ChemLock

Annie Hunziker Boyer
Branch Chief, Policy, Rulemaking, and Engagement, CISA Chemical Security

Robert Carnes
Global Corporate Security Manager, Huntsman Corporation

Moderator: Kimberly Heyne
ChemLock Program Manager, CISA Chemical Security

#ChemicalSecurity
CISA Programs to Secure Chemicals

Chemical Facility Anti-Terrorism Standards (CFATS) Regulation
- Facilities must report Chemicals of Interest
- High-risk facilities create tailored chemical security plans that meet CISA’s physical and cyber security standards

ChemLock
- Voluntary tools and services to facilitate facility security
- Open to all facilities with dangerous chemicals

Proposed Ammonium Nitrate Security Regulation
- Point-of-Sale reporting of AN purchases
- Final rule has not been promulgated

International
- Global Congress on Chemical Security and Emerging Threats
- International Testing project

Bomb-Making Materials Awareness Program (BMAP)
- Outreach, training, and awareness

Point-of-Sale Explosive Precursor Initiatives

Chemical Facility Security Initiatives

Voluntary

Regulatory
CISA ChemLock
Services
CHEM LOCK

Know your chemicals.

Lock in your security posture.
Dangerous Chemicals

**Toxics and Toxic Precursors**
Can cause death or serious injury through inhalation
► Examples: Ammonia, chlorine

**Flammables**
Can create a vapor cloud that explodes
► Examples: Butane, propane

**Explosives and Explosive Precursors**
Can be used to create an explosive device
► Examples: Ammonium nitrate, hydrogen peroxide
## Industries with Dangerous Chemicals

<table>
<thead>
<tr>
<th>Industry</th>
<th>Icon</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Colleges and Universities</td>
<td><img src="image" alt="College" /></td>
<td>Educational institutions with chemical hazards</td>
</tr>
<tr>
<td>Cold Chain/Refrigeration</td>
<td><img src="image" alt="Temperature" /></td>
<td>Cold storage and transportation of dangerous goods</td>
</tr>
<tr>
<td>Fisheries and Hatcheries</td>
<td><img src="image" alt="Fish" /></td>
<td>Aquaculture and related industries with chemicals</td>
</tr>
<tr>
<td>Energy Utilities</td>
<td><img src="image" alt="Electricity" /></td>
<td>Energy production and distribution with chemicals</td>
</tr>
<tr>
<td>Agricultural Production</td>
<td><img src="image" alt="Agriculture" /></td>
<td>Agriculture and production with chemicals</td>
</tr>
<tr>
<td>Laboratories</td>
<td><img src="image" alt="Lab" /></td>
<td>Research and development involving chemicals</td>
</tr>
<tr>
<td>Mining</td>
<td><img src="image" alt="Hammer" /></td>
<td>Exploration and production with hazardous materials</td>
</tr>
<tr>
<td>Industrial Manufacturing</td>
<td><img src="image" alt="Gear" /></td>
<td>Manufacturing processes with chemical inputs</td>
</tr>
<tr>
<td>Paints and Coatings</td>
<td><img src="image" alt="Paint" /></td>
<td>Coating and finishing industries with chemicals</td>
</tr>
<tr>
<td>Plastics Manufacturing</td>
<td><img src="image" alt="Plastic" /></td>
<td>Plastic production and processing with chemicals</td>
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<tr>
<td>Pulp and Paper</td>
<td><img src="image" alt="Paper" /></td>
<td>Paper production with hazardous chemicals</td>
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<tr>
<td>Semiconductor Manufacturing</td>
<td><img src="image" alt="Semiconductors" /></td>
<td>Electronics production with chemicals</td>
</tr>
<tr>
<td>Motor Racing</td>
<td><img src="image" alt="Motor" /></td>
<td>Motor racing and related industries with chemicals</td>
</tr>
<tr>
<td>Warehouses/Distribution</td>
<td><img src="image" alt="Logistics" /></td>
<td>Warehousing and distribution with chemical substances</td>
</tr>
<tr>
<td>Water Treatment</td>
<td><img src="image" alt="Water" /></td>
<td>Water treatment and related industries with chemicals</td>
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</table>
ChemLock Services and Tools

**On-Site Assessments and Assistance**
- Security awareness consultations
- Security posture assessment
- Actionable security planning

**ChemLock Resources**
- Security planning guidance
- Security planning template
- Fact sheets and best practices

**Exercises and Drills**
- Chemical security exercise templates
- CISA-facilitated tabletop exercises

**Training Courses**
- Introduction to Chemical Security
- Secure Your Chemicals Security Planning

**Special Access to CISA Services**
- CISA Active Shooter Preparedness
- Cyber Security Evaluation Tool (CSET) Demo

*All ChemLock services are completely voluntary and no cost.*
On-Site Assessments and Assistance

Which security measures will best enhance security at your facility?

- Risk management processes
- Cyber and physical security gap assessment
- Assessment of existing security measures
- Recommendations for adding or enhancing security measures
- Assistance in developing tailored security plans

Facilities can request on-site assessments and assistance at cisa.gov/chemlock.
ChemLock Publications

Guidance Documents: Helps facilities build a step-by-step chemical security plan tailored to their business model and unique circumstances

Fact Sheets: Focuses on a particular aspect of chemical security

Flyers: Brings general awareness to chemical threats and need for chemical security measures
Training Courses

ChemLock Training 1 – Introduction to Chemical Security
An introductory course that provides an overview to chemical security and identifies key components for chemical security awareness.

ChemLock Training 2 – Secure Your Chemicals: Planning
An in-depth course that:
► Provides an overview of the ChemLock: Secure Your Chemicals resource
► Identifies elements of a security plan, examples, lessons learned, and best practices
► Walks through how to create a tailored, scalable security plan
Exercises and Drills

- CISA Tabletop Exercise Packages (CTEPs), drills, and general materials to help conduct exercises tailored to chemical security
  - Active Shooter
  - Drone Threat
  - Cyberattacks
  - Fire as a Weapon
  - Active Threat Communication
  - Complex Coordinated Attack
  - Edged Weapon
  - Major Earthquake
  - Vehicle Ramming
  - Improvised Explosive Device
  - Vehicle-Borne Improvised Explosive Device
  - Theft and Diversion
  - Insider Threat
  - Chemical Release/Spill
  - Civil Unrest

Facilities can request live exercise that are tailored to the needs and requests of the participating facility at cisa.gov/chemlock.
ChemLock provides access to these CISA services:

- Active Shooter Preparedness
- Cyber Security Evaluation Tool (CSET)

Services are provided specifically for ChemLock participants.

Information on additional CISA services is available at [cisa.gov/chemlock](http://cisa.gov/chemlock).
What Is an OAA Visit?

An Outreach Assessment and Assistance (OAA) visit is a ChemLock service conducted to provide expert chemical security consultative services and technical assistance to chemical facilities that are not high-risk under the Chemical Facility Anti-Terrorism Standards, CFATS (6 CFR Part 27).

<table>
<thead>
<tr>
<th>Type of Visit</th>
<th>Service Provided</th>
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<tbody>
<tr>
<td><strong>Level 1:</strong> Security Awareness Consultation</td>
<td>Identify security concerns associated with certain chemicals</td>
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<tr>
<td><strong>Level 2:</strong> Security Posture Assessment</td>
<td>Provide a physical and cyber security gap assessment and offer options for facilities to consider to enhance security</td>
</tr>
<tr>
<td><strong>Level 3:</strong> Security Planning Visit</td>
<td>Deliver assistance in developing a tailored security plan</td>
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</table>
Level 1 - Security Awareness Consultation

Visit Activities
A L1 Security Awareness Consultation may be conducted in-person or virtually and consists of the following activities:

- Introducing the facility security team’s roles and responsibilities
- Identifying and discussing the facility’s chemical holdings
- Outlining the fundamentals of the risk equation and how it applies to the facility’s chemical holdings
- Introducing ChemLock security goals

Visit Outcomes
The facility will understand the potential threats and vulnerabilities of their chemical holdings, be introduced to the risk equation, and be able to start outlining their security goals.
Level 2 - Security Posture Assessment

Visit Activities

A L2 Security Posture Assessment is conducted in-person following the Security Awareness Consultation and consists of the following activities:

- Defining and discussing overarching security goals (Delay, Detection, Response, Cyber, Policies/Plans/Procedures)

- Identifying and assessing current facility security measures compared to the desired state of security while presenting available security measures

- Sharing ChemLock voluntary tools and resources to drive cost-effective security improvements

- Develop options for consideration to improve security tailored to facility needs

Visit Outcomes

*The facility will gain a deeper understanding of the ChemLock security goals and receive options for consideration to improve their current security posture.*

2022 Chemical Security Summit  
August 24, 2022
Level 3 - Security Planning Visit

Visit Activities

A L3 Security Planning Visit is conducted in-person following the Security Posture Assessment and consists of the following activities:

- Working with the facility’s security team to revise or construct a holistic chemical security plan
- Assessing existing chemical security measures and reviewing options for consideration to include in the security plan with facility input

Visit Outcomes

The facility will have a new or revised security plan that is tailored to address the facility’s security risks and meet their security goals.
What ChemLock Services Are Available?

<table>
<thead>
<tr>
<th>Facility with Dangerous Chemicals</th>
<th>Untiered Facility Under CFATS</th>
<th>High-Risk Facility Under CFATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Site Assessments and Assistance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ChemLock Resources</td>
<td>✓</td>
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<td>Special Access to CISA Services</td>
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<td>✓</td>
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Current Status and Future State
Program Updates

Most requested Services

Types of Facilities Request
ChemLock Services

- On-Site Chemical Security Assessments and Assistance
- Chemical Security Training
- Chemical Security Tabletop Exercise or Drill
- Cyber Security Evaluation Tool (CSET) Demonstration and Support
- Active Shooter Preparedness Training
- Other

- Chemical Transport
- Chemical Manufacturing
- Chemical Processing
- Chemical Storage and Distribution
- Chemical End-User
- Emergency Planning/Responder Organization
- Industry Organization
- Other

2022 Chemical Security Summit
August 24, 2022
Spreading the Word – Increasing ChemLock Participation

- Chemical Facility Contacts
  - Outreach to untiered facilities

- Engaging Stakeholder Networks
  - Local Emergency Planning Committees (LEPCs)
  - Private Organizations
  - Other Conferences

- Seeking opportunities and open to ideas
ChemLock Offerings in Development

- New Training: Security Awareness
- New Materials
  - Best practices
  - Tools for employees
  - Training tools
- Drills
- Incentives Program
How Do I Sign Up for a ChemLock Service?

- Visit cisa.gov/chemlock
- Fill out our short service request form
- CISA will contact you to follow up about the service you are requesting

Questions about ChemLock?

ChemLock@cisa.dhs.gov

cisa.gov/chemlock
SCAN HERE TO LEARN MORE

ABOUT THE CHEMLOCK PROGRAM!

ChemLock@cisa.dhs.gov

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