

Summary of Statement for the Record  
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Before the

Subcommittee on Environment and Hazardous Materials  
Committee on Energy and Commerce  
United States House of Representatives

Thursday, June 12, 2008

Today's testimony will address progress on the implementation of the Department's authority over security at high-risk chemical facilities through the Chemical Facility Anti-Terrorism Standards (CFATS) program.

We have made significant progress in the past few months, including the receipt and review of approximately 30,000 facilities' Top-Screen questionnaires and analysis to preliminarily tier these high-risk facilities. We will soon be notifying those preliminarily tiered facilities of the Department's initial high-risk determination, and of their requirement to submit a Security Vulnerability Assessment to the Department.

The Department is collaborating extensively with the public, including members of the chemical sector and other interested groups, to actively work toward achieving our collective goals under the CFATS regulatory framework. In almost every case, industry has voluntarily done a tremendous amount to ensure the security and resiliency of its facilities and systems. As we implement the chemical facility security regulations, we will continue to work as partners with industry, States, and localities to get the job done.

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. 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. The Department of Homeland Security and the Environmental Protection Agency look forward to working with the committees to address this issue.

We must focus our efforts on implementing a risk- and performance-based approach to regulation and, in parallel fashion, continue to pursue the voluntary programs that have already borne considerable fruit. In doing so, we look forward to collaborating with the Committee to ensure that the chemical security regulatory effort is sufficiently defined in order to achieve success in reducing risk throughout the chemical sector. In addition to our Federal Government partners, success is dependent upon continued cooperation with our industry and State and local government partners as we move toward a more secure future.

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Thank you, distinguished Members of the Subcommittee. It is a pleasure to appear before you today to address progress on the implementation of the Department's authority over security at high-risk chemical facilities through the Chemical Facility Anti-Terrorism Standards (CFATS) program, as well as provide insight regarding a transition of the existing regulatory program to a permanent authorization. In terms of CFATS, we have made significant progress in the past few months, including the receipt and review of approximately 30,000 facilities' Top-Screen questionnaires, initial identification of high-risk facilities, and analysis to preliminarily tier these high-risk facilities. We will soon be notifying those preliminarily tiered facilities of the Department's initial high-risk determination, and of their requirement to submit a Security Vulnerability Assessment to the Department.

**Chemical Security Regulations**

Section 550 of the Fiscal Year 2007 Department of Homeland Security Appropriations Act directed the Department to develop and implement a regulatory framework to address the high level of security risk posed by certain chemical facilities. Consequently, the Department

published an Interim Final Rule, known as the Chemical Facility Anti-Terrorism Standards (CFATS), on April 9, 2007. Specifically, Section 550(a) of the Act authorizes the Department to require high-risk chemical facilities to complete Security Vulnerability Assessments (SVAs), develop Site Security Plans (SSPs), and implement protective measures necessary to meet risk-based performance standards established by the Department of Homeland Security. Section 550 also exempts a number of facilities from coverage, including drinking water and waste water treatment facilities, as defined by Section 1401 of the Safe Water Drinking Act, Pub. L. No. 93-523, as amended, and by Section 212 of the Federal Water Pollution Control Act, Pub. L. No. 92-500, respectively.

The following core principles guided the development of this regulatory structure:

- 1) Securing high-risk chemical facilities is an immense undertaking that involves a national effort, including all levels of government and the private sector. Integrated and effective partnerships among all stakeholders – Federal, State, local, and private sector – are essential to securing our national critical infrastructures, including high-risk chemical facilities. Implementing this program means tackling a sophisticated and complex set of issues related to identifying and mitigating vulnerabilities and setting security goals. This requires a broad spectrum of input. By working closely with experts, such as New York and New Jersey State officials, members of industry, members of academia, and Federal government partners, we leveraged vital knowledge and insight to develop the regulation.

- 2) Risk-based tiering will ensure that resources are appropriately deployed. Not all facilities present the same level of risk, and the greatest level of scrutiny should be focused on those facilities that, if attacked, could endanger the greatest number of lives, have the greatest economic impact, or present other significant risks.
  
- 3) Reasonable, clear, and equitable performance standards will lead to enhanced security.  
The CFATS rule includes enforceable risk-based performance standards. Facilities have the flexibility to select among appropriate site-specific security measures that will effectively address risk, which leads to a Site Security Plan (SSP). The Department will analyze each facility's SSP, and, if it satisfies the CFATS performance standards, approve the SSP. If an SSP does not meet the CFATS performance standards, DHS will disapprove the plan and work with the facility, so that the facility can revise and resubmit an acceptable plan.
  
- 4) Recognition of the progress many companies have already made in improving facility security leverages those advancements. Many responsible companies have made significant capital investments in security since 9/11, and building on that progress in implementing the CFATS program will raise the overall security baseline of high-risk chemical facilities.

## **Appendix A: Chemicals of Interest List**

The final Appendix A to the CFATS rule, published in the *Federal Register* on November 20, 2007, after a notice and comment period, contains a list of Chemicals of Interest and their

Screening Threshold Quantities. Possession of one or more of these chemicals of interest at or above the applicable threshold quantity triggers a requirement for the facility to complete and submit an online consequence assessment, the Top-Screen. The data gathered through the Top-Screen inform the Department's initial determination of the facility's level of risk and the potential need for the facility to comply with the substantive requirements of the CFATS.

Appendix A lists 322 chemicals of interest, including common industrial chemicals such as chlorine, propane, and anhydrous ammonia, as well as specialty chemicals, such as arsine and phosphorus trichloride. The Department included chemicals based on the consequence associated with one or more of the following three security issues:

- 1) Release – toxic, flammable, or explosive chemicals that have the potential to create significant adverse consequences for human life or health if intentionally released or detonated;
- 2) Theft/Diversion – chemicals that have the potential, if stolen or diverted, to be used or converted into weapons; and
- 3) Sabotage/Contamination – chemicals that, if mixed with other readily available materials, have the potential to create significant adverse consequences for human life or health.

The Department established a Screening Threshold Quantity for each chemical based on its potential to create significant adverse consequences for human life or health, given the above three listed security issues.

## **Chemical Security Assessment Tool**

Implementation and execution of the CFATS regulation requires the Department to identify which facilities it considers high-risk. The Department developed the Chemical Security Assessment Tool (CSAT) to identify potentially high-risk facilities and to provide methodologies facilities can use to conduct SVAs and to develop SSPs. CSAT is a suite of online applications, including: user registration, the initial consequence-based screening tool (or Top-Screen), an SVA tool, and an SSP template. The Top-Screen builds on the voluntary assessment tool referred to as the Risk Analysis and Management for Critical Asset Protection (RAMCAP), which was developed with technical input from industry. Through the Top-Screen process, the Department can initially identify which facilities do or do not have a significant potential to be the source of negative consequences (that is, those that are or are not high-risk) and can then “screen out” those facilities across the country that are not high-risk.

The Department required facilities that possess a chemical of interest at or above the listed Screening Threshold Quantity to complete the Top-Screen within 60 calendar days of the publication of Appendix A (or within 60 calendar days of coming into possession of a chemical of interest at or above the applicable Screening Threshold Quantity *after* publication of Appendix A). As Appendix A was published on November 20, 2007, the due date for initial Top-Screen submissions was January 22, 2008. By that date, the Department had received 23,264 Top-Screen submissions from chemical facilities.

If a facility is not screened out during the Top-Screen process, the Department will assign the facility to a preliminary risk-based tier. Those facilities must then complete SVAs and submit

them to the Department. Results from this SVA will inform the Department's determination of a facility's final tier assignment. This represents the next phase of the CFATS process.

After approval of their SVAs, these high-risk facilities will be required to develop Site Security Plans that address their identified vulnerabilities as well as the performance standards and the security issues presented by the facility. The higher the risk-based tier, the more robust the security measures and the more frequent and rigorous the inspections will be. Inspections will both validate the adequacy of a facility's Site Security Plan and verify the implementation of the plan's measures.

### **Risk-Based Performance Standards**

CFATS promulgated 18 risk-based performance standards for compliance. The standards themselves are broad and designed to promote a great deal of flexibility in how a facility approaches meeting standards applicable to it. Although all high-risk facilities must comply with the risk-based performance standards, the measures necessary to meet these standards will vary for the different tiers. For example, a Tier 1 facility with a release hazard security issue would be required to satisfy the performance standards for perimeter control, personnel access, cyber security, intrusion detection, and all other standards applicable to that security issue at a level appropriate for Tier 1 facilities.

How the facility chooses to meet the required performance standard in its Site Security Plan is at the facility's discretion. In the example of the Tier 1 facility with a release hazard security issue, the "restrict area perimeter" performance standard at the Tier 1 level may involve, for example,

the facility establishing a clearly defined perimeter that cannot be breached by a wheeled vehicle. To meet the performance standard, the facility is able to consider a vast number of security measures and might ultimately choose to install cable anchored in concrete block along with movable bollards at all active gates. As long as the specific measures are sufficient to address the performance standard, the Department would approve the plan. Or, the facility might choose to “landscape” its perimeter with large boulders, steep berms, streams, or other obstacles that would thwart a wheeled vehicle. Again, as long as the proposed measures are sufficient, the Department would approve this plan.

### **Outreach Efforts and Program Implementation**

Since the release of CFATS in April of 2007, the Department has taken significant steps to publicize the rule and make sure that our security partners are aware of CFATS and its requirements. As part of a dedicated outreach program, the Department has presented at numerous security and chemical industry conferences, participated in a variety of other meetings of relevant security partners, issued several press releases regarding the regulations, published and distributed full copies of the regulations as well as various facts sheets summarizing critical aspects of the regulations, and developed and regularly updated a DHS.gov Chemical Security website. We believe these efforts are having a definite impact, given the fact that as of today, approximately 30,000 facilities have submitted a completed Top-Screen to the Department via CSAT.



Partially stemming from the implementation issues surrounding the ammonium nitrate security-related provisions within the Fiscal Year 2008 Omnibus Appropriations Act, the Department granted an extension of the Top-Screen requirement to a category of agricultural operations possessing a chemical of interest for agricultural use. The Department has used this extension to engage agri-business distributors and end users in dialogue to narrow the CFATS program's focus on the truly high-risk operations. In mid-May, we held an event at Pennsylvania State University, bringing together agri-business stakeholders from the private and public sector for the purpose of clarifying the Department's understanding of the agri-business supply chain and the interactions between components of the chain. The Department will leverage this improved understanding to determine whether any modification of the Top-Screen requirements might be warranted. As a result of this research and dialogue, the Department will likely review its approach toward chemicals of interest used in agricultural operations.

Additionally, the Department intends to continue focusing efforts on fostering solid working relationships with State and local officials and first responders in jurisdictions with high-risk facilities. To meet the risk-based performance elements under CFATS, facilities are likely to develop active, effective working relationships with local officials in the areas of delaying and responding to potential attacks and a clear understanding of roles and responsibilities during an elevated threat situation.

### **Phased Approach to CFATS Implementation**

For implementation of the CFATS program, the Department is using a phased approach to roll out the regulation at the facility level. In advance of the release of Appendix A, the Department began Phase 1 of CFATS implementation at certain facilities that the Department believed, based on available information, would likely be high-risk. Following initial outreach at the corporate level, the Department sent letters to approximately 90 facilities, informing them of their selection for participation in Phase 1, and advising those facilities of the requirement to submit a Top-Screen. The facilities were to complete the Top-Screen in advance of the release of Appendix A and were offered technical assistance from Department inspectors. The Department, after receiving the majority of Phase 1 Top-Screens, reviewed these submissions for initial high-risk determinations. A number of Phase 1 facilities initially determined to be high-risk received written notification from the Department in March 2008, informing them of the Department's determination and instructing these facilities of the requirement to complete a SVA for departmental review. The Department will offer technical assistance to those Phase 1 high-risk facilities as they conduct the SVA process, which will be due for those select Phase 1 facilities just a few weeks from today's hearing.

In addition to the above, publication of the final Appendix A initiated Phase 2, the full implementation of the CFATS program. Phase 2 covers all facilities that possess chemicals of interest at or above the listed Screening Threshold Quantities listed in Appendix A – the bulk of the facilities that submitted Top-Screens previously mentioned. Those facilities subsequently determined by the Department to be high-risk will soon receive preliminary tiering decisions and instructions on how, and by when, to complete SVAs. Upon receipt of a facility's SVA, the Department will review it for purposes of final high-risk and tiering determinations, and covered

facilities will be required to develop SSPs. The Department will review those SSPs and conduct on-site facility inspections to ensure compliance with the submitted plan.

The chemical security regulatory program has embarked on a course to fulfill in fiscal year 2008 the following deliverables:

- Review submitted SVAs for Phase 1 facilities for final tiering determinations, yielding the population of Phase 1 facilities subject to the substantive security requirements of the CFATS regulatory program;
- Develop the CSAT SSP template for use by regulated facilities;
- Begin enhancing the CSAT suite of applications, by identifying and developing requirements for CSAT version 2.0, which when completed will 1) provide chemical facilities with the ability to conduct “what if” analyses within the SVA based on risk assessments, 2) host a portal for a personnel surety capability, 3) maintain Top-Screen and SVA analytical capabilities, and 4) host a case management system for tracking CSAT usage; and
- Begin engaging State and local officials and chemical facilities to plan, train, and exercise activities related to delay and response performance standards.

In addition, as the Subcommittee is aware, in February the Department submitted a fiscal year 2009 budget request that further details the chemical security regulatory program’s requirements and objectives for future years, including additional inspector personnel to upgrade outreach, plan approval, inspection, and audit capabilities; further outfit the program’s adjudications and appeals

component; and further enhance CSAT by developing an economic modeling tool for the chemical sector, as well as accomplishing other important program objectives.

### **New Legislation**

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 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. The Department of Homeland Security and the Environmental Protection Agency look forward to working with the committees to address this issue.

### **Conclusion**

The Department is collaborating extensively with the public, including members of the chemical sector and other interested groups, to actively work toward achieving our collective goals under the CFATS regulatory framework. In almost every case, industry has voluntarily done a tremendous amount to ensure the security and resiliency of its facilities and systems. As we

implement the chemical facility security regulations, we will continue to work as partners with industry, States, and localities to get the job done.

We must focus our efforts on implementing a risk- and performance-based approach to regulation and, in parallel fashion, continue to pursue the voluntary programs that have already borne considerable fruit. In doing so, we look forward to collaborating with the Committee to ensure that the chemical security regulatory effort is sufficiently defined in order to achieve success in reducing risk throughout the chemical sector. In addition to our Federal Government partners, success is dependent upon continued cooperation with our industry and State and local government partners as we move toward a more secure future.

Thank you for holding this important hearing. I would be happy to respond to any questions you might have.