



CHEM LOCK

Chemical Security for Water and Wastewater Systems



Why Chemical Security?

Water and wastewater systems that use and store dangerous chemicals have become increasingly targeted with both cyberattacks and physical threats by bad actors. Adversaries may employ cyberattacks on industrial control systems with the intent to contaminate the water supply or release chemicals into the air. They may also employ physical attacks with the intent to release chemicals or steal chemical containers, either by stealth or by force. If you work at a site with dangerous chemicals, you can help prevent attacks by understanding the risks and developing a culture of security awareness.

Water and wastewater systems may use a variety of processes and chemicals in treating water. Dangerous chemicals that water and wastewater treatment systems may use include:

Bromine • Calcium Hypochlorite • Carbon Dioxide • Chlorine • Chlorine Dioxide • Hydrochloric Acid • Hydrogen Peroxide • Lithium Hypochlorite • Ozone • Potassium Permanganate • Sodium Hypochlorite • Sulfur Dioxide

ChemLock Services and Tools for Water and Wastewater Systems

Because no two water and wastewater systems are the same, the voluntary ChemLock program offers no-cost services and tools to help you improve your chemical security posture in a way that is tailored to your facility and business model.

- **ChemLock On-Site Assessment and Assistance (OAA):** A holistic chemical security assessment that helps you identify the security risks your on-site chemicals present; offers scalable, tailored suggestions for security measures; and assists you in developing a facility security plan customized to your facility.
- **ChemLock Resources:** Publicly available guidance documents, templates, fact sheets, and flyers to help facilities enhance the cyber and physical security surrounding your chemicals.
- **ChemLock Exercises:** Either a facilitated, tailored tabletop exercise or a suite of CISA Tabletop Exercise Packages (CTEPs) that you can download and use as desired.
- **ChemLock Training:** Virtual and in-person training to assist you with understanding the threat and what security measures can be put into place to reduce the risk of dangerous chemicals from being weaponized.



Scan the QR code with your phone to learn more about the ChemLock program and request services.

What Is ChemLock?



Managed by the Cybersecurity and Infrastructure Security Agency (CISA), ChemLock is a voluntary program that provides facilities that possess dangerous chemicals with 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. Learn more and register for ChemLock services at cisa.gov/chemlock.