

**Testimony of Paul Orum  
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**before the**

**Energy and Commerce Committee  
Subcommittee on Environment and the Economy  
U.S. House of Representatives**

**on**

**The Chemical Facility Anti-Terrorism Standards Program –  
A Progress Report**

**September 11, 2012**

My name is Paul Orum, and I have worked more than 20 years for effective chemical safety and security policies, most recently as a consultant to public interest organizations. My primary expertise is government information policy regarding hazardous chemicals. Thank you for the opportunity to testify on the nation's chemical security program.

The Blue Green Chemical Security Coalition of labor, community, and public health organizations supports chemical security policies that include safer and more secure technologies, employee participation, and government accountability. Two relevant letters from this coalition are attached to my testimony.

I will make three main points:

- 1) The problem is well known;
- 2) The current program won't fix the problem;
- 3) Congress should pass comprehensive chemical security standards.

## **1. The chemical security problem is well known.**

Many government agencies and others have documented the problem. Large quantities of industrial chemicals can cause serious harm if suddenly released, particularly in populated areas, and cannot be secured by conventional security alone.

- More than two-dozen government agencies, industry associations, labor unions, insurers, think tanks, public interest groups, and others have warned that industrial chemicals could be intentionally or inadvertently released to cause harm in workplaces, businesses, and communities.<sup>i</sup>
- Some 480 industrial facilities across the country pose worst-case chemical release hazards to any of 100,000 or more nearby residents.<sup>ii</sup>
- Local emergency response capacities are not typically sufficient or designed to handle a worst-case release.
- A worst-case release is a low probability, high consequence event that is difficult for market forces to account for without government standards.

The problem is well known. Effective action is overdue.

## **2. Current temporary Chemical Facility Anti-Terrorism Standards (CFATS) won't fix the problem.**

The current temporary standards lack basic elements of an effective program. The CFATS program:

- Exempts drinking water facilities;
- Exempts wastewater facilities;
- Exempts many major refineries, terminals, and chemical manufacturers that happen to be on navigable waters;<sup>iii</sup>

- Excludes knowledgeable employees and their representatives from security planning;
- Does not allow the Department of Homeland Security (DHS) to require companies to fix specific security problems on the ground;
- Lacks clear deadlines for the completion and approval or disapproval of facility security assessments and plans;
- Lacks basic government accountability measures such as regular progress reports to Congress;
- Does not provide citizen enforcement suits or petitions of the government to ensure implementation;
- Does not secure chemical supply chains, relying instead on conventional security and continuing current indirect subsidies that encourage pervasive shifting of chemical hazards among locations;
- Perpetuates uncertainty by sinking time and resources into conventional security measures that may inevitably fall short;
- Neglects technological changes that can make chemical facilities less attractive targets—the most foolproof solution—while modernizing operations.

The flaw is in the law. These deficiencies are all in the appropriations rider that created CFATS as a temporary program.

### **3. Congress should authorize a comprehensive chemical security program.**

The last House of Representatives passed a credible compromise bill (H.R. 2868, 111<sup>th</sup> Congress) after lengthy consultation with stakeholders and four Congressional Committees. This bill would have closed the greatest security loopholes while seamlessly incorporating CFATS, but the Senate failed to act. It is the responsibility of Congress to authorize a comprehensive program.

In addition, Congress should support, not hinder, the existing authority of the Environmental Protection Agency to promote safer technologies under the general duty clause of the Clean Air Act.<sup>iv</sup> Congress should likewise support the authority of the Department of Homeland Security to promote intrinsically more secure technologies as a security measure under CFATS.

While Congress should close all the chemical security loopholes, I would like to elaborate on two current deficiencies:

### Government Accountability

If Congress directs millions of dollars to chemical security, it is important for the public to know what the effort is producing. The comprehensive program passed in 2009 (H.R. 2868, 111<sup>th</sup> Congress) included government accountability provisions that are much more structured than the leaked documents by which Congress is now belatedly reviewing the program—namely regular public progress reports to Congress.

The reports were to summarize how facilities were complying with performance standards and to enumerate the basic scope of the program, such as the number of facilities that:

- possess chemicals of concern;
- are assigned a risk tier by DHS;
- submit vulnerability assessments and site security plans;
- have assessments and plans approved or disapproved;
- have received compliance orders, civil penalties, or administrative penalties,
- exit the program and the methods used;
- and other relevant measures of program activity.<sup>v</sup>

Had these oversight provisions been included in CFATS, the first report to Congress would have been due some five years ago, with subsequent reports due regularly thereafter. Many implementation challenges would have come to light systematically years ago

rather than as the result of an internal memorandum leaked to the news media. Oversight by leaked memoranda is not as effective as regular public progress reports.

The program will inevitably lack public credibility if it doesn't require a complete public accounting of facilities, scope, and progress. Periodic progress reports provide a basis to monitor and improve implementation.

### Intrinsically More Secure Facilities

An effective chemical security program should help companies identify and remove avoidable chemical hazards. Such provisions were included in the comprehensive bill of 2009. In comparison, under CFATS the DHS has not developed the removal of unnecessary chemical targets as a security measure.

Under CFATS more than 1,600 facilities have reportedly completely removed their chemicals of concern, and more than 700 additional facilities have reduced chemicals below high-risk thresholds. While we lack basic public information about these changes, the numbers do suggest that much more could be done with a structured program that requires companies to do their homework. Each facility that tiers-out of the program is a facility that DHS does not have to oversee. Removing unnecessary targets should be one of the tools in the chemical security toolbox.

Policy makers need better information *from covered facilities* about methods to remove avoidable chemical hazards. The 2009 House-passed bill required high hazard chemical facilities to report to DHS “the technical feasibility, costs, avoided costs (including liabilities), personnel implications, savings, and applicability of implementing each method to reduce the consequences of a terrorist attack.”<sup>vi</sup>

Such reporting would help generate solutions. It should produce information on the substances, industry sectors, and processes involved at facilities that tier-out of the program, and the most common methods used such as: substituting a less hazardous chemical; using a chemical in a less hazardous form; using an alternate process; producing and using a chemical as needed in process without storage; or reducing inventory.

Survey reports I produced through the Center for American Progress identified alternatives that are already in use at hundreds of facilities across more than 20 industry sectors.<sup>vii</sup> But even in industry sectors that show gradual improvement, such as water and wastewater treatment, it would take more than half a century to remove high-hazard processes. A structured program can accelerate progress.

Thank you for the opportunity to testify. Please let me know any questions and ways that I, or my colleagues, can be helpful to the Committee.

Attachments:

Blue-Green Coalition letter to House of Representatives, June 21, 2011.

Blue-Green Coalition letter to President Obama, May 16, 2012.

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<sup>i</sup> Sample reports and statements warning about chemical terrorism include:

- The Chemical Threat to America, by Christine Todd Whitman in the *New York Times*, August 29, 2012.
- Preventing Toxic Terrorism: How Some Chemical Facilities are Removing Danger to American Communities, Center for American Progress, 2006.
- Toxic Trains and the Terrorist Threat: How Water Utilities Can Get Chlorine Gas off the Rails and Out of American Communities, Center for American Progress, 2007.
- Chemical Security 101: What You Don't Have Can't leak, or Be Blown Up by Terrorists, Center for American Progress, 2008.
- Safer Chemicals Create a More Secure America: We Can Diminish the Security Threat from Chemical Plants, Center for American Progress, 2010.
- Wastewater Facilities: Experts' Views on How Federal Funds Should Be Spent to Improve Security, Government Accountability Office, GAO-05-165, January 2005.
- Chemical Terrorism: US Policies to Reduce the Chemical Terror Threat, Partnership for a Secure America, September 2008.
- National Planning Scenario 8: Chemical Attack—Chlorine Tank Explosion, Homeland Security Council in partnership with the Department of Homeland Security, 2005.

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- Statement before the U.S. House of Representatives Committee on Transportation and Infrastructure, Subcommittee on Railroads, Association of American Railroads, June 13, 2006.
  - Homeland Security Committee Urged to Consider Safer Chemicals; Chemical Companies Should Stop Manufacturing Extremely Dangerous Chemicals, Association of American Railroads, 2008.
  - Catastrophe, Injury, and Insurance: The Impact of Catastrophes on Workers Compensation, Life, and Health Insurance, Risk Management Solutions, Inc., 2004.
  - Assessing Terrorist Motivations for Attacking Critical “Chemical” Infrastructure, Laurence Livermore National Laboratory, December 20, 2004.
  - Testimony of Dr. Jay Boris before the City Council of the District of Columbia, U.S. Naval Research Laboratory, October 6, 2003.
  - A Method to Assess the Vulnerability of U.S. Chemical Facilities, National Institute of Justice, U.S. Department of Justice, November 2002.
  - Strategic Plan for Homeland Security, U.S. Environmental Protection Agency, September 2002.
  - Homeland Security: Voluntary Initiatives Are Under Way at Chemical Facilities, but the Extent of Security Preparedness is Unknown, U.S. General Accounting Office, GAO-03-439, March 14, 2003.
  - Homeland Security and the Private Sector, Congressional Budget Office, December 2004.
  - Statement by the Department of Homeland Security on Continued Al-Qaeda Threats, Department of Homeland Security, November 21, 2003.
  - Industrial Chemicals and Terrorism: Human Health Threat Analysis, Mitigation and Prevention, Agency for Toxic Substances and Disease Registry, 1999; and, Terrorist Use of Expedient Chemical Agents: Health Risk Assessment and Las Vegas Case Study, Agency for Toxic Substances and Disease Registry, undated.
  - Study Assesses Risk of Attack on Chemical Plant, Army Surgeon General reported in *Washington Post*, March 12, 2002.
  - The Terrorist Threat in America, Chemical Manufacturers Association (American Chemistry Council), April 1998.
  - PACE International Union Survey: Workplace Incident Prevention and Response Since 9/11, Paper, Allied-Industrial, Chemical and Energy Workers International Union (PACE), October 27, 2004.
  - America the Vulnerable: How Our Government Is Failing to Protect Us From Terrorism, Stephen Flynn, 2004.
  - Protecting the American Homeland, Brookings Institution, March 2002.
  - Toxic Warfare, RAND Corporation, 2002.
  - News Release: Chemical Facilities Vulnerable, Center for Strategic and International Studies, December 23, 2003.
  - Eliminating Hometown Hazards: Cutting Chemical Risks at Wastewater Treatment Facilities, Environmental Defense, December 2003.
  - The Safe Hometowns Guide, The Safe Hometowns Initiative, 2002.
  - Needless Risk: Oil Refineries and Hazard Reduction, U.S. PIRG Education Fund, August 2005.
  - Unnecessary Dangers: Emergency Chemical Release Hazards at Power Plants, Working Group on Community Right-to-Know, July 21, 2004.
  - Chemical Plants Remain Vulnerable to Terrorists: A Call to Action, United Steelworkers of America, undated.
  - High Alert: Workers Warn of Security Gaps on Nation’s Railroads, International Brotherhood of Teamsters, 2005.
  - Making the Nation Safer: The Role of Science and Technology in Countering Terrorism, National Research Council, National Academy of Sciences, 2002.
  - Terrorism and the Chemical Infrastructure: Protecting people and Reducing Vulnerabilities, National Research Council, National Academy of Sciences, 2006.
  - The Use and Storage of Methyl Isocyanate (MIC) at Bayer CropScience, National Research Council, National Academy of Sciences, 2012.

<sup>ii</sup> Congressional Research Service, Memorandum to Senator Frank Lautenberg, April 12, 2011.

<sup>iii</sup> Sample Maritime Transportation Security Act regulated facilities that are reportedly exempt from CFATS include: Kuehne Chemical, South Kearny, N.J.; Citgo Refinery, Corpus Christi, Texas; Valero Refinery,

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Port Arthur, Texas; Marathon Refinery, Texas City, Texas; Bayer CropScience, Institute, W.V.; Dow Chemical, Freeport, Texas.

<sup>iv</sup> See the National Environmental Justice Advisory Council letter to EPA Administrator Lisa Jackson, March 14, 2012. <https://s3.amazonaws.com/s3.documentcloud.org/documents/332041/nejac-letter.pdf>

<sup>v</sup> H.R. 2868, 111<sup>th</sup> Congress, Section 2119.

<sup>vi</sup> H.R. 2868, 111<sup>th</sup> Congress, Section 2111.

<sup>vii</sup> Center for American Progress: Leading Water Utilities Secure Their Chemicals (2010); Chemical Security 101: What You Don't Have Can't Leak, Or Be Blown Up by Terrorists (2008); Toxic Trains and the Terrorist Threat: How Water Utilities Can Get Chlorine Gas Off the Rails and Out of American Communities (2007); Preventing Toxic Terrorism: How Some Chemical Facilities Are Removing Danger to American Communities (2006).