling up to \$1 million or \$2 million a year. Consequently, CBO expects that the amount of additional fines collected under this bill would be insignificant.

While most of the provisions in this bill would affect DHS's overall role in addressing security matters at about 4,000 chemical sites, this legislation also includes a provision that targets specific types of businesses that mostly sell chemicals to the agricultural sector. Section 11 of S. 994 would establish and authorize appropriations for a grant program to assist such small businesses in making security improvements.

According to the Agricultural Retailers Association, there are about 6,000 retail suppliers of agricultural chemicals and fertilizers who would be eligible to receive grants under the bill. In addition, this association expects that many of those business could use tens of thousands of dollars to improve security and to protect against potential terrorist attacks. Assuming that DHS would attempt to provide grants to as many businesses as possible, CBO estimates that individual grants could range from \$10,000 to \$50,000, depending on the size of the business. For this estimate, CBO assumes that \$100 million would be appropriated over the next five years for the majority of eligible businesses to receive assistance.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

Section 4 of the Unfunded Mandates Reform Act excludes from the application of that act any legislative provisions that are necessary for national security. CBO has determined that section 4(d) of the Chemical Security Act, which provides emergency authority to the Secretary of Homeland Security based on threat of a terrorist attack on a chemical storage facility, falls under that exclusion and has not reviewed it for intergovernmental or private-sector mandates.

The remaining sections of the bill contain intergovernmental and private-sector mandates as defined in UMRA because it would require owners and operators of certain chemical facilities to undertake specific measures to protect against terrorist attacks, criminal acts, or other categories of chemical releases, based on regulations to be developed by DHS. Because the facilities would be selected from about 4,000 public and private entities (including public water utilities and firms in the chemical industry), the bill could impose both intergovernmental and private-sector mandates as defined in UMRA. It also would preempt state and local authority, an intergovernmental mandate, by exempting those plans and documents from state and local laws that provide public access to information.

Specifically, S. 994 would require that owners and operators of affected facilities conduct an assessment of the vulnerability of their facility, identify the hazards that may result from a substance's release and develop and implement a site security plan to prevent those releases. CBO has been unable to determine whether, and to what extent, DHS would grant owners and operators flexibility in developing and implementing the plans and in choosing to upgrade security, to redesign the manufacturing, refinement, or treatment processes that occur at the facility, or to substitute the materials used in their chemical processes. S. 994 would further require that owners and operators certify completion of both the assessment and plan, submit copies to DHS, maintain records at the facility, and complete a periodic review of the assessment and plan.

According to government and industry representatives, a substantial number of the facilities potentially affected by the bill's provisions are actively engaged in activities similar to those that would be required under S. 994. Such facilities are acting either in response to the terrorist attacks of September 11, 2001, as a condition of membership with chemical industry associations or to comply with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. If DHS determines that the efforts of such facilities would satisfy the requirements of the bill, CBO expects that those mandates would impose little additional costs on those facilities. However, if DHS uses its authority under the bill to require that owners and operators incorporate the more costly measures of process redesign or material substitution to mitigate the threat of a chemical release, those mandates would impose

significant costs on facility owners. Because we have no basis for predicting what regulations DHS would issue, CBO cannot determine whether the costs of those mandates would exceed the thresholds established in UMRA (\$60 million for intergovernmental mandates and \$120 million for private-sector mandates in 2004, adjusted annually for inflation).

ESTIMATE PREPARED BY:

Federal Costs: Susanne S. Mehlman

Impact on State, Local, and Tribal Governments: Melissa Merrell

Impact on the Private Sector: Selena Caldera

ESTIMATE APPROVED BY:

Peter H. Fontaine

Deputy Assistant Director for Budget Analysis