

New Chemical Security Requirements

Department of Homeland Security Chemical Facility Anti-Terrorism Standards (CFATS)

On April 9, 2007, the Department of Homeland Security (DHS) published [Federal Register: April 9, 2007 (Volume 72, Number 67, Page 17687)] an interim final rule (6 CFR 27 et. Seq) applicable to a broad range of facilities considered to be at “high-risk” for terrorist attacks. As discussed below, there are very few exemptions to the types of facilities potentially covered by the rules. Potentially included are educational institutions, manufacturing plants, mines and quarries, chemical producers, power plants, laboratories, and commercial facilities.

The rule requires facility owners/operators to have completed, on-line, a screening assessment **by January 22, 2008** to determine their facility’s level of risk. Owners of facilities preliminarily qualifying as “high risk” must prepare and submit an assessment of vulnerabilities and a site security plan (SSP). These submissions will be validated through DHS audits and inspections.

The new rule is a major DHS development that extends the agency’s reach beyond critical infrastructure. Rather than requiring prescriptive security measures, the rule establishes risk-based performance standards. It requires chemical facilities that meet certain threshold requirements to submit answers to a questionnaire that helps DHS assess and categorize the risk level for each facility. If designated a “Covered Facility” by DHS, the rule requires the preparation of a Security Vulnerability Assessment (SVA).

Some states have existing laws for regulating chemical facilities. Only state statutes and regulations that conflict with the DHS rule will be preempted by the new rule. Under the rule, DHS has the authority to seek compliance through the imposition of civil penalties of up to \$25,000 per day and can shut down non-compliant facilities.

What Facilities are covered?

The short answer is just about every facility outside of the limited exemptions specified in the statute and listed below. Unless specifically exempted, all facilities that use/store or plan to use/store any of 342 substances must complete the Top-Screen analysis. Since a number of chemicals have no de minimis levels, if even one of

approximately 100 chemicals is present in the smallest amount, the Top-Screen must be fully completed.

The terms “chemical plants” are misleading since the rule applies to virtually any facility that uses certain hazardous chemicals. By regulatory definition, “Chemical Facility or facility” means: “any establishment that possesses or plans to possess, at any relevant point in time, a quantity of a chemical substance determined by the Secretary to be potentially dangerous or that meets other risk-related criteria identified by the Department.” “Chemical facility or facility also refers to the owner or operator of the chemical facility.

The presence or amount of an Appendix A chemical is not an indicator of a facility’s coverage under the rule; it simply triggers the requirement to complete and submit a Top-Screen.

A facility can become a “covered facility” if it makes material modifications to its operations, e.g., increases its storage of a chemical equal to or greater than the Screening Threshold Quantity (STQ) for an Appendix A chemical. In such instances, it has 60 days to make a submission to DHS. Although the designation of a covered facility tends to be straightforward and based on chemicals present, the DHS has the discretion to request any facility to provide information or complete the Top-Screen within the timeframe provided in the rule.

Facility Exemptions

The governing law exempts five types of facilities from this new DHS regulatory regime:

1. Facilities regulated by the Maritime Transportation Security Act of 2002;
2. Public Water Systems, under section 1401 of the Safe Drinking Water Act;
3. Treatment Works, under section 212 of the Federal Water Pollution Control Act;
4. Any facility owned by the Department of Defense or Energy; and
5. Any facility subject to regulation by the Nuclear Regulatory Commission.

Overview

The new DHS rules require facilities that possess certain quantities of listed chemicals to complete, on-line, a preliminary assessment that determines the level of risk posed by the facility in question. This assessment is referred to as a “Top-Screen”.

DHS will review this information and make a determination as to whether a facility presents a "high level of security risk." DHS will notify the facility if it presents a high security risk and which tier the facility falls into (Tiers 1 through 4 with 1 posing the greatest security risk). If classified in one of the four tiers, the facility becomes a "covered facility" and must conduct a SVA, and ultimately develop and implement a Site Security Plan (SSP).

If the facility makes changes, such as reducing the amount of a covered chemical to drop it below the STQ, it is possible to have DHS review a revised top screen to seek a reclassification. However, DHS is likely to view facility reclassifications as a low priority and the facility may find it difficult to "exit" the program.

How the Tools Work

Facilities that possess the requisite quantities of Appendix A-listed chemicals must complete the Top-Screen using the on-line Chemical Security Assessment Tool (CSAT). CSAT is a suite of four applications, including User Registration, Top-screen, SVA, and SSP, through which DHS collects and analyzes key data from the facilities.

Depending upon the apparent risk, facilities will be categorized into one of four risk tiers and each of these tiers will have performance-based security obligations. It appears that the information that the facility submits on the chemicals of interest, the site setting, economic and national security value, and current security measures will generate an index that will fall into one of the four tiers. Falling into any one of these tiers initially makes the facility a covered facility.

Getting Started

The final rule imposes on facilities a multi-step process intended to give DHS information it needs to determine which facilities present what level of risk from terrorist concerns. Based on that information, DHS will phase in requirements to perform facility assessments and prepare site security plans to address and prevent those risks. This phased in effort will require that those entities facing the greatest risk take action first. However, the first step in the process requires that every entity that might possibly possess or plan to possess any of 342 substances, complete what is called a "Top-Screen" analysis. To complete that analysis the entity must first inspect its operations to see which of the 342 chemicals are present, and in what amounts.

Facilities that store, *plan to store*, or use a chemical that exceeds the STQ for that chemical must log on to the DHS site and register with DHS to use the DHS screening software. DHS will respond to the registrant with a user ID and then the registrant can access the software.

Once DHS receives the signed user access request, it will create user access accounts. All preparers and submitters will then receive usernames and passwords in separate emails from DHS. After receiving usernames and passwords, users can access the CSAT data collection tool at http://www.dhs.gov/xprevprot/programs/gc_116950_3302924.shtm#0 to submit chemical facility data as required by the rule.

DHS then evaluates the Top-Screen submissions to identify those facilities that will be required to: (1) prepare and submit an SVA using CSAT; and (2) prepare, submit, and implement an SSP to address both the vulnerability assessment and applicable risk based performance standards.

The level of security required by a given facility will be contingent on the risk-based tier to which it is assigned by DHS. Although the rule sets forth performance standards that SSPs must address, DHS will issue further guidance on the application of these standards to risk-based tiers of covered facilities, and the acceptable measures that can be used to meet these standards.

Registering for this process or having a chemical above an STQ will not necessarily bring a facility into the program. DHS has established these STQs to trigger preliminary screening requirements. The STQ is not the quantity for determining whether a given facility is, in fact, a high-risk facility, but only sets a threshold to require a facility to complete and submit a CSAT Top-Screen.

Presently, DHS requires facilities in Tiers 1 and 2 to update their Top-Screen, SVA, and SSP every two years, and facilities in Tiers 3 and 4 to update their Top-Screen, SVA, and SSP every three years. If a covered facility makes material modifications to its operations or site, the covered facility must complete and submit a revised Top-Screen to DHS within 60 days of completion of the material modification

Chemicals of Interest, Appendix A

The security criteria for listing chemicals in Appendix A include: (1) how their release could have the potential to adversely impact human life or health; (2) whether the chemicals have the

potential to be used as weapons or easily converted into weapons if they were stolen or diverted; and (3) whether the chemicals, if mixed with readily available materials, could be used for sabotage or contamination.

There are some of the substances listed in the draft Appendix A that tend to be in common use. Facilities should consult the final Appendix A to determine whether they are a “covered facility.” For comparison purposes, the federal Community Right-to-Know (40 CFR 355) and Risk Management Planning (40 CFR 68.130) threshold planning quantities (TPQ) are listed below with some of the more common chemicals presently

listed in the draft of Appendix A. Those substances with TPQs of 10,000 are generally not extremely hazardous substances and are reportable under Community Right-to-Know at 10,000 lbs or more due to OSHA MSDS requirements.

A number of DHS Chemicals of Interest have STQs well below the TPQs of the Community Right-to-Know and RMP programs. Propane used for facility heating and emergency power can potentially bring into the DHS program many facilities that are otherwise not subject to RTK reporting or Risk Management planning.

Site Security Plans (SSP)

The SSP includes measures that satisfy the identified risk-based performance standards. The SSP must remediate any deficiencies identified by the vulnerability assessment and satisfy the performance standard. Because a performance standard seeks a specific result or outcome but does not direct the manner or means to achieve it, precise security measures are “not mandated.” Thus, while DHS can mandate that all Tier 1 facilities achieve a required level of protection, it cannot mandate that all Tier 1 facilities install specific hardware or systems to do so. DHS claims it cannot reject a SSP based on the absence of a specific security measure.

Risk Based Performance Standards

DHS will issue guidance on the application of these standards to risk-based tiers of covered facilities, and the acceptable layering of measures used to meet these standards will vary by risk-based tier. Each covered facility must select, develop in their SSP, and implement appropriately risk-based measures designed to satisfy the following “performance standards:”

1. ***Restrict Area Perimeter.*** Secure and monitor the perimeter of the facility;
2. ***Secure Site Assets.*** Secure and monitor restricted areas or potentially critical targets within the facility;
3. ***Screen and Control Access.*** Control access to the facility and to restricted areas within the facility by screening and/or inspecting individuals and vehicles as they enter;
4. ***Deter, Detect, and Delay.*** Deter, detect, and delay an attack, creating sufficient time

between detection of an attack and the point at which the attack becomes successful;

5. ***Shipping, Receipt, and Storage.*** Secure and monitor the shipping, receipt, and storage of hazardous materials for the facility;
6. ***Theft and Diversion.*** Deter theft or diversion of potentially dangerous chemicals;
7. ***Sabotage.*** Deter insider sabotage;
8. ***Cyber.*** Deter computer sabotage, including by preventing unauthorized onsite or remote access to critical process controls, critical business system, and other sensitive computerized systems;
9. ***Response.*** Develop and exercise an emergency plan to respond to security incidents internally and with assistance of local law enforcement and first responders;
10. ***Monitoring.*** Maintain effective monitoring, communications, and warning systems;
11. ***Training.*** Ensure proper security training, exercises, and drills of facility personnel;
12. ***Personnel Surety.*** Perform appropriate background checks on and ensure appropriate credentials for facility personnel, and as appropriate, for unescorted visitors with access to restricted areas or critical assets;
13. ***Elevated Threats.*** Escalate the level of protective measures for periods of elevated threat;
14. ***Specific Threats, Vulnerabilities, or Risks.*** Address specific threats, vulnerabilities or risks identified by the Assistant Secretary for the particular facility at issue;
15. ***Reporting of Significant Security Incidents.*** Report significant security incidents to DHS and to local law enforcement officials;

16. ***Significant Security Incidents and Suspicious Activities.*** Identify, investigate, report, and maintain records of significant security incidents and suspicious activities in or near the site;
17. ***Officials and Organization.*** Establish official(s) and an organization responsible for security and for compliance with these standards; and
18. ***Records.*** Maintain appropriate records.

DHS Inspections/Self Audits

Following initial approval of an SSP, DHS intends to ensure compliance through audits and inspections. These audits and inspections will be conducted at a “reasonable time” and in a “reasonable manner” and typically with 24-hour notice. However, in some circumstances, DHS may conduct unannounced inspections. The agency will be issuing more guidance regarding inspections and audits. DHS will use its own auditors and inspectors to inspect high-risk tier facilities, but will be issuing a future rulemaking about how it plans to use third-party auditors.

The rule includes a provision that requires facilities to conduct annual audits of their SSPs.

Fees

DHS “is contemplating the assessment of different fees, including filing fees, fees for inspections and audits, and fees for the screening of individuals against the Terrorist Screening Database.” DHS has not provided for fees in the April 9th interim final rule, “but may, in the future, propose and seek comment on the issues surrounding fees for this regulatory program.”

Recordkeeping

Covered Facilities are required to maintain various records related to security and emergency preparedness for three years. The rule also contains provisions concerning inspections, audits, recordkeeping, and the protection of sensitive information.

What Next?

Facilities that now use, or expect they might use in the future, substances listed in the draft Appendix A should review that list and perform a site-wide inventory. If the STQ for any listed substance is equaled or exceeded, then it should begin the registration process. At the same time, facilities should examine security requirements that stem from other federal and state rules, such as the Clean Air Act’s Risk Management Program, hazardous waste management, USDOT Transportation Security requirements, and recently enacted state (NJ, MD) programs to attempt to harmonize security risk assessment and response. Of course, there is always the option to reduce the storage amounts of these chemicals or substitute less hazardous substances or processes to make the DHS Chemical Facility Anti-Terrorism Standards not applicable to the facility.



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