## CHEMLOCK PROGRAM OVERVIEW

KNOW YOUR CHEMICALS.
LOCK IN YOUR SECURITY POSTURE.





# Why Chemical Facility Security?

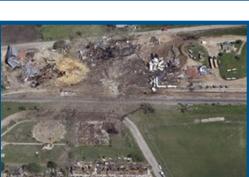


French Authorities Hold Suspect in Beheading and Explosion at Chemical Plant

NY Times, June 26, 2015



UNHCR, April 13, 2018



Death Toll in West, Texas, Fertilizer Explosion Rises to 15

NPR, April 23, 2013



AP, Sept 14, 2019



**U.S. Pipeline Cyberattack Forces Closure** 

WSJ, May 9, 2021







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**





### **ChemLock Services and Tools**



- Security awareness consultations
- ► Security posture assessment
- ► Security planning visit



### **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 <u>cisa.gov/chemlock</u>.

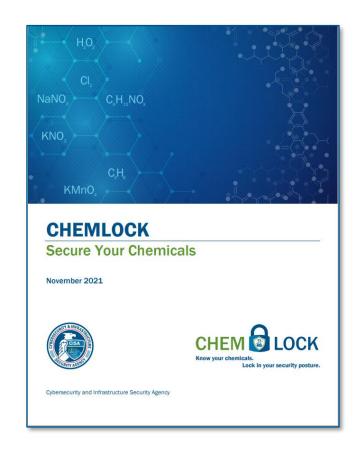
## **ChemLock Publications**

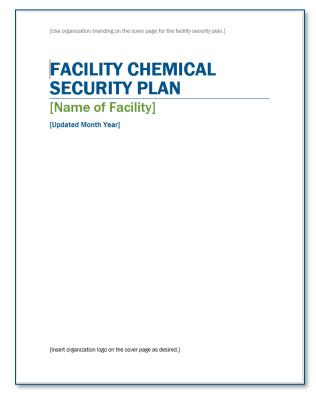


### **Guidance Documents:**

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

- ChemLock: Secure Your Chemicals
- ChemLock: Secure Your Chemicals Facility Plan Template
- Secure Your Chemicals:
   Before, During, and After a
   Pandemic







# **ChemLock Publications (cont.)**



Fact Sheets: Focuses on a particular aspect of chemical security

- ChemLock Overview
- ChemLock: Reporting Suspicious Activities and Security Incidents
- ChemLock: Chemical Product Stewardship
- ChemLock: Drone Activity
- ChemLock: Chemical Security Considerations for No-Notice Events
- ChemLock: Chemical Security Self-Assessment
- ChemLock: Security on a Budget





everyone who interacts with dangerous chemicals has a role to play in understanding the risk and taking collective action to prevent chemicals from being weaponized by terrorists. The Cybersecurity and Infrasructure Security

Agency's (CISA) ChemLock program is a completely voluntary program that provides facilities that possess dangerous chemicals no-cost services and tools to help them better understand the risks they face and improve their chemical security posture in a way that works for their business model. This resource highlights some

### Security Goals

When considering how to optimize chemical security at your facility, it is important to start with an assessmen of the different threats and hazards that may affect your facility, the vulnerability of your facility to an attack, and the consequences if the threat were to occur. For example, where are dangerous chemicals located, who has access to them, and how difficult are they to access or remove? Once these risks are assessed, facilities can apply a holistic approach to improve security measures using five security objectives.

- 1. Can you DETECT an attack or suspicious activity?
- Can you DELAY the adversary?
- 3. Are you able to RESPOND in a timely manner?
- Are you protecting your CYBER assets?
- Do you have POLICIES, PLANS, and PROCEDURES to implement your plan and security measures?

### **Examples of Effective, Cost-Efficient Security Measures**

- Explore opportunities for low-cost video monitoring systems and alarms.
- Train facility personnel on identifying and reporting suspicious activity.
- Maintaining an inventory of quantity and location(s) for each chemical on site.
- Monitoring frequency of access by authorized personnel
- o Identifying the process for tracking receipts and chemical shipments as applicable. Ensure adequate lighting to deter and detect intrusion attempts

- Consider perimeter and asset barriers that delay intruders and increase time for detection and response
- . Store smaller, portable containers of chemicals in cages or defined rooms with secure doors requiring specific keys, access cards, or keypad codes,
- Consider vehicle identification measures for vehicles to access the premises
- Ensure access points are locked when not in use or manned.















# **ChemLock Publications (cont.)**



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

- Know Your Chemicals
- Secure Your Chemicals: Chemical Threats

**Toolkits:** Provides variety of resources to help facilities evaluate chemical security and preparedness

In development





# KNOW YOUR — CHEMICALS

Chemicals are critical to our economy, national security, and public health. But in the wrong hands, dangerous chemicals can be weaponized by terrorists.



- ► What is your facility's security posture?
- ▶ Do you know if your facility possesses dangerous chemicals that could be weaponized by terrorists?
- What security does your facility have in place to prevent chemicals being weaponized?

### Chemical security is national security.

The Cybersecurity and Infrastructure Security Agency's (CISA) ChemLock program is a completely voluntary program that provides facilities that possess dangerous chemicals no-cost services and tools to help them better understand the risks they face and improve their chemical security posture in a way that works for their pusiness model.



Learn more at cisa.gov/chemlock.

## **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

- 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 <u>cisa.gov/chemlock</u>.

# **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: Security 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



## **Special Access to CISA Services**



- 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 <u>cisa.gov/chemlock</u>.





## How Do I Sign Up for a ChemLock Service?

- Visit <u>cisa.gov/chemlock</u>
- 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!** 

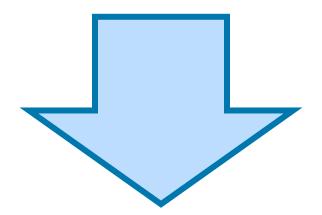


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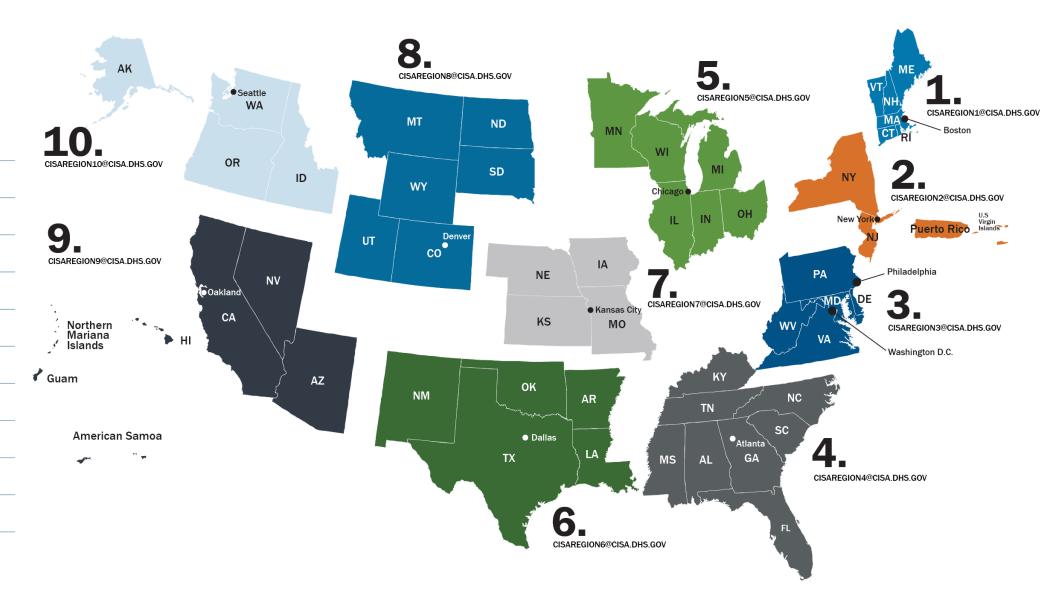
## **ADDITIONAL SLIDES**

You may choose to incorporate any of the additional slides below based on relevance to your audience.





# **Chemical Security Regional Personnel**



1 Boston, MA

New York, NY

3 Philadelphia, PA

4 Atlanta, GA

5 Chicago, IL

6 Dallas, TX

7 Kansas City, MO

8 Denver, CO

9 Oakland, CA

10 Seattle, WA

# **Five Security Goals**

- 1 Can you DETECT an attack?
- 2 Can you DELAY the adversary?
- 3 Are you able to RESPOND in a timely manner?
- 4 Are you securing your CYBER assets?
- Do you have the appropriate POLICIES, PLANS, and PROCEDURES to implement security measures?

## **ChemLock Publications**



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

- ChemLock: Secure Your Chemicals
- ChemLock: Secure Your Chemicals Facility Plan Template
- Secure Your Chemicals: Before, During, and After a Pandemic

**Fact Sheets:** Focuses on particular security measures from the ChemLock guidance documents

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