

EPCRA Tier II & CFATS Chemical Storage Programs -

How this could impact the upstream O&G industry
Overlooked and Under Scrutiny!

*Rocky Mountain Environmental,
Health, and Safety (EHS) Peer Group
Quarterly Meeting
April 17, 2014*

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Agenda

- West Fertilizer Incident
- EPCRA Tier II & CFATS at a Glance
- Applicability of Regulations
- Issues of Concern
- Assuring Compliance
- Sage's Team of Experts

EPCRA Tier II/Homeland Security – CFATS West Fertilizer Incident

- On April 17, 2013, an ammonium nitrate explosion occurred at the West Fertilizer Company storage and distribution facility in West, TX while emergency services personnel were responding to a fire at the facility.
 - At least 15 people were killed, more than 160 were injured and more than 150 buildings were damaged or destroyed.
 - Investigators have confirmed that ammonium nitrate was the explosion trigger, but the cause of the initial fire is still unknown.
- According to 2012 RMP filing - West stated it stored 540,000 pounds of ammonium nitrate and 110,000 pounds of anhydrous ammonia on the site.
 - No CFATS filings.
 - No Tier II reports were filed.
 - The 2012 RMP states “no fire risk or explosion hazard involved at the plant”.
- Police responded to at least 11 reports of burglaries and five separate ammonia leaks at West Fertilizer Company over the past 12 years, according to 911 dispatch logs and criminal offense reports.











EPCRA Tier II/Homeland Security – CFATS At a Glance...

Why do facilities need these services?

- Regulatory Compliance
- Civil & Criminal Penalties and/or Lawsuits
- Property Transactions
- Baseline Assessments/Baseline Audits
- Emergency Responder Protection
- Long-Range Environmental Planning & Asset Allocations
- Security Planning
- Sarbanes-Oxley Liability Assessment, Evaluation, Strategy

EPCRA Tier II Applicability

What is EPCRA Tier II?

- A means of providing citizens, state & local governments (e.g. SERC, LEPC, fire departments, etc) with information about hazardous chemicals and accidental releases of chemicals in their communities.
- Used by emergency responders and communities to better prepare for emergencies, to proactively improve chemical safety, and to improve protection of public health and the environment.
- Information provided report form containing information about all chemicals stored on site. Reports are filed by March 1 annually for the prior calendar year.

EPCRA Tier II Applicability

How does EPCRA Tier II apply to a facility?

- Inventory must be updated throughout the year when necessary:
 - A new chemical stored above a reporting threshold;
 - An existing chemical first exceeds a reporting threshold; or
 - A significant change in information regarding a reported chemical.
- Updates to the Tier II report are due within 90 days of exceeding the threshold or obtaining significant new information for a chemical.
- No minimum time limit on a material exceeding the threshold – a one time exceedance of a reporting threshold triggers reporting for that year.

Homeland Security – CFATS Applicability

What is CFATS?

Department of Homeland Security's Chemical Facility Anti-Terrorism Standards (6 CFR Part 27)

- A risk-based approach for “chemical” facilities with a high-risk potential

Chemicals of Interest (COI) are based on security issues

- Release Toxic/Release Flammable - chlorine, ammonia, propane, LNG
- Theft/diversion – chlorine, hydrogen peroxide, potassium nitrate, TNT
- Sabotage or contamination – aluminum powder

COI screening threshold quantity similar to RMP TPQ for releases:

- Chlorine: Release - 2500 lbs (1% conc.); Theft -500 lbs (9.77% conc.)
- Propane: Exempt for RMP, CFATS - Release - 10,000 lbs (1% conc.)
- Hydrochloric Acid: Release ($\geq 37\%$) 15,000 lbs

Homeland Security – CFATS Applicability

What is CFATS?

Covered facilities are required to comply the following reports:

- Top Screen (Initial Notification if COI exceed thresholds)
- Security Vulnerability Assessment (SVA) – If DHS considers High Risk
- Site Security Plan (SSP) – Must comply with Performance Standards

Any information or documents (whether written, verbal, electronic or digital) used to prepare the above listed notifications and plans is considered “**Chemical – terrorism Vulnerability Information**” or **CVI**

- Highly confidential and must meet STRICT security requirements
- ONLY authorized CVI Sage Personnel trained and given “need to know” by the employer or client, can deal with CFATS related work
- Client personnel must be CVI to discuss details of CFATS

Homeland Security – CFATS Applicability

What is CVI?

- Information developed to prepare the Top Screen, SVA or SSP
- All written correspondence from DHS pertaining to review and approval of the CFATS notifications & plans
- Documents relating to audits or inspections by DHS
- All DHS – related records required to be created/retained by facility
- Sensitive portions of orders, notices or letters

Unless a person is CVI authorized (e.g. consultant, facility personnel, outside officials, etc.), with a “need to know”; you cannot discuss CFATS details with anyone, even in your own company!

Homeland Security – CFATS

Covered Facilities

- Chemical Manufacturing Storage and Distribution
- Energy and Utilities
- Agriculture and Food
- Paints and Coatings
- Refineries
- LNG terminals
- Fuel terminals
- Explosives
- Mining
- Electronics
- Plastics
- Universities & Research Institutions
- Healthcare and Pharmaceutical

EPCRA Tier II/Homeland Security – CFATS Issues of Concern with Tier II and CFATS?

Accuracy:

- Misreporting/misidentification of chemicals and their hazards;
- Missing chemicals – failing to report all applicable hazardous chemicals; and
- Unknown or incorrect storage locations of hazardous chemicals in a facility.

Agency Oversight:

- Except for a handful of states, neither Federal nor local authorities are auditing these programs.
- DHS' CFATS is a security-based “chemical” regulation; many small and medium-sized companies' are not aware the regulation applies to their operations.
- Little to no communication or cross training between regulating agencies.

BEST EXAMPLE → West Fertilizer Explosion

EPCRA Tier II/Homeland Security – CFATS

Assuring Compliance

- Assessment of Chemical Management System
 - How are chemical purchases and use tracked?
 - Does the system include non-production related materials (e.g. maintenance)?
 - Is the system limited to bulk materials only?
- Applicability Determination
 - What chemical programs apply?
 - Several other programs exist outside of Tier II and CFATS
 - PSM, RMP and Hazard Communication (OSHA, CAA)
 - TRI Reporting (EPCRA Section 313)
 - Emergency Planning and Notification (EPCRA Sections 302, 304)
 - Pesticides (FIFRA)
 - TSCA
 - Are proper thresholds being applied for each type of chemical-related program?
 - Have all required reports been submitted based on review?

EPCRA Tier II/Homeland Security – CFATS

Assuring Compliance

- Review of Tier II Reporting Documentation
 - Do Tier II reports include all hazardous chemicals present above a threshold?
 - Is the inventory information in the Tier II report accurate?
 - Are the hazards associated with each reported chemical accurate?
 - Are the reports submitted to the proper authorities in a timely fashion?
 - Are changes to hazardous chemical inventories throughout the year properly reported when necessary?
- CFATS Applicability and Documentation Review
 - Does the facility have COI onsite? (Look at Appendix A list)
 - Is the facility aware of CFATs and conducted a CFATS applicability determination?

EPCRA Tier II/Homeland Security – CFATS

Sage's Team of Experts

CFATS – CVI Certified Personnel (and with EPCRA Expertise)

- ***Melissa (Missy) Hart*** – 28 years experience in EPCRA auditing, reporting, compliance and data management; 5 years of CFATS applicability determinations and reporting assistance in Top Screens. Currently working with Kari on SVA with Sage Clients.
- ***Kari Keegan*** – 15 years experience; 7.5 years experience completing and/or managing Tier II reports, CFATS applicability and Top Screen questionnaires.
- ***Emmett Keegan*** – 23 years experience; over 200 EHS audits, including Tier II programs and CFATS applicability; experience compiling data and assembling Tier II reports; experience completing CFATS Top Screen.

EPCRA Tier II

- ***Pam Hesterberg*** – 20 years experience - over 150 EHS audits, including Tier II and TRI programs & applicability determinations; experience compiling data, building tracking tools and assembling Tier II and TRI reports for clients in many industrial sectors.
- ***Lorin Jaeger*** - 2 years experience – expertise in assembling, completing, reporting and auditing of Tier II & TRI reports for various industrial sectors, completed Tier II reports using state-specific reporting requirements for over 800 different facilities in 19 states

Thank You!

For any further questions or concerns, feel free to contact us!

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