US Chemical Facility Anti-Terrorism Standards (CFATS) Overview

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Dorothy Kellogg
AcuTech Consulting Group
Alexandria, Virginia
Agenda

- Purpose & Scope
- Elements & Process
- Chemical Security Assessment Tools (CSAT)
Purpose & Scope: Authority

FY07 DHS Appropriations Section 550
P.L. 109-295

- High Risk Chemical Facilities
- Security Vulnerability Assessment (SVA)
- Site Security Plan (SSP)
- Risk Based Performance Standards (RBPS)
Purpose & Scope: Effective Dates

- Interim Final Rule, April 9, 2007
  72 Fed Reg 17688
- Interim Final Rule Effective, June 8, 2007
- Appendix A Chemicals of Interest (COI) List:
  - Proposed – April 9, 2007
  - Final – October 2007 (?)
  - Action – 60 days after promulgation
Purpose & Scope:
High Risk Chemical Facilities

- Possess **Chemicals of Interest** – manufacture, use, store or distribute
  - Chemical manufacturers
  - Petroleum refineries
  - LNG peak shaving facilities

- At or above the **Screening Threshold Quantity (STQ)**

- Serious **Consequences** from Successful Attack:
  - Human Health & Safety
  - Government Mission in Time of Emergency
  - National or Regional Economy
Purpose & Scope: High Risk Chemical Facilities (cont.)

- High Risk Chemical Facilities -- Exemptions
  - MTSA facilities*
  - Public Drinking Water Systems*
  - Waste Water Treatment Facilities*
  - DOE & DOD facilities
  - NRC-regulated facilities*

- * Parsed Facilities
  - Portion of facility subject to MTSA
  - On-site water treatment facility
  - Small radioactive sources
Elements & Process: Process Flow

1. Identify Candidate Sites

2. Perform Top Screen

3. High Risk Facility?
   - Yes
   - No

   3. Assign Preliminary Tier
   4. Perform SVA
   5. Assign Final Tier
   6. Develop SSP
   7. Review SSP
   8. Implement SSP
   9. Perform Inspection

Risk-Based Performance Standards

DHS Responsibility

Owner/Operator Responsibility

Non-covered facilities
Elements & Process: Chemicals of Interest

- Over 300 chemicals on draft Appendix A
- 3 Human Health Security Issues:
  - Release: Toxics, Flammables, Explosives
  - Theft/Diversion:
    - Chemical Weapons/Precurors
    - Weapons of Mass Effect (WME) – PIH Gasses
    - Explosives/IED Precurors
  - Sabotage/Contamination: Water Reactive ⇒ PIH Gas
- Final:
  - Chemicals of Concern with STQ’s
  - Response to Public Comments
Elements & Process: Risk-Based Performance Standards

1. Restricted Area Perimeter
2. Securing Site Assets
3. Screening and Access Controls
4. Deter, Detect, and Delay
5. Shipping, Receipt, and Storage
6. Theft and Diversion
7. Sabotage
8. Cyber
9. Response
10. Monitoring
11. Training
12. Personnel Surety
13. Elevated Threats
14. Specific Threats, Vulnerabilities, or Risks
15. Security Incidents
16. Suspicious Activities
17. Officials and Organizations
18. Records
19. Others as determined by DHS
Elements & Process:
Chemical-terrorism Vulnerability Information (CVI)

- Must be CVI Trained to handle CVI material
  - Private sector: generate, review, submit, manage
  - Public sector: receive, use, manage

- On-line training www.dhs.gov/chemicalsecurity

- Receive CVI Certificate & Unique Number

- CVI Authorized ≠ Need to Know

- CVI in enforcement proceedings treated as classified
Chemical Security Assessment Tools: Process

1. Register CSAT Users
   - Validate Facility, Preparer, Submitter & Authorizer information
   - Notify user of CVI responsibilities and restrictions

2. Top-Screen
   - Exempted or not covered at this time
   - Preliminary Facility Tier
   - Reviewer Invited by known & trusted user

3. Security Vulnerability Assessment
   - Facility Tier and Asset Specific Security Issue(s)

4. Site Security Plan
   - Preliminary Approval
   - Inspection for Final Approval
CSAT – Top-Screen

- Preliminary **facility** tier based on potential **consequence**
  - Human Health & Safety
  - Government Mission
  - Economic Criticality

- Post Top-Screen Letter (CVI)
  - Specific chemicals and security issues for SVA
  - Based on human health & safety
  - Subsequent notification for Mission or Economic criticality
CSAT – SVA

- **Elements**
  - **Asset Characterization**: assets associated with chemicals identified in the post Top-Screen letter
  - **Threat Characterization**: CSAT prescribed scenarios
  - **Consequence Analysis**: potential consequence of scenarios against assets
  - **Vulnerability Analysis**: security measures in place
  - **Countermeasures Analysis**: strategies to reduce the probability of a successful attack

- **Physical & cyber vulnerabilities**
Specific assets and security issues

Explicit attack scenarios provided
- VBIED
- Maritime
- Aircraft
- Theft (Insider/Outsider)
- Sabotage (Insider/Outsider)
- Assault Team
- Cyber
CSAT – SVA Output

- Post SVA Letter (CVI):
  - Final facility tier
  - Tier for each asset of interest
  - Next steps and deadlines for the facility

- Applicable RBPS based on asset tiers and security issues
CSAT – Site Security Plan (SSP)

- Security measures in place or planned to achieve the applicable RBPS
- All critical assets & security issue in the post-SVA letter must be addressed in the SSP
- DHS on-site validation
- Facilities may submit ASP for consideration
Summary

- Chemical security challenge – dangerous but critical
- Partnership between government & asset owners – in a regulatory construct
- Risk-based – Consequence-driven
- Adaptable – regulatory
Further Information

- **Resources:** [www.dhs.gov/chemicalsecurity](http://www.dhs.gov/chemicalsecurity)

- **Including:**
  - General CFATS Information
  - User Registration & Registration Instructions
  - Top-Screen Questions and User Manual
  - CSAT FAQ’s
  - General CVI Information
  - CVI On-Line Training
Thank You

Questions?

Dorothy Kellogg
dkellogg@acutech-consulting.com
703-399-7452