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Madam Chairwoman, members of the Energy and Commerce Subcommittee on Environment and Hazardous Materials.

I am P.J. Crowley, a Senior Fellow and Director of the Homeland Security Program at the Center for American Progress. I am grateful for the opportunity to discuss one of the most significant homeland security vulnerabilities we face, but thankfully one for which there is a clear course of action that can make a real difference. I am here today also representing a diverse coalition of public interest, labor, and environmental organizations that have come together in support of permanent, comprehensive, and effective chemical security legislation.

Let me cut right to the bottom line. If there are five things that the executive and legislative branches can do over the next 16 months to make our country as safe from terrorism as it can be, chemical security is on the list. (For the record, in my view, we also need to pay more attention to air cargo security, invest in intelligence capabilities of local police, strengthen the international nonproliferation regime, and improve oversight of biological research programs).

Across the country, more than 7,000 chemical facilities each put 1,000 or more people at risk of serious injury or death in the event of a poison gas release, due to a terrorist attack on the facility or its chemical supply chain. Approximately 100 of these plants each put more than 1 million people at risk. These facilities and their supply chains fit the existing targeting strategy of a network like Al Qaeda, which seeks to carry out a spectacular attack intended to impact as many people as possible, inflict broad economic loss on our society, and attract national and global attention. Industrial chemicals are a means to achieve those ends.

I commend the committee for this hearing, which I take as an indication that Congress is rightfully concerned about chemical security. The issue is not whether to take action, but exactly what should be done. Congress does need to act because, despite interim steps undertaken over the past two years, the risk is going up. This may seem counterintuitive. We have, thankfully, gone seven years without a major attack here in the United States. Our borders are more secure. Law enforcement is more alert. But the threat is evolving. It is imperative that we stay ahead of it, using every opportunity to improve security.

Iraq has been a laboratory for the recruitment and training of a new generation of terrorists well-schooled in urban warfare. While their weapon of choice remains a conventional bomb, they have experimented in a variety of ways with chemical weapons.

One tactic involves multiple attempts to convert chlorine gas tanker trucks into improvised weapons. While they have not yet been effective, these incidents demonstrate how insurgents will attempt to employ whatever hazardous material is available to them.

In light of this, our homeland security policy goal should be to reduce the terrorists' ability to exploit industrial chemicals as a weapon to the maximum extent possible. To be sure, the risk will never be reduced to zero. In almost every element of daily life, we rely upon chemicals and chemical processes to help us maintain our standard of living. But this should never be used as justification to do nothing to eliminate unnecessary risks or do as little as possible.

Chemical security today is a mixed picture. We are in better shape than we were two years ago. Constructive action is being taken both at the federal and state levels. New Jersey, for example, has taken meaningful steps above and beyond what has been mandated nationally. The private sector, which was reluctant to acknowledge the risk four years ago, now recognizes that voluntary and fragmentary efforts have fallen short. Responsible players understand that some kind of regulation is not only necessary, but a desirable means of creating a secure, competitive, and level playing field.

There is still resistance, however, from interests that ultimately believe either that they are not at serious risk or are already doing enough; that this is not really about security, despite the experience of 9/11; or that government regulation is an unacceptable intrusion into the marketplace, whether it is functioning well or not. You have undoubtedly heard some of these views in the run-up to this hearing.

Let's recall the significant admonition that the 9/11 Commission emphasized in its outstanding bipartisan report almost four years ago. Whether or not the attacks of September 11 could have been prevented, which is unknowable, we were handicapped by a "failure of imagination." We knew about Osama bin Laden and Al Qaeda. We understood that terrorists were focused on passenger aviation. Our security system worked as it was designed that day. However, it was not adequate to deter adversaries who were more capable than we thought and who used tactics that we had not anticipated.

What does this mean to chemical security? We have strategic-level intelligence that industrial chemicals are now part of the terrorist playbook. The fact that they have yet to perfect this weapon of significant effect only means that we have some time to act, but we must do so with a sense of urgency. Business as usual is no longer acceptable.

Congress passed a 740-word interim chemical security law in 2006 that has been translated into the Chemical Facility Anti-Terrorism Standards or CFATS, which the federal government is now applying to specific high-risk facilities around the country. CFATS improves the physical security of the status quo, but is not the right long-term solution. It has a number of shortcomings. Let me mention a couple.

First, CFATS is an interim measure that expires in 2009. The House of Representatives has the opportunity to demonstrate strong bipartisan leadership on this issue by passing permanent legislation this year. This can go a long way toward ensuring enactment before October of next year.

Second, CFATS is not comprehensive. Relevant to this hearing, the 2006 interim law explicitly exempted drinking water facilities, many of which use chlorine gas in their existing operations, from stronger chemical security standards. According to the EPA, the catastrophic release of chlorine gas from ubiquitous 90-ton rail cars used as storage vessels will put communities at risk up to 20 miles away. I recognize that there are security provisions contained in the Safe Water Drinking Act, such as requirements for vulnerability assessments and an emergency response plan, but not a comprehensive security plan. We believe that there should be a consistent set of national standards that apply to all chemical facilities, manufacturers, packagers, and users. This includes drinking water facilities, as well as wastewater facilities which fall under the jurisdiction of another committee.

The existing CFATS program can certainly be improved. For example, the interim statute relies on conventional perimeter security and actually prohibits the federal government from requiring consideration of safer cost-effective technologies even if they will eliminate catastrophic risks. This leaves us less safe than we should be—and less safe than we think we are.

For example, the Metropolitan Water District of Southern California can improve fencing, access controls, and conduct background checks of its employees as mandated by CFATS. That does not fully protect the residents of California's 32nd Congressional District, which has freight rail lines over which chlorine gas may be transported from a chlorine producer to the filtration plant in nearby Granada Hills.

Every day, chemical producers and users transfer considerable risk from their operations to the freight railroads. A 90-ton rail car in the middle of a major city is an inviting terrorist target without adequate defenses. The current guidance from the Department of Homeland Security is to keep track of hazardous materials and keep them moving. That may be a reasonable short-term answer, but it is not a long-term security solution. We need to attack this challenge both nationally and systemically. This is not happening today.

We need to do better—faster.

Chemical security legislation before this Committee, H.R. 5577, establishes a more effective and achievable security standard for chemical facilities. While it is not perfect, it is also a good benchmark to apply to drinking water facilities. It establishes risk tiers, mandates the development of formal security plans, and improves the physical security of these operations. Importantly, it requires chemical facilities to evaluate alternative methods that can be employed to reduce the consequences of a terrorist attack. Such methods can involve substitution of less hazardous materials that cannot be exploited by

terrorists. In the context of drinking water facilities, this commonly involves a shift from the use of chlorine gas to liquid bleach, which can be generated on site. More than 160 large U.S. drinking water systems serving 100,000 or more people already use liquid bleach. More broadly, other substitutes for chlorine gas include ozone gas or ultraviolet radiation. Such conversions can be done rapidly, the best example being Washington, D.C.'s Blue Plains wastewater treatment plant just 90 days after the 9/11 attacks.

The legislation takes a holistic approach to chemical security by charging the federal government to oversee security not just of chemical facilities, but the entire chemical supply chain, from point of manufacture through transportation to final use. Even as we strengthen physical plant security, the highest point of risk can be an acutely hazardous substance in an unguarded 90-ton rail car on a freight rail line that flows through a major city. Two such lines run through this city, our nation's capital. CSXT is currently observing a voluntary moratorium regarding the transportation of hazardous materials on the Capitol Hill line through the District of Columbia, even as it battles the city in court for the right to do so.

At the same time, it is important to point out that the Association of American Railroads is a significant proponent of permanent chemical security regulation that would reduce the amount of hazardous material transported around the country. In a February 27 statement, the AAR said, "It's time for the big chemical companies to do their part to help protect America. They should stop manufacturing dangerous chemicals when safer substitutes are available. And if they won't do it, Congress should do it for them in the Chemical Facility Anti-Terrorism Act of 2008." We have focused on supply chains in other areas, maritime security being an excellent example. We should take the same approach with chemical security.

H.R. 5577 gives employees at chemical plants an important role in developing vulnerability assessments and security plans, since they may be in the best position to know how risk can best be reduced. It also provides important worker protections and promotes proper training. For example, it ensures that background checks are applied properly and that they cannot be used to retaliate against employees for doing their jobs. It also allows states to set higher security standards as New Jersey has done. Section 2104 of H.R. 5577 also contains very strong and appropriate language that preserves states authority to do more if appropriate.

Earlier, I mentioned that there is resistance to chemical security regulation, particularly as it applies to drinking water facilities. Let me address a couple areas of concern.

First, some believe that the federal government will seek to impose one-size-fits-all solutions on water facilities, in the process even making our drinking water unsafe. H.R. 5577 does the opposite. Specific security concerns are identified. The facility operator is free to evaluate a range of possible actions and chose the one that is safest and most secure. Criteria are clearly spelled out in the proposed legislation. Any action considered must reduce risk to the facility, its employees and surrounding community; must be performance-based and technically feasible; and must be cost-effective. At one location,

the answer may be better physical security for an existing operation. At another, it may be a more transformative "best practice."

I have traveled extensively around the country and talked with a wide range of federal, state, local, and private sector security experts. The current system is not promoting transformative "best practices" in a systematic way. At the Center for American Progress, we have documented in multiple research reports hundreds of examples of plant conversions to proven and cost-effective alternatives. The issue really is not about imposing solutions. Viable solutions already exist. The real issue is how to create a security system and set of incentives that accelerates the pace of change.

Assuming that Congress strengthens security requirements for drinking water facilities, a second concern involves which agency will regulate them. The Environmental Protection Agency has the most mature relationship with drinking water facilities. The Department of Homeland Security is responsible for the existing CFATS regulatory process. This question is a matter of discussion between DHS and EPA as well as relevant committees here in Congress.

The coalition that I represent does not have a set position. In fact, there is no single right answer, but we would encourage a resolution that results in a regulatory framework that requires extensive collaboration between EPA and DHS such that it avoids regulatory redundancy or gaps in supply chain security; ensures equal enforcement for chemical facilities, accountability for government, and protection for existing chemical safety programs under other laws; and allows states to set more protective security standards. Regardless of the agency of jurisdiction, what is needed is a security system that requires facilities in all risk tiers to identify opportunities to reduce the consequences of an attack through the use of safer and more secure chemicals or operations, and requires the highest risk tier to use safer and more secure chemicals where feasible and cost effective without shifting catastrophic risk to other facilities. A security system will be most effective if it includes employees in vulnerability assessment, security plan development, and required inspections, trains them properly, and protects them against the misuse of background checks and retaliation.

This is too important an issue to fall victim to interagency or intercommittee rivalries. You know better than I do how challenging the legislative calendar is in this election year. A delay this year will place greater pressure on a new administration and new Congress in 2009. What we need is action this year.

One final comment on resources. We used to joke at the Pentagon that if we keep doing more with less, eventually we will be able to do everything with nothing. It is a good one-liner, but improved chemical security is not free.

If you apply the stronger national standards outlined in H.R. 5577 to drinking water facilities as we recommend, whether regulated by EPA or DHS, there will be additional costs involved. Our research at the Center for American Progress suggests that these costs are manageable, particularly taking into account potential savings (reduced requirements

for security guards, protective equipment, emergency planning, insurance costs, and so forth). In fact, 87 percent of those responding to our survey said they switched to safer chemicals or processes for $1 million or less. But there clearly will be some capital expenditures associated with physical security improvements, chemical substitution, and other process changes. Given the uncertain budget picture that many cities and states are facing, the federal government must be prepared to provide substantial funds to support this legislation. We therefore recommend that any federal funding for conversion to safer and more secure chemicals and processes be dedicated to publicly owned water treatment facilities.

And for cities, states, and the private sector, as we ask them to adopt stronger standards, they have every right to expect the federal government to be a competent and full partner. The EPA, as well as DHS, must have the personnel and support to do what needs to be done. Right now, in both agencies, we have thousands of facilities across the country overseen literally by a few dozen people. We are in the process of adding 92,000 troops to the Army and Marine Corps to enable us to fight the so-called War on Terror more effectively. Well, other agencies of government also have important security responsibilities as well. They need more "troops" to protect the American people.

Within the private sector, I would like to see the emergence of certified third-party security auditors to routinely evaluate private sector compliance with national chemical security standards. This too is envisioned under H.R. 5577. These third-party auditors would not be contractors performing a governmental function, but much like financial auditors, they would work with and for chemical operators, including drinking water facilities, to ensure facilities were meeting requirements in accordance with security plans required under this legislation. They should have demonstrated competence in physical security and also methods to reduce the consequences of a terrorist attack.

Thank you again for the opportunity to testify. I look forward to your questions.