Terrorism. Industry prevention and the Chemical Weapons Convention*

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Abstract: The 11 September 2001 terrorist attacks introduced the United States to domestic and complex terrorism. According to terrorism experts, public and private sector targets are indistinguishable to the perpetrators of this evolved form of terrorism. The global chemical industry's counteroffensive against international terrorism depends in part on implementation of the Chemicals Weapons Convention (CWC), long supported by the American Chemistry Council (ACC) and its sister associations in the International Council of Chemical Associations (ICCA). This paper describes the U.S. chemical industry's response to September 11th and how adherence to the letter and spirit of the CWC helps prevent terrorism.

INTRODUCTION

Experts have characterized the terrorism visited upon the United States on 11 September 2001 as unprecedented and complex in nature, placing the United States wholly at risk.

Shortly after the attacks, U.S. companies involved in the business of chemistry initiated immediate improvements to security. Companies undertook vulnerability assessments to identify and address security shortcomings, with the aim of preventing terrorist acts against industry personnel, plants, products, and information as well as improving security wholesale for the future. Indeed, the terrorist attacks brought security to the fore as a priority for Americans and U.S. industry alike.

A related U.S. industry priority is ensuring a continuous supply of chemicals to customers despite the continuing threat of terrorism. The products of chemistry are indispensable to our standard of living, economic strength, national defense, and all other manufacturing industries. Because any interruption or disruption in the continuity of supply could jeopardize mainstays of the U.S. and global economies, the chemical industry in the United States mandated not only urgent upgrades but continuous improvement on security under its acclaimed Responsible Care[®] program.

Industry is taking every practical step to prevent terrorism and the misuse of chemicals, especially as weapons of terror, through a combination of preventative measures, information-sharing, strategic partnerships, and reliance on proven industry programs, especially the CWC. Companies consider their adherence to the letter and spirit of the CWC as a significant security safeguard.

TERRORISM'S IMPLICATIONS FOR THE BUSINESS OF CHEMISTRY

In assessing its security, the chemical industry first sought to understand complex terrorism and second to analyze its implications for the chemical industry. The U.S. government confirms that there have not been any specific threats against any chemical plant located in the United States. However, the business of chemistry has been defined as a critical national asset, in part because it enables other industries and

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manufacturing processes. Our food, safe water, clothing, health care, computer technology, transportation, and every other facet of modern life all depend upon inputs from the business of chemistry.

The business of chemistry also contributes to the strength of the U.S. economy. In fact, the United States is home to the world's largest chemical industry. Chemistry is a \$450 billion U.S. industry as well as the nation's largest exporting sector and investor in research and development. It also employs more than 1 million American innovators who account for every one of seven patents issued in the United States.

Just as the products of chemistry enable modern living and enrich people's everyday lives, they have prepared Americans to respond in unprecedented circumstances like the September 11th terrorist attacks and the subsequent anthrax attacks. From flame-retardant fibers to disinfecting chemicals and of course, CIPRO[®] (used to treat anthrax exposures), the business of chemistry is on the front line of defense.

Simply put, chemicals are indispensable. Our industry supplies the building blocks for other industries and the military while powering the U.S. and indeed the global economy. But above all else, the chemical industry works to ensure that companies continually improve environmental, health, and safety performance under its Responsible Care program. Moreover, industry safeguards are already in place to detect and deter the diversion of commercial chemicals for misuse.

But the events of September 11th create a sense of urgency surrounding security for the chemical industry as well as others. Legitimate chemical manufacturing depends on reliable systems for operating, trading, and transporting. In light of these circumstances and the generic terrorist threat, industry is overhauling its security, and adherence to the letter and spirit of the CWC is paramount among the precautions industry is taking.

CHEMICAL WEAPONS CONVENTION AS A SAFEGUARD

The global chemical industry supported the CWC throughout its negotiation and entry into force in 1997. Industry is actively involved in full and fair implementation of the CWC through dialogue with the Organisation for the Prohibition of Chemical Weapons (OPCW). Under the auspices of the International Council of Chemical Associations (ICCA), which includes chemical associations of North America (United States, Mexico, and Canada), South America (Brazil, Argentina, Uruguay, and Chile), Europe, Japan, Australia, New Zealand, and South Africa, the world's largest chemical producing countries provide consensus input to the OPCW and their respective National Authorities, which implement the Convention country by country.

Industry is united in support of the CWC and recognizes its potential antiterrorism benefits. Complete and conscientious global industry compliance with the Convention will help hinder and effectively limit the availability of chemical weapons (CW) agents and their essential ingredients for gross misuse as weapons of terror. But realizing the antiterrorism benefits will necessitate industry involvement in implementation, verifiable destruction of existing CW stockpiles by governments, and universal membership. Industry is working to realize these corollary CWC benefits by participating in OPCW outreach and educational activities with the objective of advancing implementation in all States Parties and by urging the appropriation of resources for verifiable CW destruction while encouraging universality of membership.

With the April 2003 CWC Review Conference on the horizon, it merits mentioning that the existing Convention contributes to combating terrorism. At present, the declaration and inspection requirements apply exclusively to existing States Parties, which points to the importance of universality of membership, a shared OPCW–ICCA objective.

THE REAL THREAT

In the United States, national intelligence and law enforcement agencies, as well as independent analysts, such as the Brookings Institution, all argue the risk to the chemical industry is very low. Even so, the threat of government and even public overreaction is very real. For example, since 11 September 2001, Members of the U.S. Congress have introduced upwards of 100 bills on homeland security, and the count continues to climb.

The unspecific and unpredictable nature of the threat still begs the question—would the perpetrators of terrorism look to the chemical industry as one of their targets? While terrorism experts contemplate that question, industry is forging ahead on a plan that combines practical precautions with strategic partnerships.

RESPONSIBLE CARE CODE ON SECURITY

Security is nothing new to the chemical industry. Industry's commitment to security is already embodied in Responsible Care and the CWC. But the need for better security was punctuated by the events of September 11th.

At the centerpiece of industry's response in the United States is the action by the ACC Board of Directors on 4 June 2002 to adopt a new code on security under Responsible Care, which already requires companies to continually improve their environment, health, and safety performance. Companies must now likewise perfect their performance on security. To comply with the code, companies must complete several steps. First, companies must prioritize plants using a security hazard screen on attractiveness, difficulty, and severity. Second, companies assess security vulnerabilities using several approved methodologies or an equivalent methodology. Several companies have developed their own methodology and made it publicly available. Step three naturally involves closing security gaps identified during the vulnerability assessment. Capital expenditures are expected and probable in this step. Inherently safer technologies, a long-standing chemical engineering practice and part of Responsible Care, are logical to factor in to this step. In the fourth step, companies implement security measures and audit themselves against those measures. To help assure the public that industry plants are committed to security and continuous improvement to security, companies will invite an independent and credible third party or parties to confirm the company has closed any security gaps.

ACC estimates approximately 2000 plants will undergo vulnerability assessments. The first step or prioritization was completed on 20 June 2002 with 100 % compliance. Highest-priority plants will be assessed by December 2002, and updates to assessments are scheduled every three years or concurrent with major changes. Ultimately, adherence to the new mandatory Responsible Care code on security is designed to drive continuous improvement in protection of people, products, property, and information, as well as increase public confidence in industry security. Clearly, this security strategy has many facets. Transparency is foremost among them because of the chemical industry's interdependence with and reliance on other industries. Therefore, industry tools for improving security are made publicly and readily available on http://www.responsiblecaretoolkit.com. From guidance on physical site and transportation security to vulnerability methodologies to best practices on security derived from industry—government dialogue, the chemical industry will continue to err on the side of sharing constructive and appropriate information for the sake of strengthening security.

ACC's security program has become a model for other industries and has been praised by U.S. government officials. In effect, the chemical industry's efforts have served to reinforce existing relationships and strengthen others with partners in federal- and state-level government, and fire and police departments across the country. As well, it has helped raise awareness among chemical industry suppliers and customers along the value chain.

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CONCLUSIONS

The chemical industry is reassessing and enhancing its security in the wake of unprecedented terrorist attacks and in light of the continuing terrorist threat. This effort is well underway and draws upon the success of the CWC and proven industry programs, such as Responsible Care. While effective industry safeguards are already in place against diversion of chemicals for misuse, industry is establishing new partnerships and strengthening others in order to make continuous and informed improvements to its security for the future. The chemical industry approach continues to serve as a model for other industries and within government. Though no threats have been received specific to the chemical industry, the United States at large is at risk of attack. Industry realizes that these urgent circumstances call for nothing less than its best through increased prevention and preparedness, and constructive partnerships with law enforcement and security agencies. At the same time, industry has faith in and is fortunate to draw upon the credibility, reach, and promise of the CWC for advancing antiterrorism efforts world-wide.