

CHEMICAL FACILITY ANTI-TERRORISM STANDARDS (CFATS)

MELISSA HART, C: 636-221-8941, MELISSA.HART@SAGEENVIRONMENTAL.COM

KARI KEEGAN, C: 312-965-8038, KARI.KEEGAN@SAGEENVIRONMENTAL.COM

© AUGUST 2013. ALL RIGHTS RESERVED. REVISED AUG. 29, 2013

BACKGROUND:

SECURING
HIGH-RISK
CHEMICAL
FACILITIES

IN OCTOBER 2006, THE DEPARTMENT OF HOMELAND SECURITY (DHS) APPROPRIATIONS ACT WAS SIGNED, GRANTING AUTHORITY TO THE DEPARTMENT OF HOMELAND SECURITY TO REGULATE SECURITY AT HIGH-RISK CHEMICAL FACILITIES. THE CHEMICAL FACILITY ANTI-TERRORISM STANDARDS (CFATS) INTERIM FINAL RULE (6 CFR PART 27), IDENTIFIES SOME INDUSTRIAL AND RESEARCH FACILITIES THAT POSSESS CHEMICALS WHICH COULD BE STOLEN OR TAMPERED WITH TO MAKE WEAPONS OR SICKEN THE POPULATION. CFATS REQUIRES THOSE FACILITIES THAT HAVE SUCH CHEMICALS TO SUBMIT SECURITY INFORMATION RELATED TO THE STORAGE OF THESE REGULATED CHEMICALS. INITIAL INFORMATION SUBMITTED BY THESE FACILITIES ALLOWS THE DHS TO ESTABLISH A RISK-BASED APPROACH TO SCREENING AND SECURING SUCH FACILITIES AND TO IDENTIFY CERTAIN FACILITIES AS "HIGH RISK."

The CFATS program currently covers approximately 4,500 facilities across all 50 states. The program has illuminated the complex security issues associated with the chemical industry and helped create a clearer picture of:

- What dangerous chemicals are commercially available;
- Who has them;
- How they are handled and secured; and
- Which facilities present the highest risks.

Through online tools, high-risk facilities can now assess their own vulnerabilities and develop plans to reduce risks. A thorough review of facilities' security postures and onsite inspections verify the adequacy of facilities' measures.

SECURING HIGH-RISK CHEMICAL FACILITIES

APPLICABILITY

Facilities that may be required to comply with at least some provisions of the CFATS regulation will largely fall into the following categories:

- Chemical Manufacturing, Storage, and Distribution
- Energy and Utilities
- Agriculture and Food
- Paints and Coatings
- Explosives
- Mining
- Electronics
- Plastics
- Universities and Research Institutions
- Healthcare and Pharmaceuticals

In addition, any facility that comes into possession of any listed Chemical of Interest (COI) on the CFATS Appendix A: DHS Chemicals of Interest List at or above the applicable Screening Threshold Quantity (STQ) after November 20, 2007, must complete and submit a Chemical Security Assessment Tool (CSAT) Top-Screen. The Department may also notify facilities – either directly or through a Federal Register notice – they need to complete and submit a CSAT Top-Screen. To determine which chemical facilities meet the CFATS criteria for high-risk chemical facilities, the Department developed the CSAT Top-Screen, an easy-to-use online questionnaire.

CHEMICALS OF INTEREST

In developing the list of Chemicals of Interest, the Department looked to existing expert sources of information, including other Federal regulations related to chemicals. Among the other sources that the Department referenced, in part, are the following:

- Chemicals covered under the Environmental Protection Agency's Risk Management Program (RMP);
- Chemicals included in the Chemical Weapons Convention;
- Hazardous materials, such as gases that are poisonous by inhalation; and
- Explosives regulated by the Department of Transportation or state agencies like the Department of Natural Resources.

PRIMARY SECURITY ISSUES

The Department of Homeland Security identifies three security issues related to chemicals:

- Release—Toxic, flammable, or explosive chemicals or materials that, if released from a facility, have the potential for significant adverse consequences to human life or health.

BACKGROUND:

SECURING HIGH-RISK CHEMICAL FACILITIES

- **Theft or Diversion**—Chemicals or materials that, if stolen or diverted, have the potential to be misused as weapons or easily converted into weapons using simple chemistry, equipment or techniques, in order to create significant adverse consequences for human life or health.
- **Sabotage or Contamination**—Chemicals or materials that, if mixed with readily available materials, have the potential to create significant adverse consequences for human life or health.

EXEMPTIONS

Not every facility will be regulated by the Department of Homeland Security as seen in the following exemptions:

- **Facilities regulated pursuant to the Maritime Transportation Safety Act (MTSA)**

The Department will apply the MTSA exemption to facilities regulated under 33 CFR Part 105, Maritime Facility Security regulations. If the facility site includes both a facility regulated pursuant to the MTSA, and a facility not regulated pursuant to the MTSA, the facility shall select “Partially” when filling out the statutory exemption page of the Top-Screen. The facility must then complete the remainder of the Top-Screen for the facility not subject to Maritime Transportation Security Act.

- **Public Water Systems, as defined in the Safe Drinking Water Act**

If a facility contains a unit that is a Public Water System regulated under the Safe Drinking Water Act, but also contains components that are not so regulated, the facility shall select “Partially” when filling out the statutory exemption page of the Top-Screen. The facility must then complete the remainder of the Top-Screen for the portion of the facility that is not exempted (i.e., the portion of the facility that is not regulated under the Safe Drinking Water Act).

- **Water Treatment Facilities, as defined in the Federal Water Pollution Control Act**

If the facility site contains Treatment Works regulated under the Federal Water Pollution Control Act, but also contains a facility or portion of a facility not so regulated, the facility shall select “Partially” when filling out the statutory exemption page of the Top-Screen. The facility must then complete the remainder of the Top-Screen for the portion of the facility that is not exempted (i.e., the facility or portion of the facility that is not regulated under the Federal Water Pollution Control Act).

- **Facilities owned or operated by the Department of Defense or the Department of Energy**

- **Facilities subject to regulation by the Nuclear Regulatory Commission (NRC)**

The Department will apply the NRC statutory exemption only to facilities where NRC already imposes significant requirements and regulates the safety and security of most of the facility, not just a few radioactive sources. For example, a power reactor holding a license under 10 CFR Part 50, a special nuclear material fuel cycle holding a license under 10 CFR Part 70, and facilities licensed under 10 CFR Parts 30 and 40 that have received security orders requiring increased protection, are all exempt from 6 CFR Part 27. A facility that only possesses small radioactive sources for chemical process control equipment, gauges, and dials is not exempt.

BACKGROUND:

SECURING HIGH-RISK CHEMICAL FACILITIES

TOP-SCREEN QUESTIONNAIRE

Any facility that manufactures, uses, stores or distributes any of the DHS COI at or above a specified quantity, and does not fall into an exemption, must complete and submit a Top-Screen questionnaire as a first step in complying with CFATS.

After reviewing the Top-Screen, DHS determines which facilities are considered preliminarily high risk. Those facilities deemed a preliminarily high risk facility by DHS following review of the Top-Screen questionnaire will be required by DHS to conduct and submit a Security Vulnerability Assessment (SVA). The facilities still considered high risk after a review of their SVA are provided a final tier and required to complete a

OUR SERVICES AND APPROACH:

ESTABLISHING APPLICABILITY & COMPLIANCE

Establishing applicability and compliance with CFATS regulations is a systematic approach, similar to EPCRA Tier II chemical reporting.

CHEMICALS OF INTEREST EVALUATION

Sage assists clients by evaluating chemicals used at a facility and compares those inventories to the Appendix A Chemicals of Interest (COI) in the CFATS Interim Final Rule. Under the CFATS rule, if a facility possesses an Appendix A COI at or above the applicable Screening Threshold Quantity (STQ), the facility must complete and submit a Top-Screen to DHS within 60 calendar days of coming into possession of the COI.

Sage reviews all potential COI, quantities stored onsite (tanks, piping, production units), material safety data sheets, facility drawings, and personnel designated for onsite COI security. In addition, Sage reviews standard operating procedures at the facilities to determine if transportation deliveries of raw materials and product would need to be included in the threshold calculations. Sage then prepares calculations of COI thresholds from aggregate storage, piping, and other site processes, in accordance with applicable requirements for specific security issues associated with the specific COI.

CSAT REGISTRATION

Prior to entering information into the CSAT system, Sage advises clients on the setup of User Roles for CFATS reporting and compliance. The facility will designate personnel who will assume the User Roles, and Sage will work with each named individual, as specific training is required prior to discussion of COI-related information and applicability of CFATS regulations to the facility.

CHEMICAL-TERRORISM VULNERABILITY INFORMATION

Chemical-Terrorism Vulnerability Information (CVI) is a program created by the CFATS regulation to protect information pertaining to the COI created or maintained under the regulation. Access to CVI requires proper training and the “need to know”. Not everyone at a facility will need CVI certification and the certification should be

OUR SERVICES AND APPROACH:

ESTABLISHING APPLICABILITY & COMPLIANCE

maintained by a few individuals. Civil penalties may apply for the improper use or disclosure of this information. Each user must be CVI certified and must complete the CVI training. Upon completion of the CVI training the user will be assigned a CVI Authorized User Number via email. Once assigned a number, users can go into the CSAT system and register for a particular facility. Sage will assist all clients through the registration process as needed.

User roles are assigned for any CSAT notifications; Sage's function typically is that of "preparer" for the Top Screen submittals and subsequent SVA, as needed; however, Sage can also serve in other user roles as requested by clients. The designation of the User Roles may change per facility location; it is recommended initial User Roles be delegated to corporate personnel. Roles may be delegated to other authorized personnel at a future date, as applicable.

TOP-SCREEN SUBMITTAL

Upon determination of COI STQ thresholds, Sage prepares the Top-Screen reports for each facility and associated COI. Upon submittal, DHS reviews the report(s) and issues a preliminary determination of risk in writing directly to the facility. Facilities deemed as no risk or low risk are issued letters stating they are not subject to CFATS; facilities deemed high risk will be expected to submit the next online report, the SVA.

RISK-BASED TIERING

The CFATS regulation follows a risk-based approach that allows DHS to focus its resources on high-risk chemical facilities in accordance with their specific level of risk. First, DHS will examine facility information submitted through the Top-Screen. After analyzing Top-Screen data from facilities, DHS will preliminarily assign high risk facilities to one of four risk-based tiers. At this time, the facility is provided written notification by DHS to submit an SVA using the CSAT online system. The SVA identifies facility security vulnerabilities and Sage is prepared to assist facilities in evaluating and addressing all questions relating to the SVA. High-risk facilities will receive their final risk-based tiering assignments after DHS reviews their SVAs. Sage can provide assistance to the facility in preparing and submitting the SVA using the CSAT online system.

SITE SECURITY PLANS (SSP) AND RISK-BASED PERFORMANCE STANDARDS

DHS may require a facility to submit a Site Security Plan (SSP), or an Alternative Security Plan (Tier 4 only), which will be tailored to its specific tier level, security issues, risks, and circumstances, as determined by DHS's review of its SVA. CFATS establishes Risk-Based Performance Standards (RBPS) for security issues, such as perimeter security, access control, personnel surety, and cyber security. However, not all high-risk facilities will need to take action to satisfy each RBPS.

OUR SERVICES AND APPROACH:

ESTABLISHING APPLICABILITY & COMPLIANCE

Sage has teamed with a high-level security firm, Business Protection Specialists, Inc. (BPS), who can characterize and prepare an SSP for any type facility as needed. BPS has rapidly and cost-effectively written dozens of Facility Security Plans for single sites or multi-site national and international organizations. All BPS plan development team members maintain multiple certifications. This ensures that all team members are familiar with the latest methodologies and most current industry best practices.

INSPECTIONS PROCESS

The DHS will inspect high-risk chemical facilities at regular intervals, with higher tiered facilities being inspected first and more frequently. The DHS may also inspect a high-risk facility at any time based on new information or security concerns. A minimum of 24 hours advance notice typically will be provided to facilities unless specific security concerns demand immediate attention. The DHS staff who will conduct inspections have completed a rigorous training program, incorporating both classroom and onsite facility instruction by experts in chemistry, emergency response, terrorism, and industrial security.

Sage partner, BPS, can assist clients when the DHS schedules an Authorized Inspection to assess the Site Security Plan and security procedures to meet CFATS. BPS will help clients in getting their documentation ready for presentation, and assist clients in managing DHS inspectors when they are on site. By providing this service, BPS can potentially correct security procedures and other issues noted in the facility inspection while the DHS inspectors are on site, assuring the utmost efficiency and client comfort level during this process!

COMPLIANCE AND ENFORCEMENT

The CFATS regulation provides that if DHS believes any facility is in violation of the regulation, the Department may issue an appropriate order to the facility specifying the violation and steps that must be taken to correct non-compliance. Violation of such a compliance order may result in additional orders assessing civil penalties of \$25,000 per day or to cease operations.

TURNKEY SERVICES THROUGH BPS

By joining forces with Business Protection Specialists, Inc. (BPS), Sage also now offers an extended amount of customized solutions tailored to the oil, gas and chemical industry's business and operational requirements, including:

- Participating in SVA's as security subject matter expert;
- Facility Security Officer (FSO) Training;
- CFATS physical security planning and capital cost estimating;
- Security system design, bidding and construction administration (e.g., barriers, access control, video surveillance, detection, security command centers.)

SUMMARY:

SAGE
ENVIRONMENTAL
CONSULTING'S
SERVICES

Sage is uniquely qualified to provide turnkey services for the applicability and compliance with CFATS regulations for chemical security through our partnership with Business Protection Specialists (BPS). Sage has a strong working relationship with Homeland Security CFATS inspectors to assist in regulatory compliance. Our involvement with CFATS since its onset in 2007 has further allowed us to help clients avoid CFATS in the preliminary discussion of new construction, prepare applicability determinations for COI, register and submit online CFATS report notifications to DHS, and team with respected security firms to provide high quality, comprehensive services for this important regulation.