Chemical Facility Security: Issues and Options for the 112th Congress

Dana A. Shea
Specialist in Science and Technology Policy

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Summary

The Department of Homeland Security (DHS) has statutory authority to regulate chemical facilities for security purposes. The 112th Congress extended this authority through October 4, 2011. The 112th Congress debated the scope and details of reauthorization and continues to consider legislation establishing an authority with longer duration. Some Members of Congress support an extension, either short- or long-term, of the existing authority. Other Members call for revision and more extensive codification of chemical facility security regulatory provisions. Questions regarding the current law's effectiveness in reducing chemical facility risk and the sufficiency of federal funding for chemical facility security exacerbate the tension between continuing current policies and changing the statutory authority.

The DHS is in the process of implementing the authorized regulations, called chemical facility anti-terrorism standards (CFATS). The DHS finalized CFATS regulations in 2007. No chemical facilities have completed the CFATS process, which starts with information submission by chemical facilities and finishes with inspection and approval of facility security measures by DHS. Several factors, including the level of detail provided to DHS and the availability of inspectors, likely complicate the inspection process and lead to delays in inspection. Policymakers have questioned whether the compliance rate with the CFATS is sufficient to address this homeland security issue.

Key policy issues debated in previous Congresses contribute to the reauthorization debate. These issues include the adequacy of DHS resources and effort; the appropriateness and scope of federal preemption of state chemical facility security activities; the availability of information for public comment, potential litigation, and congressional oversight; the universe of facilities that are considered as chemical facilities; and the role of inherently safer technologies in achieving security goals.

The 112th Congress might take various approaches to this issue. Congress might allow the statutory authority to expire but continue providing appropriations to administer the regulations. Congress might permanently or temporarily extend the expiring statutory authority in order to observe the impact of the current regulations and, if necessary, address any perceived weaknesses at a later date. Congress might codify the existing regulation in statute and reduce the discretion available to the Secretary of Homeland Security to change the current regulatory framework. Alternatively, Congress might substantively change the current regulation's implementation, scope, or impact by amending the existing statute or creating a new one. Finally, Congress might choose to terminate the program by allowing its authority to lapse and removing funding for the program. This last approach would leave chemical facility security regulation to the discretion of state and local governments.

Both authorization and appropriation legislation in the 112th Congress addresses chemical facility security. The Senate- and House-passed continuing resolution, H.R. 2017, would continue the existing authority until October 4, 2011. The House-passed continuing resolution, H.R. 2608, would extend the existing authority until November 18, 2011. Authorizing legislation in the House includes H.R. 225; H.R. 901, ordered reported as amended by the House Committee on Homeland Security and referred to the House Committee on Energy and Commerce; H.R. 908, ordered reported as amended by the House Committee on Energy and Commerce; H.R. 916; H.R. 2890; S. 473, ordered reported as amended by the Senate Committee on Homeland Security and Governmental Affairs, and S. 709.

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Introduction

Even before September 11, 2001, congressional policymakers have expressed concern about the safety and security of facilities possessing certain amounts of hazardous chemicals. The sudden release of hazardous chemicals from facilities storing large quantities might potentially harm many people living or working near the facility. Chemical facilities engaged in security activities on a voluntary basis. Following September 11, 2001, some states enacted laws requiring additional consideration of security at chemical facilities.[1] Congress debated whether the federal government should regulate such facilities for security purposes to reduce the risk they pose. The 109th Congress passed legislation in 2006 providing the Department of Homeland Security (DHS) statutory authority to regulate chemical facilities for security purposes, and subsequent Congresses have extended this authority. The statutory authority expires October 4, 2011. Advocacy groups, stakeholders, and policymakers have called for congressional reauthorization of this authority, though they disagree about the preferred approach. Congress may extend the existing authority, revise the existing authority to resolve potentially contentious issues, or allow this authority to lapse.

This report provides a brief overview of the existing statutory authority and the regulation implementing this authority. It describes several policy issues raised in previous debates regarding chemical facility security and identifies policy options for congressional consideration. Finally, legislation in the 112th Congress is discussed.

Overview of Statute and Regulation

The 109th Congress provided DHS with statutory authority to regulate chemical facilities for security purposes.[2] The statute explicitly identified some DHS authorities and left other aspects to the discretion of the Secretary of Homeland Security. The statute contains a "sunset provision" and expires on October 4, 2011.[3]

On April 9, 2007, the Department of Homeland Security issued an interim final rule regarding the chemical facility anti-terrorism standards (CFATS).[4] This interim final rule entered into force on

[1] For example, New Jersey, Maryland, and New York each enacted laws addressing security at chemical facilities.

[2] Section 550, P.L. 109-295, Department of Homeland Security Appropriations Act, 2007.

[3] The original statute expired on October 4, 2009, three years after enactment. The Department of Homeland Security Appropriations Act, 2010 (P.L. 111-83) extended the existing statutory authority an additional year. The Continuing Appropriations Act, 2011 (P.L. 111-242) extended the statutory authority through December 3, 2010. The second continuing resolution (P.L. 111-290) extended the statutory authority through December 18, 2010. The third continuing resolution (P.L. 111-317) extended the statutory authority through December 21, 2010. The Continuing Appropriations and Surface Transportation Extensions Act, 2011 (P.L. 111-322) extended the statutory authority through March 4, 2011. The Further Continuing Appropriations Amendments, 2011 (P.L. 112-4) extended the statutory authority through March 18, 2011. The Additional Continuing Appropriations Amendments, 2011 (P.L. 112-6) extended the statutory authority through April 8, 2011. The Further Additional Continuing Appropriations Amendments, 2011 (P.L. 112-8) extended the statutory authority through April 15, 2011. The Department of Defense and Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10) extends the statutory authority through October 4, 2011.

[4] 72 *Federal* Register 17688-17745 (April 9, 2007). An interim final rule is a rule that meets the requirements for a final rule and that has the same force and effect as a final rule, but that contains an invitation for further public comment on its provisions. After reviewing comments to the interim final rule, an agency may modify the interim final rule and issue a "final" final rule. The DHS first issued a proposed rule in December 2006 and solicited public (continued...)

June 8, 2007. The interim final rule implements both statutory authority explicit in P.L. 109-295, Section 550, and authorities DHS found Congress implicitly granted. In promulgating the interim final rule, DHS interpreted the language of the statute to determine what it asserts was the intent of Congress when crafting the statutory authority. Consequently, much of the rule arises from the Secretary's discretion and interpretation of legislative intent rather than explicit statutory language.

Under the interim final rule, the Secretary of Homeland Security determines which chemical facilities must meet regulatory security requirements, based on the degree of risk posed by each facility. The DHS lists 322 chemicals as "chemicals of interest" for the purposes of compliance with CFATS.[5] The DHS considers each chemical in the context of three threats: release; theft or diversion; and sabotage and contamination. Chemical facilities with greater than specified quantities of potentially dangerous chemicals must submit information to DHS, so that DHS can determine the facility's risk status. The statute exempts several types of facilities from this requirement: facilities defined as a water system or wastewater treatment works; facilities owned or operated by the Department of Defense or Department of Energy; facilities regulated by the Nuclear Regulatory Commission; and those facilities regulated under the Maritime Transportation Security Act of 2002 (P.L. 107-295).

Based on the submitted information, DHS determines the risk associated with each facility. Facilities DHS deems high risk must meet CFATS requirements. The DHS assigns high-risk facilities into one of four risk-based tiers. The statute mandated that DHS establish performance-based security requirements.[6] The DHS created graduated performance-based requirements for facilities assigned to each risk-based tier. Facilities in higher risk tiers must meet more stringent performance-based requirements.

All high-risk facilities must assess their vulnerabilities, develop an effective security plan, submit these documents to DHS, and implement their security plan.[7] The vulnerability assessment serves two purposes under the interim final rule. One is to determine or confirm the placement of the facility in a risk-based tier. The other is to provide a baseline against which to evaluate the site security plan activities.

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comments. 71 *Federal Register* 78276-78332 (December 28, 2006).

[5] 72 *Federal Register* 65396-65435 (November 20, 2007).

[6] According to the White House Office of Management and Budget, a performance standard is a standard

> that states requirements in terms of required results with criteria for verifying compliance but without stating the methods for achieving required results. A performance standard may define the functional requirements for the item, operational requirements, and/or interface and interchangeability characteristics. A performance standard may be viewed in juxtaposition to a prescriptive standard which may specify design requirements, such as materials to be used, how a requirement is to be achieved, or how an item is to be fabricated or constructed.

Office of Management and Budget, The White House, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," *Circular A-119*, February 10, 1998. For example, a performance standard might require that a facility perimeter be secured, while a prescriptive standard might dictate the height and type of fence to be used to secure the perimeter.

[7] High-risk facilities may develop vulnerability assessments and site security plans using alternative security programs so long as they meet the tiered, performance-based requirements of the interim final rule.

The site security plans must address the vulnerability assessment by describing how activities in the plan correspond to securing facility vulnerabilities. Additionally, the site security plan must address preparations for and deterrents against specific modes of potential terrorist attack, as applicable and identified by DHS. The site security plans must also describe how the activities taken by the facility meet the risk-based performance standards provided by DHS.

The DHS must review and approve the submitted documents, audit and inspect chemical facilities, and determine regulatory compliance. The DHS may disapprove submitted vulnerability assessments or site security plans that fail to meet DHS standards. The DHS may not disapprove an assessment or plan because of the presence or absence of a specific security measure. In the case of disapproval, DHS must identify in writing those areas of the assessment and/or plan that need improvement. Owners or operators of chemical facilities may appeal such decisions to DHS.

Similarly, if, after inspecting a chemical facility, DHS finds a facility not in compliance, the Secretary must write to the facility explaining the deficiencies found, provide an opportunity for the facility to consult with DHS, and issue an order to the facility to comply by a specified date. If the facility continues to be out of compliance, DHS may fine and, eventually, order the facility to cease operation. The interim final rule establishes the process by which chemical facilities can appeal DHS decisions and rulings, but the statute prohibits third-party suits for enforcement purposes.

The interim final rule creates a category of information exempted from disclosure under the Freedom of Information Act (FOIA) and comparable state and local laws. The DHS named this category of information "Chemical-terrorism Vulnerability Information" (CVI). This category exempts information generated under the interim final rule, as well as any information developed for chemical facility security purposes identified by the Secretary. In accordance with statute, judicial and administrative proceedings shall treat CVI as classified information. The DHS asserts sole discretion regarding who will be eligible to receive CVI. Disclosure of CVI may be punishable by fine.

The interim final rule states it preempts state and local regulation that "conflicts with, hinders, poses an obstacle to or frustrates the purposes of" the federal regulation. States, localities, or affected companies may request a decision from DHS regarding potential conflict between the regulations. Since DHS promulgated the interim final rule, Congress amended P.L. 109-295, Section 550, to state that such preemption will occur only in the case of an "actual conflict."[8] The DHS has not issued revised regulations addressing this change in statute.

Implementation

Within DHS, the National Protection and Programs Directorate (NPPD) is responsible for chemical facility security regulations. The NPPD generally attempts to reduce the risks to the homeland and has various offices addressing both physical and virtual threats. Within NPPD, the Office of Infrastructure Protection, through its Infrastructure Security Compliance Division, oversees the CFATS program.[9] As seen in **Table 1**, requested and appropriated funding for this

[8] P.L. 110-161, the Consolidated Appropriations Act, 2008, Section 534.

[9] The budget request for the Infrastructure Security Compliance Project contains the funding and personnel allocations (continued...)

program has generally increased since its creation. Additionally, full-time equivalent staffing for this program has also generally increased. This increase in staffing reflects, in part, the development of a cadre of CFATS inspectors, based in regional offices.

Table 1. DHS Funding for Chemical Facility Security Regulation by Fiscal Year

Fiscal Year	Request ($ in millions)	Appropriation ($ in millions)	Full-time Equivalents
FY2007	10	22[a]	0
FY2008	25	50	21
FY2009	63	78[b]	78
FY2010	103[c]	103[d]	246
FY2011	105[e]	96[f]	257
FY2012	99[g]		242

Source: Department of Homeland Security, Preparedness Directorate, Infrastructure Protection and Information Security, *FY2007 Congressional Justification*; Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2008 Congressional Justification*; Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2009 Congressional Justification*; Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2010 Congressional Justification*; Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2011 Overview Congressional Justification*; Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2012 Congressional Justification*; H.Rept. 109-699; P.L. 110-28; the explanatory statement for P.L. 110-161 at *Congressional Record*, December 17, 2007, p. H16092; the explanatory statement for P.L. 110-329 at *Congressional Record*, September 24, 2008, pp. H9806-H9807; H.Rept. 111-298; P.L. 111-242, as amended; and P.L. 112-10.

Notes: Funding levels rounded to nearest million. A full-time equivalent equals one staff person working a full-time work schedule for one year.

a. Including funds provided in supplemental appropriations (P.L. 110-28).

b. Of this amount appropriated for the Infrastructure Security Compliance Project, $5 million were designated for activities related to the development of ammonium nitrate regulations.

c. Of this amount requested for the Infrastructure Security Compliance Project, $14 million were designated for activities related to the development of ammonium nitrate regulations.

d. Of this amount appropriated for the Infrastructure Security Compliance Project, $14 million were designated for activities related to the development of ammonium nitrate regulations.

e. The DHS planned to use an unspecified amount of the requested funds to regulate ammonium nitrate sale and transfer.

f. P.L. 112-10 provided $838,763,112 in FY2011 appropriations for the National Protection and Programs Directorate Infrastructure Protection and Information Security appropriations account. It does not specify a level for chemical facility security regulation. The DHS determined the distribution of funding for programs within the account. The DHS uses an unspecified amount of these funds to regulate ammonium nitrate sale and transfer.

g. The DHS plans to use an unspecified amount of the requested funds to regulate ammonium nitrate sale and transfer.

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for implementing the CFATS regulations.

The DHS received statutory authority to regulate chemical facilities in 2006. It did not possess a chemical facility security office or inspector cadre at that time. The DHS requested additional positions to create an inspector cadre and is still in the process of hiring. As of February 2011, DHS had hired 109 inspectors.[10]

Chemical inspectors must be able to assess the security measures at a chemical facility using the performance-based criteria developed by DHS. Performance-based security measures are likely more difficult than prescriptive measures for chemical inspectors to assess and thus require greater training and experience in the inspector cadre. In order to overcome this challenge, DHS has established a Basic Inspector School training program for its inspector cadre. Such training, while likely improving the quality of inspection, also introduces additional time between the hiring of new inspectors and their deployment in the field.

As of September 2011, more than 38,000 chemical facilities had registered with DHS and completed the Top-Screen process, the process by which DHS determines whether a facility is high-risk based on a facility's initial submission of information. Of these facilities, DHS considered more than 7,000 as preliminarily high-risk and required to submit a site vulnerability assessment.[11] From the submitted site vulnerability assessments, DHS identified and placed 4,569 facilities into preliminary or final risk tiers. **Table 2** identifies by risk tier the universe of high-risk facilities, with Tier 1 those of highest risk.

Table 2. Facilities Regulated by DHS under CFATS

Risk Tier	Facilities with Regulated Final Tier Decision	Facilities Awaiting Final Tier Decision	Total Facilities
1	99	3	102
2	502	37	539
3	1,155	135	1290
4	2,195	443	2,638
Total	**3,951**	**618**	**4,569**

Source: Personal communication with Department of Homeland Security, September 15, 2011. See also, AcuTech Consulting Group, *A Survey of CFATS Progress in Securing the Chemical Sector*, September 6, 2011.

Notes: DHS has preliminarily assigned some facilities to a risk tier. Final assignment to a risk tier occurs after final review of submitted vulnerability assessments. In June 2011, DHS reassigned approximately 500 facilities from their risk tier to a lower risk tier.

In June 2011, DHS identified an anomaly in one of the risk-assessment tools used by DHS to determine a facility's risk tier.[12] Subsequent review of this risk-assessment tool resulted in DHS

[10] Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Homeland Security Committee, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011. As of July 2010, DHS had hired 88 field personnel, including 11 regional commanders. Office of Infrastructure Protection, National Protection and Programs Directorate, Department of Homeland Security, *Update on Implementation of the Chemical Facility Anti-Terrorism Standards and Development of Ammonium Nitrate Regulations-2010 Chemical Sector Coordinating Council Security Summit*, July 7, 2010.

[11] Infrastructure Security Compliance Division, Office of Infrastructure Protection, National Protection and Programs Directorate, Department of Homeland Security, *Chemical Facility Anti-Terrorism Standards*, January 27, 2011.

[12] Department of Homeland Security, "DHS Notifies Chemical Facilities of Revised Tiering Assignments," July 5, (continued...)

reassigning approximately 500 facilities from their risk tier to a lower risk tier.[13] The DHS lowered the number of facilities allocated to the highest-risk tier from 211 to 102, a greater than 50% reduction.[14] In some cases, DHS determined that regulated facilities no longer qualified as a high-risk facility and thus did not receive a risk tier.

The total number of chemical facilities assigned a risk tier by DHS has declined since the CFATS program began. Several factors may have contributed to this decline, including erroneous filing by regulated entities, process changes on the part of regulated entities, and business operations and decisions. The DHS has also engaged in targeted outreach activities to identify those facilities that fall under the regulation but have not yet complied by filing required information.

The DHS planned to begin inspections of Tier 1 facilities as quickly as 14 months after issuance of regulations.[15] A series of factors has delayed inspections, including the release of additional regulatory information in the form of an appendix and the need to build an inspector cadre, to establish a regional infrastructure, and to perform pre-authorization inspections at facilities. DHS officials provided a series of timeframes for beginning inspections.[16] The DHS began inspections of Tier 1 facilities in February 2010.[17] Although the DHS testified that they planned to inspect all Tier 1 facilities by the end of calendar year 2010,[18] DHS had only performed nine authorization inspections as of September 2011.[19] The DHS states that it expects to inspect all Tier 1 facilities

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2011, http://www.dhs.gov/files/programs/cfats-revised-tiering-assignments.shtm.

[13] Society of Chemical Manufacturers and Affiliates, "DHS Provides latest on CFATS and Tiering at Chemical Sector Security Summit," http://www.socma.com/tags/printerFriendly.cfm?pageid=3109.

[14] CRS analysis of Department of Homeland Security data from Infrastructure Security Compliance Division, Office of Infrastructure Protection, National Protection and Programs Directorate, Department of Homeland Security, *Chemical Facility Anti-Terrorism Standards*, January 27, 2011; Personal communication with Department of Homeland Security, September 15, 2011; and AcuTech Consulting Group, *A Survey of CFATS Progress in Securing the Chemical Sector*, September 6, 2011.

[15] Department of Homeland Security, *Chemical Facility Anti-Terrorism Standards Interim Final Rule Regulatory Assessment,* DHS-2006-0073, April 1, 2007, p. 15.

[16] In July 2007, DHS provided testimony that formal site inspections of a selected group of facilities would begin by the end of the calendar year (Testimony of Robert B. Stephan, Assistant Secretary for Infrastructure Protection, National Protection and Programs Directorate, Department of Homeland Security, before the House Committee on Homeland Security, Subcommittee on Transportation Security and Infrastructure, July 24, 2007). In December 2007, DHS provided testimony that facility inspection would begin in fall of 2008 (Testimony of Robert B. Stephan, Assistant Secretary for Infrastructure Protection, National Protection and Programs Directorate, Department of Homeland Security, before the House Committee on Homeland Security, Subcommittee on Transportation Security and Infrastructure, December 13, 2007). In 2009, DHS provided testimony that inspections would begin in the first quarter of FY2010 (Testimony of Philip Reitinger, Deputy Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Committee on Homeland Security, June 16, 2009). The DHS now states that it expects to inspect all Tier 1 facilities by the end of calendar year 2011 (Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Homeland Security Committee, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011).

[17] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[18] Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[19] Personal communication with Department of Homeland Security, September 15, 2011.

by the end of calendar year 2011. The DHS has not approved the implementation of any site security plan.[20]

The DHS identified an additional factor in the delay of the inspection schedule: the necessary iteration between DHS and the regulated entity regarding its site security plan.[21] The DHS has issued 66 administrative orders to compel facilities to complete their site security plans.[22] In addition, DHS established a pre-authorization inspection process to gain additional information from facilities in order to fully assess the submitted site security plan. Once DHS completes a pre-authorization inspection at a facility, the facility may amend its site security plan to reflect the results of the pre-authorization inspection. The DHS has performed 180 pre-authorization inspections to date.[23]

Policy Issues

Previous congressional discussion on chemical facility security raised several contentious policy issues.[24] Some issues, such as whether DHS has sufficient funds to adequately oversee chemical facility security; whether federal chemical facility security regulations should preempt state regulations; and how much chemical security information individuals may share outside of the facility and the federal government, will exist even if Congress extends the existing statutory authority. Other issues, such as what facilities DHS should regulate as a chemical facility and whether DHS should require chemical facilities to adopt or consider adopting inherently safer technologies, may be more likely addressed if Congress chooses to revise or expand existing authority.

Adequacy of Funds

The regulation establishes an oversight structure that relies on DHS personnel inspecting chemical facilities and ascertaining whether regulated entities have implemented their approved site security plans. Although the use of performance-based measures, where chemical facilities have flexibility in how to achieve the required security performance, may reduce some demands on the regulated entities, it may also require greater training and judgment on the part of DHS inspectors. Inspecting the regulated facilities likely will be costly. Congressional oversight has raised the question of whether DHS has requested and received appropriated funds sufficient to hire and retain the staff necessary to perform the required compliance inspections.[25]

[20] Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Homeland Security Committee, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011.

[21] The DHS identified such iteration on the contents of site security plans as one factor delaying the start of the inspection process from December 2009 to February 2010. Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[22] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Committee on Energy and Commerce, Subcommittee on Environment and the Economy, March 31, 2011.

[23] Personal communication with Department of Homeland Security, September 15, 2011.

[24] Congressional policymakers have debated chemical facility security issues since at least the 106th Congress.

[25] House Committee on Homeland Security, Subcommittee on Transportation Security and Infrastructure Protection, (continued...)

The DHS may face challenges when creating the necessary infrastructure to perform nationwide inspections. As stated by DHS when describing its efforts to hire, train, and deploy an inspector cadre and support staff:

> Infrastructure Security Inspectors, located in up to 10 primary field offices across the Nation, will inspect and ensure regulatory compliance at facilities covered by the CFATS regulation, including site security plan approval and maintaining respective inspection and audit schedule. Creating a fully functional cadre will require not just recruiting and training staff, but also procurement of communications and [information technology] equipment (laptops, blackberries, etc.) to facilitate work efforts while conducting inspections and traveling, but also the acquisition of office space and equipment, government vehicles, support staff, safety equipment and clothing, and support for frequent travel.[26]

The degree to which funds meet agency needs likely depends on factors external and internal to DHS. External factors include the number of regulated facilities and the sufficiency of security plan implementation. Internal factors include the ratio between headquarters staff and field inspectors; the risk tiers of the regulated facilities; and the timetable for implementation of inspections. Once the DHS determines the number of regulated facilities and their associated timetables, DHS may be able to more comprehensively determine its resource needs.[27] Now that DHS has begun implementation of these requirements, it may be able to provide further estimates of both funding and staff requirements.

Rate of Inspection

As of February 2011, no chemical facilities have completed the CFATS process, which starts with information submission by chemical facilities and finishes with inspection and approval of security measures by DHS.[28] Some policymakers have expressed surprise at the pace of inspection and questioned whether DHS should continue at the current pace or accelerate the compliance process.[29] Several factors likely complicate the inspection process and lead to delays in inspection. A primary factor appears to be that the information facilities submit in site security plans does not provide what DHS views as necessary detail to evaluate compliance.[30] Rather than reject these site security plans, DHS has implemented an additional inspection function, a pre-authorization inspection, to allow DHS to gather the necessary information from regulated facilities.

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Chemical Security: The Implementation of the Chemical Facility Anti-Terrorism Standards and the Road Ahead, 110th Congress, December 12, 2007.

[26] Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2009 Congressional Justification*, p. IPIS-41.

[27] Congress required DHS in FY2006 and FY2007 to report on the resources needed to create and implement mandatory security requirements. See P.L. 109-295, Department of Homeland Security Appropriations Act, 2007, and H.Rept. 109-241, accompanying P.L. 109-90, Department of Homeland Security Appropriations Act, 2006.

[28] Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Homeland Security Committee, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011.

[29] Monica Hatcher, "Why Chemical Plants Are Vulnerable to Terrorism," *Houston Chronicle*, April 5, 2010.

[30] For example, see Department of Homeland Security, *Chemical Facility Anti-Terrorism Standards Site Security Plans and Preliminary Inspections, NASTTPO Annual Meeting*, May 12, 2010; and W. Koch, Air Products, *Overview of DHS CFATS Pre Authorization Visit*, July 7, 2010.

While pre-authorization inspections may lead to higher quality site security plan submissions, they appear to be a significant drain on DHS resources. The DHS cites it has performed 180 pre-authorization inspections but only nine authorization inspections.[31] In principle, such pre-authorization inspections may lower the future authorization inspection burden, as CFATS inspectors will be familiar with security measures at the chemical facility. Such familiarity may hasten the actual authorization inspection.

The DHS has also suggested that pre-authorization inspections are most necessary at higher risk tier facilities, due to the complexity of the facility, the potential presence of multiple chemicals of interest, and the more stringent risk-based performance standards that apply. Lower-risk-tier facilities may not need pre-authorization inspections both because of their comparative simplicity and because inspectors may develop best practices through the pre-authorization inspections of higher-tiered facilities.

In contrast, some policymakers have questioned whether the low inspection rate is due to constraints in the number of chemical facility security inspectors hired by DHS or the availability of appropriated funding. The CFATS regulation states that DHS will inspect the implementation of site security plans at all facilities and requires that facilities resubmit their site security plan every two years for Tier 1 and Tier 2 facilities or three years for Tier 3 and Tier 4 facilities.[32] This requires DHS to perform approximately 1,700 inspections annually in order to inspect each facility's implementation of its site security plan. The DHS has asserted that inspections require two or more inspectors and approximately one week to perform.[33]

The DHS appears to have requested sufficient inspectors to manage the workload associated with a reinspection cycle of every two years for top tier facilities and every three years for lower-tier facilities, but such a staffing level may be insufficient to address the large number of initial regulatory submissions.[34] This level of staffing would appear to require approximately a full cycle of inspections to reduce the backlog created from the initial site security plan submissions. If DHS were to hire additional inspectors, it might reduce the backlog of site security plans but also run the risk of having additional unnecessary staff in future years. The DHS might hire temporary or short-term staff to augment the inspector cadre, but the need to train such employees for CFATS-specific inspections may pose challenges.

Finally, because DHS has focused on inspecting those facilities in the highest risk tier, it potentially faces the most complicated inspection environments. Inspections of lower risk tier facilities may pose fewer complications, take less time, and involve fewer inspectors. If so, DHS might quickly and substantially increase the number of facilities inspected by focusing efforts on lower-tier facilities. Through this approach, DHS might gain insight and experience among the inspector cadre while reducing some national risk.[35]

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[31] Personal communication with Department of Homeland Security, September 15, 2011.

[32] The DHS also states that it plans to inspect compliance at Tier 1 facilities annually (Department of Homeland Security, National Protection and Programs Directorate, Infrastructure Protection and Information Security, *Fiscal Year 2012 Congressional Justification*, p. 26).

[33] Department of Homeland Security, *The Chemical Facility Anti-Terrorism Standards—Update for the Chemical Sector Security Summit*, June 29, 2009.

[34] CRS calculation assuming two inspectors per inspection and one inspection per week.

[35] It should be noted that all facilities regulated under CFATS are by definition high-risk chemical facilities and that a lower or higher risk tier is relative to other high-risk chemical facilities.

Federal Preemption of State Activities

The original statute did not expressly address the issue of federal preemption of state and local chemical facility security statute or regulation. When DHS issued regulations establishing the CFATS program, DHS asserted that the CFATS regulations would preempt state and local chemical facility security statute or regulation that conflicted with, hindered, posed an obstacle, or frustrated the purposes of the federal regulation.[36] Subsequent to the release of the regulation, Congress amended DHS's statutory authority to state that only in the case of an "actual conflict" would the federal regulation preempt state authority.[37] Few states have established independent chemical facility security regulatory programs, and conflict between the federal and state activities has not yet occurred.[38] The DHS did not identify any state programs that conflict with the CFATS regulations.[39] The DHS has also not altered its regulatory language in response to the statutory amendment.

Advocates for federal preemption call for a uniform security framework across the nation. They assert that a "patchwork" of regulations might develop if states independently develop additional chemical facility security regulations.[40] Variances in security requirements might lead to differing regulatory compliance costs, and companies might suffer competitive disadvantage based on their geographic location.

Supporters of state rights to regulate chemical facility security claim that the federal regulation should be a minimum standard with which all regulated entities must comply. They assert that DHS should allow states to develop more stringent regulations than the federal regulations. They claim such regulations would increase security. Some supporters of state regulation suggest that more stringent, conflicting state regulations should preempt the federal regulations.[41] Such a case might occur if a state regulation mandated the use of a particular security approach at chemical facilities, conflicting with the federal regulation that adopts a performance-based, rather than prescriptive, approach. The desire to retain industries that might relocate faced with increased regulation arguably would temper state inclinations to require overly stringent or incompatible regulations.

Some policymakers may assert that chemical facility security should be left to the states rather than be implemented as a federal regulation. If Congress allows the statutory authority to expire

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[36] 72 *Federal Register* 17688–17745 (April 9, 2007) at 17739.

[37] Section 534, P.L. 110-161, Consolidated Appropriations Act, 2008.

[38] Several states, including New Jersey, Maryland, and New York, have implemented laws addressing security at chemical facilities.

[39] 72 *Federal Register* 17688–17745 (April 9, 2007) at 17727.

[40] See, for example, National Association of Chemical Distributors, "NACD Key Issue: Chemical Facility Security," *Key Issues 2009 Washington Fly-In 111th Congress*.

[41] For example, in the 111th Congress, Representative Rothman asked Secretary of Homeland Security Napolitano,

> And in particular, there was language enacted in 2008 which said that the states could have their own regulations with regard to securing chemical plant facilities unless there was a conflict with the federal requirements. Might it be time to revisit that language to allow each state to have its own chemical plant security regulations, even stricter than a national minimum standard, even if they conflict?

("House Appropriations Subcommittee on Homeland Security Holds Hearing on the Department of Homeland Security," *CQ Congressional Transcripts*, May 12, 2009.)

and does not appropriate funds for the further implementation of CFATS, the authority would lapse and states would again be responsible for regulating chemical facility security.

Transparency of Process

The CFATS process involves determining chemical facility vulnerabilities and developing security plans to address them. Information developed in this process is not to be widely or openly disseminated. The CFATS program categorizes this information as CVI and provides penalties for its disclosure. Some advocates have argued for greater transparency in the CFATS process, even if the program does not provide detailed information regarding potential vulnerabilities and specific security measures. They assert that those individuals living in surrounding communities require such non-detailed information to plan effectively and make choices in an emergency.[42]

The current statute and regulation prohibit public disclosure of security-related information. Only specific "covered persons" may access CVI. While acknowledging a legitimate homeland security need to limit dissemination of security information, some policymakers have questioned whether such limitations hinder other efforts. For example, first responders and community representatives have highlighted how such information protection regimes may impede emergency response and the ability of those in the surrounding community to react to emergency situations at the chemical facility.[43] Additionally, worker representatives have raised concerns that these limitations and the lack of mandated inclusion of worker representatives may impede worker input into security plans.[44]

The current information protection regimes for chemical facility security information, CVI under CFATS and Sensitive Security Information (SSI) under the Maritime Transportation Security Act (MTSA), do not contain penalties for incorrectly marking information as protected. Only disclosure of correctly marked information is penalized. Additionally, the chemical facility is responsible for identifying and appropriately marking protected information. These information markings only would be assessed in the case of dispute. As was asserted during congressional oversight, this disparity may lead to a tendency by regulated entities, in order to protect themselves against potential liability or scrutiny, to erroneously limit dissemination of information that should be made available to the public.[45]

Congressional investigation indicated that documents related to a 2007 explosion at a Bayer CropScience chemical facility in West Virginia were incorrectly labeled as protected from disclosure.[46] The DHS regulated this chemical facility under MTSA, not CFATS.[47] In this case,

[42] OMB Watch and Public Citizen, "Chemical Facility Anti-Terrorism Standards, Department of Homeland Security, DHS-2006-0073," *Letter*, February 7, 2007.

[43] Testimony of Joseph Crawford, Chief of Police, City Saint Albans, West Virginia, before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, April 21, 2009; and testimony of Kent Carper, President, Kanawha County Commission, Kanawha County, West Virginia, before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, April 21, 2009.

[44] See, for example, testimony of Glenn Erwin, United Steelworkers International Union, before the Senate Committee on Homeland Security and Governmental Affairs, July 13, 2005.

[45] "House Energy and Commerce Subcommittee on Oversight and Investigations Holds Hearing on the Bayer CropScience Facility Explosion," *CQ Congressional Transcripts*, April 21, 2009.

[46] For example, see "House Energy and Commerce Subcommittee on Oversight and Investigations Holds Hearing on the Bayer CropScience Facility Explosion," *CQ Congressional Transcripts*, April 21, 2009.

security information was protected from disclosure as SSI, an information protection regime similar to CVI. Company officials broadly applied SSI markings to facility documents partly in hopes of avoiding a public debate on the use and storage of particular chemicals at the facility.[48] This revelation led to questions regarding the application and oversight of such protective markings.

Additionally, the existing statute contains no provisions explicitly protecting or allowing for concerned covered persons to divulge CVI or to challenge the categorization of information as protected in an attempt to inform authorities about security vulnerabilities or other weaknesses. Depending on the circumstances, those individuals might be penalized for their disclosure of protected information. The CFATS regulations, reflecting this inherent tension, provide for a point of contact to which such information might be revealed, but also state "Section 550 did not give DHS authority to provide whistleblower protection, and so DHS has not incorporated specific whistleblower protections into this regulation."[49]

Definition of Chemical Facility

The DHS regulates both entities that possess and entities that manufacture chemicals of interest. Thus, the term chemical facility encompasses many types of facilities, including agricultural facilities, universities, and others. With DHS defining chemical facilities according to possession of a substance of concern, facilities not part of the chemical manufacturing and distributing chain have become regulated facilities. Stakeholders have expressed concern that the number of entities so regulated might be unwieldy and that the regulatory program might focus on many chemical facilities that pose little risk rather than on those facilities that pose more substantial risk. For example, during the rulemaking process, DHS received commentary and revised its regulatory threshold for possession of propane, stating:

> DHS, however, set the [screening threshold quantities] for propane in this final rule at 60,000 pounds. Sixty thousand pounds is the estimated maximum amount of propane that non-industrial propane customers, such as restaurants and farmers, typically use. The Department believes that non-industrial users, especially those in rural areas, do not have the potential to create a significant risk to human life or health as would industrial users. The Department has elected, at this time, to focus efforts on large commercial propane establishments but may, after providing the public with an opportunity for notice and comment, extend its [CFATS] screening efforts to smaller facilities in the future. This higher [screening threshold quantity] will focus DHS's security screening effort on industrial and major consumers, regional suppliers, bulk retail, and storage sites and away from non-industrial propane customers.[50]

Similarly, academic institutions have asserted that DHS should not apply CFATS regulations to them because of the dispersed nature of chemical holdings at colleges and universities. These

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[47] The DHS regulates for security purposes chemical facilities located in ports under the Maritime Transportation Security Act of 2002 (P.L. 107-295). The chemical facility security statute exempts chemical facilities regulated under MTSA.

[48] Testimony of William B. Buckner, President and Chief Executive Officer of Bayer CropScience, before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, April 21, 2009.

[49] 72 *Federal Register* 17688–17745 (April 9, 2007) at 17718.

[50] 72 *Federal Register* 65396–65435 (November 20, 2007) at 65406.

institutions claim that regulatory compliance costs would not be commensurate with the risk reduction.[51] While the regulatory compliance costs likely decrease at lower-risk tiers compared to higher-risk tiers, all regulated entities bear compliance costs as continued annual expenses.

As mentioned above, the statutory authority underlying CFATS exempts several types of facilities, including water and wastewater treatment facilities. The federal government does not regulate water and wastewater treatment facilities for chemical security purposes. Instead, current chemical security efforts at water and wastewater treatment facilities are voluntary in nature.[52] Some advocacy groups have called for inclusion of currently exempt facilities, such as water and wastewater treatment facilities.[53] Some drinking water and wastewater treatment facilities possess large amounts of potentially hazardous chemicals, such as chlorine, for purposes such as disinfection.[54] Advocates for their inclusion in security regulations cite the presence of such potentially hazardous chemicals and their relative proximity to population centers as reasons to mandate security measures for such facilities. In contrast, representatives of the water sector point to the critical role that water and wastewater treatment facilities play in daily life. They caution against including these facilities in the existing regulatory framework because of the potential for undue public impacts. They cite, for example, loss of basic fire protection and sanitation services if the federal government orders a water or wastewater utility to cease operations for security reasons or failure to comply with regulation.[55]

If Congress were to remove the drinking water and wastewater treatment facility exemption, the number of regulated facilities might substantially increase, placing additional burdens on the CFATS program. The United States contains approximately 52,000 community water systems and 16,500 wastewater treatment facilities.[56] These facilities vary substantially in size and service. The number of regulated facilities would depend on the criteria used to determine inclusion, such as chemical possession or number of individuals served. It is likely that only a subset of these facilities would meet a regulatory threshold.[57] A DHS official testified that approximately 6,000 facilities would likely meet the CFATS threshold.[58]

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[51] 72 *Federal Register* 65396–65435 (November 20, 2007) at 65412.

[52] Congress required certain drinking water facilities to perform vulnerability assessments and develop emergency response plans through section 401 of P.L. 107-188, the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. For more information on drinking water security activities, see CRS Report RL31294, *Safeguarding the Nation's Drinking Water: EPA and Congressional Actions*, by Mary Tiemann.

[53] See, for example, Paul Orum and Reece Rushing, Center for American Progress, *Chemical Security 101: What You Don't Have Can't Leak, or Be Blown Up by Terrorists*, November 2008; and testimony of Philip J. Crowley, Senior Fellow and Director of Homeland Security, Center for American Progress, before the House Committee on Energy and Commerce, Subcommittee on Environment and Hazardous Materials, June 12, 2008.

[54] See U.S. Environmental Protection Agency, *Factoids: Drinking Water and Ground Water Statistics for 2008*, EPA 816-K-08-004, November 2008; and U.S. Environmental Protection Agency, *Clean Watersheds Needs Survey 2004: Report to Congress*, January 2008.

[55] American Water Works Association, "Chemical Facility Security," *Fact Sheet*, 2009, online at http://www.awwa.org/files/GovtPublicAffairs/PDF/2009Security.pdf. For more information on security issues in the water infrastructure sector, see CRS Report RL32189, *Terrorism and Security Issues Facing the Water Infrastructure Sector*, by Claudia Copeland.

[56] See U.S. Environmental Protection Agency, *Factoids: Drinking Water and Ground Water Statistics for 2008*, EPA 816-K-08-004, November 2008; and U.S. Environmental Protection Agency, *Clean Watersheds Needs Survey 2004: Report to Congress*, January 2008. For comparison, more than 38,000 chemical facilities filed a Top-Screen under CFATS.

[57] For example, the number of individuals served by the drinking water facility might be used as a regulatory criterion. Section 401 of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188) (continued...)

Inherently Safer Technologies

Previous debate on chemical facility security has included whether to mandate the adoption or consideration of changes in chemical processes to reduce the potential consequences following a successful attack on a chemical facility. Suggestions for such changes have included reducing the amount of chemical stored onsite and changing the chemicals used. In previous congressional debate, these approaches have been referred to as inherently safer technologies or methods to reduce the consequences of a terrorist attack.

A fundamental challenge for inherently safer technologies is how to compare one technology with its potential replacement. It is challenging to unequivocally state that one technology is inherently safer than the other without adequate metrics. Risk factors may exist outside of the comparison framework.[59] Some experts have asserted that the metrics for comparing industrial processes are not yet fully established and need additional research and study.[60] The National Academies have recommended that DHS support research and development to foster cost-effective, inherently safer chemistries and chemical processes.[61] A facility might consider many additional factors beyond homeland security implications when weighing the applicability and benefit of switching from one process to another. These factors include cost, technical challenges regarding implementation in specific situations, supply chain impacts, quality and availability of end products, and indirect effects on workers.[62]

Supporters of adopting these approaches as a way to improve chemical facility security argue that reducing or removing these chemicals from a facility will reduce the incentive to attack the facility. They suggest that reducing the consequences of a release also lowers the threat from terrorist attack and mitigates the risk to the surrounding populace. They point to facilities that have voluntarily changed amounts of chemicals on hand or chemical processes in use as examples that facilities can implement such an approach in a cost-effective, practical fashion.[63]

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mandated drinking water facilities serving more than 3,300 individuals develop an emergency response plan and perform a vulnerability assessment. Approximately 8,400 community water systems met this requirement at that time. For more information on drinking water security activities, see CRS Report RL31294, *Safeguarding the Nation's Drinking Water: EPA and Congressional Actions*, by Mary Tiemann.

[58] Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Homeland Security Committee, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011.

[59] For example, the replacement of hydrogen fluoride with sulfuric acid for refinery processing would replace a more toxic chemical with a less toxic one. In this case, experts estimate that equivalent processing capacity would require twenty-five times more sulfuric acid. Thus, more chemical storage facilities and transportation would be required, potentially posing different dangers than atmospheric release to the surrounding community. Determining which chemical process had less overall risk might require considering factors both internal and external to the chemical facility and the surrounding community. See testimony of M. Sam Mannan, Director, Mary Kay O'Connor Process Safety Center, Texas A&M University, before the House Committee on Homeland Security, December 12, 2007.

[60] Testimony of M. Sam Mannan, Director, Mary Kay O'Connor Process Safety Center, Texas A&M University, before the House Committee on Homeland Security, December 12, 2007.

[61] Committee on Assessing Vulnerabilities Related to the Nation's Chemical Infrastructure, National Research Council, *Terrorism and the Chemical Infrastructure: Protecting People and Reducing Vulnerabilities*, 2006.

[62] For further discussion on this issue, see Center for Chemical Process Safety, American Institute of Chemical Engineers, *Final Report: Definition for Inherently Safer Technology in Production, Transportation, Storage, and Use,* July 2010.

[63] See, for example, Paul Orum and Reece Rushing, Center for American Progress, *Preventing Toxic Terrorism: How* (continued...)

Opponents of mandating what proponents call inherently safer technologies question the validity of the approach as a security tool and the government's ability to effectively oversee its implementation. Industrial entities assert that process safety engineers within the regulated industry already employ such approaches and that these are safety, not security, methods. They assert that process safety experts and business executives should determine the applicability and financial practicality of changing existing processes at specific chemical facilities.[64] One industry survey stated that, of those respondents that assessed using alternative chemicals or processes, 66.4% determined such alternatives were not technically feasible.[65] Opponents of an inherently safer technology mandate also state concern that few existing alternative approaches are well understood with regard to their unanticipated side effects. They claim that researchers should continue to study these alternative approaches rather than immediately apply them, since unanticipated side effects could injure business and other interests.[66] A third opposing view questions whether the federal government contains the required technical expertise to adjudicate the practicality and benefit of alternative technological approaches. Holders of this view raise concerns that the federal government may not possess the required knowledge or expertise to judge whether a particular site can implement alternative technology, even if the alternative theoretically provides benefits over existing technology.[67]

Some industry representatives have asserted that an inherently safer technology mandate might have a potentially significant negative financial impact.[68] Regulated entities incur a cost when meeting existing CFATS requirements, and small businesses may be challenged to make necessary capital investments. In its interim final rule, DHS estimated that CFATS "may have a significant economic impact on a substantial number of small entities."[69] Because of the performance-based nature of the regulatory requirement, it is difficult to detail the exact impact

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Some Chemical Facilities are Removing Danger to American Communities, April 2006; and Paul Orum and Reece Rushing, Center for American Progress, *Chemical Security 101: What You Don't Have Can't Leak, or Be Blown Up by Terrorists*, November 2008.

[64] See, for example, testimony of Timothy J. Scott, Dow Chemical Company, before the House Committee on Homeland Security, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011; and testimony of Marty Durbin, Managing Director, Federal Affairs, American Chemistry Council, before the House Committee on Energy and Commerce, Subcommittee on Environment and Hazardous Materials, June 12, 2008.

[65] AcuTech Consulting Group, *A Survey of CFATS Progress in Securing the Chemical Sector*, September 6, 2011, p. 41.

[66] For example, EPA experts have pointed to the change by drinking water treatment facilities between two approved disinfectants—chlorine and chloramine—as correlated with an unexpected increase in levels of lead in drinking water due to increased corrosion. Government Accountability Office, *Lead in D.C. Drinking Water*, GAO-05-344, March 2005.

[67] See, for example, testimony of M. Sam Mannan, Director, Mary Kay O'Connor Process Safety Center, Texas A&M University, before the House Committee on Homeland Security, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011; testimony of Dennis C. Hendershot, Staff Consultant, Center for Chemical Process Safety, American Institute of Chemical Engineers, before the Senate Committee on Environment and Public Works, June 21, 2006, S.Hrg. 109-1044; and testimony of Matthew Barmasse, Synthetic Organic Chemical Manufacturers Association, before the Senate Committee on Homeland Security and Governmental Affairs, July 13, 2005.

[68] Testimony of Stephen Poorman, International EHS Manager, FUJIFILM Imaging Colorants Ltd., on behalf of the Society of Chemical Manufacturers and Affiliates before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[69] 72 *Federal Register* 17688–17745 (April 9, 2007) at 17772.

on small businesses.[70] Adding an inherently safer technology requirement might increase the cost of CFATS compliance and might disproportionately affect small entities not already incorporating such activities in their business processes. Policymakers in previous Congresses highlighted the issue of small business impact, especially in the context of requiring additional measures that might hurt productivity.

Policy Options

The statutory authority for CFATS expires on October 4, 2011. The 112th Congress may address chemical facility security through several options. Congress might extend further the existing statutory authority by revising or repealing its sunset provision; codify the existing regulations; amend the existing statutory authority; address existing programmatic activities; or restrict or expand the scope of chemical facility security regulation.

If Congress does not act and allows the statutory authority to expire, the authority for the application and enforcement of the CFATS regulations may be questioned. In the case where Congress allows the statutory authority to expire, but Congress appropriates funds for enforcing the CFATS program, DHS will likely be able to enforce the CFATS regulations. The Government Accountability Office (GAO) has found that in the case where a program's statutory authority expires, but Congress explicitly appropriates funding for it, the program may continue to operate without interruption.[71] If Congress allows the statutory authority to expire and also does not appropriate funding for implementing the CFATS program, the CFATS regulations will likely also lapse. In this case, the states would likely become the primary source of any chemical facility security regulation.

Maintain the Existing Regulatory Framework

The existing statutory authority places much of the CFATS regulatory framework at the discretion of the Secretary of Homeland Security. The DHS is still in the process of implementing these regulations and has not yet determined their efficacy. Congressional oversight of their implementation, enforcement, and efficacy may play a key role in determining the sufficiency of the existing authority and regulations. Congress might choose to maintain the existing regulations by extending the statutory authority's sunset date or codifying the existing regulations. Also, as noted above, allowing the statutory authority to expire could in effect maintain the existing regulatory framework if Congress continues to fund implementation, although this might lead to litigation.

Extend the Sunset Date

Congressional policymakers might choose to extend the current statutory authority for a fixed or indefinite time. In passing the 2010 DHS appropriations act (P.L. 111-83), Congress extended the existing statutory authority one year to October 4, 2010, as requested by the Obama

[70] Department of Homeland Security, *Chemical Facility Anti-Terrorism Standards Interim Final Rule Regulatory Assessment,* DHS-2006-0073, April 1, 2007.

[71] Office of the General Counsel, General Accounting Office, *Principles of Federal Appropriations Law, Third Edition*, GAO-04-261SP, January, 2004, pp. 2-70–2-71.

Administration.[72] The Department of Defense and Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10) extends the statutory authority through October 4, 2011. The Obama Administration requested for FY2012 an extension of the statutory authority to October 4, 2013.[73] Extending the existing statutory authority may provide regulated entities continuity and protect them from losing those resources already expended in regulatory compliance. An extension may allow assessment of the efficacy of the existing regulations and inclusion of this information in any future attempts to revise or extend DHS's statutory authority. Moreover, since DHS is in the process of implementing current regulations, some policymakers argue for a simple extension without changing statutory requirements.

In addition to requesting a two-year extension of the statutory authority, the Obama Administration also supports enacting a permanent statutory authority.[74] Congress might make the existing program permanent by removing the sunset date entirely. Some chemical manufacturers support converting the existing program into a permanent program.[75] The removal of the sunset date would maintain the current discretion granted to the Secretary of Homeland Security to develop regulations and might allow assessment of the efficacy of the existing regulations. Making the existing statute permanent would provide consistency in authority and remove the statutory pressure to reauthorize the program. The presence of a sunset date for the statutory authority increases the likelihood of congressional attention to chemical facility security as a legislative topic. Some advocates who wish for more regular congressional review of the statute might oppose removing the sunset date.

Codify the Existing Regulations

Congressional policymakers might choose to affirm the existing regulations by codifying them or their principles in statute. Such codification could reduce the discretion of the Secretary of Homeland Security to alter the CFATS regulations in the future. The existing statutory authority grants broad discretion to the Secretary to develop many elements of the CFATS regulations. Future Secretaries may choose to alter its structure or approach and still comply with the existing statute. Policymakers might identify specific components of the existing regulation that they wish any future regulation to retain and codify those portions. Specifying these components might limit the ability of the Secretary to react to changing circumstance, gained experience, and new knowledge. On the other hand, the codified portions might enhance the regulated community's ability to plan for future expenses and requirements.

Alter the Existing Statutory Authority

Congressional policymakers might choose to alter the existing statutory authority to modify the existing regulations, address stakeholder concerns, or broadly change the regulatory program.

[72] Department of Homeland Security, *FY2010 Budget Justification*.

[73] Office of Management and Budget, The White House, *Budget of the United States Government, Fiscal Year 2012, Appendix*, p. 553.

[74] Oral testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Homeland Security Committee, Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, February 11, 2011.

[75] Randy Dearth and Cal Dooley, "Commentary: Taking Chemical Plant Security In Pittsburgh Seriously," *Pittsburgh Post-Gazette*, May 27, 2009.

Accelerate or Decelerate Compliance Activities

The DHS bases its schedule for facility CFATS compliance on the chemical facility's assigned risk tier. Those chemical facilities assigned to higher risk tiers have a more accelerated compliance and resubmission schedule than those assigned to lower risk tiers. Congressional policymakers might attempt to accelerate the compliance schedule by increasing funding available to DHS for CFATS, thereby increasing the ability of DHS to provide feedback to regulated entities, review submissions, and inspect facilities filing site security plans. Additional funding might reduce or mitigate inefficiencies or delays related to DHS processing of submissions.

Alternatively, policymakers might provide DHS with the authority to use third parties as CFATS inspectors. The DHS could then augment the number of CFATS inspectors to meet increased demand or delegate inspection authority to state and local governments. Third-party inspectors might allow DHS to draw on expertise outside of the federal government in assessing the efficacy of the implemented site security activities. The DHS may need to define the roles and responsibilities of these inspectors and how DHS will assess and accredit their qualifications. The DHS has stated its intent to issue a rulemaking regarding the use of third-party inspectors but has not yet done so.[76] The use of third-party inspectors might lead to concerns about equal treatment of chemical facilities by different third-party inspectors, and questions about whether homeland security inspections of this type are an inherently governmental responsibility that only federal employees should perform.

Finally, Congress might determine that DHS has sufficient resources to accelerate compliance activities but is restrained by some other procedural factor. Congressional policymakers might direct DHS to streamline its review process, reduce the timeframe for response and interaction with regulated entities, or otherwise enact process improvements.

Congressional policymakers might choose to slow the implementation schedule of the chemical facility security regulations. Concern about the impact of the regulation on small businesses or other entities might lead to a decelerated compliance schedule. The DHS has already implemented select regulatory extensions for certain agricultural operations.[77] Congressional policymakers might direct DHS to provide longer submission, implementation, and resubmission timelines for those regulated entities that might suffer disproportionate economic burdens from compliance.

Incorporate Additional Facility Types

Policymakers might remove some or all of the statutory exclusions from the CFATS program. The DHS and the Environmental Protection Agency (EPA) have called for additional authorities to regulate water and wastewater treatment facilities:

> The Department of Homeland Security and the Environmental Protection Agency believe that there is an important gap in the framework for regulating the security of chemicals at water and wastewater treatment facilities in the United States. The authority for regulating the chemical industry purposefully excludes from its coverage water and wastewater

[76] 72 *Federal Register* 17688–17745 (April 9, 2007) at 17712.

[77] 73 *Federal Register* 1640 (January 9, 2008).

> treatment facilities. We need to work with the Congress to close this gap in the chemical security authorities in order to secure chemicals of interest at these facilities and protect the communities they serve. Water and wastewater treatment facilities that are determined to be high-risk due to the presence of chemicals of interest should be regulated for security in a manner that is consistent with the CFATS risk and performance-based framework while also recognizing the unique public health and environmental requirements and responsibilities of such facilities.[78]

The EPA has testified that the Obama Administration believes that EPA should be the lead agency for chemical security for both drinking water and wastewater systems, with DHS supporting EPA's efforts.[79] The EPA also supports providing states with an important role in regulating chemical security at water systems, including determinations, auditing, and inspecting.[80]

In addition, DHS supports modifying the existing exemption for (1) MTSA facilities to increase security at these facilities to the CFATS standard and (2) facilities regulated by the Nuclear Regulatory Commission to clarify the scope of the exemption.[81]

If Congress provides the executive branch with statutory authority to regulate water and wastewater treatment facilities for chemical security purposes, it may weigh several policy decisions. Among these choices are which facilities should be regulated; how stringent such security measures should be; what federal agency should oversee them; and whether compliance with these security measures is practicable given the public nature of many water and wastewater treatment facilities.

One option for congressional policymakers might be to include water and wastewater treatment facilities under the existing CFATS regulations, effectively removing the exemption currently in statute. This would place water and wastewater treatment facilities on par with other possessors of chemicals of interest. The DHS would provide oversight of all regulated chemical facilities.[82] Opponents might claim that activities under CFATS, such as vulnerability assessment, duplicate existing requirements under the Safe Drinking Water Act.[83] Also, opponents of such an approach cite the essential role that water and wastewater treatment facilities play in daily life and assert

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[78] Testimony of Benjamin H. Grumbles, Assistant Administrator for Water, U.S. Environmental Protection Agency before the House Committee on Energy and Commerce, Subcommittee on Environment and Hazardous Materials, June 12, 2008. See also testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[79] Testimony of Peter S. Silva, Assistant Administrator for Water, Environmental Protection Agency, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[80] Testimony of Peter S. Silva, Assistant Administrator for Water, Environmental Protection Agency, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[81] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010. The DHS and the Nuclear Regulatory Commission have developed a memorandum of agreement regarding security at chemical facilities regulated by the Nuclear Regulatory Commission (*Memorandum of Understanding between the U.S. Department of Homeland Security and the U.S. Nuclear Regulatory Commission*, March 31, 2011).

[82] Those chemical facilities exempt from CFATS because they are regulated under MTSA are overseen by the Coast Guard, which is part of DHS. The DHS testified that 365 facilities are fully exempt from CFATS regulation due to compliance with MTSA, while 135 are partially exempt ("House Homeland Security Committee Holds Hearing on the Chemical Facility Antiterrorism Act of 2009," *CQ Congressional Transcripts*, June 16, 2009).

[83] Section 1433 of the Safe Drinking Water Act as amended by section 401 of P.L. 107-188, the Public Health Security and Bioterrorism Preparedness and Response Act of 2002.

that several authorities available to DHS under CFATS, such as the ability to require a facility to cease operations, are inappropriate if applied to a municipal utility.[84]

Another option might be to grant statutory authority to regulate water and wastewater treatment facilities for security purposes to EPA or require DHS to consult with EPA regarding its regulation of water and wastewater treatment facilities. Since water treatment facilities must provide a vulnerability assessment to EPA, some facilities might view regulation under CFATS as redundant in this context. Some industry representatives have expressed concern regarding the effects of multiple agencies regulating security at drinking water and wastewater treatment facilities.[85] They assert that municipalities that operate both types of facilities might face conflicting regulations and guidance if different agencies regulate drinking water and wastewater treatment facilities. These stakeholders suggest that EPA retaining the lead for water and wastewater facilities would be more efficient. Following prior debate on chemical facility security, Congress provided statutory authority for chemical security to DHS. This separated DHS security responsibilities from the public health and safety responsibilities given to EPA. Providing one agency the authority to oversee safety and security operations may reduce the potential for redundancy and other inefficiencies but also might increase stakeholder reluctance to voluntarily consult on security issues.[86]

If policymakers assign responsibility for chemical facility security at different facilities to different agencies, each agency affected will promulgate separate rules. These rules may be similar or different depending on the agencies' statutory authority, interpretation of that authority, and ability of the regulated entities to comply as well as any interagency coordination that might occur. Congress may wish to assess the areas where such facilities are similar and different in order to provide authorities that meet any unique characteristics.

Any new regulation of drinking water and wastewater treatment facilities is likely to cause the regulated entities, and potentially the federal government, to incur some costs. Representatives of the water and wastewater sectors argue that local ratepayers will eventually bear the capital and ongoing costs incurred due to increased security measures.[87] Congressional policymakers may wish to consider whether the regulated entities should bear these costs, as is done for other regulated chemical facilities, and by those ratepayers they serve or by the taxpayers in general through financial assistance to the regulated entities. Additionally, if inclusion of other facility types significantly increases the number of regulated entities, DHS may require additional funds to process regulatory submissions and perform required inspections.

[84] Testimony of Brad Coffey, Association of Metropolitan Water Agencies, before the House Committee on Energy and Commerce, Subcommittee on Environment and Hazardous Materials, June 12, 2008.

[85] See, for example, American Water Works Association, "AWWA Members Urged to Contact Congress on Chemical Security Bill," and Association of Metropolitan Water Agencies, "Drinking Water Security and Treatment Mandates," *Policy Resolution*, October 2008.

[86] Some agencies oversee both safety and security issues. For example, the U.S. Coast Guard has both safety and security responsibilities for ports.

[87] Testimony of Brad Coffey, Association of Metropolitan Water Agencies, before the House Committee on Energy and Commerce, Subcommittee on Environment and Hazardous Materials, June 12, 2008.

Harmonize Regulations

Other security provisions, such as MTSA, apply to some facilities exempt from the existing chemical facility security regulations. The DHS supports modifying the existing exemption for MTSA facilities to increase security at these facilities to the CFATS standard and modifying the existing exemption for facilities regulated by the Nuclear Regulatory Commission to clarify the scope of the exemption.[88] The EPA has testified that the Obama Administration believes that DHS should be responsible for ensuring consistency of high-risk chemical facility security across all critical infrastructure sectors.[89] If Congress modifies these exemptions, conflicts may arise between requirements under chemical facility security regulations and these other provisions. One approach to resolving these conflicts is to identify which statute would supersede the others, providing a single statutory requirement. Critics of such an approach might assert that the superseding statute does not contain all of the protections present in the other statutes. Another approach might be to require agencies to generally harmonize the regulations implementing each statute. Regulatory agencies might identify and determine the best ways to meet statutory requirements while also limiting regulatory duplication or contradiction. Such harmonization might reduce the regulatory burden on companies possessing facilities regulated under two frameworks, such as MTSA and CFATS, by allowing a single security approach to the regulations. The DHS has established a joint NPPD/U.S. Coast Guard working group to evaluate and, where appropriate, implement methods to harmonize the CFATS and MTSA regulations.[90] In contrast, if the process of harmonization leads to a significant increase in security requirements, the regulatory burden faced by industry might increase.

Consider Inherently Safer Technologies

Congressional policymakers may choose to address the issue of inherently safer technologies, sometimes called methods to reduce the consequences of terrorist attack. One approach might be to mandate the implementation of inherently safer technologies for a set of processes. Another might be to mandate the consideration of implementation of inherently safer technologies with certain criteria controlling whether implementation is required. A third approach might be to mandate the development of a federal repository of inherently safer technology approaches and consideration of chemical processes against those options listed in the repository. Stakeholders might assess and review the viability of applying these inherently safer approaches at lower cost if such information were centralized and freely available. Alternatively, policymakers might establish an incentive-based structure outside of the chemical facility security mandate to encourage the adoption of inherently safer technologies by regulated entities. Lastly, congressional policymakers might choose to not require any consideration or adoption of inherently safer technology approaches.

[88] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[89] Testimony of Peter S. Silva, Assistant Administrator for Water, Environmental Protection Agency, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[90] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the House Committee on Energy and Commerce, Subcommittee on Environment and the Economy, March 31, 2011.

The Obama Administration has given some support to the use of inherently safer technologies to enhance security at high-risk chemical facilities. It has established a series of principles directing its policy:

- The Administration supports consistency of inherently safer technology approaches for facilities regardless of sector.
- The Administration believes that all high-risk chemical facilities, Tiers 1-4, should assess [inherently safer technology] methods and report the assessment in the facilities' site security plans. Further, the appropriate regulatory entity should have the authority to require facilities posing the highest degree of risk (Tiers 1 and 2) to implement inherently safer technology methods if such methods demonstrably enhance overall security, are determined to be feasible, and, in the case of water sector facilities, consider public health and environmental requirements.
- For Tier 3 and 4 facilities, the appropriate regulatory entity should review the inherently safer technology assessment contained in the site security plan. The entity should be authorized to provide recommendations on implementing inherently safer technologies, but it would not have the authority to require facilities to implement the inherently safer technology methods.
- The Administration believes that flexibility and staggered implementation would be required in implementing this new inherently safer technology policy.[91]

A congressional mandate for regulated entities to adopt or consider adopting inherently safer technologies may lead regulated entities to consider factors such as homeland security impact in their chemical process assessments. Some experts assert that existing chemical process safety activities consider and assess inherently safer technology approaches though not necessarily in a homeland security context.[92] These assessments may lead to changes in chemical process when deemed safer, more reliable, and cost-effective. The extent to which homeland security impact has factored into these industry decisions is unknown, but DHS has identified cases where chemical facilities have voluntarily modified chemical processes to lower their CFATS tier. An additional complication to assessing inherently safer technology is the varying amounts and quality of information available regarding industrial implementation of inherently safer technologies. While some facilities have converted to processes generally deemed as inherently safer, other facilities may not have sufficient information available to effectively assess the impacts from changing existing processes to ones considered inherently safer.[93] The differences that exist among chemical facilities, in terms of chemical process, facility layout, and ability to

[91] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

[92] See, for example, testimony of Dennis C. Hendershot, Staff Consultant, Center for Chemical Process Safety, American Institute of Chemical Engineers, before the Senate Committee on Environment and Public Works, June 21, 2006, S.Hrg. 109-1044.

[93] The DHS Science and Technology (S&T) Directorate is engaged in a Chemical Infrastructure Risk Assessment Project that, among other goals, will assess the potential for safer alternative processes that may reduce risk to a select subset of high volume toxic chemicals (Department of Homeland Security, *FY2010 Budget Justification*, pp. S&T R&D - 27–28). The Chemical Security Analysis Center of the DHS S&T Directorate contracted with the Center for Chemical Process Safety of the American Institute of Chemical Engineers to develop a technically based definition for inherently safer technology. See Center for Chemical Process Safety, American Institute of Chemical Engineers, *Final Report: Definition for Inherently Safer Technology in Production, Transportation, Storage, and Use*, July 2010.

finance implementation, may challenge mandatory implementation of inherently safer technologies at regulated entities. Even the mandatory consideration of inherently safer technologies may place a financial burden on some small regulated entities. Congress might limit mandatory measures to those facilities considered by DHS to pose the most risk or might provide such financial assistance to regulated facilities.[94]

Policymakers might choose to try to further incentivize regulated entities to adopt inherently safer technologies. Under the CFATS regulations, facilities that adopt inherently safer technologies might change their assigned risk tier by reducing the amount of chemicals of interest on hand. Policymakers might provide regulated entities that adopt inherently safer technologies with financial or regulatory incentives. Alternatively, policymakers might direct DHS or another agency to perform inherently safer technology assessments for regulated entities, transferring the cost of such assessment from the facility to the federal government.[95] The regulated entity or the overseeing agency might use the results of these assessments to guide implementation.

Modify Information Security Provisions

Congressional policymakers might choose to increase transparency in the CFATS process by altering the information security provisions of the program. Such an approach might include increasing the number and type of individuals granted access to CVI, improving information exchange with first responders, and adjusting the manner by which courts and administrative proceedings handle CVI. The Obama Administration has testified that CVI is a distinct information protection regime and expressed support for maintaining CVI in its current form.[96]

Congress might choose to amend the existing statutory authority to address policy concerns. For example, while still maintaining disclosure prohibitions for vulnerability or security related information, Congressional policymakers might require that DHS gather and document comments and information. Such input might come from outside groups, worker organizations, or other trade representatives through formal and informal mechanisms or by the solicitation, development, and use of industry best practices. Policymakers might direct DHS to make specific types of information, such as the results of enforcement activities or the approval of successful implementation of a site security plan, more generally available. By mandating the inclusion of such information gathering or the release of specific information, congressional policymakers might facilitate greater cooperation between various stakeholder groups. Conversely, such requirements may raise concerns about the degree of security given to the protected information, since more individuals will participate in its development and analysis, perhaps increasing the ability of malicious persons to use such information for targeting purposes. As more information about the vulnerability assessment process and the results of the security process becomes available, the potential that adversaries might combine this disparate information to obtain insight

[94] Section 401 of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188) mandated drinking water facilities serving more than 3,300 individuals develop an emergency response plan and perform a vulnerability assessment. Funds were authorized to help offset the costs to these facilities.

[95] Following investigation into the explosion at the Bayer CropScience facility in Institute, WV, Members of Congress requested that the Chemical Safety Board provide recommendations on the adoption of alternative chemical processes at the chemical facility. Rep. Henry A. Waxman, Sen. John D. Rockefeller IV, Rep. Bart Stupak, and Rep. Edward J. Markey, *Letter to John Bresland*, May 4, 2009, online at http://energycommerce.house.gov/Press_111/20090504/bayer.pdf.

[96] Testimony of Rand Beers, Under Secretary, National Protection and Programs Directorate, Department of Homeland Security, before the Senate Committee on Homeland Security and Governmental Affairs, March 3, 2010.

into a security weakness could result in a dangerous synergy of information. Congressional policymakers might require that the executive branch or another entity identify the threats or vulnerabilities that might accrue from release of a greater amount of chemical facility security information prior to implementing such a policy change.[97]

Congressional policymakers can choose as a policy option to alter the information protection regime afforded to chemical facility security information by specifically expanding access to first responders. The existing regulation explicitly states that information developed in response to other laws or regulations, such as Emergency Planning and Community Right-to-Know Act, are not protected from disclosure. Enhancing first responder access to such information might minimize perceived barriers to disclosing information during an accident. For example, Congress might mandate that each jurisdiction containing a regulated chemical facility contain a first responder designated as a covered individual.

Congressional policymakers also can choose to further limit dissemination of CVI so as to increase barriers to its release if that is a policy goal. Congress might prohibit DHS from sharing such information outside of the federal government or set particular criteria that would allow CVI access to state and local officials. Limiting the number of individuals with access to CVI may make it more difficult for those wishing to do harm to obtain technical or operational security information. Conversely, state and local officials may not support such an approach, as limitations on distribution may also adversely affect emergency response at a regulated facility or inhibit the ability of state and local law enforcement officials to provide targeted protection of particular chemical facility assets.

Policymakers might also choose to address the issue of identifying and marking protected information by mandating review of marked documents. Congressional policymakers might place this responsibility to review and certify marked information on the chemical facility. Alternatively, the federal government might review and certify documents marked CVI on a regular basis. Industry representatives may not support such a review requirement due to the additional regulatory burden caused by the review. Additionally, while such review might potentially limit incorrect marking, it may inhibit information reporting by regulated entities to the federal government. Additionally, absent a penalty for incorrect marking, it is unclear how to ensure compliance.

Congressional policymakers may also address concerns raised regarding the ability of concerned individuals to report misdeeds by creating a "whistleblower" reporting mechanism.[98] One approach might be to codify the current mechanism of reporting such concerns specific to DHS or a similar federal entity, such as an agency Inspector General. Alternatively, Congress can create a more general exemption to the penalties arising from disclosure of protected information for those individuals who report such concerns to federal officials if that is needed to protect whistleblowers. As part of a whistleblower mechanism, policymakers might choose to extend

[97] A similar approach was taken with regard to making available chemical facility information submitted to the EPA under the auspices of the Risk Management Program. In this case, Congress directed the President to assess the potential risk of placing this information on the Internet. See Section 3 of Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40). See Department of Justice, *Assessment of the Increased Risk of Terrorist or Other Criminal Activity Associated with Posting Off-Site Consequence Analysis Information on the Internet*, April 18, 2000.

[98] While DHS has established a "CFATS Tip-Line" where individuals may report security concerns, individuals using the tip-line accrue no special protections.

protections against retaliation or other job-related actions to those individuals availing themselves of current or newly established reporting mechanisms.

Preempt State Regulations

The 110th Congress addressed the issue of federal preemption of state chemical facility security statutes and regulations by placing in statute the requirement that only when an "actual conflict" occurs between state and federal regulation will the state regulation be preempted.[99] Congressional policymakers may choose to further limit the cases where federal regulation would preempt state regulation by affirming the right of states to make chemical facility security regulations that are more stringent than federal regulation even if they conflict. Alternatively, policymakers may choose to increase the number of cases where federal regulations preempt those of a state by expanding the types of conflict, beyond "actual," that will lead to preemption.

Congressional Action

The annual appropriations process provides funding for implementation of chemical facility security regulation. The Department of Defense and Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10) extends the statutory authority through October 4, 2011. While P.L. 112-10 provides a FY2011 expenditure level for the National Protection and Programs Directorate—Infrastructure Protection and Information Security appropriations account, it does not specify a level for chemical facility security regulation.

Extend the Existing Authority

The current statutory authority expires on October 4, 2011. Congress is considering extending the existing authority through appropriations and authorization legislation. The Obama Administration has requested an extension of the existing statutory authority in each budget request. It requested an extension of the existing statutory authority to October 4, 2011, in the FY2011 budget and an extension to October 4, 2013, in the FY2012 budget.[100]

H.R. 901

H.R. 901, the Chemical Facility Anti-Terrorism Security Authorization Act of 2011, was ordered reported as amended by the House Committee on Homeland Security. The act would amend the Homeland Security Act of 2002 with provisions authorizing DHS oversight of chemical facility security. The provisions of H.R. 901 generally match the existing statutory authority. H.R. 901 would also authorize appropriation of approximately $90 million annually from FY2012 through FY2018. The statutory authority would expire on September 30, 2018. In addition, the DHS would be required to approve or disapprove of vulnerability assessments and site security plans within 180 days of receipt and provide technical support to regulated entities qualifying as small

[99] P.L. 110-161, the Consolidated Appropriations Act, 2008, Section 534.

[100] Office of Management and Budget, The White House, *Budget of the United States Government, Fiscal Year 2011, Appendix*, p. 574; Office of Management and Budget, The White House, *Budget of the United States Government, Fiscal Year 2012, Appendix*, p. 553.

businesses. The DHS would issue guidance on how alternative background checks would meet in full or in part any background check personnel security requirement. Finally, the DHS would be required to report to select congressional committees regarding its success at meeting the 180 day requirement, efforts to harmonize CFATS and MTSA regulations, and on the number of jobs created or eliminated due to CFATS regulation.

H.R. 901 was also referred to the House Committee on Energy and Commerce to the Subcommittee on Environment and the Economy. The subcommittee has taken no further action on this bill.

H.R. 908

H.R. 908, the Full Implementation of the Chemical Facility Anti-Terrorism Standards Act, was ordered reported as amended by the House Committee on Energy and Commerce. The act would extend the existing statutory authority to October 4, 2018. H.R. 908 would authorize appropriations of $89.92 million for each fiscal year from FY2012 through FY2018. It would allow the Secretary of Homeland Security to accept security background checks conducted for other purposes. Finally, it would also allow holders of Transportation Worker Identification Credential cards access to CFATS-regulated facilities.

H.R. 916

H.R. 916, the Continuing Chemical Facilities Antiterrorism Security Act of 2011, was referred to the House Committee on Energy and Commerce and the House Committee on Homeland Security. The act would extend the existing statutory authority to October 4, 2015. It would also amend the Homeland Security Act of 2002 to direct the Secretary of Homeland Security to establish a voluntary chemical security training program and a voluntary chemical security exercise program. Finally, it would authorize such sums as necessary for these programs.

H.R. 2017

H.R. 2017, the Continuing Appropriations Act, 2012, was passed by the Senate on September 26, 2011, and by the House on September 29, 2011. It would continue the existing statutory authority to October 4, 2011.

H.R. 2608

H.R. 2608, the Continuing Appropriations Act, 2012, was passed by the House on September 23, 2011. It would extend the existing statutory authority to November 18, 2011.

S. 473

S. 473, the Continuing Chemical Facilities Antiterrorism Security Act of 2011, was ordered reported with an amendment by the Senate Committee on Homeland Security and Governmental Affairs. S. 473 would extend the existing statutory authority to October 4, 2014. In addition, it would amend the Homeland Security Act of 2002 to direct the Secretary of Homeland Security to establish a voluntary chemical security training program, a voluntary chemical security exercise

program, a voluntary technical assistance program, and a chemical facility security advisory board. S. 473 would authorize such sums as necessary for the programs and board.

Modify the Existing Authority

Legislation has been introduced in both chambers that would modify the existing authority.

H.R. 225

H.R. 225, the Chemical Facility Security Improvement Act of 2011, was referred to the House Committee on Energy and Commerce and the House Committee on Homeland Security. The act would prohibit the Secretary of Homeland Security from approving a chemical facility site security plan if the plan did not meet or exceed existing state or local security requirements. It would allow the Secretary of Homeland Security to mandate the use of specific security measures in site security plans. The bill would also cause CVI to be treated as sensitive security information in both general and legal proceedings. Finally, the act would no longer prohibit third-party individuals from bringing suit in court to require the Secretary of Homeland Security to enforce chemical facility security regulations against a chemical facility.

S. 709

S. 709, the Secure Chemical Facilities Act, was referred to the Senate Committee on Homeland Security and Governmental Affairs. The act would codify aspects of the CFATS regulation. It would require facilities to evaluate whether the facility could reduce the consequences of an attack by using a safer chemical or process. The act would authorize DHS to require implementation of those safer measures if a facility has been classified as one of the highest-risk facilities, implementation of safer measures is feasible, and implementation would not increase risk overall by shifting risk to another location. Among other provisions, S. 709 also would increase the participation of employees and employee representatives in developing security plans. S. 709 would alter the current information control regime, aligning it with that for sensitive security information. Finally, S. 709 would allow citizens to file suit against the Secretary of Homeland Security or submit a petition to the Secretary to enforce compliance with statute.

H.R. 2890

H.R. 2890, a bill to expand homeland security at public water systems and treatment works by allowing the Secretary of Homeland Security to include these facilities in the Chemical Facility Anti-Terrorism Standards program, was referred to the House Committee on Energy and Commerce and the House Committee on Transportation and Infrastructure. The act would expand chemical facility security regulation to public water systems and wastewater treatment facilities and direct the President to delegate such authority from the Secretary of Homeland Security to the EPA Administrator.

S. 711

S. 711, the Secure Water Facilities Act, was referred to the Senate Committee on Environment and Public Works. The act would authorize the EPA Administrator to regulate community water systems and wastewater treatment facilities for security purposes. S. 711 also would authorize

implementation of methods to reduce the consequences of a chemical release from an intentional act. Among other provisions, the Administrator would be directed to promulgate regulations as necessary to prohibit the unauthorized disclosure of controlled information. S. 711 would authorize the Administrator to provide grants or enter into cooperative agreements with states or regulated entities to assist in regulatory compliance.

Author Contact Information

Dana A. Shea
Specialist in Science and Technology Policy
dshea@crs.loc.gov, 7-6844