INTRODUCTION TO THE CHEMICAL SECTOR RISK MANAGEMENT AGENCY

The Chemical Sector is comprised of owners and operators ranging from manufacturers to distributors—who use, manufacture, store, transport, or deliver chemicals. Chemicals touch every critical infrastructure sector and impact the lives of Americans every day. Effective security and resilience planning requires a shared commitment between the public and private sectors to implement the most effective risk management strategies throughout the Sector. The Cybersecurity and Infrastructure Security Agency (CISA), which serves as the Chemical Sector Risk Management Agency (SRMA), collaborates with government, private, and public sector partners to develop guidance, resources, and training that support the security and resilience of our Nation's critical chemical facilities. Whether the company is an upstream or downstream provider engaging in the use, manufacturing, storage, transport, or delivery of basic, specialty, agricultural, or consumer product chemicals, the Chemical SRMA is the central point of contact for innovative physical and cyber programs, products, and services that ensure the security and resilience of the chemical industry.

CHEMICAL SECTOR COLLABORATION, RESOURCES, AND TRAINING

CISA offers many resources to assist owners and operators manage risks, improve security, and aid the implementation and execution of protective and response measures across the Chemical Sector. This fact sheet lists a sampling of sector collaboration mechanisms, resources, and training materials. Unless otherwise noted, additional information can be found on the CISA website at cisa.gov/chemical-sector.

Collaboration

The Chemical Sector Government Coordinating Council (GCC) & Sector Coordinating Council (SCC) represent the public-private partnership across the sector. These councils meet regularly to share information and develop industry practices aimed at building a culture of safety and security. They work collaboratively in planning, implementing, and executing sector-wide resilience and security programs.

Regional Outreach & Engagement focuses on collaborating with private sector owners and operators as well as state, local, and other government partners to facilitate discussion, information sharing, and networking among stakeholders. Learn more at CISA Regions | CISA.

The Homeland Security Information Network–Critical Infrastructure (HSIN-CI) Chemical Sector Portal allows vetted Chemical Sector partners to effectively collect and distribute security and resilience information for government and private sector partners. Access the portal at HSIN-CI Chemical.

Classified and Unclassified Briefings are coordinated by CISA and the Intelligence Community (IC) for cleared sector partners. These briefings provide updates on threat environments, recent terrorism investigations, and other suspicious incidents in physical and cyber realms.

Resources

Chemical Sector Playbook, Fifth Edition December 2022 outlines the roles and responsibilities of the Chemical Sector Coordinating Council (SCC) and the Chemical Sector Risk Management Agency (SRMA). It also describes their collaboration to ensure a coordinated public-private sector response, assisting the Chemical Sector in preparing for, responding to, and recovering from emergencies.

Chemical Sector Cybersecurity Framework Implementation Guidance provides a common language that Chemical Sector owners and operators can use to assess and manage their cybersecurity risks and use the National Institute of Standards and Technology (NIST) voluntary Framework for Improving Critical Infrastructure Cybersecurity.

Department of Homeland Security (DHS) Sponsored Private Sector Security Clearance Program allows critical infrastructure owners and operators to apply for a secret-level security clearance to facilitate the sharing of classified information pertinent to the security and resilience of the nation's critical infrastructure.

A complete listing of Chemical Resources & Publications can be found at Chemical Sector | Cybersecurity and Infrastructure Security Agency CISA and all CISA resources can be accessed at CISA Resources.

Training

Chemical Sector Security Awareness Training foundational voluntary training that provides an overview of security awareness at chemical facilities for private sector stakeholders. Learn more at Chemical Sector Security Awareness Training | CISA.

CHEMLOCK Training live or on-demand training to assist owners, operators, facility personnel, and retailers with understanding chemical threats and security measures. Learn more at ChemLock Training | CISA.

CISA Tabletop Exercise Program (CTEP) series for Chemical Industry Stakeholders features a situation manual and materials to conduct an exercise on various topics including active shooter scenarios, improvised explosive devices, unmanned aircraft systems, insider threats, and other relevant scenarios.

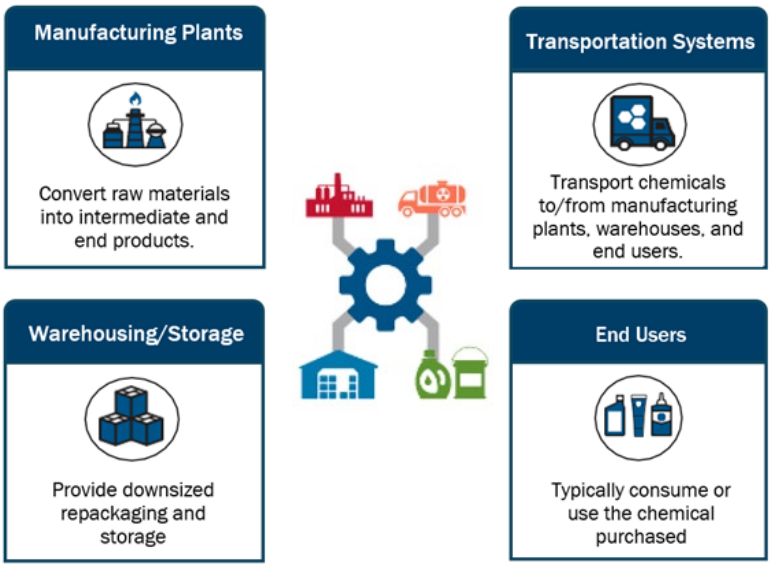
Counter-Improvised Explosive Device (IED) Training and Awareness course options include bombing prevention workshops, soft target awareness, and surveillance detection. More information can be found at Counter-Improvised Explosive Device (C-IED) Capabilities Assessments (CCA) Program | CISA.

General Security, Safety, and Resilience Webinars are on-demand webinars produced by CISA for sector partners. For more details, visit the Chemical Sector Training section on the Chemical Sector webpage.

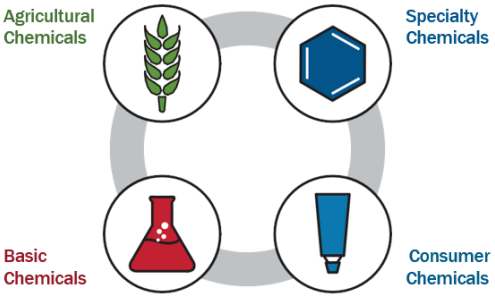
Sector Profile

The Chemical Sector converts various raw materials into more than 70,000 diverse products that are essential to modern life and distributes those products to more than 750,000 end users throughout the Nation. Several hundred thousand U.S. chemical facilities—ranging from petrochemical manufacturers to chemical distributors—use, manufacture, store, transport, or deliver chemicals along a complex, global supply chain. End users include critical infrastructure sectors and the American public, making the uninterrupted production and transportation of chemicals essential for national and economic security. Most chemical facilities are privately owned and operated, and, due to their potential health and safety hazards, chemicals must be carefully managed from manufacturing to their end use.

Functional Areas of the Chemical Sector



Chemical Industry Components



Agricultural – Examples include fertilizers, pesticides, fungicides, insecticides, and herbicides.

Specialty – Examples include adhesives, sealants, flavors and fragrances, food additives, and explosives.

Basic - Examples include sodium chloride, ethanol, and sulfuric acid.

Consumer - Examples include soaps, detergents, bleaches, toothpaste, cosmetics, perfume, and paints.

CHEMICAL SECTOR SECURITY CONSIDERATIONS

- **Insider Threat:** Cyber and physical security systems in the sector largely prevent damage from outsider threats, but the potential for insiders to intentionally or unintentionally cause harm is a significant concern.
- **Cyber Threats:** Cyber systems face a variety of risks, including deliberate attacks such as hacking, ransomware, and social engineering. Outdated software, hardware issues, and poor maintenance can lead to downtimes and data loss. Additionally, threats from nation-states and cybercriminals have increased, posing financial and operational risks, exacerbated by weak cybersecurity practices. These disruptions may lead to theft of intellectual property, loss of operational capability, or chemical theft or release incidents.
- **Natural Disasters and Extreme Weather:** All facilities are susceptible to natural disasters and extreme weather. Chemical Sector facilities nationwide continue to face challenges from events such as hurricanes, winter storms, and heat waves. These incidents, combined with a growing population that relies on sector resources, may impact facility operations and cause supply chain disruptions by damaging facilities or restricting access to critical resources such as transportation, personnel, water, and electricity.
- **Deliberate Attacks and Terrorism:** Facilities may be a target for attack or terrorism due to concentration or type of chemicals on site which could cause significant immediate and long-term damage to people and/or surrounding environments. Materials located at facilities may also be a target for theft and diversion.

FOR MORE INFORMATION ON THE CHEMICAL SECTOR

Contact the Chemical Sector Management Team at ChemicalSector@mail.cisa.dhs.gov or learn more at Chemical Sector | Cybersecurity and Infrastructure Security Agency CISA.