



IMPLEMENTING THE DHS CHEMICAL SECURITY RULE AT NRC FACILITIES

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Overview

- Background on DHS CFATS
- Sandia Labs Study

Background on DHS CFATS

- Section 550 – DHS Appropriations Act - FY07
 - Establish performance standards
- Final Rule
 - Chemical Facility Anti-Terrorism Standards (CFATS)
- November 2007: Appendix A
 - Over 300 chemicals of interest
 - Establish “Screening Threshold Quantities” (STQs)
- Submit “Consequence Assessment Tool”
 - Known as a “Top-Screen”
 - Only for facilities possessing STQs

Background on DHS CFATS

- Top Screen: determination of security risk
 - On-line tool
- Potential consequence based on local population density
 - From chemicals at facility
- Approximately 7000 U.S. facilities categorized as “high risk”
 - Subject to CFATS regulations

Background on DHS CFATS

- Facilities requiring protection graded from
 - Tier 1 (most severe consequences) to
 - Tier 4 (least severe)
- 18 risk-based performance standards
 - Robustness depends on tier

Background on DHS CFATS

- Section 550 exempts any facility subject to NRC regulation from DHS chemical security
 - Could lead to gap in chemical security.
- DHS applied exemption only to facilities with significant NRC-imposed security requirements over most of the facility.
 - To address possible gap
- DOE facilities exempt, even if NRC-licensed.

Sandia Labs Study

- In 2009, NRC contracted with Sandia National Laboratories (SNL)
- Study objectives:
 - Assess the status of chemical security (CFATS-exempt); identify significant vulnerabilities
 - Compare NRC security measures to CFATS guidance
 - Assess prudent security measures NRC might take
 - Recommend how to integrate chemical security into the overall NRC regulatory approach

SNL Study Activities

- 19 facilities visited Sept – Dec 2009
 - 4 NPPs
 - 2 Cat I fuel cycle facilities
 - 4 Cat III fuel cycle facilities
 - 1 conversion facility
 - 3 irradiators
 - 2 RTRs
 - 3 source M&Ds
- Coordination/participation: NRR, FSME, NMSS, NSIR, Regions, Agreement States

SNL Study General Observations

- No chemical security concerns:
 - Most irradiators; RTRs; NPPs; Source Manufacturing and Distribution
- Significant chemical holdings appropriate for CFATS regulations:
 - Chemical Manufacturing and Distribution
- Significant chemical holdings appropriate for NRC regulations:
 - Conversion/deconversion; enrichment; fuel fabricators; some irradiators

SNL Study Conclusions

- Cat I facilities and NPPs protected at least as well as under DHS requirements
- May need new requirements, or better specify current ones, for Cat III and facilities using radioactive sources