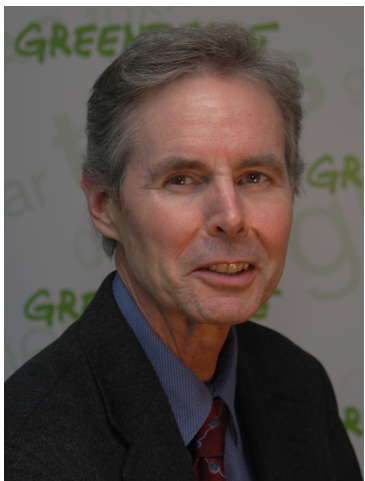


# Chemical Facility Security

## Will Chemical Disaster Prevention Finally Be Implemented in 2012?

RICK HIND \*



On December 3, 1984, the Union Carbide plant in Bhopal, India released tons of methyl isocyanate into the air killing thousands of people. Today, most major U.S. cities have one or more chemical facilities that are equally deadly. Together they endanger more than 100 million Americans.

Following the 9/11 attacks, security agencies listed chemical plants among the most vulnerable sectors of our infrastructure to terrorism. In 2006, then Senator Obama, called them “stationary weapons of mass destruction” and pushed for legislation to make them safer.

If you were tempted to believe the threat of terrorism had diminished after Osama Bin Laden was killed, think again. In July, the Department of Homeland Security (DHS) issued a warning about home grown threats to utilities including water treatment plants, which use large quantities of poison gases.

Given the number of facilities using these gases, it is not surprising that accidents kill plant employees on a regular basis. A fatal 2008 accident at Bayer chemical plant in West Virginia nearly repeated the Bhopal disaster. According to chemical plant reports to the Environmental Protection Agency (EPA), there are 483 chemical facilities that each endanger 100,000 or more people in surrounding communities. Ninety-two of these plants each put 1,000,000 or more people at risk. A tank car release of chlorine gas can endanger people in an urban area up to 14 miles away.

Regarding terrorism, the DHS warns that the magnitude of an attack on a plant would be worse than an accident. The U.S. Naval Research Laboratory estimates that such an attack could kill or injure 100,000 people within 30 minutes. The U.S. Army surgeon general estimated 900,000 to 2.4 million casualties.

Lethal gases were first used as a weapon in the First World War, when Germans killed thousands of French troops with chlorine gas in Ypres, Belgium on April 22, 1915. Today, these same gases are used by the chemical, petroleum, water treatment and other sectors. According to the EPA, just four poison gases (chlorine gas, anhydrous ammonia, hydrogen fluoride and sulfur dioxide) account for fifty-five percent of chemical processes that put communities at risk of a chemical disaster.

Following the Bhopal disaster, the Clean Air Act was amended to require chemical facilities to submit worst-case disaster reports to the EPA and to obligate plants to prevent catastrophic chemical releases. This obligation has never been enforced. In 2002 in response to 9/11, the EPA proposed enforcing this obligation with rules that would have reduced these hazards through the greater use of safer chemical processes. Unfortunately, the EPA proposal was scuttled by the Bush White House. This year, however, on October 26<sup>th</sup> an EPA federal advisory panel recommended that the agency enforce this obligation.

The only other law we have is a temporary security statute written on behalf of the petro-chemical lobby. That lobby is pushing Congress to make that law permanent. Doing so would lock in a provision that prohibits the DHS from requiring the use of safer chemical processes. It will also lock in loopholes that exempt most refineries and thousands of water treatment plants. As a result, the DHS program covers only 4,569 facilities, while the EPA has authority over 12,361 chemical facilities.

Guards, guns and gadgets won't protect communities at risk. (cont)

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## Making the CFATS Program Permanent

PATRICK J. COYLE \*

As the end of the year approaches, there is once again an important legislative task that is being postponed, the creation of a permanent chemical facility security program. People have long been aware that there are chemical facilities in this country that store large amounts of dangerous chemicals that could be turned into improvised chemical weapons. What has held up creation of a permanent security program to protect communities from such a terrorist attack is the lack of a consensus on how to best go about protecting those facilities.

### The CFATS Program

In 2006 Congress created a temporary security program that would start high-risk chemical facilities on the road to a secure future while legislators worked out a political solution to create a permanent program. Added to the 2007 spending bill for the Department of Homeland Security §550 provided interim authority for a three year DHS program that:

- Identified chemical facilities that were at high-risk for terrorist attack;
- Required those facilities to conduct a security vulnerability assessment; and
- Required those facilities to develop a site security plan.

Since the December 2006 publication of the notice of proposed rulemaking for the CFATS regulations, DHS has accomplished a great deal, including the:

- Crafting of a working definition of 'high-risk chemical facility';
- Developing of a number of on-line tools to collect the information necessary to determine which chemical facilities fit that definition;
- Developing of a Risk-Based Performance Standard (RBPS) guidance document; and
- Training of a chemical security inspection force.

With the publication of the Site Security Plan in the spring of 2009, the program has slowed to a crawl as the Infrastructure Security Compliance Division's (ISCD) Chemical Security Inspectors do the hard job of

determining if site security plans actually conform to the RBPS requirements.

### Temporary Reauthorizations

Since the original authorization expired in October of 2009, Congress has extended that authority in each spending bill that provided funding for DHS. When continuing resolutions were used to continue the funding of the government those CRs specifically included temporary short term extensions of the CFATS program as well.

This year-to-year, and sometimes month-to-month, authorization process has led to some budgetary uncertainty at many high-risk chemical facilities. While there has been no Congressional opposition to the CFATS program per se, there still exists the possibility that the next extension of that authority will not happen and facilities will be stuck with compliance costs that they would not have undertaken were it not for the requirements of CFATS.

This is further complicated by the slow pace of compliance verification by ISCD. The vast majority of facilities have yet to have the preliminary evaluation of their security plans completed and there are only a handful that have completed the evaluation process. As a result many companies have budgeted large sums of money for security-related capital projects, waiting to determine if those projects will actually be necessary.

### The Conflicts

The most basic reason for the congressional failure to approve a permanent chemical-facility security program comes down to a major philosophical difference between industry and environmental/labor organizations. Industry wants to be free to use a mix of classical physical and programmatic security measures tailored to their particular



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Fortunately, safer chemical processes are widely available. Washington, D.C.'s waste water treatment plant converted to a safer process within 90 days following the 9/11 attacks – yet today major U.S. cities, including New York, Philadelphia, Los Angeles, Miami, and Houston, remain at risk. Since 1999, more than 500 chemical facilities have converted to safer processes but many of these put few if any people at risk in the first place.

What's missing is a program that prioritizes the

conversion of the highest risk plants to the safest processes available.

The Obama administration has consistently urged the Congress to require safer available chemical processes as part of its security legislation. Given the inability of Congress to break free of the petro-chemical lobby, it's time for the EPA to revisit its 2002 Clean Air Act proposal to protect the millions of Americans who live and work in the shadow of another Bhopal disaster. ■

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## Making the CFATS Program Permanent

facility to protect them against terrorist attacks. The activist community would rather see highly dangerous chemicals, particularly toxic inhalation hazard (TIH) chemicals, removed from the sites to eliminate the threat of a terrorist attack.

The environmentalists contend that there is no such thing as absolute security and that the consequences of a large-scale release of TIH chemicals are so severe that the only way to protect surrounding communities from those consequences is to remove the chemicals. Industry responds that aggressive security policies and procedures will deter and prevent attacks so that the probability of a successful attack is infinitesimally small.

Industry also maintains that the decision as to what chemical is appropriate for a particular chemical process is a complex technical and business decision that the government is ill equipped to evaluate and judge. The activists respond by pointing to the large number of facilities that have already shifted from TIH chemicals to less toxic alternatives as proof that the change can frequently be made at little or no overall cost increase.

Further complicating things is the fact that the two groups have been on opposite sides of so many disputes that there is little actual communications between them. The environmentalists actively mistrust industry because of a long history of chemical releases at some manufacturing facilities that appear to be a direct result of mismanagement or active disregard for safety. Many in industry feel that the activists won't be satisfied until the chemical industry is shut down. Neither side appears to be willing to discuss the legitimate concerns of the other.

### Moving Forward

It seems likely that sometime next year the House will pass a multi-year CFATS extension; much the same way that the House in the previous Congress passed a bill that was supported by the environmentalists. The Senate will again be the likely stumbling block. The Senate rules will allow a dedicated opposition to prevent consideration of the bill.

Until legislators can reach a compromise between these two factions, it is unlikely that a bill establishing a long-term chemical facility security program will become law. ■