



Highlights of [GAO-03-439](#), a report to Congressional Requesters

## HOMELAND SECURITY

# Voluntary Initiatives Are Under Way at Chemical Facilities but the Extent of Security Preparedness Is Unknown

### Why GAO Did This Study

The events of September 11, 2001, triggered a national re-examination of the security of thousands of industrial facilities that use or store hazardous chemicals in quantities that could potentially put large numbers of Americans at risk of serious injury or death in the event of a terrorist-caused chemical release. GAO was asked to examine (1) available information on the threats and risks from terrorism faced by U.S. chemical facilities; (2) federal requirements for security preparedness and safety at facilities; (3) actions taken by federal agencies to assess the vulnerability of the industry; and (4) voluntary actions the chemical industry has taken to address security preparedness, and the challenges it faces in protecting its assets and operations.

### What GAO Recommends

This report recommends that the Secretary of Homeland Security and the Administrator of the Environmental Protection Agency (EPA) jointly develop a comprehensive national chemical security strategy that is both practical and cost effective, which includes assessing vulnerabilities and enhancing security preparedness.

The Departments of Homeland Security and Justice and EPA generally agreed with the report's findings and conclusions and were supportive of efforts to pursue chemical security legislation.

[www.gao.gov/cgi-bin/getrpt?GAO-03-439](http://www.gao.gov/cgi-bin/getrpt?GAO-03-439).

To view the full report, including the scope and methodology, click on the link above. For more information, contact John B. Stephenson at (202) 512-3841 or [stephensonj@gao.gov](mailto:stephensonj@gao.gov).

### What GAO Found

Chemical facilities may be attractive targets for terrorists intent on causing economic harm and loss of life. Many facilities exist in populated areas where a chemical release could threaten thousands. EPA reports that 123 chemical facilities located throughout the nation have toxic "worst-case" scenarios where more than a million people in the surrounding area could be at risk of exposure to a cloud of toxic gas if a release occurred. To date, no one has comprehensively assessed the security of chemical facilities.

No federal laws explicitly require that chemical facilities assess vulnerabilities or take security actions to safeguard their facilities from attack. However, a number of federal laws impose safety requirements on facilities that may help mitigate the effects of a terrorist-caused chemical release. EPA believes that the Clean Air Act could be interpreted to provide authority to require chemical facilities to assess their vulnerabilities and to make security enhancements that protect against attacks. However, EPA has not attempted to use these Clean Air Act provisions because of concerns that this interpretation would pose significant litigation risk and has concluded that chemical facility security would be more effectively addressed by passage of specific legislation.

The federal government has not comprehensively assessed the chemical industry's vulnerabilities to terrorist attacks. EPA, the Department of Homeland Security, and the Department of Justice have taken preliminary steps to assist the industry in its preparedness efforts, but no agency monitors or documents the extent to which chemical facilities have implemented security measures. Consequently, federal, state, and local entities lack comprehensive information on the vulnerabilities facing the industry.

To its credit, the chemical industry, led by its industry associations, has undertaken a number of voluntary initiatives to address security at facilities. For example, the American Chemistry Council, whose members own or operate 1,000, or about 7 percent, of the facilities subject to Clean Air Act risk management plan provisions, requires its members to conduct vulnerability assessments and implement security improvements. The industry faces a number of challenges in preparing facilities against attacks, including ensuring that all chemical facilities address security concerns. Despite the industry's voluntary efforts, the extent of security preparedness at U.S. chemical facilities is unknown. Finally, both the Secretary of Homeland Security and the Administrator of EPA have stated that voluntary efforts alone are not sufficient to assure the public of industry's preparedness.