

6 CFR Part 27

Chemical Facility Anti-Terrorism Standards

Department Of Homeland Security

INTERIM FINAL RULE



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Is this Threat Real and Credible

The Department of Justice has concluded that the risk of terrorists attempting in the foreseeable future to cause an industrial chemical release is both real and credible.

DOD has been concerned about these elements since WW II - CBRNE

Terrorists or other criminals are likely to view the potential of a chemical release from an industrial facility as a relatively attractive means to cause mass casualties to the populace and/or large scale damage to property.

TERRORIST EFFECTS

- ✍ Releases from industrial facilities using bombs.
- ✍ Converted the facilities into makeshift WMD.
- ✍ Damage on the surrounding communities.
- ✍ Panic and disruption among the targeted population.

These are precisely the Goals of a Terrorist

WHO THREATENS US

Middle Eastern Theology

- 1- Baathists, Shiites, al Qaeda, Independent Sympathizers
- 2- Wahhabis – Saudi Oil Support, 2/3 World Supply, Jihad Training similar to al Qaeda vying for Top Dog
- 3- Hojateih – Iranian Radical Sect - becoming “The Martyr Nation”. Ahmadinejad inner circle

Education Level

- The Majority of these terrorist organizations have a loose military ranking system
- Generals, Commanders, Lieutenants
- Most are educated and some through college
- They have turned the Internet into an Offensive Weapon for Knowledge and Penetration
- Iraqi IED's have undergone refinement every 3 to 4 months – past weapons took 6 to 10 years

Binary Explosives - epoxy

HARDEN YOUR TARGET

- The Department of Homeland Security would like High Risk Chemical Facilities to Protect their Products from Potential Terrorist Acts by;
 1. Reducing Facility Vulnerabilities
 2. Awareness/ notification of external threats

Protect

Personnel
Facilities
Shipments

Chemical Products
Information

Definition: ``Chemical Facility or Facility''

``Any facility 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 criterion identified by the Department.''

✂ Chemical manufacturing, storage and distribution facilities

✂ Petroleum refineries

✂ Liquefied Natural Gas (LNG) facilities



REQUIREMENTS

- Owners/Operators housing certain quantities of specified chemicals must complete a preliminary screening assessment to determine the level of risk to their facility
- If DHS determines the facility to be a security risk – the Owners/Operators must prepare and submit

✍ Top – Screen

✍ Security Vulnerability Assessment

✍ Site Security Plan

Facility Exemptions

- ✍ Facilities regulated by the Maritime Transportation Act (MTSA)
- ✍ Public Water Systems defined by Safe Drinking Water Act
- ✍ Water Treatment Facilities – Federal Water Pollution Control Act
- ✍ DOD or DOE Facilities
- ✍ Nuclear Regulatory Commission (NRC) Facilities

Security Risk Determination

- The Assistant Secretary may contact chemical facilities individually or by publishing a notice in the Federal Register seeking information from chemical facilities to determine risk profiles.
- Possible Questions –
 - ✍ Nature of the business and activities conducted at the facility
 - ✍ Information concerning the names, nature, conditions of storage, quantities, volumes, properties, customers, major uses
 - ✍ Information concerning facilities' security, safety, and emergency response practices, operations, and procedures
 - ✍ Information regarding incidents, history, funding, and other matters bearing on the effectiveness of the security, safety and emergency response programs

SECURITY STANDARDS

EXAMPLES

- Securing the perimeter and critical targets
- Deterring theft of potentially dangerous chemicals
- Preventing internal sabotage
- Protecting Chemical – terrorism Vulnerability Information (CVI)

DHS Risk Assessment Methodology

DHS Two Part on-line suite of tools

1. Top-Screen – Facilities that manufacture, use, store, or distribute “chemicals of interest” at or above the Screening Threshold Quantity (STQ)
**Chemical Facility Anti-Terrorism Standards Proposed Appendix A:
DHS Chemicals of Interest – Approximately 360 Chemicals**

- ✍ Tool for preliminary consequence analysis
- ✍ Preliminary determination of facility tier ranking

2. Chemical Security Assessment Tool (CSAT)

- ✍ Tools to conduct a thorough facility Security Vulnerability Assessment (SVA)
- ✍ Final tier ranking from SVA results

Risk-Based Tier

- DHS will determine a facilities preliminary RBT from the **top-screen** results and notify tier level
- If a facility presents a high level of security risk, an **SVA** will be required and a final tier level will be assigned
- The highest security risk facility will be required to complete a **Site Security Plan (SSP)**

TIER LEVELS –

1 – Highest Risk

4 – Lowest Risk



Security Vulnerability Assessment

1. Asset Characterization – critical assets, supporting infrastructure, existing protection
2. Threat Assessment – external threats, internal threats, espionage (corporate and terrorist)
3. Security Vulnerability Analysis – identifying vulnerabilities, countermeasures and their effectiveness
4. Risk Assessment – determining the degree of risk to the facility and effect an attack would have on each critical asset – likelihood of success
5. Countermeasure Analysis – Mitigation Options

Protection

Site Security Plans

- Address each vulnerability identified in the facility's Security Vulnerability Assessment, and identify and describe the security measures to address each such vulnerability
- Address terrorist attacks including, vehicle-borne explosive devices, water-borne explosive devices, ground assault or other potential attack modes
- A covered facility must conduct an annual audit of its compliance with its Site Security Plan

Risk-based Performance Standards

Site Security Plans must have designed, developed and appropriately implemented risk-based performance standards

1. Secure and monitor the perimeter of the facility
2. Secure and monitor restricted areas or potentially critical targets within the facility;
3. 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 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. Deter theft or diversion of potentially dangerous chemicals;
7. Deter insider sabotage;
8. Deter cyber sabotage, including by preventing unauthorized onsite or remote access to critical process controls, such as Supervisory Control and Data Acquisition (SCADA) systems, Distributed Control Systems (DCS), Process Control Systems (PCS), Industrial Control Systems (ICS), critical business system, and other sensitive computerized systems;
9. Develop and exercise an emergency plan to respond to security incidents internally and with assistance of local law enforcement and first responders;
10. Maintain effective monitoring, communications and warning systems;

11. Ensure proper security training, exercises, and drills of facility personnel;

12. 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. Escalate the level of protective measures for periods of elevated threat;

14. Address specific threats, vulnerabilities or risks identified by the Assistant Secretary for the particular facility at issue;

15. Report significant security incidents to the Department and to local law enforcement officials;

16. Identify, investigate, report, and maintain records of significant security incidents and suspicious activities in or near the site

17. Establish officials and an organization responsible for security and for compliance with these standards;

18. Maintain appropriate records; and

19. Address any additional performance standards the Assistant Secretary may specify.

Thank You



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