



New DHS Regulations Apply to Many Commercial and Industrial Facilities

January 19, 2008 Reporting Deadline is Days Away

Introduction

Experienced environmental professionals keep an ear tuned to the EPA, listening for any word about new regulations in the pipeline that may affect their clientele. Changing times, however, require us to broaden our thinking, and we now must remain alert to new regulations originating from the Department of Homeland Security (DHS) as well. This past November 20, DHS published in the Federal Register (72 FR 65396 et seq) Appendix A to the Chemical Facility Anti-Terrorism Standards (6 CFR Part 27). This regulation, also referred to as CFATS, is similar to some environmental regulations; however, instead of being applicable to certain SIC or NAICS codes, it is applicable to **any** facility that stores a listed chemical at or above a threshold quantity.

Applicability

The title of this regulation can be misleading. Many facilities and operations not typically thought of as "chemical facilities" will be subject to regulation. The key to identifying applicability is the Appendix A list of chemicals. Facilities that possess, or plan to possess, listed chemicals at or above threshold quantities, are covered by CFATS. Example chemicals in widespread industrial use and their associated storage thresholds include:

- Anhydrous ammonia: 5 tons
- Ammonia > 20% solution: 10 tons
- Ammonium nitrate: 1 ton, or 400 lb if combustible content exceeds 0.2%
- Aluminum powder: 100 lb
- Chlorine: 500 lb
- Chlorine dioxide: any placarded amount
- Hydrogen peroxide > 35% solution: 400 lb
- Fluorine: 15 lb or any placarded amount
- Nitric acid > 68% solution: 400 lb
- Phosphorus: 400 lb
- Sulfur dioxide: 500 lb

There are over 400 chemical names in Appendix A and less than 30 days remaining in the compliance window to assess applicability and register if your company may be subject to this regulation.

Naturally there are a few exceptions such as:

- Facilities, or portions thereof, regulated pursuant to the Maritime Transportation Safety Act (MTSA);
- Facilities regulated under the Safe Drinking Water Act;
- Treatment Works as defined in Section 212 of the Federal Water Pollution Control Act;
- DoD and DoE facilities; and,
- Facilities where primary security is regulated by the Nuclear Regulatory Commission (NRC).

Companies should immediately review Appendix A to determine if they store any listed chemicals in quantities that exceed the screening threshold quantities (STQ).

Overview

The purpose of this new regulation is to enhance the nation's security by mitigating the risk posed by the storage of certain chemicals that might be targeted by terrorist activities for illicit use. The intent is to identify facilities where stored chemicals might be used to endanger public health, cause other harm, or create havoc from a release, theft, or other malicious act.

The impact that these new regulations will have on a particular industry, facility, or other commercial operation will in large part be determined by the projected risk posed from a malicious act, and the potential resulting consequences if such a malicious event were successful. The DHS has developed a process or algorithm to evaluate risk based upon threats to: 1) human life, 2) public health, and 3) economic consequences. Regulated facilities will be assigned a **risk tier** ranging from 1 to 4. The criteria that will be employed by DHS to evaluate risk are considered secret and will not be made available due to national security concerns.

It is estimated that 100 to 200 facilities nationwide will earn the highest-risk rating - Tier 1. Initially, these facilities will receive the most attention, but all facilities will need to complete the initial Top-Screen submittal as discussed below.

Companies have until January 19, 2008 to complete a Top-Screen assessment and submittal. The Top-Screen is essentially a chemical inventory, similar in fashion to the inventories conducted years ago to assess compliance with SARA Section 312.



Any facility that may reasonably have any Appendix A chemical in non-trivial quantities should register with DHS. Failure to register, or failure to submit the Top-Screen if required, may result in a facility's being categorized as presumptively high-risk, leading to additional compliance burdens.

Compliance Requirements

The CFATS Top-Screen evaluation requires that facility to assess its potential vulnerability to three **threat vectors** identified in the rule:

- Off-site release: toxic by inhalation, flammables, explosives
- Theft or diversion – potential for use as a weapon
- Theft and sabotage by contamination

Facilities that store chemicals that pose a toxic release threat must calculate the downwind Distance of Concern using the USEPA RMP*Comp prediction software.

Upon submission of the Top-Screens, DHS is required to determine preliminary risk tiering. DHS will advise facilities within approximately one month of their tiering and advise as to whether a Security Vulnerability Assessment (SVA) will be required. Facilities assigned Tier 1 - 3 risk assessments will have 60 days to prepare and submit SVA.

Once SVAs have been reviewed by DHS, facilities will have their risk tiering refined by DHS. Following this refined tiering, DHS will request facilities in Tiers 1 and 2 to prepare a Site Security Plan (SSP).

Penalties for Non-Compliance

DHS is not a regulatory agency, and its Assistant Secretary for Infrastructure Protection Robert B. Stephan has indicated the agency is more interested in assisting companies to comply. However, there is provision for up to \$25,000 per day fines for non-compliance, and shutdown of facilities that are recalcitrant. As described above, the agency may classify as "presumptively high-risk" facilities that fail to register or submit the required Top-Screen on the prescribed schedule, so these activities are vital.

Other Considerations

- Materials that are stored in vehicular containers such as tank trucks or tank railcars must be included in the facility inventory. Such materials and the vehicles they are transported in are under regulation by the Transportation Security Administration until they enter the facility fence line, but thereafter become part of the facility inventory.

- Estimates of the total number of facilities that will need to submit Top-Screens range from 50,000 to over 100,000 nationwide. Of these, perhaps 5,000 to 8,000 will be high-risk facilities that will need to prepare SVAs.
- Submittals may be prepared with a consultant's assistance, but the final online submittal to the secure DHS website must be by an employee of the facility (or its parent company).
- Inspections and enforcement will be by the Federal Protective Services (FPS); DHS currently has 40 FPS staff trained and ready to begin facility inspections. FPS provides law enforcement and security services to federally owned and leased facilities.

Weaver Boos Qualifications

Weaver Boos is partnering with First Response Solutions, Inc., a firm specializing in homeland security services, to provide compliance assistance to facilities under CFATS. Together, our staff have specialized training in the DHS Chemical Security Assessment tools, including the SVA process under one of DHS's preliminary approved methodologies, extensive experience in facility security systems, and on-ground experience in the Afghanistan and Pakistan areas that are training grounds for al-Qaeda and other potential terrorist adversaries. The two firms offer a unique combination of chemical, environmental and security expertise that can address all aspects of CFATS compliance from Top-Screen through SVA and Site Security Plan development.

For more information on this rule, or how Weaver Boos can help your firm with compliance, please call Jeff Hullinger at 614-487-1066 or Doug Dorgan at 630-717-4848.

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