

## Calendar No. 764

107TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
{ 107-342

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### CHEMICAL SECURITY ACT OF 2002

NOVEMBER 15, 2002.—Ordered to be printed

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

### REPORT

together with

### ADDITIONAL VIEWS

[to accompany S. 1602]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred a bill (S. 1602) to help protect the public against the threat of chemical attacks, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

#### GENERAL STATEMENT AND BACKGROUND

Congress has long been concerned about releases of hazardous chemicals from industrial facilities. In 1984, an accidental release of methyl isocyanate from a Union Carbide plant in Bhopal, India resulted in more than 2,000 deaths and hundreds of thousands of injuries. Reacting to this incident and a number of accidental chemical releases in the United States, Congress enacted several statutes to help prevent such releases and to improve preparedness and response capabilities.

The Emergency Planning and Community Right-to-Know Act (EPCRA), passed in 1986, contains four major requirements designed to help facilities and communities understand, prepare for

and respond to accidental releases of hazardous chemicals.<sup>1</sup> The four requirements are emergency planning, release notification, hazardous chemical storage reporting, and toxics release reporting. The emergency planning provisions of EPCRA established State Emergency Response Commissions (SERCs) and Local Emergency Planning Commissions (LEPCs). LEPCs are comprised of emergency responders and other local officials, and are required to develop emergency response plans and communicate these plans to the public. The EPCRA notification and storage reporting requirements establish thresholds and reporting requirements for releases and storage of certain extremely hazardous substances held onsite. EPCRA also created the Toxics Release Inventory, which requires facilities to report their releases of more than 600 chemicals into the environment.

The Clean Air Act Amendments of 1990 included requirements that the Occupational Safety and Health Administration promulgate Process Safety Management (PSM) regulations that apply to chemical facilities.<sup>2</sup> The regulations increase worker safety by preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable or explosive chemicals. The Clean Air Act Amendments of 1990 also include provisions in section 112(r) that are designed to prevent accidental releases of dangerous chemicals, and mitigate the consequences of releases that may occur. The requirements of this section apply to stationary facilities that process more than a threshold amount of certain dangerous chemicals. Approximately 15,000 facilities are subject to the requirements. These facilities must develop risk management programs that include a hazard assessment of the offsite consequences of releases under worst-case and alternate scenarios, a prevention program, and an emergency response program. Information about the program must be documented in a Risk Management Plan (RMP) that is submitted to EPA and made available to States and local planning agencies as well as the public according to procedures set forth in 40 CFR 68.

RMPs were submitted by covered facilities pursuant to a statutory deadline on June 21, 1999. RMP data indicate that the potential for catastrophic chemical releases is widespread in the United States. According to EPA data, a “worst-case” release of toxic chemicals could threaten more than one million people at more than 123 U.S. facilities spread across 24 States. In addition to these 123 facilities, there are more than 700 facilities located in 39 States at which a “worst-case” release of toxic chemicals could threaten more than one hundred thousand people.<sup>3</sup>

Anticipating the deadline for submission of RMPs, Congress passed the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act, Public Law 106-40, on August 2, 1999.<sup>4</sup> This Act amended section 112(r) of the Clean Air Act to limit the availability of RMPs to address concerns regarding the potential terrorist threat posed by Internet access to offsite consequence analysis information. The 1999 amendments also mandated a comprehensive Department of Justice study of the vulnerability of toxic

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<sup>1</sup>Public Law 99-499.

<sup>2</sup>Public Law 101-549.

<sup>3</sup>RMP Info., U.S. Environmental Protection Agency.

<sup>4</sup>Public Law 106-40.

chemical handling or manufacturing facilities to criminal and terrorist activity. In May of 2002, the Department of Justice completed an interim study, nearly 2 years after the statutory deadline of August 5, 2000. The results of this interim study are classified, and therefore cannot be discussed in this report. The final study was due to be completed August 5, 2002, and was not completed by that date or expected to be completed in the near future.

Notwithstanding the failure by the Department of Justice to complete its full vulnerability study, existing evidence suggests that security is inadequate at many chemical facilities. In 1999, the Agency for Toxic Substances and Disease Registry studied security at 30 chemical plants in three States.<sup>5</sup> The ATSDR found that “security at chemical plants ranged from fair to very poor.” In a separate study, the Department of Justice concluded in April, 2000 that “the risk of terrorists attempting in the foreseeable future to cause an industrial chemical release is both real and credible.”<sup>6</sup> In this same report, the Department of Justice noted that attacking an existing chemical facility, for example, presents an easier and more attractive alternative for terrorists than constructing a weapon of mass destruction. In addition, the Department concluded that many plants that contain hazardous chemicals would be attractive targets for terrorists because of the plants’ proximity to densely populated areas.

Since September 11, there have been a variety of voluntary industry initiatives to improve security. The American Chemistry Council (ACC), for example, has adopted a security code as part of its Responsible Care program, and will require adherence to that code as a condition of membership in the ACC. But in spite of the ACC program and related efforts, there have been security gaps reported at numerous chemical facilities since September 11, 2001. Governor Tom Ridge echoed the conclusions of these investigations in his testimony before the Senate Committee on Environment and Public Works on July 10, 2002, stating that: “The fact is, we have a very diversified economy and our enemies look at some of our economic assets as targets. And clearly, the chemical facilities are one of them. We know that there have been reports validated about security deficiencies at dozens and dozens of those.”

In spite of these documented security lapses and widespread agreement about the vulnerability of the nation’s chemical infrastructure, there are no Federal standards in place to require plants to assess their vulnerabilities and take steps to reduce them. As discussed above, there are several programs in place to plan for and mitigate the threat of accidental releases of chemicals. But these accidental release programs do not address the contingencies that a terrorist attack might entail, and therefore do not provide adequate protection. By contrast, nuclear plants are already subject to extensive security requirements designed to prevent armed intruders from sabotaging the plants. Industry groups, such as the American Chemistry Council, are in the process of implementing voluntary programs to reduce hazards and improve security at

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<sup>5</sup>Agency for Toxic Substances and Disease Registry, *Industrial Chemicals and Terrorism: Human Health Threat Analysis, Mitigation and Prevention*, 1999.

<sup>6</sup>Department of Justice, *Assessment of Increased Risk of Terrorist or Other Criminal Activity Associated with Posting Off-Site Consequence Analysis Information on the Internet*. April 18, 2000. pp. 23–24.

their plants. However, the American Chemistry Council represents only approximately 10 percent of facilities that use large quantities of dangerous chemicals, and its measures are not enforceable and do not involve either Federal review of assessments and response plans or credible third-party review of such assessments and plans.

#### OBJECTIVES OF THE LEGISLATION

S. 1602 is intended to ensure that the threat of terrorist attack on chemical facilities is addressed quickly, consistently and effectively across the spectrum of U.S. industrial facilities that have hazardous chemicals. The Act puts the Environmental Protection Agency (EPA) in the lead role in implementing the Act, with the Office of Homeland Security or its successor in a consultative role. This approach is consistent with the approach outlined in the President's Homeland Security strategy.<sup>7</sup> The Act requires the EPA to consult with the Office of Homeland Security, as well as States and local governments, to identify "high-priority" facilities within the universe of approximately 15,000 facilities that have submitted risk management plans (RMPs) to EPA under the accidental release prevention programs established under section 112(r) of the Clean Air Act. Population density, proximity to other critical infrastructure, and additional criteria, as appropriate, would be used to screen the 15,000 facilities to set the priority list. This would be accomplished through a rulemaking within one year of enactment. That rulemaking would also include requirements for each high priority facility to: conduct a vulnerability and hazard assessment, and; prepare a prevention, preparedness and response plan that addresses the hazards and vulnerabilities by improving security, employing safer technology, and other means. Copies of the assessments and plans must be submitted to EPA 12 and 18 months, respectively, after the date of promulgation of regulations. EPA is required to review the documents in consultation with the Office of Homeland Security to determine whether the vulnerability assessments were conducted in compliance with the regulations and whether the response plans were prepared and are being implemented in compliance with the regulations.

#### SECTION-BY-SECTION ANALYSIS

##### *Section 1. Short Title*

The Chemical Security Act of 2002.

##### *Sec. 2. Findings*

Section 2 contains four findings, which can be summarized as follows: 1) the chemical industry is a crucial part of the United States' critical infrastructure; 2) the possibility of attacks on chemical facilities poses a serious threat to public health, safety and welfare as well as critical infrastructure and national security; 3) the possibility of chemical theft from a chemical facility also poses such threats, and; 4) there are significant opportunities to prevent attacks and threats, and reduce harm that would result by using safer technologies and improving site security.

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<sup>7</sup>The White House. *National Strategies for Homeland Security*, July 2002, pp. 29–35.

*Sec. 3. Definitions*

## SUMMARY

Section 3 defines ten terms for the purposes of the Act. Definitions include:

- “Chemical Source” is a stationary source (as defined in section 112(r) of the Clean Air Act) that contains a substance of concern.
- “Employee” means a duly recognized collective bargaining representative at a chemical source; or, in the absence of such a representative, other appropriate personnel.
- “Head of the Office” means the head of the Office of Homeland Security or a successor agency.
- “Safer Design and Maintenance” includes, to the extent practicable: use of inherently safer technology, use of secondary containment equipment, implementation of security measures, and use of buffer zones.
- “Security Measure” means an action to increase the security of a chemical source, including employee training and background checks, perimeter and access controls, and cybersecurity.
- “Substance of Concern” is any regulated substance under 112(r) of the Clean Air Act, and any substance added by the Administrator through rulemaking.
- “Unauthorized Release” is the removal or release from a chemical source of a covered substance of concern that is unauthorized or is caused, in whole or in part, by a criminal act.
- “Use of Inherently Safer Technology” means use of a technology (or product, practice, etc.) that as compared with current practices, reduces or eliminates the possibility of a release of a substance of concern or threat to public health resulting from such a release.

## DISCUSSION

The definitions of “chemical source” and “substance of concern” set the parameters for the universe of substances and entities potentially covered by the Act, as described in the discussion of Section 4. The definition of “employee” is used in Section 4 to require that workers be consulted in the development of vulnerability assessments and response plans. The definition and its use in this Act in no way affects employer obligations under section 8(a)(2) of the National Labor Relations Act. The definition of “head of the Office” reflects the fact that Congress is considering the establishment of a Department of Homeland Security, which would replace the existing Office of Homeland Security. The term “practicable,” as used in the definition of “safer design and maintenance,” is intended to incorporate consideration of both technical feasibility and cost.

*Sec. 4. Designation and Regulation of High Priority categories*

## SUMMARY

*Subsection 4(a).—Designation and Regulation of High Priority Categories by the Administrator*

*Subsection 4(a)(1).—*Within one year of enactment, requires the Administrator, in consultation with the Office of Homeland Secu-

riety or its successor, and State and local emergency response agencies, to designate “high priority” combinations of chemical sources and substances of concern based on the threat of a release and criteria in subsection (a)(2). Subsection (a)(5) authorizes the Administrator, in consultation with the Office of Homeland Security, to add substances of concern as part of the rulemaking under subsection (a)(1).

*Subsection 4(a)(2).*—Sets safety and security criteria for the Administrator, in consultation with the Office of Homeland Security, to consider in designating “high priority” categories, including severity of harm that could be caused by a release, proximity to population centers, threats to national security or critical infrastructure, threshold quantities of substances of concern that pose a serious threat, and such other safety or security factors that the Administrator considers appropriate.

*Subsection 4(a)(3).*—Requires the Administrator, in consultation with the Office of Homeland Security, the Chemical Safety Board, and State and local agencies, to establish regulations for “high priority” chemical sources within one year of designating such categories under subsection (a)(1). Such regulations shall require chemical sources, in consultation with local law enforcement/emergency responders and employees, to:

- conduct a vulnerability assessment;
- identify hazards that could result from a release;
- prepare a plan that includes actions, and procedures, including safer design and maintenance, to eliminate or significantly reduce the potential consequences of a release.

*Subsection 4(a)(4).*—Requires the Administrator, in consultation with the Office of Homeland Security, to revise the regulations under subsections (a)(1) and (a)(3) within 5 years.

#### DISCUSSION

Subsection 4(a) requires a two-part regulatory process that establishes the major requirements of the Act. First, the EPA must consult with the Office of Homeland Security, as well as the State and local agencies listed, to identify “high priority” categories. These high priority categories are combinations of chemical sources and substances of concern. It is the committee’s expectation that the facilities currently subject to EPA’s Risk Management Program requirements, established under Section 112(r) of the Clean Air Act, would be EPA’s starting point for determining the high priority categories. There are approximately 15,000 of these facilities, each of which has onsite more than a threshold quantity of at least one of 140 listed toxic or flammable chemicals. The high priority list would be developed by screening the RMP list of 15,000 facilities using the criteria listed in subsection 4(a)(2). These criteria include the severity of harm that could be caused by a release of a substance of concern, proximity to population centers, threats to critical infrastructure or national security and threshold quantities. The size of the universe of high-priority facilities would therefore likely be smaller than the 15,000 that are subject to EPA’s RMP requirements.

While the decision of how to develop and apply the criteria listed in subsection 4(a)(2) is left to the EPA, the committee does not ex-

pect that facilities located in remote areas, such as many agricultural retailers, would be included in the high priority categories. In addition, the committee notes that some facilities subject to the RMP requirements may exceed the RMP threshold quantities for brief periods during the year, making them less attractive targets for attack than RMP facilities that consistently exceed the threshold quantities. EPA should consider the frequency and duration that the threshold quantities of substance of concern are onsite at a particular facility in designating high priority categories.

Subsection 4(a)(3) establishes the requirements applicable to high priority category chemical sources. These requirements must be developed through rulemaking no later than one year after enactment of the Act. The committee is aware that there are voluntary security programs currently being implemented at some of the facilities that may be subject to the requirements of this Act. For example, the American Chemistry Council has developed and adopted a security code as part of its Responsible Care program, and has made adherence to the security code a condition of membership in the American Chemistry Council. In addition, energy producers have conducted vulnerability assessments at a portion of their facilities in conjunction with the Department of Energy under Presidential Decision Directive 63. Finally, some community water suppliers are required to conduct vulnerability assessments with respect to attacks that could cause a disruption in water supplies under the bioterrorism bill that was signed into law earlier this year. The committee recognizes that these efforts may overlap with the assessment and planning requirements in subsection 4(a)(3). The committee does not intend unnecessary duplication of efforts, however, the committee has left to the Administrator and the Office of Homeland Security the determination of whether assessments required by other laws are duplicative of the purposes and requirements of this Act. With respect to voluntary programs such as the American Chemistry Council Responsible Care program, EPA may consider the requirements of such programs as it develops its regulations, but may not relieve any facility of the responsibility to comply with the provisions of this Act on the basis of participation in any such program.

*Subsection 4(b).—Compliance Certification*

*Subsection 4(b)(1).*—Requires each owner and operator of each high-priority chemical source to certify compliance with the vulnerability/hazard assessment regulations within one year of promulgation of applicable regulations.

*Subsection 4(b)(2).*—Requires each owner and operator of each high-priority chemical source to certify compliance with the prevention, preparedness and response plan regulations within 18 months of promulgation of applicable regulations.

*Subsection 4(b)(3).*—Requires review of assessments and plans and re-certification by chemical sources every 3 years.

*Subsection 4(b)(4).*—Exempts from disclosure under the Freedom of Information Act all information provided to the Administrator under this section, with the exception of the compliance certifications described in subsections 4(b) and 5(a). The subsection also requires the Administrator, in consultation with the Office of

Homeland Security, to develop protocols necessary to prevent unauthorized disclosure of assessments and plans.

#### DISCUSSION

Subsection 4(b)(4) exempts the assessments and plans from disclosure under FOIA. It also directs EPA to develop protocols to prevent disclosure to unauthorized persons of the assessments and plans. During committee markup of the Act, an amendment was offered by Senator Bond, and accepted by voice vote, that requires specific protocols prohibiting disclosure to unauthorized persons to be developed. Notwithstanding the FOIA exemptions and protocols mentioned above, this subsection provides that certifications of compliance will be publicly available, so that the public will know whether a local facility has complied with the law. In addition, the certifications will provide a checklist to indicate whether the chemical source has implemented each of the four elements of safer design and maintenance. It is not the committee's intent that such certification be utilized as demonstration of full compliance with the requirements of the Act. Rather, the EPA may utilize the authorities contained in current law to request access to and inspection of documents, facilities and other information to ascertain compliance with the Act.

#### *Sec. 5. Enforcement*

##### *(a) Review of Assessments and Plans*

*Subsection 5(a)(1).*—Requires the Administrator, in consultation with the Office of Homeland Security, to review vulnerability assessments and response plans to determine their compliance with applicable regulations.

*Subsection 5(a)(2).*—Requires the Administrator to certify each compliance determination in writing, including a checklist indicating consideration of safer design and maintenance.

*Subsection 5(a)(2)(C).*—Establishes an “early compliance” authority. The Administrator, in consultation with the Office of Homeland Security, shall review assessments and plans submitted prior to publication of proposed regulations to determine compliance with the Act. No further revisions to the assessments or plans will be required if such a determination is made. This provision has been included to enable facilities that already have assessments and plans underway—such as American Chemistry Council members—to continue their work and submit the assessments and plans for early approval by the Administrator if the Administrator determines that they assessments and plans meet the requirements of the Act.

*Subsection 5(a)(2)(D).*—Requires the Administrator to establish a schedule for reviewing assessments and plans, not to exceed 3 years beyond the deadline for submission of such assessments and plans.

*5(b) Compliance Assistance.*—Requires the Administrator to provide notice and compliance assistance to a chemical source if the Administrator, after consultation with the Office of Homeland Security, determines that a chemical source has not complied with the assessment or planning regulations; or that a threat exists that is beyond the scope of a plan or implementation of a plan.

*5(c) Compliance Orders.*—Thirty days after the later of the date that the Administrator first provides compliance assistance or a chemical source receives notice under (b), the Administrator may issue an order directing compliance after notice and opportunity for hearing.

*5(d) Abatement Orders.*—Requires the Office of Homeland Security to provide notification to a chemical source if the Office of Homeland Security, in consultation with local law enforcement and first responders, determines that a terrorist threat exists that is beyond the scope or implementation of a response plan submitted by a chemical source. Requires the Office of Homeland Security to notify the Administrator and the Attorney General if the Office of Homeland Security determines that actions taken by a chemical source in response to the notification are insufficient. Once these preliminary steps have been taking, the Administrator and the Attorney General are then authorized to secure relief through court orders to protect the public health or welfare.

#### DISCUSSION

Section 5 establishes requirements for review of assessments and plans submitted to EPA, and authorities and procedures for EPA to address deficiencies in these documents.

Section 5(c) establishes an “early compliance” provision. As noted in the discussion of Section 4, industry groups such as the American Chemistry Council are in the process of implementing voluntary security measures. The aim of the Act is to encourage such voluntary efforts to continue, while ensuring that they meet the standards set out in the Act. To accomplish this goal, the Act includes an “early compliance” provision. Under this provision, chemical sources can submit assessments and response plans for review at any time after enactment of the Act. Assessments and plans received prior to publication of draft regulations must be reviewed by the Administrator and must meet the standards in the Act. Assessments or plans received after that date must meet the requirements of the final regulations.

#### *Sec. 6. Recordkeeping and Entry*

Section 6 establishes record retention requirements for covered chemical sources. The section also establishes authority for the Administrator, in carrying out the Act, to enter or request information from a chemical source.

#### *Sec. 7. Penalties*

Section 7 establishes civil penalties for violations of the Act and criminal penalties for knowing violations of the Act.

#### *Sec. 8. No Effect on Requirements Under Other Law*

Section 8 states that nothing under this Act affects any duty or other requirement imposed under any other Federal or State law.

#### *Sec. 9. Authorization of Appropriations*

Section 9 authorizes such sums as are necessary to carry out this Act.

## LEGISLATIVE HISTORY

S. 1602 was introduced on October 31, 2001 by Senator Corzine, with Senators Jeffords, Boxer and Clinton as cosponsors, and was referred to the Committee on Environment and Public Works. A hearing was held by the Subcommittee on Superfund, Toxics, Risk and Waste Management on November 14, 2001 to consider S. 1602; and a full committee oversight hearing was held on July 10, 2002 to receive testimony the creation of a Department of Homeland Security. The full Committee on Environment and Public Works met on July 25, 2002 to consider S. 1602, and ordered it reported to the Senate with an amendment in the nature of a substitute.

## HEARINGS

On Wednesday, November 14, 2001, the Subcommittee on Superfund, Toxics, Risk and Waste Management of the Committee on Environment and Public Works held a legislative hearing to receive testimony on S. 1602, the Chemical Security Act. There were no prior congressional hearings on this legislation. Witnesses at the hearing appeared in the following order: Robert C. Shinn, Jr., Commissioner, New Jersey Department of Environmental Protection; Mr. Fred Webber, President and Chief Executive Officer, American Chemistry Council; Mr. Paul Orum, Director, Working Group on Community Right-to-Know; Mr. Bill Stanley, Synthetic Organic Chemical Manufacturers Association; and Ms. Rena Steinzor, Academic Fellow, National Resources Defense Council.

## ROLLCALL VOTES

On July 25, 2002, the Committee on Environment and Public Works met to consider S. 1602. The committee agreed, by voice vote, to an amendment in the nature of a substitute offered by Senator Corzine. Also, agreed to by voice vote was an amendment by Senator Bond that directs the Administrator to develop protocols to protect sensitive information received by EPA in the form of chemical facility vulnerability assessments and response plans. Finally, agreed to by voice vote was a technical amendment by Senator Corzine to the definition of "unauthorized release" on page 6, line 18. A recorded vote on S. 1602 was requested by Senator Corzine and seconded by Senator Clinton. A recorded vote occurred on the bill, as amended. S. 1602 was unanimously ordered reported by 19 ayes.

## REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee makes evaluation of the regulatory impact of the reported bill. The bill 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 the Unfunded Mandates Reform Act of 1995 (Public Law 104-4), the committee finds that S. 1079 would not impose any Federal intergovernmental unfunded mandates on State, local, or tribal governments.

## COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, October 1, 2002.*

Hon. JAMES M. JEFFORDS, *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. 1602, the Chemical Security Act of 2002.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Susanne S. Mehlman (for Federal costs), who can be reached at 226-2860, Greg Waring (for the State and local impact), who can be reached at 225-3220, and Lauren Marks (for the private-sector impact), who can be reached at 226-2940.

Sincerely,

DAN L. CRIPPEN.

*S. 1602, the Chemical Security Act of 2002, as ordered reported by  
the Senate Committee on Environment and Public Works on  
July 25, 2002*

*Summary*

S. 1602 would require the Environmental Protection Agency (EPA) to develop regulations to identify sources of industrial chemicals or facilities vulnerable to unauthorized releases of hazardous chemicals. The regulations would require owners and operators of those facilities to perform vulnerability assessments of chemical sources and to establish safety and security plans. EPA also would be responsible for developing methods to guard against inappropriate disclosure of the vulnerability assessment plans prepared by the owners of chemical sources that may pose a security threat, and for certifying their compliance with these plans.

CBO estimates that implementing this bill would cost \$80 million over the 2003-2007 period, assuming appropriation of the necessary funds. Enacting S. 1602 could affect direct spending and receipts because this bill would provide for civil and criminal penalties against owners of chemical sources who fail to comply with the bill's requirements. However, CBO estimates that any such increase in civil and criminal penalties would be not be significant.

S. 1602 would require the owners and operators of certain facilities to undertake measures to protect against the unauthorized release of chemical substances. Because the owners and operators of those facilities include both public and private-sector entities, the requirements would be both intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). Based on information from EPA and industry sources, CBO estimates that the cost to comply with the mandates would

not exceed the annual thresholds established by UMRA (\$58 million for intergovernmental mandates and \$115 million for private-sector mandates in 2002, adjusted annually for inflation).

*Estimated Cost to the Federal Government*

The estimated budgetary impact of S. 1602 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

By Fiscal Year, in Millions of Dollars

	2003	2004	2005	2006	2007
SPENDING SUBJECT TO APPROPRIATION					
Development of Regulations:					
Estimated Authorization Level .....	1	1	*	*	*
Estimated Outlays .....	1	1	*	*	*
Coordination with Office of Homeland Security and Technical Support:					
Estimated Authorization Level .....	2	2	2	1	1
Estimated Outlays .....	2	2	2	1	1
Review of Vulnerability Assessments, Certification of Compliance, and Enforcement:					
Estimated Authorization Level .....	1	10	31	21	9
Estimated Outlays .....	1	9	27	22	11
Total Proposed Changes:					
Estimated Authorization Level .....	4	13	33	22	10
Estimated Outlays .....	4	12	29	23	12

NOTE : \* = Less than \$500,000.

*Basis of Estimate*

For this estimate, CBO assumes that S. 1602 will be enacted near the beginning of 2003. According to EPA, 12,000 to 15,000 chemical plants and storage sites handle hazardous chemicals that could be vulnerable to unauthorized releases of hazardous material caused by terrorist attacks. Under this legislation, EPA would work with owners and operators of these facilities to develop vulnerability assessment guidelines, identify and correct problems related to the production and storage of hazardous chemicals, and obtain verification that problems have been remedied. CBO estimates that implementing these provisions would cost \$80 million over the 2003–2007 period, assuming appropriation of the necessary amounts. Such spending would fund additional personnel, travel expenses, and contract support services necessary to implement EPA’s three main responsibilities under this bill—to develop regulations, coordinate with the Office of Homeland Security (OHS) and provide technical support, and enforce the bill’s new requirements.

Over the next 5 years, CBO estimates that efforts to support the development of regulations under S. 1602 would require about 12 staff-years at a cost of about \$1 million, as well as \$1 million in contract services to support economic analyses and research required to establish the regulations.

S. 1602 would require EPA to coordinate its oversight and enforcement activities with OHS and to establish and maintain computer systems for tracking information about possible threats and other recordkeeping associated with hazardous chemical sites. CBO estimates that coordinating with OHS and developing and maintaining information technology would require about 20 staff-years

at a cost of about \$2 million, as well as \$6 million in contract services over the 2003–2007 period.

Enforcing the bill's requirements would demand the most resources from EPA. The bill would require the agency to review vulnerability assessments submitted by the owners and operators of chemical sources, certify whether sites are in compliance, and pursue enforcement actions when necessary. CBO estimates that over the 2003–2007 period such activities would require about 200 staff-years at a cost of about \$20 million, plus \$22 million in travel expenses and \$28 million in contractor support services.

Based on information from EPA, CBO assumes that following the submission and review of vulnerability assessments, EPA and contractor staff would travel to most of the 12,000–15,000 chemical sites or facilities. A site visit would include up to a three-person team performing inspection duties over a three-to 5-day period. Furthermore, because EPA expects that about 85 percent of the owners and operators of the sites would submit their assessments sometime in 2004, CBO estimates that the majority of the site inspections would occur over the 2004–2006 period. Thus, most of the personnel and related travel expenses would occur during that time period.

Because those prosecuted and convicted for violation of the provisions of S. 1602 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 EPA has imposed fines on firms handling hazardous chemicals for violations of the clear air act totaling \$1 million to \$2 million a year. CBO expects that the amount of additional fines collected under this bill would be insignificant.

#### *Intergovernmental and Private-Sector Impact*

The bill would require EPA to develop regulations designating certain facilities as “high priority,” based upon the severity of the threat posed by an unauthorized release of chemicals from those facilities. Owners and operators of facilities designated as high priority would be required to undertake specific measures to protect against terrorist attacks, criminal acts, or other types of chemical releases. Because the high-priority facilities would be selected from about 15,000 public and private entities (including public water utilities and firms in the chemical industry), the bill would impose both intergovernmental and private-sector mandates, as defined in UMRA.

Specifically, S. 1602 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 plan to prepare, prevent, and respond to a release. According to EPA, owners and operators would be granted some flexibility in developing and implementing the response plans and could choose to upgrade security, redesign the manufacturing, refinement, or treatment processes that occur at the facility, or substitute for the materials used in

their chemical processes. S. 1602 would further require that owners and operators certify completion of both the assessment and plan, submit copies to EPA, 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. 1602. Such facilities are acting either in response to the terrorist attacks of September 11, 2001, as a condition of membership in chemical industry associations, or to comply with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. EPA has indicated that the efforts of such facilities would likely satisfy the requirements of the bill. Therefore, CBO expects that enactment would impose few additional costs on those facilities. Further, EPA does not expect to use its authority under the bill to require that owners and operators incorporate the more costly measures of process redesign or material substitution in order to mitigate the threat of a chemical release.

Assuming that EPA does not use such authority, and based on information from government and industry sources on the costs of measures that would protect against a release, CBO estimates that the total cost of the mandates contained in the bill would not exceed the annual thresholds established by UMRA (\$58 million for intergovernmental mandates and \$115 million for private-sector mandates in 2002, adjusted annually for inflation).

*Estimate Prepared By:* Federal Costs: Susanne S. Mehlman (226-2860); Impact on State, Local, and Tribal Governments: Greg Waring (225-3220); Impact on the Private Sector: Lauren Marks (226-2940).

*Estimate Approved By:* Robert A. Sunshine Assistant Director for Budget Analysis.

#### ADDITIONAL VIEWS OF SENATOR INHOFE

On July 25, 2002, I supported the reporting of this bill from the Environment and Public Works Committee with every expectation that major improvements to the bill would occur. The legislation as reported out of committee does not address all of the concerns that were raised in the committee, including the role of the Department of Homeland Security, human resource needs, distribution of sensitive site vulnerability information, and incentives for early action on the part of companies. Additionally, the committee must address concerns regarding agricultural operations, fire emergency prevention and mitigation, consolidation of national security responsibility, energy assurance, overlapping government authorities, and others that have arisen from scores of stakeholders upon thoughtful consideration of this legislation.

I wholeheartedly support the goal of ensuring the security of our nation's chemical infrastructure. However, Congress should not let our chance to address such a critical issue miss the mark and possibly hurt our nation in the process. At a time when Congress has such major issues before it, I believe that Congress must work together to craft an effective solution to improving the security of our nation's chemical infrastructure.

CHANGES IN EXISTING LAW

Section 12 of rule XXVI of the Standing Rules of the Senate, provides that reports to the Senate should show changes in existing law made by the bill as reported. Passage of this bill will make no changes to existing law.

