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THE CHEMICAL FACILITIES ANTI-TERRORISM STANDARDS PROGRAM (CFATS)—A PROGRESS REPORT

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT

OF THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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THE CHEMICAL FACILITIES ANTI–TERRORISM STANDARDS PROGRAM (CFATS)—A PROGRESS REPORT

THURSDAY, JUNE 14, 2018

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENVIRONMENT,
COMMITTEE ON ENERGY AND COMMERCE
Washington, DC.

The subcommittee met, pursuant to call, at 10:00 a.m., in room 2123 Rayburn House Office Building, Hon. John Shimkus (chairman of the subcommittee) presiding.

Members present: Representatives Shimkus, McKinley, Harper, Olson, Johnson, Flores, Walberg, Carter, Duncan, Walden (ex officio), Tonko, Ruiz, Peters, Green, DeGette, McNerney, Cárdenas, Dingell, Matsui, and Pallone (ex officio).

Staff present: Mike Bloomquist, Deputy Staff Director; Samantha Bopp, Staff Assistant; Kelly Collins, Staff Assistant; Jerry Couri, Chief Environmental Advisor; Margaret Tucker Fogarty, Staff Assistant; Jordan Haverly, Policy Coordinator, Environment; Mary Martin, Deputy Chief Counsel, Energy & Environment; Sarah Matthews, Press Secretary; Drew McDowell, Executive Assistant; Peter Spencer, Professional Staff Member, Energy; Austin Stonebraker, Press Assistant; Hamlin Wade, Special Advisor, External Affairs; Everett Winnick, Director of Information Technology; Jean Fruci, Minority Energy and Environment Policy Advisor; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; Jourdan Lewis, Minority Staff Assistant; Alexander Ratner, Minority Policy Analyst; Tuley Wright, Minority Energy and Environment Policy Advisor; C.J. Young, Minority Press Secretary; and Catherine Zander, Minority Environment Fellow.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. The subcommittee will now come to order. The chair recognizes himself for 5 minutes for the purpose of an opening statement.

Today, the subcommittee will check on the progress of the Chemical Facilities Anti-Terrorism Standards Program, or CFATS, allowing our subcommittee to review the progress of the CFATS program, including overall implementation by the Department of Homeland Security as well as overall achievement of benchmark

objectives identified in the past by the Government Accountability Office.

This program, which Congress authorized in the fall of 2006 was a continuation of congressional efforts since the terror attacks of September 11, 2001, to surgically and directly address gaps in Federal law regarding terrorism or other intentional acts against high-risk facilities due to their use or possession of chemicals of concern at levels of concern. The core of this new security-focused law was a process where DHS issued risk-based performance standards that required vulnerability assessments and the site security plans by covered facilities. Most importantly, to avoid overlapping with other Federal programs, CFATS was designed to foster collaboration between government and regulated parties. Having finally set up this program, many had great optimism about its possibilities. Unfortunately, the early years of CFATS program implementation were marked with several growing pains, some more hurtful than others. No one knows that more that our witness from the Department of Homeland Security, David Wulf. Very few people have demonstrated the courage, commitment, and longevity with the program that he has. He's kind of the Cal Ripken of CFATS.

Based on this subcommittee's hearing in March 2014, we know Mr. Wulf not only set many remedial goals to address issues he found in the CFATS program, but GAO also found areas that needed serious attention. GAO provided recommendations to DHS on how to correct these areas. I look forward to hearing about the progress DHS is making here from Mr. Wulf on the first panel, and from Christopher Currie at GAO, who is on the second panel.

I also look forward to a meaningful dialogue with our other witnesses representing CFATS regulated stakeholders as well as those of organized labor, environmental, and community advocacy interests.

Particularly, I am interested in knowing what steps DHS has taken to improve its risk assessment methodology and what that has meant for facility tiering, what DHS has done to become more effective and efficient carrying out the CFATS program, and, finally, what steps has DHS taken to improve CFATS program transparency and communication with regulated facilities, whether it relates to the facility tiering or employee screening. In my opinion, CFATS has had four uninterrupted years to course correct and these are threshold questions that must be addressed in evaluating whether CFATS is a worthwhile investment for the United States taxpayer.

I know there are some who would like to see the CFATS universe expand to also do EPA's job, or OSHA's job, or FEMA's job, or addressed some other way and we have had lively discussions on the advisability of these changes in the past. My own thinking has been guided by two thoughts. Are these new requirements advisable as a legally enforceable part of this program, filling a security gap that does not exist or are they merely an additive burden without security benefits, and recognizing the challenges CFATS has faced in the past, CFATS must excel at its present obligations before being given new responsibilities.

I want to thank our witnesses for being with us today. We look forward to having your experience, wisdom, and ideas.

[The prepared statement of Mr. Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS

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Today, the Subcommittee will check in on the progress of the Chemical Facilities Anti-Terrorism Standards Program or CFATS, allowing our Subcommittee to review the progress of the CFATS program, including program implementation by the Department of Homeland Security (DHS) as well as overall achievement of benchmark objectives identified in the past by the Government Accountability Office (GAO).

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I know there are some who would like to see the CFATS universe expanded to also do EPA's job, or OSHA's job, or FEMA's job, or addressed some other way—and we have had lively discussions on the advisability of these changes in the past. My own thinking has been guided by two thoughts: (1) are these new requirements advisable as a legally enforceable part of this program, filling a security gap that does not exist, or are they merely an additive burden without security benefits, and (2) recognizing the challenges CFATS has faced in the past, CFATS must excel at its present obligations before being given new responsibilities.

I want to thank our witnesses for being with us today. We look forward to having your experience, wisdom, and ideas.

With that, I yield back the balance of my time.

Mr. SHIMKUS. With that, I have a minute left. Anyone seeking time? No one is seeking time so I will yield back and recognize the ranking member of the subcommittee, Mr. Tonko from New York, for 5 minutes.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TONKO. Thank you, Mr. Chair, and thank you to our witnesses for your testimony, the Department of Homeland Security's Chemical Facility Anti-Terrorism Standards, or CFATS program.

CFATS is an important part of our nation's counterterrorism efforts to secure high-risk chemical facilities. The program was first created in late 2006 through a DHS appropriations bill. In the early years, Congress extended the program through annual appropriations under the passage of a long-term authorization in 2014. Without further congressional action the program will terminate in January of 2019.

Under CFATS certain chemical manufacturing, handling, and storage facilities must implement risk-based performance standards for vulnerability assessments and site security plans. Facilities that possess certain chemicals of interest must be screened by DHS. If a facility is deemed a high risk, it will be placed in one of four tiers that will establish standards appropriate to secure the site. As of May 30th of 2018 the CFATS program identifies 3,395 facilities as high risk with 159 in tier one and 78 in tier two.

While there is complete agreement around the need for a program to keep these chemicals out of the hands of terrorists, even the program's most ardent supporters would admit there have been implementation problems.

Over the years, DHS has addressed a number of concerns with the program including some of GAO's recommendations which we will hear about today, I am certain.

As Congress considers reauthorization, this is an opportunity to review the program and consider what is working, working well, and how the program could be improved. This includes how we might continue to reduce risks at these sites and ensure that workers, first responders, and local communities have the information they need to stay safe.

In my view, we should be working to reauthorize CFATS and, hopefully, improving it. But I would caution against a permanent reauthorization. It is rare for us to discuss this program and a permanent reauthorization may result in even less congressional oversight.

We should also keep in mind that CFATS is not the only Federal program to regulate chemical facilities. While others are beyond the scope of DHS, I strongly believe Congress should be looking at all aspects of risks at chemical facilities, not just terrorism.

Recent incidents should remind us that our concerns must not be limited to security issues alone. We should take a holistic approach to chemical risks which, obviously, includes facility security as well as safety, accounting for the risks to the people working there and living in nearby communities and facilities' resilience.

Chemical fires, explosions, and releases can have serious consequences regardless of whether an incident was an accident, a natural disaster or an act of terrorism. For example, EPA's risk management plan program is focused on reducing chemical risk in the event of an accidental release. RMP establishes emergency measures which help local first responders prepare for and respond to a chemical accident.

In January of 2017, the Obama administration finalized an RMP amendments rule but in June of last year EPA delayed that rule's implementation, and a few weeks ago EPA proposed a reconsideration of the RMP program, which would essentially roll back nearly all of the safety measures that were adopted in 2017.

In addition to safety issues, chemical facilities are also vulnerable to climate change and natural disasters as we have seen during Hurricane Harvey when a power outage and equipment failure led to a significant chemical fire at the Arkema facility in Crosby, Texas. The Chemical Safety Board's post-Arkema report recommended the development of comprehensive industry guidance to help companies assess their risk for potential extreme weather events.

While we all support keeping these facilities secure, I hope we can also address these critical safety and resilience issues, and if there is an opportunity to improve CFATS in a way that close security gaps, reduce risks, better address emerging threats such as cybersecurity and keep first responders and workers safer, now is an excellent opportunity to consider those changes to the program.

Again, I thank the chair for calling this hearing and thank our witnesses for being here today, and I yield back, Mr. Chair.

Mr. JOHNSON [presiding]. I thank the gentleman for yielding back.

The chair now recognizes the ranking member of the full committee, Mr. Pallone, for 5 minutes.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman.

It's been over 5 years since this committee held a hearing on the Department of Homeland Security's Chemical Facility Anti-Terrorism Standards, or CFATS. Given CFATS' inauspicious history, I believe we should have conducted more regular oversight. Existing CFATS authorization expires on January 2019 so it's important that Congress act to continue this program.

At the same time, there are well-documented gaps in the current statute that Congress should address instead of simply rubber stamping an extension of the existing program.

I've been an advocate for increased safety and security at our nation's chemical facilities for many years, well before the CFATS program was established in 2006.

My home State of New Jersey, which has a high population density, also has a large number of chemical facilities. So the consequences of insufficient security are dire.

The program shouldn't have any gaps, and while it took the program five years to approve its first chemical facility security plan, I understand we will hear today that improvements have been made.

Nevertheless, there are still shortfalls in the program that DHS cannot address without changes to the law. For example, several significant categories of facilities are exempt from the standards, such as public water systems and wastewater treatment plants, and they should be added.

We should also reject a suggestion from Senate Republicans that we exempt explosive manufacturers from this anti-terrorism program.

We also cannot have a conversation about chemical facilities without discussing the Trump administration's reckless proposal to dismantle EPA's risk management program, or RMP, improvement rule.

This is a common sense update to a nearly 20-year-old risk planning and reduction policy for our nation's chemical facilities. The rule would have improved chemical process safety, assisted local emergency authorities and planning for and responding to accidents and improved public awareness of chemical hazards at regulated facilities.

Unfortunately, the administration's decision to walk away from the RMP improvement rule has widespread and harmful ramifications. Dangerous incidents at chemical facilities across the country are happening too often. Forty-six incidents have occurred at RMP facilities since Administrator Pruitt blocked the RMP improvement rule. Had the rule been in place, those facilities would have been required to prepare for and implement safety improvements to reduce the frequency and severity of those events. The highest profile case occurred in the aftermath of Hurricane Harvey at the Arkema chemical plant in Crosby, Texas. Heavy rains flooded the facility, causing equipment to fail, triggering a chemical fire, and releasing hazardous fumes and smoke into the air.

Last month, the Chemical Safety Court released an investigative report on the incident and found that chemical facilities are wholly unprepared for extreme weather events like floods and hurricanes. Improving the resiliency of these facilities will only become more critical as the climate continues to change. More frequent flooding and powerful storms associated with unchecked climate change increase the risk to workers and vulnerable populations in and around these facilities which too often are low-income communities and communities of color.

Earlier this year, the New York Times reported that more than 2,500 sites handling toxic chemicals are located in flood-prone areas across the country. It is clear that far more remains to be done to ensure chemical facilities are truly resilient to this growing threat.

Mr. Chairman, I also believe we must examine Federal chemical safety and security policy holistically. We can't turn a blind eye to the administration's actions to undermine the efficacy of EPA's RMP program. Preventing terrorism at these facilities is important, but accidents and industrial incidents due to extreme weather are far more common and they should also be given due consideration by this committee.

We have to ensure the safety and security of workers, first responders, and communities living near our nation's chemical facilities are being prepared on both fronts.

And with that, Mr. Chairman—I don't think anybody wants my time—I'll yield back.

Mr. MCKINLEY [presiding]. Thank you, and absent the chairman of the full committee, we will now conclude the members' opening remarks.

The chair would like to remind our members that pursuant to the committee rules, all members' opening statements be made part of the record.

[The prepared statement of Mr. Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN

Good morning, Mr. Chairman, and thank you for yielding me this time.

I am glad you have decided to have an oversight hearing on the Chemical Facility Anti-Terrorism Standards program—or CFATS, which is a program the Committee has been overseeing since its inception. This hearing continues Energy and Commerce's work this month on Federal preparedness laws for deliberate events—like last week's hearing on pandemic and health hazard preparedness and response and tomorrow's hearing examining the federal reaction to biological attacks.

In the wake of the terrorist attacks of September 11th, Congress assessed Federal authority to address theft, diversion, and terrorism at chemical facilities and decided accident prevention and process safety laws were insufficient to tackle these malicious, and intentional acts. Instead, Congress decided a separate and distinct body of law and requirements were needed for security purposes. Leaving the Clean Air Act to address general safety and accident concerns, Congress used CFATS to fill legal gaps in addressing intentional acts against this critical infrastructure sector. In addition, to avoid overlapping with other Federal programs, CFATS was designed to foster collaboration between the government and regulated parties.

Since each chemical facility faces different security challenges, CFATS established 18 layered, risk-based performance standards for security at chemical facilities. It is important to point out that CFATS is a program that not only covers huge chemical and petrochemical complexes, but also race tracks, wineries and breweries, universities and colleges, and hospitals and health care providers—3,400 hundred facilities in all.

However, the CFATS program had to overcome some tough years. While there have not been any documented attacks on these facilities to date, the program has suffered in the past from poor accomplishment numbers, inadequate support from senior DHS officials, management and workforce issues, and a lack of transparency about the program, especially with the stakeholder community. Since we last heard from DHS on the status of CFATS, the Department has had four years to correct the program and I understand DHS has been steadily making progress on these areas. I am eager to find out first-hand what that means, not just from DHS, but from some of its past critics—the Government Accountability Office and the regulated community.

CFATS must provide value to taxpayers, the Federal government, and the facilities that could fall victim to intentional attacks. To do that, it needs to not just focus on its outputs and become highly proficient at those but stay in its lane and not try to emulate or replicate other laws whose primary purpose is safety, not security.

I want to welcome our witnesses for being with us today and thank them for sharing their views with us.

With that, Mr. Chairman, I yield back the balance of my time.

Mr. MCKINLEY. We wish to thank all of our witnesses for being here today, taking the time to testify before this subcommittee.

Today's witnesses, beginning with the first panel, will have the opportunity to give opening statements followed by a round of questions. You know how this works.

Our first witness panel for today's hearing includes Mr. David Wulf, the Acting Assistant Secretary for Infrastructure Protection with the Department of Homeland Security.

Mr. Wulf, we appreciate you being here today and we will begin the program with you and you're recognized for your 5 minutes to make an opening statement.

STATEMENT OF DAVE WULF, ACTING DEPUTY ASSISTANT SECRETARY, INFRASTRUCTURE PROTECTION, U.S. DEPARTMENT OF HOMELAND SECURITY

STATEMENT OF DAVE WULF

Mr. WULF. Thank you so much, Mr. Chairman. I really do appreciate the opportunity to be here and thanks as well to Ranking Member Tonko and other members of this committee.

I am excited to be here to provide an update on the progress that the Chemical Facility Anti-Terrorism Standards, or CFATS program, continues to make in fostering security at high-risk chemical facilities across this nation.

When I last testified before this committee in 2013, no question but that the CFATS program was in a very different place, having experienced some significant difficulties in its early years. But we had at that point implemented a comprehensive corrective action plan and had begun making measurable forward progress.

At the time, I emphasized the importance of long-term authorization for this critical anti-terrorism program and I am very grateful for the leadership that you all provided—that this committee demonstrated in securing the 4-year CFATS authorization that was signed into law in December of 2014.

So as we now find ourselves nearly 3 ½ years into the authorization period, I am grateful that this committee is, again, taking a lead role in ensuring continuing long-term authorization of CFATS.

Now, as I am sure you'll hear me say once or twice today, the stability that has come along with long-term authorization has driven unprecedented progress as we have worked with CFATS-covered facilities to make America's high-risk chemical infrastructure a truly hard target with literally tens of thousands of security measures having been put in place at high-risk chemical facilities across the nation.

So the stability afforded by long-term authorization has facilitated our planning and execution of important programmatic improvements while it has also afforded regulated industry stakeholders with the certainty they deserved as they planned for and made significant investments in CFATS-related security measures.

I am very pleased that you'll be hearing today directly from CFATS industry stakeholders about their direct experience with CFATS. Doug Brown, Jamie Conrad, Steve Roberts, along with a host of industry associations, have been true leaders in promoting a strong culture of chemical security across the Nation and I really appreciate their presence and that of the other witnesses here today.

As we are all too aware, the threat of chemical terrorism remains a real and very relevant one. Around the globe, we continue to see bad actors seeking to acquire and using in attacks chemicals of the sort that trigger coverage under CFATS and the threat stream continues to reflect that chemical facilities themselves remain an attractive target for terrorist.

I can tell you with certainty that the work we are doing in concert with our committed stakeholders across the wide variety of industries and facilities that compose the CFATS-covered universe is making a real difference in protecting the nation, and having had

the opportunity to work closely with my counterparts in other nations and to co-chair the G-7 Global Partnerships' Chemical Security Working Group, I can absolutely tell you that what we are doing here in the United States through CFATS what you have helped build with your support for long-term authorization is absolutely the envy of the world.

With its 18 comprehensive risk-based performance standards and its nonprescriptive flexible approach, CFATS is well suited to enhancing security across the very diverse universe of high-risk chemical facilities.

So what have we been doing to make CFATS even stronger as we have enjoyed the stability of long-term authorization over the past 3 ½ years?

Well, we have improved processes and we have seen unprecedented progress in the pace of inspections and in the review and approval of facility site security plans, eliminating a backlog of security plan reviews 6 years ahead of earlier GAO projections.

We have developed and launched an improved risk assessment methodology that effectively accounts for all relevant elements of risk and have reassessed the level of risk associated with nearly 30,000 facilities across the Nation.

We have implemented the CFATS personnel surety program, affording the highest tiered CFATS-covered facilities the ability to ensure that individuals with access to those facilities have been vetted for terrorist ties and we have significantly reduced burden across our stakeholder community, having built and launched a streamlined more user-friendly suite of online tools through which facilities submit risk assessment or top-screen surveys and develop their site security plans.

So in addition to facilitating all this progress, long-term authorization as compared to our former reality of authorization through the annual appropriations process enabled us to continue to recruit and retain top talent and it reduced the possibility of another lapse in authority such as occurred during the October 2013 government shut down.

In addition to the confusion this situation created among our industry stakeholders, the need had arisen for us to take enforcement action to address the national security threat at a CFATS facility during this period of lapse in appropriations. The underlying statutory authority for such enforcement action would have been in doubt.

I know this is not a situation that anyone wants to see repeated. So to finish on a bit more of a positive note, I would, again, like to thank this committee and your top-notch staff for your leadership in the CFATS reauthorization process.

We are fond of saying that chemical security is a shared commitment and, not unlike the role of our industry stakeholders who have embraced and helped us to build this program in so many ways and the role of our committed and very talented team at DHS, the role of Congress and of this committee in shaping and authorizing CFATS for the long term has been hugely important and I am looking forward to working further with you as we drive toward reauthorization this year.

So thank you so much, Mr. Chairman. I look forward to your questions and to the dialogue here today.

[The prepared statement of Mr. Wulf follows:]

Written Testimony

of

David Wulf

Acting Deputy Assistant Secretary for Infrastructure Protection

National Protection and Programs Directorate

U.S. Department of Homeland Security

Before the

United States House of Representatives

Committee on Energy and Commerce Subcommittee

On the Environment

Regarding

The Chemical Facility Anti-Terrorism Standards Program

June 14, 2018

Introduction

Chairman Shimkus, Ranking Member Tonko, Members of the subcommittee,

I appreciate the opportunity to appear before you today to discuss the development and maturation of the Department of Homeland Security's (DHS) regulation of high-risk chemical facilities under the Chemical Facility Anti-Terrorism Standards (CFATS) Program.

Threat Landscape

Chemicals are vital to our way of life, to include a strong economy. They are used to develop medicines that maintain our health, provide refrigeration for our food supply, manufacture fuel for our vehicles and build the microchips that run our smartphones. Despite these benefits, the use of chemicals does not come without risk.

The CFATS Program was born out of the recognition that, though we had worked hard to strengthen our homeland security in the aftermath of the September 11, 2001 attacks, the Nation continued to face very real threats. In particular, it was noted by Congress that in the hands of terrorists or others seeking to do us harm, chemicals can cause death and mass casualties. Moreover, Congress noted that security gaps at chemical facilities had left our Nation vulnerable to the illicit acquisition and use of chemicals in attacks. It was this recognition that led Congress to establish the CFATS Program under Section 550 of the Homeland Security Appropriations Act for Fiscal Year 2007.

As we are all too aware, we live in a dynamic threat environment and the threat of a terrorist attack using chemicals is as real and relevant today as it was when CFATS was first created. We continue to see potential adversaries around the world seeking out and using in attacks such chemicals that are regulated under CFATS. We need look no further than to the

continuing threat streams, the intelligence community assessments, and incidents in Belgium, Syria, France, and the United Kingdom, to know that this is not a time to stop addressing the security threat posed by chemicals.

The CFATS Program is a vital part of our Nation's counterterrorism efforts as we work with industry stakeholders to keep dangerous chemicals out of the hands of those who wish to do us harm. Since the CFATS Program was created, we have engaged with industry to identify and regulate chemical facilities that are at the highest risk of terrorist attack or exploitation and to ensure that these facilities have security measures in place to reduce the risks associated with the possession of chemicals. As a result of implementation of the CFATS Program, the level of security across the chemical industry has significantly increased, not only making a successful attack on a chemical facility more difficult, but also serving as a significant deterrent to adversaries who might seek to attack facilities or acquire chemicals for use in an offsite terrorist attack.

CFATS Act of 2014 Afforded Stability and Certainty

In December 2014, Congress passed the *Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014* (CFATS Act of 2014). This statute, which enjoyed strong stakeholder support, brought stability for both the Department and the regulated community and provided stakeholders with confidence in the program's future. Until the passage of that legislation and its four-year authorization, the program had been authorized through appropriations legislation--from fiscal year to fiscal year (or even more challenging, from continuing resolution to continuing resolution). Subjecting this important anti-terrorism program to the vicissitudes of the appropriations process put our

nation at risk, as evidenced by the funding lapse in October 2013. During this lapse, not only did the programmatic activities of CFATS cease, its authorization also expired. This gap caused many facilities to question whether the program's provisions were still in effect and the Department to question whether it had the authority to take enforcement action had there been an exigent need or imminent threat. Enacting a multi-year CFATS authorization as Congress did in 2014 marked an important turning point for the program. Among other things, it:

- Provided industry stakeholders with the certainty they needed to plan for and invest in CFATS-related security measures to harden their critical sites against possible terrorist attack or exploitation;
- Afforded the stability needed to enable the Department to make programmatic improvements as well as strategic, long-term planning decisions regarding staffing, program development, and process efficiency; and
- Sent a clear message to potentially-covered facilities storing and utilizing threshold quantities of dangerous chemicals that the CFATS Program is here to stay.

With long-term authorization, chemical facilities have become further incentivized to engage with the Department with regard to facility security. Returning to the instability of short-term renewal of CFATS would represent a significant step backwards for the Nation's chemical security efforts, inhibit long-term planning, and undermine stakeholder confidence in the longevity of the program.

CFATS Program Overview

The cornerstone of the CFATS Program is the development, submission, and implementation of Site Security Plans (SSPs), or Alternative Security Programs in lieu of SSPs that document the security measures that high-risk chemical facilities utilize to satisfy the applicable Risk-Based Performance Standards (RBPS) under CFATS. Due to the diversity of facilities that hold chemicals of interest, it is important to note that these plans are not "one-size-fits-all," but are in-depth, highly customized, and account for each facility's unique circumstances and risks.

In order to determine whether a facility is covered under CFATS, the facility submits a Top-Screen to the Department's Infrastructure Security Compliance Division within the National Programs and Protection Directorate's Office of Infrastructure Protection. Since we began collecting this information in 2007, more than 40,000 facilities have reported chemical holdings. Based on the information received in the Top-Screens, DHS determines which facilities are at high-risk of terrorist attack or exploitation and assigns each of these to a tier.

Facilities determined to be high-risk must submit a Security Vulnerability Assessment (SVA) and SSP or Alternative Security Program to DHS for approval. The plan must include security measures that address the 18 RBPS established by DHS. The Department performs an authorization inspection at the facility prior to granting a security plan approval to ensure that the measures contained in the security plan are appropriate given the facility's specific security issues and unique characteristics. CFATS has been established as a non-prescriptive regulatory framework, which means that a chemical facility has flexibility to work with DHS to negotiate security measures that are uniquely tailored to the circumstances of the individual facility. This makes CFATS particularly well-suited to addressing the diversity of the universe

of covered chemical facilities—which includes not only traditional chemical manufacturers and distributors, but oil refineries, semiconductor-fabrication plants, and university labs, among many others. Once a facility's plan is approved, DHS conducts regular compliance inspections to verify that the facility is implementing the agreed-upon security measures.

Accomplishments Since the CFATS Act of 2014

Due in large part to the stability afforded by passage of the CFATS Act of 2014, I am happy to report today that much has been accomplished in the past four years and that our program continues to make significant forward progress. Through the collective efforts of our dedicated Federal workforce, industry and other stakeholders, and the leadership of Congress, the CFATS program has matured significantly in this time and is poised to continue this progress in the coming years.

Clearing the SSP Backlog and Moving into "Steady-State"

In July 2016, after more than 6,000 inspections and Compliance Assistance Visits, and review of nearly 3,000 SSPs; I approved an SSP which marked a milestone for the CFATS program. This approval, after three years of concerted effort to move the CFATS program forward, effectively eliminated the backlog of SSP reviews six years ahead of GAO projections.

With this achievement, we transitioned from "start up" to a more mature "steady-state" posture, and are now able to more fully focus on conducting compliance inspections and building a stronger culture of security. Whereas previously our inspections were overwhelmingly of the pre-approval Authorization Inspection variety, now the majority of the inspections we are conducting are post-security plan-approval Compliance Inspections (CI). To illustrate how far

we have come in this regard, at the end of fiscal year 2013, the Department had completed only one compliance inspection. Since that time, the Department has conducted 3,552 compliance inspections. I'm pleased to note that, nearly across the board, the results of these inspections have been positive. Facilities across the nation are effectively executing their comprehensive CFATS SSPs. Where issues have been identified during inspections, they have nearly always been quickly remedied; where needed, however, we have utilized our enforcement authorities to incentivize compliance.

Enhanced Risk Tiering Methodology and Chemical Security Assessment Tool (CSAT) Version 2.0

In the fall of 2016, the Department launched an enhanced risk-assessment and tiering methodology that more-fully accounts for all elements of risk and addresses statutory requirements laid out in the *Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014*. The result of three years of work by DHS risk experts, the methodology has benefited from and has been informed by analysis and input from panels of external experts from industry, government, and academia. Sandia National Laboratories has also performed an independent validation.

The enhanced tiering methodology uses a scientifically-supported approach to calculate each facility's risk as a function of information related to terrorist threat, the facility's inherent vulnerabilities, and the potential consequences of a terrorist attack. Enhancements include the addition of physics-based models for chemicals that are susceptible to being taken offsite and used in an attack, updates to the threat model informed by intelligence, and improvements to the

population modeling for release facilities. We believe that these changes make this methodology a more accurate reflection of a facility's risk.

All facilities with holdings of chemicals of interest have been asked to resubmit information to inform a risk-assessment using the new methodology. To date, nearly all 28,000 facilities that had previously reported holdings of chemicals of interest at or above the screening threshold quantity have submitted a revised Top-Screen. All Top-Screens receive an eyes-on quality assurance review to ensure the data reported makes sense for the type of chemical and facility reporting. In cases in which there are concerns with the data reported, the Infrastructure Security Compliance Division contacts the facility for clarifications. When necessary, the facility is asked to make corrections to appropriately reflect the data.

The Department began issuing tiering determination letters using the enhanced methodology on April 4, 2017. We anticipate that we will have tiered the entire current population of chemical facilities of interest using the new methodology by October 2018. Having received almost nearly all revised Top-Screens and having completed analysis on those facilities, we have seen a shift in the populations as follows:

- All facilities that were high-risk (Tier 1-4) have been notified of their revised tier.
- Approximately 36% of the previous high-risk population has remained at the same risk tier.
- Approximately 48% of the previous high-risk population has moved from one tier to another tier.
- Approximately 15% of the previous high-risk population has been determined not to be high-risk.

- Approximately 4% of the previous not high-risk population has been determined to be high-risk.

In concert with this re-tiering effort, the Department also deployed CSAT 2.0, a streamlined, user-friendly update to its online portal and Top-Screen, SVA, and SSP suite of online reporting tools. The CSAT 2.0 Top-Screen collects the data necessary to process facilities through the enhanced tiering engine and improves the integration between the CSAT SVA application and the CSAT SSP application, which has resulted in a dramatically simplified experience for facilities submitting Top-Screens, SVAs, and SSPs.

As an example, under the previous format, completing a Top-Screen was estimated to take just over 11 hours. The current format has reduced that to just six hours. In addition, building upon lessons learned over the life of the program, the Department eliminated duplication and reduced the number of questions on the SVA and SSP questionnaires by more than half.

Personnel Surety Program

Vetting individuals who have access to chemicals of interest and other sensitive parts of high-risk chemical facilities is a key aspect of facility security. Under RBPS 12, Personnel Surety, facilities must implement (1) measures to verify and validate identity, (2) check criminal history, (3) validate legal authorization to work in the United States, and (4) identify individuals with terrorist ties. While all tier 1 through 4 facilities have been implementing the first three elements of RPBS 12, the Department began working with tier 1 and tier 2 facilities to implement the fourth element in December 2015 after the Office of Management and Budget

approved the Department's Information Collection Request for the CFATS Personnel Surety Program (RPBS 12(iv)).

This approval closed a critical gap by allowing facilities in these two tiers to submit names to DHS for vetting individuals' potential terrorist ties. Going forward, the Department is planning on expanding its implementation to tiers 3 and 4. The Department is in the process of requesting approval, through the Paperwork Reduction Act process, to collect information about individuals who have or who are seeking access to high-risk chemical facilities for all four tiers. In anticipation of this request, the Department published a 60-day notice in December of 2017 and will be publishing a 30-day notice soon.

Extensive Stakeholder Engagement

Recognizing that chemical security is a shared responsibility, we continue to prioritize outreach to various stakeholder communities—including relevant industries and organizations, but also with a specific emphasis on first responders and emergency managers with the aim of ensuring that information is flowing to those who have a need to know about high-risk chemical facilities in their jurisdictions. By the end of fiscal year 2017, DHS had conducted outreach with more than 1,200 state and local offices and 1,400 Local/Tribal Emergency Planning Committees (LEPCs/TEPCs) in all U.S. states and territories. Specifically, we reached nearly all State Homeland Security Advisors (or their representatives), State Fire Marshals, and State Public Safety officials and we plan to continue these engagements on a recurring basis. Further, the Department regularly participates and presents at State Emergency Response Commission meetings, Area Maritime Security Meetings, and HAZMAT conferences.

The Department prioritizes engagement with LEPCs based on the existence of CFATS covered facilities in their counties as well as their level of activity. Further, we work to build relationships with less-robust LEPCs/TEPCs to create future opportunities for providing presentations/briefings on CFATS-program requirements and resources.

Also, outreach to first responders is incorporated into the development of site security plans through Risk Based Performance Standard 9 (RBPS 9) - Response. This standard requires covered facilities to have a documented, comprehensive crisis management plan that details how the facility will respond to security incidents and requires that the facility run exercises and drills—and make contact with local first-responders--to improve its ability to implement these provisions. DHS verifies this outreach during on-site compliance inspections. In many instances, the Department has facilitated contact between the first responders and the facilities.

The Road Ahead and Reauthorization

Four years ago, in my testimony at CFATS-focused hearings, I outlined the improvements we had made and assured the Congress that we would move forward strategically and aggressively to address the challenges that remained. Today, I am proud to say that we have made good on that assurance. The CFATS universe is as diverse as the world of regulated chemicals. The program's non-prescriptive, flexible design allows each regulated facility to customize security measures, while also meeting the required risk based performance standards. Through CFATS and the hard work of our industry stakeholders who continue to harden America's highest-risk chemical facilities, we have collectively accomplished much since 2014.

This progress would not have been possible without the stability and certainty afforded by enactment of the CFATS Act of 2014.

Long term reauthorization will allow the Department and the chemical security community to continue to work together to secure the Nation's chemicals and keep them out of the hands of terrorists. The Department will be able to continue to focus on pursuing more efficient ways to implement the program, to include the enhancement of existing materials and tools, while industry will have the confidence to continue to make important investments in security.

Chemical security is very much a pressing need and must remain a continuing high priority for the nation in view of the threat environment. The CFATS program has positioned the United States as world-leaders in building the culture of security necessary to secure our nation's highest-risk chemical facilities. I look forward to working with this Committee to chart a path towards permanent reauthorization of this critical national security program, and I thank you in advance for your continuing leadership in this regard. I look forward to your questions.

Mr. MCKINLEY. Thank you for your testimony, Mr. Wulf, and if I could recognize myself for 5 minutes to begin the round of questioning.

Mr. Wulf, last time you testified before the committee one of the key issues identified by GAO regarding CFATS was Homeland Security's approach to calculating risks and in fact they concluded DHS did not take into consideration all the elements and consequences of threat risk and vulnerability.

Your written testimony mentions an enhanced risk assessment and tiered methodology that Homeland Security believes more accurately reflects a facility risk.

Has DHS changed its policy to risk analysis?

Mr. WULF. Yes. In fact, Mr. Chairman, we have.

So we took very seriously the dialogue we had with this committee—took very seriously the recommendations we received from GAO, recognizing that our previous risk-tiering methodology was not as comprehensive as they could have been. It was very focused on the consequences of terrorist attacks and less so on vulnerability and threat.

We commissioned a peer review with a committee drawn from a panel of experts from across academia, government partners, and industry. We received some excellent recommendations as to ways in which we could enhance our risk-tiering methodology and we set about doing just that.

So in the fall of 2016, we did in fact launch a new and improved risk-tiering methodology that accounts for all relevant elements of risk. So consequence, vulnerability, and threat, and we set about retiering the universe of chemical facilities against that new tiering methodology.

Mr. MCKINLEY. With this tiering methodology, I am just curious—has it been peer reviewed what you've done on that methodology?

Mr. WULF. Yes. It sure has. So after we developed the methodology we drew together another group of experts, again, from across government academia and our industry community to go over the methodology—to make recommendations for potential tweaks before we finalized the methodology.

And following that, we embarked upon a verification and validation process that was conducted by Sandia National Labs, which advised us that our methodology was in fact sound, was working as intended, and at that point, we launched upon the retiering process.

Mr. MCKINLEY. Again, back on the tiers, Mr. Wulf, almost half the group changed tiers onto this new methodology. Fifteen percent apparently left the program and four became newly regulated.

And so my question is, is what quality reviews and are there updates occurring to make sure that you are appropriately tiering everybody that should be in the system and, as the engineering room counts up the numbers, your numbers total over 100 percent. So I am curious if there is a discrepancy in your math.

Mr. WULF. That is a good question. So I would say the way to look at the math is, looking at the number of facilities that had been previously tiered, that group should add up to 100 percent.

So of that group, about 36 percent of previously tiered high-risk facilities stayed put at the same tier level.

About 48 percent, as I think you mentioned, moved across tiers from one tier to another and about 15 percent of that previously tiered population was determined to be no longer high risk, using the new methodology, and fell out of the high-risk category.

So those three numbers add up to 100 percent when you take into account the decimals. The additional 4 percent is from the population that had previously been not determined to be high risk—those previously untiered facilities. Four percent of those were subsequently determined under the new methodology to be high risk and moved into the risk tiers.

Mr. MCKINLEY. Just in the time that remains—the 30 some seconds—how do we have confidence that you're appropriately tiering people, risk-tiering companies.

Mr. WULF. So, the risk-tiering methodology is a sound one and is very robust and now takes into account all relevant elements of risk.

We have built a system in which human eyes look at tiering for each facility as we move through the process and before a final tiering decision is issued and if anything looks off—if it appears as though a facility might have submitted information in a way that doesn't quite make sense, we are able to reach out directly through our field inspectors, through our compliance case managers directly, to the facility to resolve any discrepancies and to ensure that we are in fact issuing the correct tier.

Mr. MCKINLEY. Thank you. Thank you for my question.

Now, recognize the ranking member, Mr. Tonko from New York, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair.

And Mr. Wulf, again, welcome and thank you for your testimony. I commend you on the progress that has been made over the recent years.

I believe, however there are ways we can continue to reduce risks and improve the program. I want to reference a few issues that came up when DHS last testified before this committee on the CFATS program. This includes the importance of closing security gaps. Is it true that drinking water and wastewater facilities are statutorily exempt from the CFATS program?

Mr. WULF. Water and wastewater facilities are among the statutory exemptions along with facilities regulated by our friends in the Coast Guard through the NHTSA program and a handful of other exemptions.

Mr. TONKO. Thank you. And do you think they were exempted because there are no risks of terrorist attacks at these sites?

Mr. WULF. I was not here when when that exemption went into effect. Certainly, I think it might be worth studying what gaps may exist in that arena. I think that might be a sound next step.

Mr. TONKO. OK. And is it true that nuclear facilities are also statutorily exempt from the CFATS program?

Mr. WULF. Facilities regulated by the NRC are exempt.

Mr. TONKO. And what about Federal facilities that have large amounts of chemicals of interest? Are they exempt?

Mr. WULF. Facilities owned and operated by the Department of Energy and the Department of Defense, both of which have robust standards and audit controls of their own, are exempt as well.

Mr. TONKO. Just because a facility is not covered by CFATS does that mean it is not a potential target by terrorists? Should these sites be monitored at all?

Mr. WULF. So, CFATS is very focused. It is a risk-based program. It is targeted at the highest—those facilities that are assessed to be at the highest risk of terrorist attack or exploitation so I think it is an appropriate targeting of our best resources to the facilities that are at the highest risk.

That is certainly not to say that other facilities do not present a risk. We have within the Department of Homeland Security a suite of voluntary tools and resources that are available to other chemical facilities through our chemical sector-specific agency.

We have protective security advisors who work with facilities on a voluntary basis across the Nation every day. So yes, certainly——

Mr. TONKO. But that's statutorily imposed. So——

Mr. WULF. Yes. Those are not a statutory requirement.

Mr. TONKO. OK. Obviously, there are very different security and regulatory regimes at nuclear facilities—Federal facilities—and other sites that have received exemptions.

But in the past, DHS has expressed concerns over the gaps created by these exemptions. A number of years ago, DHS testified that the administration's position to support closing security gaps at drinking water and waste water facilities—is that still the administration's position?

Mr. WULF. I think I would have to take that back.

Mr. TONKO. OK. And does the administration still support maintaining EPA as the lead agency for drinking water and waste water facility security with the DHS supporting EPA's efforts?

Mr. WULF. I think that is another one we would need to take back.

Mr. TONKO. All right. If you can get back to the committee, please.

And can you explain how DHS has worked with EPA in recent years to encourage improvements in chemical security at water facilities?

Mr. WULF. So I can speak more broadly to the work we have done with EPA across the chemical sector. So as you probably know, in the wake of the tragic explosion at west Texas, an Executive order on improving chemical security safety and security was issued.

In implementing that order, we developed a national working group composed of us at DHS along with EPA, OSHA, Bureau of Alcohol, Tobacco, Firearms, and Explosives and others with a role in assuring chemical facility safety and security.

We took steps to ensure that we were sharing information as fully as possibly, comparing notes on inspections, comparing notes on facilities that existed in our relative respective jurisdictions and ensuring that word was getting out as widely as possible about all of the different regulatory and other requirements.

Mr. TONKO. OK. I would simply encourage the committee to consider how we might close some of these security gaps before we de-

bate creating new ones through additional exemptions and I think it's important that we have this holistic approach to cover everyone that might be impacted.

With that, I yield back, Mr. Chair.

Mr. MCKINLEY. Thank you.

And now I recognize my colleague from Mississippi, Mr. Harper, for 5 minutes.

Mr. HARPER. Thank you, Mr. Chairman.

Mr. Wulf, thank you for your time being here, and we appreciate it. It's such an important issue and topic for us to continue to look at and we know that we all want to be on the same page here on where we go, what we look at, and how we try to strengthen this in the future.

One of the issues that was identified by the GAO, and also a second witness that will be on the next panel, as a place that needed improvement was compliance, inspections, and enforcement, and I'd like to know what steps DHS has taken to improve in this area.

Mr. WULF. I appreciate the question. We have made really unprecedented progress in our conduct of inspections in our review and adjudication of site security plans and have moved as well in—as a result have enclosed the backlog of site security plan reviews and adjudications.

We have moved now into steady state phase of the program. So, more than 90 percent of the inspections we are now conducting for post site security plan approval, compliance inspection, variety of inspections. So we have developed standard operating procedures for these inspections and I will say that the inspections that are happening across the country are going well almost across the board.

Facilities are taking seriously their obligation to implement their site security plans. They are putting in place planned or new security measures in accordance with agreed upon timelines where issues are being identified or found by inspectors.

Nearly always they are being resolved quickly and in good faith by the facility. We are not hesitant though where needed to use the enforcement authorities with which we have been entrusted.

But our overwhelming bias continues to be to work with facilities that are working with us in good faith to come into compliance.

Mr. HARPER. Mr. Wulf, let's talk about your—the inspectors for just a moment. Is there a—does DHS have minimum qualification requirements for inspectors so they could demonstrate the knowledge and understanding of the facilities that they encounter and relevant guidance on enforcement requirements.

Do you have the minimum qualifications there and, if yes, will you provide the committee any written items the department has governing inspector qualifications and training?

Mr. WULF. Glad to do that, sir, and absolutely, we have minimum standards—a pretty high bar for those standards as well for our inspectors who go through a comprehensive training program when they first come on board at DHS and to whom we provide advanced training throughout their careers on specific topics such as cybersecurity or personnel surety background check focused program among many others.

There is an exam at the end of the basic training and it is rigorous. We also focus heavily on on-the-job training and on fostering consistency across our inspector cadre and the inspections they conduct.

We have put in place relatively recently a group of senior inspectors in each of our 10 regions and their job is to foster training, the development of our inspector cadre and to ensure that we are working in a consistent way. But absolutely glad to provide you information.

Mr. HARPER. And that would be great. Obviously, the goal here is that if you had any inspector come in to any facility that there would be a consistent review and finding, do you sense that the ongoing training for those inspectors is going to meet that?

Mr. WULF. Yes, I do. I think, it's never completely perfect. We strive for absolute consistency. We appreciate the feedback we receive from our industry stakeholders, many of whom own and operate companies that have facilities in different parts of the country and, if we hear things are perhaps a little different in one part of the country than the other, we work quickly to address that.

In some cases there are reasons for that. It may be that, one of the kind of game changing things we have done as an organization is to begin to take more of a corporate approach to inspections.

So we are looking at a number of issues at the corporate headquarters level so if there are policies that apply across facilities it may be that a company's facility that is hit from an inspection standpoint early on in the process it might appear to that facility that it's getting a little more thorough treatment than one that's hit later in the process. But that is likely only because we have

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Mr. HARPER. My time has expired, Mr. Wulf. My time has expired. Thank you so much, and I yield back.

Mr. WULF. Thank you so much.

Mr. MCKINLEY. Thank you, and now 5 yield 5 minutes to one of my latest friends, Mr. Peters from California, for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman.

Thank you, Mr. Wulf, for being here today. I want to commend you for the improvements in the CFATS program over the last few years.

A longer-term authorization or focus on fixing the known deficiencies in program management have helped to eliminate the site security plan backlog and start the process of compliance inspections.

However, a program can only be as good as the statute that authorized it. So I wanted to talk a little bit about how we might improve the statute, if you thought that was useful, starting with effective enforcement.

In your testimony, you note that where issues have been identified during inspections they have nearly always been quickly remedied where needed. However, we have utilized our enforcement authorities to incentivize compliance.

So can you explain to me, Mr. Wulf, what kind of types of enforcement mechanisms you've been able to use under the program?

Mr. WULF. So yes, I appreciate the question. So the enforcement process within the program I think is in line with the flexible non-

prescriptive approach to the program and our general orientation to work with facilities to foster compliance.

So where issues are identified on inspections, we work with a facility, assuming the facility is working with us in good faith to resolve them.

So, occasionally, if, for instance, a planned measure that has been agreed in the site security plan to be put into place on a certain timeline has slipped on that timeline, it may be that there has been a change in personnel, sort of a lack of understanding of what was in the site security plan.

We will work on an agreeable quick time frame to get that planned measure in place and frequently those sorts of things are resolved at that point.

If we get into the enforcement structure it is a two-step process. The first step involves the issuance of essentially, a notice of noncompliance, which gives a facility formally a certain period of time, generally, not too much time to come into compliance and I am pleased to say before a penalty order is issued—I am pleased to say that 95 percent of the cases that is enough to bring the facility into compliance.

Where if we get to a point where a facility has run through that period we will go ahead and issue a penalty order. We do take into account facility status as potentially, a small business, a facility's ability to pay in determining the ultimate penalty.

It's only happened in a small number of cases.

Mr. PETERS. I was going to ask you, so how many times have you had to use penalties or cease operation orders for facilities that aren't executing their——

Mr. WULF. So we have issued penalty orders in three instances at this point.

Mr. PETERS. Three instances. OK.

So that's the number of times you had to enforce against a noncompliant facility?

Mr. WULF. That's the number of times we have gotten to the point of——

Mr. PETERS. To that point, right.

Mr. WULF. A penalty, probably in about 70 occasions begun the process.

Mr. PETERS. Great. And do you see that the bill that acts as it's written—does it give you enough authority to do what you have to do? It sounds like that's going fairly well.

Mr. WULF. I believe that we have the authority that we need to do to foster security at America's highest-risk chemical facilities.

I think it is a regulatory framework that is really well suited to the mission at hand and to the diversity of America's chemical infrastructure.

Mr. PETERS. Great. Just one other topic then—the effective and adequate enforcement mechanisms are crucial to preventing noncompliance. We saw the dangers of noncompliance when the West Fertilizer Company in West, Texas exploded.

Facilities that don't report their holdings to DHS and are otherwise not identified to the department still pose a risk to workers, first responders, and surrounding communities.

What kind of steps have you taken to address the problem of these so-called outlier facilities?

Mr. WULF. Yes. So, certainly, a high priority for us, ensuring that we are getting the word out as widely as possible to facilities about their obligations to report information to us through the top-screen.

So we work through industry associations. We participate in conferences. We drill down to the state and local level through state industry associations, though recognizing that not all chemical facilities, companies are members of these associations.

Wee get creative. We work through——

Mr. PETERS. I am going to run out of——

Mr. WULF [continuing]. The state and local law enforcement, preparing lists of facilities and comparing information about——

Mr. PETERS. We are out of time. But I have 5 seconds for you to tell us if there is anything Congress can improve in this area. Is there anything you would ask us to improve within the law?

Mr. WULF. No. I think we have what we need from an outreach standpoint.

Mr. PETERS. Thank you.

Mr. Chairman, I yield back.

Mr. MCKINLEY. Thank you, and the chair now recognizes Mr. Johnson from Ohio for 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman, and Mr. Wulf, thanks for joining us today.

I've heard concerns that any changes to Appendix A including through guidance might not be subject to notice and comment.

So would changes to Appendix A by guidance be subject to public notice and comment based on requirements of OMB?

Mr. WULF. So yes, I appreciate the question, and Appendix A is a list of chemicals of interest—320 or some chemicals—is part of our regulation and so, under the Administrative Procedures Act it cannot be adjusted or changed without going through the notice and comment rulemaking process. So as things currently stand, that would be the——

Mr. JOHNSON. Even through guidance?

Mr. WULF. Pardon me?

Mr. JOHNSON. Even through guidance.

Mr. WULF. That's right.

Mr. JOHNSON. OK.

Mr. WULF. I think it would be considered significant guidance that would need to go through notice of rulemaking.

Mr. JOHNSON. OK. Great.

Previously, GAO indicated that DHS does not systematically solicit feedback to assess the effectiveness of outreach efforts and does not have a mechanism to measure effectiveness of your outreach activities.

Mr. Currie, in his written testimony, indicated that DHS developed a questionnaire to solicit feedback on outreach with industry stakeholders.

Would you please walk us through the questionnaire and explain whether it's been effective?

Mr. WULF. Yes. Absolutely. I am glad to do that.

So, we have taken GAO's recommendations seriously. As you mentioned, we have developed that outreach questionnaire. I do believe it is effective. We are in the relative early stages of its deployment.

We are using it as we go out to conferences as opposed to going facility by facility during inspections or compliance assistance visits.

We ask in this questionnaire those who participate in our engagements to give us some feedback on the content, on the speaker, on the relevance of the information, on the extent to which they expect to be using the information to inform their chemical security risk-based decisions.

You know, the challenge sometimes is to get the questionnaire into the hands of the people who have actually participated in the event as we are guests at these conferences. We don't necessarily control the attendee email distribution lists.

So we work with organizers of the conference to push it out. To this point, we have received upwards of 60 responses back. Ninety-seven percent of those who responded reported that information was relevant and highly useful.

So we are going to continue to look at how we can expand the use of the questionnaire. I think it is very much a worthwhile tool.

Mr. JOHNSON. Good. OK.

Well, since the last time the department testified before our committee the Government Accountability Office has made 10 recommendations for improvements to the CFATS program.

What progress have you made on those recommendations?

Mr. WULF. I appreciate that, and I appreciate GAO's engagement and very helpful oversight and recommendations over the course of the year.

I am confident that we are among the most thoroughly scrutinized programs in the government and pleased that GAO has recognized our significant forward progress over the year and, happy to report that we have made a lot of progress in implementing GAO's recommendations.

I think those recommendations, broadly speaking, fall into a couple of different bins. One of those focused on our risk assessment process, our tiering methodology.

We, as I've mentioned in this hearing, made a lot of progress in developing our new risk-tiering methodology, one that comprehensively accounts for all relevant elements of risk. Along with that, we have launched a new and very much streamlined and user-friendly suite of online tools to facilitate tiering.

I am confident that when GAO issues its next report it will recommend or it will close out the remaining recommendations related to our development of our tiering methodology—the conduct of the tiering peer review among other tiering-related issues.

The second bin I think concerns, broadly, our internal processes and controls and, we have made a lot of progress on that front, too, executing a 95-point action plan to improve the program, developing standard operating procedures on things like enforcement and on the conduct of inspections, developing metrics to measure the effectiveness of the program and, pleased to report, based upon those metrics, facilities that are within the program have enhanced

their security very, very measurably under CFATS. It's a program that is working.

Mr. JOHNSON. Well, great. Well, thank you for your responses. I yield back, Mr. Chair.

Mr. MCKINLEY. Thank you.

And I now recognize our colleague, Mr. Green from Texas, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Secretary Wulf, thank you for being here. I have a very urban district in Houston in East Harris County that's home to one of the largest petrochemical complexes in the world so I know how important CFATS is and I'd like to thank you for your work in implementing these safety standards, and I'd heard a lot of good things about the work.

I was glad in your earlier testimony or question you acknowledged that CFATS, because it was called anti-terrorism standards, we are more likely to have a natural disaster than we are a terrorist.

In fact, in my area, I think we could take care of the terrorists pretty quickly. As I say in Texas, we don't have any shortage of small arms. So but Hurricane Harvey that hit our community—and I know the other issue was the—that facility out in Crosby, Texas, and that's not my area but East Harris County is.

But a lot of our refineries literally were under water in the Houston Ship Channel and that's what my concern is and maybe we need to focus on that, although, admittedly, when we passed the Chemical Facilities Anti-Terrorism Standards program we didn't think about natural disasters.

But now we need to recognize that because about every 7 years in Houston, Texas or southeast Texas we get a tropical storm or a hurricane, and although the last one with Harvey I don't know how we could ever plan for 55 inches of rain in 4 days.

So but can you talk about how subjecting CFATS to a yearly authorization through the appropriations process before 2014 put a burden on the program?

Mr. WULF. Yes, absolutely. Glad to. Until we attained long-term authorization, we were subject to the vicissitudes of the appropriations process.

So going from year to year or, worse, from continuing resolution to continuing resolution. When the government shut down——

Mr. GREEN. I think every federal agency has that problem.

Mr. WULF. Yes. When the government shut down in October or November—October 2013, our stakeholders didn't know whether CFATS continued in force.

We didn't know if we needed to take enforcement action to address a national security threat at a CFATS facility, whether the underlying statutory authority was in existence.

So long-term authorization in December of 2014 was huge for us. It enabled us to plan for and execute important improvements to the program, some of which I have detailed here today.

It provided our industry stakeholders with the certainty that they deserved as they thought through making significant investments in CFATS-focused security measures.

So I cannot underscore enough how important continuing long-term authorization for the program is.

Mr. GREEN. Do you think we need to put specific language in there? Because when we have these shut downs that our committee doesn't have a whole lot to do with since we are not appropriations.

Mr. WULF. Yes.

Mr. GREEN. But our military still functions. Our law enforcement functions. Why would we not want our terrorism safety or even if there is a natural disaster during a shut down? So do you think we need specific language to say that?

Mr. WULF. So I think the language we have in the current authorization does the trick there.

But I think you have summed up exactly the importance of longer-term authorization to continue—the program continues in force regardless of what is happening on the appropriations front.

Mr. GREEN. Do you currently feel that the facilities labeled high risk have enough incentive through the program to reduce that risk and do you see facilities switching tiers commonly after a high risk designation?

Mr. WULF. So, as we have gone through the retiering process using our new risk tiering methodology, we have seen some shifting across tiers. We have seen some new facilities come into the program, some previously designated high-risk facilities move out of the program. But I do think that organically the CFATS program promotes the consideration by facilities of safer processes, consideration of different chemicals.

So, there is an incentive for facilities to lower their level of risk by doing things differently based on the CFATS program and over the course of the program we have seen about 4,000 facilities that have changed their processes, changed their chemical holdings, and dropped out of high-risk status, which we view as a good thing.

Mr. GREEN. Well, in a way that's good—they are responding to the threat. Has the industry response been in revamping of the chemical safety assessment tool, or CSAT?

Do you feel the program is now easy enough to comply with if you're a small-scale manufacturer?

Mr. WULF. Yes, I do. I think we made some significant strides forward with CSAT 2.0, that new online suite of tools. The amount of time it now takes facilities to work through the process of submitting a top-screen or a site security plan has been cut by about 75 percent across the board.

The tool is much simpler. It's more of a Turbo Tax sort of model. Duplicative irrelevant questions are no longer seen by facilities. So greatly simplified and we have had really tremendous feedback from our industry stakeholders on it.

And, in many respects they helped us to develop it. They were closest to the pain of working through the old system. They were able to help us understand ways in which we could simplify it and make it more user friendly.

Mr. GREEN. Well, Mr. Chairman, thank you for your patience. In my area, we don't have those smaller facilities that you have.

Mr. WULF. Yes, I know.

Mr. GREEN. Chemical plants and refineries who run 250,000 barrels a day. So but I know that we like to go where the problems are, not just be a paper pusher.

So thank you, Mr. Chairman.

Mr. WULF. Yes. You're in the center of the petrochemical universe.

Mr. MCKINLEY. Thank you.

And the chair now recognizes Mr. Duncan from South Carolina for his 5 minutes.

Mr. DUNCAN. Thank you, Mr. Chairman.

Back in 2014, I was on the Homeland Security Committee and I worked with them to help reauthorize CFATS for 4 consecutive years.

H.R. 4007, Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014 was under jurisdiction of both Homeland and Energy and Commerce. Now we are back to yearly funding extensions and this creates instability for both DHS and companies operating under the program.

If Congress were able, Mr. Wulf, to provide multi-year authorization like we did back in 2014 how can we ensure DHS will update the program as intended?

Mr. WULF. So we are very incentivized to try to continually improve the program. I think a long-term authorization gives us the stability that we need to focus on those improvements.

We have made a number of them over the course of the last 4 years. We are eager to push forward through the rule making process to engage with our stakeholders through notice and comment in a number of different areas——

Mr. DUNCAN. How can we be certain that you will take the stakeholders' comments into consideration?

Mr. WULF. I think we have demonstrated over the course of the last 4 years that we take very seriously our stakeholders' comments and that we seek to involve them in the program.

This whole effort is a shared commitment. It wouldn't work without the buy-in of our stakeholders. We have put into place tens of thousands of security measures at facilities across the country.

So, they know in many ways best ways in which we can improve the program. That's why we have involved them in the development of the new risk-tiering methodology. That's why we have involved them in the development of the new suite of online tools and their input on those fronts has been invaluable.

Mr. DUNCAN. I think as long as they know how to comply and what you're going to expect of them it makes it easy for them.

Let me shift gears for just a minute. There is a company in my home county, Austin Powder, and it's a company facility there in Clinton and previously noted how duplicate regulations cost them substantial amounts of money.

The facility has explosive regulated both by the ATF and by DHS under CFATS. The compliance mandated under CFATS does not measurably improve their facility security. It seems ATF adequately protects against theft and diversion.

So given the cost of compliance, which stakeholders in the explosives industry face in return for no measurable security gain, what

is your opinion on exempting those in the explosive industry already regulated by ATF from the CFATS program?

Mr. WULF. So we are certainly sympathetic—sensitive to concerns about duplicative regulation. I think in the case of explosive materials, there is regulation in place with ATF.

I think we are talking about a universe of about 30 facilities that are regulated both by CFATS for explosives only and also by ATF. ATF and DHS have different programs but I think they are both solid programs. So, we are open to working with the committee on a path forward there.

I am not sure I completely agree with the premise that CFATS doesn't provide any additional security benefit but there are certainly measures in place at ATF-regulated facility. I've spent a dozen years myself at ATF. A very solid program there. And so, among the things that I would not lose too much sleep over exiting the program, explosives are one of those.

I will note, though, that ATF's program does not address explosives' precursor chemicals. So, I think many of those facilities receive benefits still under CFATS with respect to the regulation of security of explosives' precursor chemicals—for instance, ammonia nitrate.

Mr. DUNCAN. So do you think the redundancy and overlap of regulations are OK? I don't hear a whole lot of jurisdictional prejudice in your answer there.

We are going to look at that. We are going to look and see, because what we are trying to do is make sure that businesses aren't faced with multiple compliance burdens when one agency can handle it, and we run into that too much in government, I think, where you've got this jurisdictional overlap and one agency is coveting that and they don't want to give it up when there maybe be a better agency that can handle it. And in this case, DHS might be the best agency and take it away from ATF—I don't know that—or vice versa.

Mr. WULF. Yes. We are happy to work with you on that.

Mr. DUNCAN. Thank you.

Mr. Chairman, I yield back.

Mr. MCKINLEY. Thank you. Now I recognize my colleague, Mr. McNerney from California, for 5 minutes.

Mr. MCNERNEY. I don't know if I sense a little reluctance in that acknowledgment, Mr. Chairman.

I thank the panelist. Mr. Wulf, I missed your testimony and I apologize about that. Now, there are several categories of threats. I am going to list a few of them.

There is natural disasters. There is physical attacks. There is industrial accidents and cyber attacks. Do you feel that cyber attacks are on par with the others in terms of risk to public safety and health?

Mr. WULF. I think cyber is a very important threat vector and I think that, no question but that America has critical infrastructure and that includes America's chemical infrastructure is in the cross-hairs of cyber criminals.

Mr. MCNERNEY. Well, I've learned from the utility industry that there is some difficulty getting information sharing across because

of lack of security clearance within the utility industry mainly because of the length of time it takes to get a security clearance.

So you think that that is also an issue with the chemical industry is a lack of security clearance within the industry prohibiting information sharing that could be helpful in safety areas?

Mr. WULF. I think, certainly, getting appropriate folks across the industry cleared to receive classified threat information is helpful.

We maintain a program called the private sector clearance program through which we grant clearances to folks in the private sector to include those who serve on our sector coordinating counsels.

So I think, certainly, to the extent we can streamline that process, that's a good thing.

Mr. MCNERNEY. Would it be helpful for the legislative branch to get involved in streamlining that process or would that be cumbersome?

Mr. WULF. I think we are working the issue. It is a high priority for us. I think it's sort of a process thing, in my view, that, we need to continue to focus like a laser beam upon and we are certainly committed to doing that.

Mr. MCNERNEY. Well, suppose someone goes into the industry, say, from the Department of Energy with a pretty high clearance level—a Q clearance or some clearance—top secret clearance. How long would it take them to get the clearance to get information sharing once they go into industry?

Mr. WULF. Yes. I would hope not very long. I might have to get back to you on exact time lines.

Mr. MCNERNEY. Yes. I have a specific case where it took someone with a top secret clearance 18 months to get a secret clearance in industry.

Mr. WULF. Yes, not good.

Mr. MCNERNEY. OK. Well, I'd like to follow up on that and hear specifically how that that's going to be——

Mr. WULF. Happy to talk with you more about that program.

Mr. MCNERNEY. OK. Do you think that there is—on a different subject, is there resistance to safety regulations by industry of regulations that actually provide safety to the public?

Mr. WULF. Although our security-focused regulation has positive benefits from a safety standpoint, I don't know if I am in a position to talk about the extent to which there may or may not be resistance to EPA's or OSHA's safety-focused regulations.

I would hope not. I think there is a strong culture across the chemical industry of safety and security. So my expectation is that they are meeting requirements across the board.

Mr. MCNERNEY. Right. It just takes one bad player to cause an accident to hurt the whole industry.

Mr. WULF. Yes. Absolutely.

Mr. MCNERNEY. So I think we both and industry understand that and are anxious to work with regulatory bodies such as yours.

Mr. WULF. Yes.

Mr. MCNERNEY. OK. Mr. Chairman, I am going to yield back. I'll give you a minute.

Mr. MCKINLEY. Thank you.

Now the chair recognizes Mr. Flores from Texas for 5 minutes.

Mr. FLORES. I thank the chairman and I thank this subcommittee for holding this important hearing.

On April 18th, 2013 one of the communities in my district, that being West, Texas experienced a disastrous explosion that took 15 lives. Twelve of them were first responders. So CFATS is important to me and to my district.

Furthermore, it was really disturbing to learn from the findings that were released 3 years later that this wasn't an industrial accident. It was actually arson.

That said, the citizens of West deserve great credit for how they've been resilient in rebuilding their community and the rebound of West today is really remarkable.

As the current authorization for CFATS is set to expire in January of next year, we must carefully consider how the program is measured and what improvements should be made or could be made in the reauthorizing legislation.

I want to thank all of today's witnesses for their insight in this hearing. And so now I'll move to my question for Mr. Wulf.

Some people argued that the greater public sharing of chemical vulnerability information—or the CVI, as we call it—is necessary for communities to be better prepared.

So, Mr. Wulf, I have three subquestions under that. First of all, to whom does Section 2103 currently allow access to CVI?

Mr. WULF. So that section of the statute currently allows access to state and local government officials who essentially have a need to know that information in performing their official duties in the first response arena—emergency planning arena.

Mr. FLORES. So the next question would be do you think it's wise to have CVI publicly disclosed?

Mr. WULF. I do not. The reason we developed the chemical terrorism vulnerability information protection regime was to keep close hold among those who have a need to know information about high-risk chemical facilities and the chemical holdings at those sites.

Mr. FLORES. OK. And so that brings us to the next one. Some people have suggested that local emergency planning commissions should have access to CVI. Is there a reason to not provide it to them?

Mr. WULF. So local emergency planning commissions perform an important function. But they vary in their—in their composition. So there are certainly folks who are members of local emergency planning missions who do have a need to know information about high-risk chemical facilities and chemical holdings.

So those first responders, those emergency planners, we absolutely want to ensure that they have the information they need to perform their official duties.

But we need to balance that with the need to ensure that we are not sharing so broadly that we make it easy for terrorists and other adversaries to obtain information to effectively have a roadmap to America's highest risk facilities.

Mr. FLORES. If you have first responders that are CVI trained, would it be appropriate to share the information with those first responders?

Mr. WULF. Absolutely.

Mr. FLORES. OK. Mr. Chairman, this has been helpful and I thank you.

I yield back the balance of my time.

Mr. MCKINLEY. Thank you very much, and now the chair recognizes Mr. Cárdenas from California for 5 minutes.

Mr. CÁRDENAS. Thank you very much, Mr. Chairman. I appreciate the opportunity to discuss this very, very important issue that affects all Americans.

Thank you for being here, Mr. Wulf. Earlier this year at a subcommittee hearing before the House Committee on Homeland Security, chemical safety advocate Paul Oram testified that facility owners should be required to develop and maintain employee input plans.

Mr. Oram commented that, "Employees are often the most vulnerable in the chemical release but also the most knowledgeable about problems and remedies."

So with that, has DHS encouraged or required facility owners to consult with employees when developing security vulnerability assessments?

Mr. WULF. So I appreciate the question. We certainly urge companies—we urge high-risk facilities to involve their employees in development of site security plans and I would say that almost across the board employees are involved in the development of those plans.

The 2014 long-term authorization act makes clear that to the extent practicable, facilities should be involving employee and my expectation and my general understanding is that facilities are doing just that.

I mean, facility employees are the ones developing plans.

Mr. CÁRDENAS. So the facilities' owners—these plants voluntarily give that feedback to you? If it's not one of the checklist things that the department asks, by the way, do you have an employee input plan on your site?

Mr. WULF. It is not a checklist thing. We are not really a checklist program. But we are a program that engages very constructively with facilities. So that is voluntary feedback. That's the experience——

Mr. CÁRDENAS. OK.

Mr. WULF. —of our inspectors working with these facilities.

Mr. CÁRDENAS. So that feedback right now is ad hoc? It's just as——

Mr. WULF. I don't know if I'd characterize it as ad hoc, and there is not a check box.

Mr. CÁRDENAS. OK. Well, I'll describe it as ad hoc if there is not a formal process. Five years ago when the last oversight hearings on the CFATS program then under Secretary Rand Beers noted on the record that the department's strategic communications plan may eventually include "systematic outreach to facilities including employees at the facilities."

Has systematic outreach become the norm in the CFATS program?

Mr. WULF. Yes. I am pleased to say that it has and we have an outreach engagement plan. We identify areas of priority from year to year and we focus on ensuring that we are getting the word out

to those relevant communities and that certainly includes to the organized labor—relevant organized labor communities.

Mr. CÁRDENAS. Mr. Oram also stated that public confidence is critical to the success of the CFATS program and the secrecy is not in the best interest of the communities.

I couldn't agree more. As a parent, I would not want to know if I lived down the street from a facility that puts my family at risk. I would want to know as much as we believe possible.

Do you agree that this is important to proactively engage communities living near or next to these facilities?

Mr. WULF. So I think, again, it's a balance. I think we need to ensure that those who are charged with protecting our communities, our first responders, our emergency planners have the information that they need. The balance, though, is in ensuring that we are not making sensitive information so widely available that it can be accessed by those who would seek to do harm to the community. So it's a balance.

Mr. CÁRDENAS. So what, if any, specific steps has DHS taken to improve community outreach and engagement through the CFATS program?

Mr. WULF. So, as part of our outreach engagement plan we are out talking to local emergency planning committees. Those can include members of—and frequently do include members of the community and public officials, first responders, emergency planners. That is one of the main means by which we are out across the relevant communities.

Mr. CÁRDENAS. Thank you. I can't stress enough how important it is for employees and local members of the community to be involved in disaster assessment and preparedness process.

These individuals are the ones bearing the greatest risk. They work, live, shop, walk to school, pray, and drive to jobs near these facilities and they might be at high risk and they need to know about that. And yet, they are often left in the dark when it comes to disaster preparedness. Their voices are critical to the facility and community safety and I hope that we can work together to improve engagement efforts under the CFATS.

So I appreciate your time. Thank you very much. I yield back.

Mr. WULF. Thank you.

Mr. MCKINLEY. Thank you very much.

The chair recognizes Mr. Walberg from Michigan for 5 minutes.

Mr. WALBERG. Thank you, Mr. Chairman, and thank you, Mr. Wulf, for being here.

In your written testimony you indicate that DHS has conducted over 3,500 compliance inspections and that, and I quote your statement, "Nearly across the board results of these inspections have been positive."

That's good. Could you elaborate a little bit more for us?

Mr. WULF. Yes. No, I am glad to.

So we are in sort of steady state compliance inspection phase. Most of the inspections we are doing across the country are post-site security plan approval inspections.

So we are assessing the extent to which facilities are doing what they signed up to do in developing their site security plans, whether they are implementing those plans, whether they are putting in

place new security measures along the time lines agreed to in the plans and I'd say almost across the board that is absolutely happening. That has been our experience in conducting these inspections.

Where we have identified issues nearly always we are able to resolve those with the facility in pretty short order.

So, the chemical industry stakeholder community is taking its obligations seriously under CFATS. Those facilities that have been identified as being at the highest risk of terrorist attack or exploitation that are covered by CFATS are taking their obligations seriously and are implementing their plans.

They have put into place literally tens of thousands of security measures at facilities across the country. So, really appreciate their commitment to the program and their buy-in.

Mr. WALBERG. Do you sense and your inspectors sense that they see you as a partner with them—that it's a benefit and not a burden?

Mr. WULF. I do. Yes, I do. And I think, the program is one that lends itself to a little bit of that partnership approach. Certainly, we are regulators.

But this is a nonprescriptive regulatory framework. So we are in a position to work with facilities to identify security measures within a site security plan that make sense, given that specific facility's unique circumstance.

So, really pleased to be able to work with facilities that way, and we will say also that we prioritize not just being out there to conduct inspections but to provide compliance assistance.

So to talk with facilities, to talk with those who own and operate those facilities about options for meeting the spirit of the 18 CFATS risk-based performance standards.

So, I think it is a really unique and—I want to say uniquely effective program that is well suited to the diversity of the Nation's chemical industry infrastructure.

Mr. WALBERG. I encourage that. We certainly know of other entities that are involved in regulating and inspecting at the work site, at the business, that there is no relationship. This seems to be a partner relationship.

Mr. WULF. Yes.

Mr. WALBERG. This is an important——

Mr. WULF. Absolutely, and we rely on our industry stakeholders very much to help us think through potential improvements to the program, to develop new tools like our new and improved suite of online tools through which top-screens and site security plans are developed to help us develop things like our new risk-tiering methodology.

So, in a lot of ways it is a thriving partnership relationship with our entire stakeholder community. I am very grateful for that.

Mr. WALBERG. Thank you.

Your written testimony notes that where necessary DHS has utilized our enforcement authorities to incentivize compliance. Can you elaborate on that? Explain that a little more?

Mr. WULF. Yes. I am glad to.

So we have a two-step enforcement process. As I mentioned, the vast majority of the time we are able to resolve issues without getting into the enforcement process.

But in about 70 instances over the history of the program we have begun the process. We have issued a notice of not compliance that, under the law, gives a facility a specific amount of time to come into compliance.

I am happy to say that most of time that is sufficient where cooperative work with the facility has worked to nudge the facility into compliance.

But if that doesn't work we will go ahead and issue a penalty order, and in all cases—and it's only three cases in which we have had to get to the penalty order—that has been the thing that has compelled compliance.

So our overwhelming bias is to work with facilities and, certainly, the vast majority of facilities out there are acting, in my experience, in good faith and are committed to the program and understand—committed to meeting their obligations under CFATS.

But in the small number of instances where that is not happening, we will go ahead and use those enforcement authorities.

Mr. WALBERG. Thank you.

I yield back.

Mr. MCKINLEY. Thank you very much.

Now the chair recognizes Ms. Matsui from one of the three possible states of California for the next 5 minutes.

Ms. MATSUI. I think we are still going to be united—still one state.

Thank you, Mr. Chairman. Today we have talked a lot about the industries and facilities that we calmly associate with chemicals. But the CFATS program also covers many types of facilities that we don't always think of as using high-risk chemicals like hospitals and universities.

In Sacramento, we have four major hospital systems including an academic medical center, which represents the second largest employer in the district.

So I am pleased that DHS has emphasized the importance of stakeholder involvement, and I've also heard that the agency and hospitals in California collaborate well.

You've emphasized the CFATS as a nonprescriptive regulatory framework, which gives flexibility to regulated facilities.

What are some of the unique challenges that hospitals face under CFATS and how has DHS worked with hospitals to tailor security measures to those challenges?

Mr. WULF. And I appreciate that question. You're absolutely right. The universe of facilities covered under CFATS is a very broad one.

So, we prioritize getting out across the relevant communities and working to address the unique circumstances of facilities such as hospitals.

So hospitals, college university campuses can't necessarily be secured in the same way as a more traditional chemical manufacturing or chemical distribution site.

We need to maintain reasonably open access to the site. You have members of the public coming in and out so, what we have

recommended in cases like that and in the conduct of our compliance assistance with those sites is taking kind of an asset-based approach to security.

So you're not necessarily constructing a perimeter around the entirety of the hospital but ensuring that where those sensitive chemicals are being held you have the requisite security in place. So that tends to be the approach for facilities such as hospitals.

Ms. MATSUI. OK. Thank you.

I understand the CFATS has improved its risk-based performance standards and risk calculations based upon actual threat level and facility vulnerability.

It makes me wonder—as climate change is increasing the frequency and severity of extreme weather if the CFATS couldn't be used to address weather-related vulnerabilities.

Recently, the Chemical Safety Board released their investigative report on the Arkema chemical plant fire and explosion in Crosby, Texas. The CSB found that the plant was not adequately prepared for the extreme flooding that occurred during Hurricane Harvey and that a number of equipment failures occurred as a result.

The CSB also indicated that other facilities in flood prone areas face similar problems and made recommendations on how to address some of these risks.

I think that many of these recommendations are relevant to CFATS facilities. Do you believe that the damage extreme weather causes facilities covered by CFATS is a serious threat to the safety of surrounding communities?

Mr. WULF. I think, certainly, natural hazards are just that and we have certainly seen them impact chemical facilities.

Ms. MATSUI. OK. Do you think a CFATS security plan should consider the threat of severe weather and help protect facility worker and communities? Why or why not?

Mr. WULF. So I think it's important that CFATS be able to stay focused on security. It is a security-focused anti-terrorism program.

But I will note that there is a lot about the CFATS program and about security measures that are put into place or that are required to be put in place at CFATS-covered facilities that has a positive impact in addressing the facilities' resilience in the face of natural disasters.

So, we require facilities to develop response plans, to conduct training, to conduct exercise, to conduct exercises to make contact with their local first responders and all of those things are equally important in both the terrorism context, in the deliberate man-made attack context, as well as in the natural disaster context and we have seen it play out in instances in which, for instance, a tornado hit a CFATS-covered facility in Illinois and it was very well prepared.

Ms. MATSUI. So you're really preparing—in essence, to really coordinate these activities more in the sense of part of the program to review how to do this so, in a sense, it's part of the program?

Mr. WULF. I don't believe it makes sense to make it a formal part of the program. I think it's important that we retain our focus on security. But, again, I think their security and safety are very much complementary.

There are agencies that focus squarely on the safety issues on those hazards. We work very closely with the likes of EPA, OSHA, with our friends at FEMA, within the Department of Homeland Security.

So I think as a Federal Government community we are very much committed to that.

Ms. MATSUI. OK. Thank you very much.

I yield back.

Mr. MCKINLEY. Thank you. And now the chair recognizes the chairman of the full committee, the gentleman from Oregon, Mr. Walden, 5 minutes.

Mr. WALDEN. Thank you very much, Mr. Chairman, and thanks to you for holding this hearing and, Mr. Wulf, thank you for being here. We appreciate your guidance.

I just have a couple of questions. You've been with the program a long time—I won't say a very long time—a long time, and, frankly, many people credit your leadership and your committed staff with the gains the program has made in recent years. So, we go through this with different agencies and, frankly, depending on who's in charge doesn't seem to matter sometimes who's in the White House.

So this isn't a partisan issue because we have seen it in other agencies. But having seen how a less committed senior political leadership can wreak havoc on a program, how do we know these reforms are permanent?

Mr. WULF. Thank you. Thank you, Mr. Chairman. I appreciate very much the kind words. We have a great team in place within our program and great buy-in and commitment across our industry stakeholder community. So it's very much a team effort.

I can tell you that our new senior political leadership with the change of administration is very, very committed to the future of CFATS. It remains a priority with this administration, very focused on ensuring that we are able to maintain positive momentum that we have the resources we need to do just that.

So, we remain focused like a laser beam. I've seen nothing but support from the upper reaches of the department and the administration.

Mr. WALDEN. Right. And some of the witnesses on the second panel in their testimony today on CFATS that they say that CFATS has made serious improvements in problems it was facing 4 years ago.

What do you attribute the progress of CFATS program over the course of the last 4 years?

Mr. WULF. I appreciate that question.

I think, first and foremost, I attribute the progress we have been able to make to the environment of stability that has been fostered by long-term authorization on which this committee showed so much leadership in 2014.

So that gave us the stability that we needed to plan for and execute many of the improvements I've detailed here today. It afforded our industry stakeholders the certainty they deserved as they were thinking through making significant investments in CFATS-focused security measures.

I would say also I would credit a lot of the progress to the spirit of openness and transparency which we have strived to operate over the past 4 years.

So, we have a very strong relationship with our industry stakeholders. We take their feedback very seriously. We involve them in efforts to improve the program. We very much value their input.

And, thirdly, I would point maybe to a willingness to change processes—to not stick with the status quo to do game changing things like take a corporate approach to inspection activity, to take a fresh look at our suite of online tools and see what we can do about making them more user friendly, more streamlined, and more useful in the development of top-screen risk assessment surveys and site security plans.

So all of the above but at its core, the stability of that long-term authorization has been absolutely key.

Mr. WALDEN. Well, and as chairman of the full committee, you have my assurance that we are going to move expeditiously to reauthorize this work.

Mr. WULF. We appreciate that.

Mr. WALDEN. We know of its critical importance. You keep this up, you may get cloned and your staff too because not every program and agency achieves these kinds of results.

So we do appreciate your leadership and that of your team and you look forward to working with you so we meet our deadlines here and get this reauthorized.

So with that, Mr. Chairman, I'd yield back.

Mr. MCKINLEY. Thank you very much.

The chair recognizes Ms. DeGette from Colorado for 5 minutes.

Ms. DEGETTE. Thank you, Mr. Chairman.

Thank you for coming today, Mr. Wulf. Right on the border of my district is the Suncour oil refinery.

There are 53,000 people that live within a 3-mile radius of that refinery and that includes over 5,000 children under 5 years old who are particularly susceptible to air toxins.

The neighborhood that's the closest to the refinery, Elyria-Swansea, has a population that's over 80 percent Latino with over 25 percent of the residents living with incomes below the poverty line, and as you know, these characteristics are pretty common for neighborhoods that are nearby industrial facilities.

So I wanted to ask you would you agree that while security is important for all chemical facilities, additional considerations like mitigation are necessary when you're dealing with urban facilities with large populations right nearby. Security is not the only issue that these institutions or that these refineries and others are facing.

Mr. WULF. Well, sure. Yes. Absolutely.

Ms. DEGETTE. And one thing that happened over at Suncour we have had problems with interruptions from the external power supply and, as you know, even brief disruptions to the power supply can cause harmful chemical emissions.

In October 2016, the Suncour refinery suffered an accidental power failure that led to release of a yellow cloud of smoke, which closed the highway and caused 14 local schools to go into lockdown.

And then they had a second power outage in March 2017 which released more than 500 pounds of sulfur dioxide gas and a hundred pounds of hydrogen sulfide gas.

So my question is—I know, you look a little puzzled because—but I am wanting to know is power supply security a consideration when the Department of Homeland Security considers site security plans submitted by high-risk facilities?

Mr. WULF. So, yes, the power supply is certainly something that——

Ms. DEGETTE. Is one of the things?

Mr. WULF [continuing]. Something to be considered and also considering what contingencies are in place it is certainly important from a security perspective when the power goes out.

Ms. DEGETTE. OK. Does DHS have specific recommendations for providing a secure power supply under CFATS?

Mr. WULF. I will get back to you on that, certainly.

Ms. DEGETTE. Thank you. OK. Now, DHS is not allowed to disapprove of the site security plan because it lacks specific security measures. Is that right?

Mr. WULF. That is correct. It's a nonprescriptive program so we work with facilities to assess what makes sense and meets the intent of the relevant risk-based performance standards.

Ms. DEGETTE. So would you consider a facility secure if it suffered a significant chemical release due to a brief power outage or would that show that the facility might be susceptible to deliberate disruption? Would you look at that?

Mr. WULF. It would be something we would look at, certainly.

Ms. DEGETTE. Now, the CFATS program is intended to protect chemical facilities from terrorist attacks. Is that right?

Mr. WULF. That is correct, to protect against terrorist attack or exploitation. The majority of the facilities we have in the program that have been designated at high risk are designated as such owing to the threat of theft or diversion of chemicals——

Ms. DEGETTE. OK.

Mr. WULF [continuing]. Being taken offsite and deployed.

Ms. DEGETTE. Off site. So the Suncour refinery incidents I talked about before caused by accidental power outages they would be included in the scope of the program though, right?

Power outages that are causing chemical releases.

Mr. WULF. Yes. The power situation and resilience in the face of power, ensuring that the security systems are resilient is important.

Ms. DEGETTE. Now, what about emissions caused by negligence, natural disasters, or other types of actions? That would not be included?

Mr. WULF. That is not within our purview. But, as I've mentioned here, many of the measures that we require to be put in place through CFATS such as the conduct of training, exercise the development of response plans that are applicable——

Ms. DEGETTE. They would——

Mr. WULF [continuing]. In both the natural disaster context or manmade attacks.

Ms. DEGETTE. They would have that potential spillover effect, right?

Mr. WULF. Right. Right. A complementary——

Ms. DEGETTE. Yes. But, Mr. Chairman, the reason why I bring this up is because security is really important to me but there is so many other issues.

I would hope that we can also come to bipartisan agreement on how we address these toxic releases, because in my district and many other districts in the country, people are living right next to these plants and even if it's not a terrorist attack or a natural disaster, they are at risk of contamination every day.

So I would hope that would be another issue that we could work on in this committee.

Thank you, and I yield back.

Mr. MCKINLEY. Thank you very much, and I hope we can continue that dialogue on that.

Now the chair recognizes from Texas Mr. Olson for 5 minutes.

Mr. OLSON. I thank the chair, and welcome, Mr. Wulf.

As you know, I am a congressman from Texas 22. I like to call that the suburbs of the energy capital of the entire world, the massive petrochemical complex along the Port of Houston and Houston ship channel.

Mr. WULF. Absolutely.

Mr. OLSON. As you know, there are lots of nasty chemicals on our highways and our railroads. In fact, this last month, Houston had the anniversary but remembered that—see, was it in 1976 had a tanker turn over a truck with ammonia.

Six people died. Over 60 were hospitalized. That was right by Interstate 610 U.S. 59, right by the Galleria. I know that's not CFATS, but my point is those chemicals are all over our roads, and that's just ammonia going by traffic.

It's been talked about, some of the issues with the Crosby fire during Hurricane Harvey. I want to talk about cyber attacks, because the bad guys now are adjusting to attack us through cyberspace.

What happened at Crosby was a failure of the backup system. They had backup power but they didn't test enough. They fired up for maybe a minute or two—hey, it's working. It had to work. It didn't. And as you know, the chemical—once you lost control of the process it was going to come through and have an emission.

And so terrorists could easily hack into there and open up those things, do exactly what nature did. So how is CFATS adapting to terror attacks through cyberspace?

Mr. WULF. Yes, you're absolutely right. Cyber attacks—very significant threat vector. Chemical facilities vary in the level to which cyber systems are integrated with their industrial control systems, with their process systems, and, for that matter, with their security systems.

But there certainly exists a decent population of facilities where those systems are very much integrated and so one of our risk-based performance standards—and I think this was in place before any folks were thinking about cybersecurity—one of the 18 risk-based performance standards under CFATS focuses specifically on cybersecurity.

Mr. OLSON. All right. Good.

Mr. WULF. So we have trained a large number of our inspectors to work with facilities that have the fuller integration of cyber systems with their industrial control systems.

We have cyber experts on our staff at headquarters who review those facility site security plans and provide guidance to the inspectors in the—in the field.

We ask facilities to put in place sound cybersecurity practices or other site security things—a very important part of our program.

Mr. OLSON. Thank you. That is music to my ears.

More of a softball question for you. As you noted, CFATS was authorized a little over one decade ago. Looking back, could you talk about the single biggest lesson learned that you've had the first years of the program? What's one thing you've learned over those first couple years?

Mr. WULF. So I think the most important thing is that it takes a community to secure America's chemical infrastructure—that it's not something we can do alone and it's not something we can do without the feedback of our industry stakeholders.

So, the importance of transparency, the importance of openness, the importance of a community wide approach. A shared commitment to chemical security is absolutely key and I think as a result we have seen a great deal of buy-in and a great deal of commitment across our community of owners and operators of high-risk chemical facilities.

Mr. OLSON. Thank you. That brings up the next question and that is domestic community. How about international community?

As you note in your opening statement, the threats we have seen in our homeland have spiked up following terrorist attacks overseas.

NATO and our allies in Europe are dealing with these attacks every single day as are allies all across the world. Can you discuss how our CFATS program compares with their programs and are we exchanging data with NATO, with other countries? Are they exchanging with us? Are we working together to address this problem?

Mr. WULF. That's a great question, and we are prioritizing international outreach. So I actually have the privilege of chairing a G-7 global partnership working group on chemical security.

We are engaging with our European Union partners and a number of other nations to sort of share best practices, to compare notes on chemical security.

I will tell you that what we are doing here is in many, many ways the envy of the world—significantly more comprehensive.

There is a large threat out there. We have been relatively privileged not to have as many chemical-focused attacks. But no question adversaries around the world continue to seek out and to use in attacks chemicals of exactly the sort that trigger coverage under CFATS.

So, we need to remain vigilant. There are other approaches to securing certain chemicals, in particular, IED precursor chemicals. In Europe, that seemed to be making some headway. I think we want to learn from our colleagues over there what is working as we think through potentially new approaches at the point of sale to high threat IED precursor chemicals, whether of a voluntary or a

regulatory nature and that's probably another hearing for another day. But we learn a lot from our international colleagues and I think they learn a lot from us.

Mr. OLSON. I thank you. So my time is expired.

A final closing comment—you always have a standing invitation to come to Houston, Texas, see all that stuff with your own eyes. Also, enjoy the best barbecue at the Swinging Door in Fort Bend County and also the best Mexican breakfast at Bob's Taco Station in Rosenberg, Texas.

Mr. WULF. OK. What was the first one? I want to make——

Mr. MCKINLEY. OK.

Mr. OLSON. The Swinging Door. That's in Richmond. Bob's Taco Station is in Rosenberg.

Mr. WULF. All right. We are down there quite a bit so I will——

Mr. OLSON. Yield back.

[Laughter.]

Mr. MCKINLEY. Thank you.

Mr. OLSON. Thank you, Chairman.

Mr. MCKINLEY. The chair now recognizes the very patient member from Georgia, Mr. Carter, for his 5 minutes.

Mr. CARTER. Well, it's certainly going to be hard to follow that but I'll do my best.

Thank you, Mr. Wulf, for being here. I appreciate it.

I want to echo the comments of the chair of the full committee. Just from listening to you, it appears that you have a firm grasp of this and have a handle on it and I appreciate that. That's good to know.

I wanted to ask you, it appears that improvements have been made in the program as it's gone along, and from what I understand in some of my reading that since the implementation of CFATS the GAO makes a number of recommendations that appear to have improved the program, and I just wanted to ask you specifically about two things—: vulnerability and economic consequences. Those two things are of concern to me and I just wanted to ask, have you changed your overview of these two things, particularly of economic consequences? Or the management of the program—have you tried to address this at all?

Because I believe that GAO had noted that that was one thing that was not taken into consideration enough and that was the economic consequences.

Mr. WULF. That's exactly right. So GAO made a number of recommendations related to tiering and we have taken them all very much to heart in developing our new and improved risk tiering methodology which does take a significantly more comprehensive approach to addressing all relevant elements of risk to include consequence, vulnerability as well, looking at the sort of inherent vulnerabilities associated with facilities on a facility by facility basis—things like, how chemicals are stored, the types of containers, among many other things, and threat.

With respect to economic consequences, we have studied this very hard in response in response to the recommendation and I think just makes sense to have done that anyway.

Our ultimate conclusion was that the threshold, which is actually a classified threshold for significant economic consequences to the

Nation from an attack on a specific chemical facility, is a pretty high one.

And so, it was based on a review of the facilities in our program. They were not facilities on which an attack would move the needle from a risk tiering perspective with respect to economic consequences.

So it is not included in our tiering methodology right now but we have the resources. We have the knowledge from the study to include it as needed if we get to a point where economic consequences are, potentially, significant enough from one attack on a single facility.

Mr. CARTER. Let me ask you just a couple of simple questions, if you will. How do you determine who is to comply? Is that incumbent upon the business itself or do you determine that or what?

Mr. WULF. Yes. So the way the process works is that facilities that have holdings of one or more of our 320 chemicals of interest that are in the regulation self-identify if they have those chemical holdings at or above the specified threshold or at or above the specified concentration.

They submit to us what we call a top-screen, so basic information about the facility, about the chemical holdings, and we run that through our risk tiering methodology and make a determination as to whether the facility, based on the totality of the circumstances of its facility, of its chemical holdings, of its location as relevant—whether it's in an urban or rural area, whether that facility is at high risk of terrorist attack or exploitation, and if it is—and about 10 percent of the facilities that submit this paperwork to us ultimately are determined to be high risk—if a facility is issued that determination we then issue it a risk tier.

So it's placed in one of our four risk tiers and then embarks upon the process of collaborating with us as it develops a site security plan that's ultimately approved and then entering into the regular cycle of compliance——

Mr. CARTER. So it is incumbent upon the business to initiate it?

Mr. WULF. It is.

Mr. CARTER. OK.

Mr. WULF. But we prioritize getting the word out about those reporting obligations because the community of those who hold chemicals is very diverse.

Mr. CARTER. I see. Right.

Mr. WULF. So it's not only the traditional chemical manufacturers.

Mr. CARTER. Well, very quickly, because I want to get this in. I have two major seaports in my district.

That seems like that would be a bugaboo to try to really have an overview of that——

Mr. WULF. Yes. No, that's——

Mr. CARTER [continuing]. Of everything that's going through those ports.

Mr. WULF. Yes. There is a lot of chemical infrastructure on the water at the ports. Our friends at the Coast Guard have the responsibility actually——

Mr. CARTER. OK.

Mr. WULF [continuing]. For managing that. So facilities that are regulated by the Coast Guard are specifically exempted from CFATS.

Mr. CARTER. Right.

Mr. WULF. So we work very closely with the Coast Guard.

Mr. CARTER. Good. Thank you very much.

Mr. WULF. Absolutely.

Mr. CARTER. And I yield back.

Mr. MCKINLEY. Thank you very much.

Now, if I could, you've been going here almost 2-plus hours on this thing. But let me just conclude with one question, if I could—the privilege of the chair.

I want to clarify your answer to Congressman Johnson about the listing of items on Appendix 1, because I've spoken to several chemical manufacturers in our district and they claim that on Appendix 1 is this designation of high priority chemicals—you understand that. They claim the existing statute is silent over whether it's subject to notice in rulemaking versus the sole discretion of DHS.

I thought you said that it had to go through notice in rulemaking. I just want for the record you saying it does go under——

Mr. WULF. Yes. It is part of our regulation and so I have a crack team of lawyers who tell me that as a result of its status in the regulation it is subject to notice and comment rulemaking pursuant to the administrative procedures.

Mr. MCKINLEY. So these manufacturers maybe are just mistaken where they think it's silent?

Mr. WULF. Yes. It may not be explicitly addressed in the statute but there are other legal frameworks that apply to it.

Mr. MCKINLEY. OK. Thank you very much. Thank you.

Mr. WULF. Absolutely.

Mr. MCKINLEY. Seeing that there are no further members wishing to participate and ask questions, I'd like to thank our witness again for being here today.

And with that, we will end the first panel.

Mr. WULF. Thank you so much.

[Pause.]

Mr. MCKINLEY. So if we could, we call up the second panel now—and your placards.

[Pause.]

OK. We want to thank our witnesses for being here today, many of you just went through the first panel and so we begin the second panel so—and your taking the time to testify before this subcommittee.

Today's witnesses will have the opportunity to give opening statements followed by a round of questions from the members that are present.

Our second panel for today's hearing includes Chris Currie, Director of the Emergency Management National Preparedness and Critical Infrastructure Protection, Homeland Security, and the Justice Team in the U.S. Government Accountability Office; Mr. Brown, President and CEO of Brown Chemical Company; we also have Mike Wilson, National Director for Occupational and Environmental Health in BlueGreen Alliance; Mr. Roberts, Principal of

Chemical Security Group, LLC; and James Conrad, the Principal of Conrad Law and Policy Council on behalf of the Society of Chemical Manufacturers and Affiliates; and lastly, Yvette Arellano, the Policy Research and Grassroots Advocate of the Texas Environmental Justice and Advocacy Services.

So we appreciate you. The subcommittee appreciates all of you for being here today and the patience of working with us on this, and we will begin the panel discussion with Mr. Currie for his opening statement of 5 minutes.

STATEMENTS OF CHRIS P. CURRIE, DIRECTOR, EMERGENCY MANAGEMENT, NATIONAL PREPAREDNESS, AND CRITICAL INFRASTRUCTURE PROTECTION, HOMELAND SECURITY AND JUSTICE TEAM, U.S. GOVERNMENT ACCOUNTABILITY OFFICE; DOUG BROWN, PRESIDENT AND COO, BROWN CHEMICAL COMPANY; DR. MIKE WILSON, NATIONAL DIRECTOR, OCCUPATIONAL AND ENVIRONMENTAL HEALTH, BLUEGREEN ALLIANCE; STEVE ROBERTS, PRINCIPAL, CHEMICAL SECURITY GROUP, LLC; JAMES CONRAD, PRINCIPAL, CONRAD LAW AND POLICY COUNSEL, ON BEHALF OF SOCIETY OF CHEMICAL MANUFACTURERS AND AFFILIATES; YVETTE ARELLANO, POLICY RESEARCH AND GRASSROOTS ADVOCATE, TEXAS ENVIRONMENTAL JUSTICE ADVOCACY SERVICES

STATEMENT OF CHRIS P. CURRIE

Mr. CURRIE. Thank you, Mr. Chairman, Ranking Member Tonko, other members of the committee that are here.

I think this hearing is really well-timed. CFATS is over 10 years old. We have spent almost a billion dollars of taxpayer money implementing it, getting it up and running, and industry has spent its own dollars doing the same thing.

GAO has been assessing this program for almost a decade, and I want to be clear that we have no position on reauthorization. That's a decision for Congress.

Our jobs, as always, is to help you make those decisions with information on how well programs like this are working. In that regard, it's no secret that this program has had challenges.

Today, after numerous GAO recommendations and heavy oversight by Congress, CFATS has addressed many of the management challenges it faced early on. I think DHS deserves a lot of credit for that. I think Congress deserves a lot of credit for the oversight.

I'd like to summarize just some of our past work and where DHS is in addressing the recommendations. First, just identifying facilities originally that could have been subject to this regulation was daunting and a huge challenge.

In 2014, we identified, through our own work, chemical facilities that were not reporting ammonium nitrate holdings, for example, to DHS as they were required to do.

We recommended the DHS work with EPA, other agencies, and states to better share their separate data sources to close this gap. Since then, DHS implemented this recommendation and identified 1,000 additional facilities that should have complied with CFATS.

Assessing facility risk levels, as was discussed a lot on the first panel, and improving site security plans has also been a complicated process.

Specifically, we recommended that DHS improve its process for assessing facility risk, or tiering, as was mentioned, and have this process peer reviewed, and DHS has taken steps to address these issues as well.

DHS also eliminated the backlog for reviewing and approving facility site plans, which at one point we estimated to be 7 to 9 years long.

More recently, DHS overhauled and streamlined its tools for gathering information from facilities and assessing the risk and, according to most industry officials and facilities we have talked to so far, the new tool is much easier to use and understand.

As of June 2008, DHS told us they've processed hearing results for all but 226 facilities nationwide. Compliance inspections are also a critical piece of the program. These inspections ensure that facilities are implementing and maintaining the security measures in their plans.

In our 2015 report, at that time DHS had only done 83 of these inspections. They recently told us the number is now up to over 3,500, and this is promising, but DHS still hasn't fully implemented our recommendation to establish a final procedure for conducting these inspections.

They have one in draft that they are using and they tell us they expect to finalize that later this year. However, just fixing past problems is not enough to declare victory. Now it's an important time, I think, to shift our mind set from establishing the functional components of a regulatory program to questions about what do we expect from CFATS in the future.

Many of these will be addressed in the report we plan to issue next month. First, it's critical that the CFATS program be able to measure over time how risk and vulnerability are actually being reduced and not just focus on outputs like inspection numbers.

In the past, we have found weakness in how the program measures performance and we continue to assess their progress in this area.

Second, the program must evolve and can't be static. New security threats such as cyber have to be constantly considered. Also, the program is in a unique position to help the industry by communicating these threats and best practices.

Further, a balance must be struck between sharing information and protecting security. For example, recently deadly incidents show how important it is that first responders know what they are responding to at these facilities and how to address it.

We are assessing these and other issues in our ongoing work and, as I mentioned, we expect a report out on those specific things next month.

This concludes my statement and I look forward to the discussion.

[The prepared statement of Mr. Currie follows:]

United States Government Accountability Office

Testimony

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CRITICAL INFRASTRUCTURE PROTECTION

Progress and Challenges in DHS's Management of Its Chemical Facility Security Program

Statement of Chris Currie, Director,
Homeland Security and Justice

GAO-18-613T

GAO Highlights

Highlights of GAO-18-613T, a testimony before the Subcommittee on Environment, Committee on Energy and Commerce, House of Representatives.

Why GAO Did This Study

Thousands of facilities have hazardous chemicals that could be targeted or used to inflict mass casualties or harm surrounding populations in the United States. In accordance with the DHS Appropriations Act, 2007, DHS established the CFATS program in 2007 to, among other things, identify and assess the security risk posed by chemical facilities. DHS inspects high-risk facilities after it approves facility security plans to ensure that the facilities are implementing required security measures and procedures.

This statement summarizes progress and challenges related to DHS's CFATS program management. This statement is based on prior products GAO issued from July 2012 through June 2017, along with updates conducted in June 2018 on DHS actions to address prior GAO recommendations. To conduct the prior work, GAO reviewed relevant laws, regulations, and DHS policies for administering the CFATS program, how DHS assesses risk, and data on high-risk chemical facilities. GAO also interviewed DHS officials and reviewed information on DHS actions to implement its prior recommendations.

What GAO Recommends

GAO has made various recommendations to strengthen DHS's management of the CFATS program, with which DHS has generally agreed. DHS has implemented or described planned actions to address most of these recommendations.

View GAO-18-613T. For more information, contact Chris Currie at (404) 679-1875 or curriec@gao.gov.

June 2018

CRITICAL INFRASTRUCTURE PROTECTION

Progress and Challenges in DHS's Management of Its Chemical Facility Security Program

What GAO Found

The Department of Homeland Security (DHS) has made progress addressing challenges that GAO's past work identified to managing the Chemical Facility Anti-Terrorism Standards (CFATS) program. The following summarizes progress made and challenges remaining in key aspects of the program.

Identifying high-risk chemical facilities. In July 2015, GAO reported that DHS used self-reported and unverified data to determine the risk of facilities holding toxic chemicals that could threaten surrounding communities if released. GAO recommended that DHS should better verify the accuracy of facility-reported data. DHS implemented this recommendation by revising its methodology so it now calculates the risk of toxic release, rather than relying on facilities to do so.

Assessing risk and prioritizing facilities. In April 2013, GAO reported weaknesses in multiple aspects of DHS's risk assessment and prioritization approach. GAO made two recommendations for DHS to review and improve this process, including that DHS enhance its risk assessment approach to incorporate all of the elements of consequence, threat, and vulnerability associated with a terrorist attack involving certain chemicals. DHS launched a new risk assessment methodology in October 2016 and is currently gathering new or updated data from about 27,000 facilities to (1) determine which facilities should be categorized as high-risk because of the threat of sabotage, theft or diversion, or a toxic release and (2) assign those facilities deemed high risk to one of four risk-based tiers. GAO has ongoing work assessing these efforts and will report later this summer on the extent to which they fully address prior recommendations.

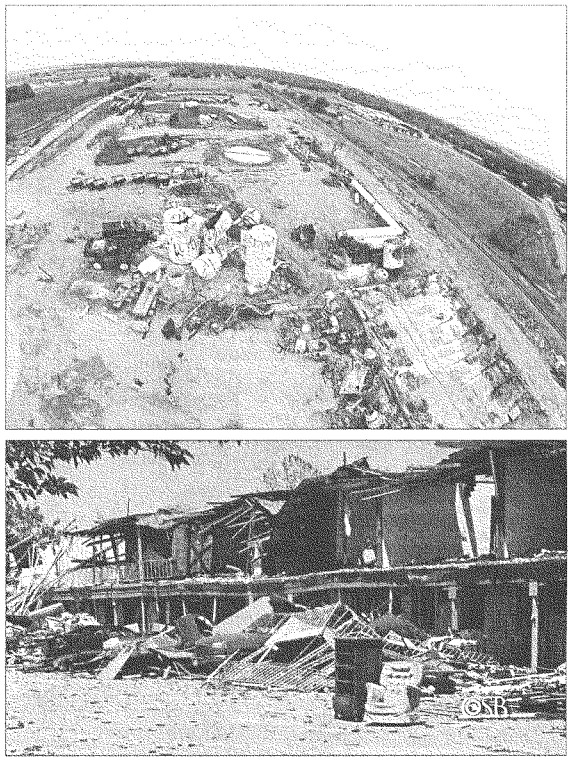
Reviewing and approving facilities' site security plans. DHS is to review security plans and visit facilities to ensure their security measures meet DHS standards. In April 2013, GAO reported a 7 to 9 year backlog for these reviews and visits. In July 2015, GAO reported that DHS had made substantial progress in addressing the backlog—estimating that it could take between 9 and 12 months for DHS to review and approve security plans for the approximately 900 remaining facilities. DHS has since taken additional action to expedite these activities and has eliminated this backlog.

Inspecting facilities and ensuring compliance. In July 2015, GAO reported that DHS conducted compliance inspections at 83 of the 1,727 facilities with approved security plans. GAO found that nearly half of the inspected facilities were not fully compliant with their approved security plans and that DHS did not have documented procedures for managing facilities' compliance. GAO recommended that DHS document procedures for managing compliance. As a result, DHS has developed an enforcement procedure and a draft compliance inspection procedure and expects to finalize the compliance inspection procedure by the end of fiscal year 2018.

Chairman Shimkus, Ranking Member Tonko, and Members of the Subcommittee:

Thank you for the opportunity to discuss our past work on the Department of Homeland Security's (DHS) efforts to manage its Chemical Facility Anti-Terrorism Standards (CFATS) program. Thousands of facilities that produce, use, or store hazardous chemicals could be of particular interest to terrorists who are intent on using toxic chemicals to inflict mass casualties in the United States. These chemicals could be released from a facility to cause harm to surrounding populations; they could be stolen and used as chemical weapons or as their precursors (the ingredients for making chemical weapons); or they could be stolen and used to build an improvised explosive device. Past incidents remind us of the danger that these chemicals pose, including the 2013 ammonium nitrate explosion at a fertilizer storage and distribution facility in West, Texas, which killed at least 14 people and damaged or destroyed at least 200 homes, and the 1995 domestic terrorist attack on the federal building in Oklahoma City, Oklahoma, where 168 people were killed using ammonium nitrate fertilizer mixed with fuel oil.

Figure 1: Photographs of Damage from the Explosion in West, Texas in April 2013



Source: Chemical Safety Board. | GAO-18-613T

The Department of Homeland Security Appropriations Act, 2007, required DHS to issue regulations to establish risk-based performance standards (performance standards) for securing high-risk chemical facilities.[1] DHS subsequently established the CFATS program in 2007 to, among other things, identify high-risk chemical facilities and assess the risk posed by them; place facilities considered to be high risk into one of four risk-based tiers (with tier 1 being the highest risk tier and 4 being the lowest); assess facility security; approve security plans prepared by facilities; and inspect facilities to ensure compliance with regulatory requirements.[2] DHS's CFATS rule established 18 performance standards that identify the areas for which a facility's security posture are to be examined, such as perimeter security, access control, and cyber security.[3] To meet these standards, facilities are free to choose whatever security programs or processes they deem appropriate so long as DHS determines that the facilities achieve the requisite level of performance in each of the applicable areas. The Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014 (CFATS Act of 2014) enacted in December 2014, in effect, reauthorized the CFATS program for an additional 4 years, while also imposing additional implementation requirements on DHS for the program.[4] DHS's National Protection and Programs Directorate's Infrastructure Security Compliance Division manages the CFATS program. According to DHS, the Department received approximately $911 million for the CFATS program for the period beginning fiscal year 2007 through fiscal year 2018.

My testimony today summarizes our past work examining DHS's management of the CFATS program, and provides updates on actions DHS has taken to address our prior recommendations.[5] This testimony is

[1]Pub. L. No. 109-295, § 550, 120 Stat.1335, 1388-89 (2006).

[2]See 72 Fed. Reg. 17,792 (Apr. 9, 2007) (codified as amended at 6 C.F.R. pt. 27).

[3]DHS has enumerated 18 risk-based performance standards that covered chemical facilities must meet to comply with CFATS. See 6 C.F.R. § 27.230.

[4]See Pub. L. No. 113-254, 128 Stat. 2898 (2014); 6 U.S.C. §§ 621-629. The Act amended the Homeland Security Act of 2002, Pub. L. No. 107-296, 116 Stat. 2135 (2002), as amended, by adding Title XXI—Chemical Facility Anti-Terrorism Standards—and expressly repealing the program's authority under the fiscal year 2007 DHS appropriations act.

[5]We are currently reviewing the CFATS program at the request of the Chairmen and Ranking Members of the Senate Committee on Homeland Security and Governmental Affairs and the House Committee on Homeland Security. We intend to issue a report based on that work later this summer.

based on our reports issued from July 2012 through June 2017.[6] For these reports, we reviewed applicable laws and regulations, DHS policies and procedures, DHS data on tiered facilities, information on the approach DHS used to determine a facility's risk and process for reviewing security plans. We also interviewed DHS officials about facility tiering, how DHS assesses risk, and how it processes security plans. Additional details on the scope and methodology are available in our published reports. In addition, this statement contains updates as of June 2018 from DHS on actions it has taken to address the recommendations made in our prior reports. The work upon which this statement is based was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[6]GAO, *Critical Infrastructure Protection: DHS Is Taking Action to Better Manage Its Chemical Security Program, but It Is Too Early to Assess Results*, GAO-12-515T (Washington, D.C.: July 26, 2012); *Critical Infrastructure Protection: DHS Efforts to Assess Chemical Security Risk and Gather Feedback on Facility Outreach Can Be Strengthened*, GAO-13-353 (Washington, D.C.: Apr. 5, 2013); *Critical Infrastructure Protection: DHS Efforts to Identify, Prioritize, Assess, and Inspect Chemical Facilities*, GAO-14-365T (Washington, D.C.: Feb. 27, 2014); *Critical Infrastructure Protection: Observations on DHS Efforts to Implement and Manage Its Chemical Security Program*, GAO-14-608T (Washington, D.C.: May 14, 2014); *Critical Infrastructure Protection: DHS Action Needed to Verify Some Chemical Facility Information and Manage Compliance Process*, GAO-15-614 (Washington, D.C., July 22, 2015); *Critical Infrastructure Protection: Improvements Needed for DHS's Chemical Facility Whistleblower Report Process*, GAO-16-572, (Washington, D.C.: Jul 12, 2016); and *Critical Infrastructure Protection: DHS Has Implemented Its Chemical Security Expedited Approval Program and Participation To Date Has Been Limited*, GAO-17-502 (Washington, D.C.: June 29, 2017).

DHS Has Made Progress Addressing Past Challenges, But Some Actions are Still In Progress

Our past work has identified progress and challenges in a number of areas related to DHS's management of the CFATS program including (1) the process for identifying high risk chemical facilities; (2) how it assesses risk and prioritizes facilities; (3) reviewing and approving facility security plans; (4) how it conducts facility compliance inspections; and (5) efforts to conduct stakeholder outreach and gather feedback. DHS has made a number of programmatic changes to CFATS in recent years that may also impact its progress in addressing our open recommendations; these changes are included as part of our ongoing review of the program.

Identifying High-Risk Chemical Facilities

In May 2014, we found that more than 1,300 facilities had reported having ammonium nitrate to DHS. However, based on our review of state data and records, there were more facilities with ammonium nitrate holdings than those that had reported to DHS under the CFATS program.[7] Thus, we concluded that some facilities that were required to report may have failed to do so.[8] We recommended that DHS work with other agencies, including the Environmental Protection Agency (EPA), to develop and implement methods of improving data sharing among agencies and with states as members of a Chemical Facility Safety and Security Working

[7]GAO, *Chemical Safety: Actions Needed to Improve Federal Oversight of Facilities with Ammonium Nitrate*, GAO-14-274 (Washington, D.C.: May 19, 2014). We reviewed Emergency Planning and Community Right-to-Know Act of 1986 data from Texas and Alabama, which have different reporting criteria than CFATS. Under section 312 of the Act and Environmental Protection Agency's regulations, facilities with 10,000 pounds or more of ammonium nitrate generally must submit an annual chemical inventory report to their designated state and local authorities. 42 U.S.C. § 11022, 40 C.F.R. § 370.10(a)(2)(i).

[8]Consistent with law and regulation, certain facilities—including, in general, facilities regulated under the Maritime Transportation Security Act of 2002 (Public Law 107-295, 116 Stat. 2064), public water systems or wastewater treatment facilities, facilities owned and operated by the Department of Defense or the Department of Energy, and facilities subject to regulation by the Nuclear Regulatory Commission or in accordance with the Atomic Energy Act of 1954—are not subject to regulation under CFATS and are referred to as excluded facilities. See 6 U.S.C. § 621(4); 6 C.F.R. § 27.110(b). In addition, pursuant to its authority under 6 C.F.R. § 27.210(c), DHS has extended the deadline for submitting CFATS reports until further notice for certain agricultural production facilities, such as farms, ranches, turfgrass growers, golf courses, nurseries, and public and private parks. See Notice to Agricultural Facilities About Requirement To Complete DHS' Chemical Security Assessment Tool, 73 Fed. Reg. 1640 (Jan. 9, 2008).

Group.[9] DHS agreed with our recommendation and has since addressed it. Specifically, DHS compared DHS data with data from other federal agencies, such as EPA, as well as member states from the Chemical Facility Safety and Security Working Group to identify potentially noncompliant facilities. As a result of this effort, in July 2015, DHS officials reported that they had identified about 1,000 additional facilities that should have reported information to comply with CFATS and subsequently contacted these facilities to ensure compliance. DHS officials told us that they continue to engage with states to identify potentially non-compliant facilities. For example, as of June 2018, DHS officials stated they have received 43 lists of potentially noncompliant facilities from 34 state governments, which are in various stages of review by DHS. DHS officials also told us that they recently hired an individual to serve as the lead staff member responsible for overseeing this effort.

DHS has also taken action to strengthen the accuracy of data it uses to identify high risk facilities. In July 2015, we found that DHS used self-reported and unverified data to determine the risk categorization for facilities that held toxic chemicals that could threaten surrounding communities if released.[10] At the time, DHS required that facilities self-report the Distance of Concern—an area in which exposure to a toxic chemical cloud could cause serious injury or fatalities from short-term exposure—as part of its Top-Screen.[11] We estimated that more than 2,700 facilities with a toxic release threat had misreported the Distance of Concern and therefore recommended that DHS (1) develop a plan to implement a new Top-Screen to address errors in the Distance of Concern submitted by facilities, and (2) identify potentially miscategorized

[9]Executive Order 13650–*Improving Chemical Facility Safety and Security* established a Chemical Facility Safety and Security Working Group, composed of representatives from DHS; EPA; and the Departments of Justice, Agriculture, Labor, and Transportation, and directed the working group to identify ways to improve coordination with state and local partners; enhance federal agency coordination and information sharing; modernize policies, regulations and standards; and work with stakeholders to identify best practices. See Exec. Order No. 13,650 (Aug. 1, 2013), 78 Fed. Reg. 48,029 (Aug. 7, 2013).

[10]GAO-15-614.

[11]Any chemical facility that possesses any of the 322 chemicals in the quantities that meet or exceed the threshold quantity or concentration outlined in Appendix A to the DHS CFATS rule is required to complete the Chemical Security Assessment Tool (CSAT) Top Screen—which is the initial screening tool or document whereby the facility is to provide DHS various data, including the name and location of the facility and the chemicals and their quantities at the site. See 6 C.F.R. § 27.200(b); see also 72 Fed. Reg. 65,396 (Nov. 20, 2007) (codified at 6 C.F.R. pt. 27, App. A).

facilities that could cause the greatest harm and verify that the Distance of Concern of these facilities report is accurate.[12] DHS has fully addressed both of these recommendations. Specifically, DHS implemented an updated Top-Screen in October 2016 and now collects data from facilities and calculates the Distance of Concern itself, rather than relying on the facilities' calculation. In response to our second recommendation, in November 2016, DHS officials stated they completed an assessment of all Top-Screens that reported threshold quantities of toxic release chemicals of interest and identified 158 facilities with the potential to cause the greatest harm. As of May 2017, according to ISCD officials, 156 of the 158 facilities submitted updated Top-Screens and 145 of the 156 Top-Screens had undergone a quality assurance review process.

Assessing Risk and Prioritizing Facilities

DHS has also taken actions to better assess regulated facilities' risks in order to place the facilities into the appropriate risk tier. In April 2013, we reported that DHS's risk assessment approach did not consider all of the elements of threat, vulnerability, and consequence associated with a terrorist attack involving certain chemicals. Our work showed that DHS's risk assessment was based primarily on consequences from human casualties, but did not consider economic consequences, as called for by the National Infrastructure Protection Plan (NIPP) and the CFATS regulation. We also found that (1) DHS's approach was not consistent with the NIPP because it treated every facility as equally vulnerable to a terrorist attack regardless of location or on-site security and (2) DHS was not using threat data for 90 percent of the tiered facilities—those tiered for the risk of theft or diversion—and using 5-year-old threat data for the remaining 10 percent of those facilities that were tiered for the risks of release or sabotage.[13] We recommended that DHS enhance its risk assessment approach to incorporate all elements of risk and conduct a

[12]We recalculated the Distance of Concern for a generalizable sample of facilities—a simple random sample of 475 facilities from the population of 36,811 facilities that submitted Top-Screens since the inception of the CFATS program in 2007 through January 2, 2015—and compared these results to what facilities reported in their Top-Screen submission. Based upon this sample, we estimated that 4,173 facilities with a toxic release chemical misreported the Distance of Concern, with an associated 95 percent confidence interval of 2,798 to 5,822 facilities.

[13]For theft or diversion, DHS's model assumes that a terrorist will steal or have the chemical of interest diverted to him or herself and then estimates the risk of a terrorist attack using the chemical of interest in a way that causes the most harm at an unspecified off-site location.

peer review after doing so. DHS agreed with our recommendations and has made progress towards addressing them.

Specifically, with regard to our recommendation that DHS enhance its risk assessment approach to incorporate all elements of risk, DHS worked with Sandia National Laboratories to develop a model to estimate the economic consequences of a chemical attack. In addition, DHS worked with Oak Ridge National Laboratory to devise a new tiering methodology, called the Second Generation Risk Engine. In so doing, DHS revised the CFATS threat, vulnerability, and consequence scoring methods to better cover the range of CFATS security issues. Additionally, with regard to our recommendation that DHS conduct a peer review after enhancing its risk assessment approach, DHS conducted peer reviews and technical reviews with government organizations and facility owners and operators, and worked with Sandia National Laboratories to verify and validate the new tiering approach. We are currently reviewing the reports and data that DHS has provided about its new tiering methodology as part of our ongoing work and will report on the results of this work later this summer.

To further enhance its risk assessment approach, in fall 2016, DHS also revised its Chemical Security Assessment Tool (CSAT), which supports DHS efforts to gather information from facilities to assess their risk. According to DHS officials, the new tool—called CSAT 2.0—is intended to eliminate duplication and confusion associated with DHS's original CSAT. DHS officials told us that they have improved the tool by revising some questions in the original CSAT to make them easier to understand; eliminating some questions; and pre-populating data from one part of the tool to another so that users do not have to retype the same information multiple times. DHS officials also told us that the facilities that have used the CSAT 2.0 have provided favorable feedback that the new tool is more efficient and less burdensome than the original CSAT. Finally, DHS officials told us that as of June 2018, DHS has completed all notifications and has processed tiering results for all but 226 facilities. DHS officials stated they are currently working to identify correct points of contact to update registration information for these remaining facilities. We are currently assessing DHS's efforts to assess risk and prioritize facilities as part of our ongoing work and will report on the results of this work in our report later this summer.

Reviewing and Approving Facility Site Security Plans

DHS has also made progress reviewing and approving facility site security plans by reducing the time it takes to review these plans and eliminating the backlog of plans awaiting review. In April 2013, we

reported that DHS revised its procedures for reviewing facilities' security plans to address DHS managers' concerns that the original process was slow, overly complicated, and caused bottlenecks in approving plans.[14] We estimated that it could take DHS another 7 to 9 years to review the approximately 3,120 plans in its queue at that time. We also estimated that, given the additional time needed to do compliance inspections, the CFATS program would likely be implemented in 8 to 10 years. We did not make any recommendations for DHS to improve its procedures for reviewing facilities' security plans because DHS officials reported that they were exploring ways to expedite the process, such as reprioritizing resources and streamlining inspection requirements. In July 2015, we reported that DHS had made substantial progress in addressing the backlog—estimating that it could take between 9 and 12 months for DHS to review and approve security plans for the approximately 900 remaining facilities.[15] DHS officials attributed the increased approval rate to efficiencies in DHS's review process, updated guidance, and a new case management system. Subsequently, DHS reported in its December 2016 semi-annual report to Congress that it had eliminated its approval backlog.[16]

Finally, we found in our 2017review that DHS also took action to implement an Expedited Approval Program (EAP).[17] The CFATS Act of 2014 required that DHS create the EAP as another option that tier 3 and tier 4 chemical facilities may use to develop and submit security plans to

[14]See GAO-13-353. A November 2011, internal ISCD memorandum, prepared by ISCD's former Director in consultation with the former Deputy Director and designated by DHS as "for official use only" (FOUO), expressed concerns about the management of the CFATS program. The ISCD memorandum, which was leaked to the media in December 2011, cited an array of challenges that, according to these officials, hindered ISCD's ability to implement and manage the CFATS program.

[15]GAO-15-614.

[16]Department of Homeland Security, National Protection and Programs Directorate, *Implementation Status of the Chemical Facility Anti-Terrorism Standards: Second Semiannual, Fiscal Year 2016 Report to Congress* (Washington, D.C.: December 9, 2016).

[17]GAO-17-502.

DHS.[18] Under the program, facilities may develop a security plan based on specific standards published by DHS (as opposed to the more flexible performance standards using the standard, non-expedited process). DHS issued guidance intended to help facilities prepare and submit their EAP security plans to DHS, which includes an example that identifies prescriptive security measures that facilities are to have in place. According to committee report language, the EAP was expected to reduce the regulatory burden on smaller chemical companies, which may lack the compliance infrastructure and the resources of large chemical facilities, and help DHS to process security plans more quickly.[19] If a tier 3 or 4 facility chooses to use the expedited option, DHS is to review the plan to determine if it is facially deficient, pursuant to the reporting requirements of the CFATS Act of 2014.[20] If DHS approves the EAP site security plan, it is to subsequently conduct a compliance inspection.

In 2017, we found that DHS had implemented the EAP and had reported to Congress on the program, as required by the CFATS Act of 2014.[21] In addition, as of June 2018 according to DHS officials, only 18 of the 3,152 facilities eligible to use the EAP opted to use it. DHS officials we interviewed attributed the low participation to several possible factors including:

[18]See 6 U.S.C. § 622(c)(4). Under the CFATS rule, once a facility is assigned a final tier, it is to submit a site security plan or participate in an alternative security program in lieu of a site security plan. An alternative security program is a third-party or industry organization program, a local authority, state, or federal government program, or any element or aspect thereof that DHS determines meets the requirements of the regulation and provides an equivalent level of security to that established by the regulation. See 6 C.F.R. § 27.105.

[19]S. Rep. No. 113-263, at 9-10 (Sept. 18, 2014).

[20]A facially deficient site security plan is defined as a security plan that does not support a certification that the security measures in the plan address the security vulnerability assessment and risk-based performance standards, based on a review of the facility's site security plan, the facility's Top-Screen, the facility's security vulnerability assessment, or any other information that the facility submits to ISCD or ISCD obtains from a public source or other source. 6 U.S.C. § 621(7). Specifically, ISCD determines that an EAP site security plan is deficient if it: does not include existing or planned measures which satisfy applicable Risk Based Performance Standard; materially deviates from at least one EAP security measure without adequately explaining that the facility has a comparable security measure; and/or contains a misrepresentation, omission, or inaccurate description of at least one EAP security measure. A facility is to implement any planned security measures within 12 months of the EAP site security plan's approval because ISCD has determined that it is unlikely that all required security measures will be in place when a facility submits its plan to ISCD.

[21]GAO-17-502.

- DHS had implemented the expedited program after most eligible facilities already submitted standard (non-expedited) security plans to DHS;
- facilities may consider the expedited program's security measures to be too strict and prescriptive, not providing facilities the flexibility of the standard process; and
- the lack of an authorization inspection may discourage some facilities from using the expedited program because this inspection provides useful information about a facility's security.[22]

We also found in 2017 that recent changes made to the CFATS program could affect the future use of the expedited program.[23] As discussed previously, DHS has revised its methodology for determining the level of each facility's security risk, which could affect a facility's eligibility to participate in the EAP. DHS continues to apply the revised methodology to facilities regulated under the CFATS program and but it is too early to assess the impact on participation in the EAP.

Inspecting Facilities and Ensuring Consistent Compliance

In our July 2015 report, we found that DHS began conducting compliance inspections in September 2013, and by April 2015, had conducted inspections of 83 of the 1,727 facilities that had approved security plans.[24] Our analysis showed that nearly half of the facilities were not fully compliant with their approved site security plans and that DHS had not used its authority to issue penalties because DHS officials found it more productive to work with facilities to bring them in compliance. We also found that DHS did not have documented processes and procedures for managing the compliance of facilities that had not implemented planned measures by the deadlines outlined in the plans. We recommended that DHS document processes and procedures for managing compliance to provide more reasonable assurance that facilities implement planned measures and address security gaps. DHS agreed and has taken steps toward implementing this recommendation. DHS updated its CFATS Enforcement Standard Operating Procedure (SOP) and has made progress on the new CFATS Inspections SOP. Once completed these

[22]An authorization inspection consists of an initial, physical review of the facility to determine if the Top-Screen, security vulnerability assessment, and site security plan accurately represent and address the risks for the facility

[23]GAO-17-502.

[24]GAO-15-614.

two documents collectively are expected to formally document the processes and procedures currently being used to track noncompliant facilities and ensure they implement planned measures as outlined in their approved site security plans, according to ISCD officials. DHS officials stated they expect to finalize these procedures by the end of fiscal year 2018. We are examining compliance inspections as part of our ongoing work and will report on the results of our work in our report later this summer.

Stakeholder Outreach and Feedback

In April 2013, we reported that DHS took various actions to work with facility owners and operators, including increasing the number of visits to facilities to discuss enhancing security plans, but that some trade associations had mixed views on the effectiveness of DHS's outreach.[25] We found that DHS solicited informal feedback from facility owners and operators in its efforts to communicate and work with them, but did not have an approach for obtaining systematic feedback on its outreach activities. We recommended that DHS take action to solicit and document feedback on facility outreach consistent with DHS efforts to develop a strategic communication plan. DHS agreed and implemented this recommendation by developing a questionnaire to solicit feedback on outreach with industry stakeholders and began using the questionnaire in October 2016.

Chairman Shimkus, Ranking Member Tonko, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

GAO Contact and Staff Acknowledgements

If you or your staff members have any questions about this testimony, please contact me at (404) 679-1875 or curriec@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Other individuals making key contributions to this work include John Mortin, Assistant Director; and Brandon Jones, Analyst-in-Charge; Michael Lennington, Ben Emmel, and Hugh Paquette.

[25]GAO-13-353.

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Mr. MCKINLEY. Thank you, Mr. Currie.

And now the chair recognizes Mr. Brown for his 5 minutes.

STATEMENT OF DOUG BROWN

Mr. BROWN. Good morning, Vice Chairman McKinley, and Ranking Member Tonko, and members of the subcommittee.

My name is Doug Brown and I am President and CEO of Brown Chemical, a chemical distributor based in Oakland, New Jersey. I am also the current chairman of the National Association of Chemical Distributors—NACD.

I thank you for holding this important hearing today on the Chemical Facility Anti-Terrorism Standards program and I am pleased to provide testimony.

Brown Chemical was founded in 1936. It is a fourth generation family-owned and operated business with 14 employees. We operate facilities in Oakland and Patterson, New Jersey.

Brown Chemical direct sells, distributes, or packages over 350 products to approximately 400 customers in 41 states. We've been practising NACD's responsible distribution since its inception in 1991 when it became mandatory for all association members.

This comprehensive program addresses environmental, health, safety, and security risks. Members companies are third-party verified to ensure the highest quality of performance in these areas.

While security has always been an inherent element of responsible distribution, after the September 11 terrorist attacks NACD specifically added security elements to the program and the association continues to enhance these requirements.

In 2013, NACD added a specific security code to responsible distribution and consolidated many prior requirements and improved others.

Brown Chemical supports a long-term reauthorization of CFATS. I believe the CFATS program has made the chemical industry in our nation more secure.

Since the program's establishment in 2007, the industry has invested significant capital and training resources for its enhanced security measures at our facilities.

While these investments did not help grow my business, they nonetheless ensured the security of my company, our employees, and the community.

It is undeniable there were growing pains in the first few years of CFATS. The Department of Homeland Security has worked hard to address these issues and has made substantial improvements to run the program more efficiently.

One reason for the success of the CFATS program is the fact that DHS has taken the time to truly learn about the diversity of the chemical industry and work with companies on security measures that meet the CFATS risk-based performance standards.

DHS has taken a collaborative common sense approach in implementing the program while providing flexibility to each unique chemical facility in doing so.

The clear objective of the CFATS program is to help facilities be more secure while not taking a punitive approach. DHS has excelled in outreach to the industry in three key ways: by publishing

numerous fact sheets and lessons learned documents, by interacting with facility owners and operators during the chemical sector security summits and other industry meetings, and always making inspectors and headquarters personnel available to talk through issues and answer questions.

The 2014 reauthorization of the CFATS program, which, for the first time provided CFATS a multi-year authorization, further enhanced security efforts by providing regulatory certainty to both industry and DHS.

This stability allowed DHS to increase efficiencies in the program while streamlining the information submission process for regulated facilities.

I believe the CFATS program is strong and needs minimal change. One priority I can recommend is to require that any changes to the Appendix A chemicals of interest list remain subject to notice and comment rulemaking.

Changes to the COI list could have major impacts on my business operations and security investments. Changes may be needed upon discovery of new threat information. But it is important for regulated companies like mine to be able to provide information to DHS and explain the impacts of any proposed changes.

I also support the creation of a program under which DHS would recognize companies that meet certain criteria such as participation and an environmental health, safety, and security program like responsible distribution.

By acknowledging responsible distributors through measures like less frequent inspections, DHS would then be able to prioritize resources on the noncompliant outliers that may pose a greater security risk.

Brown Chemical supports the CFATS program and looks forward to working with the subcommittee on legislation to reauthorize this important regulation. A multi-year reauthorization of CFATS will provide the certainty needed to enhance the security of my chemical facilities and our nation.

On behalf of Brown Chemical, I appreciate this opportunity to present our views on this important issue and I look forward to your questions.

[The prepared statement of Mr. Brown follows:]

PO Box 440
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Testimony of Douglas A. Brown
President and Chief Executive Officer
Brown Chemical Company, Inc.

before the

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

on

The Chemical Facility Anti-Terrorism Standards

June 14, 2018

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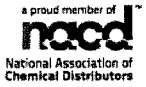

Good Morning, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee. My name is Doug Brown, and I am president and CEO of Brown Chemical Company, Inc., a chemical distribution company based in Oakland, New Jersey. I am also the current chairman of the National Association of Chemical Distributors (NACD). I am pleased to provide testimony today on the Chemical Facility Anti-Terrorism Standards (CFATS) program.

About Brown Chemical

Brown Chemical was founded in 1936 in Paterson, New Jersey, and is a fourth-generation family-owned and operated chemical distribution company. Brown Chemical is a regional distributor, with 14 employees. Our corporate headquarters is in Oakland, New Jersey and includes general warehouse space of 46,000 square feet. We also operate a facility in Paterson, New Jersey, which houses bulk storage tanks of approximately 80,000 gallons and multiple packaging lines. Brown direct-sells, distributes or packages over 350 products to approximately 400 customers in 41 states.

Brown Chemical is a member of NACD, an international association of nearly 440 chemical distributors and their supply-chain partners. While chemical distribution is big business, NACD members are predominantly small regional companies, many of which are multi-generational, and family owned like Brown Chemical.

NACD Responsible Distribution®

As background, all NACD members, including Brown Chemical, must implement policies and procedures to meet the highest standards in safety and performance through mandatory participation in NACD Responsible Distribution®, the association's third-party-verified environmental, health, safety, and security program. Through Responsible Distribution, NACD members demonstrate their commitment to continuous performance improvement in every phase of chemical storage, handling, transportation, and disposal operations.

While security has always been an inherent element of Responsible Distribution, following the terrorist attacks of September 11, 2001, distributors were the first sector of the chemical industry to mandate security measures for its members. NACD continues to assess Responsible Distribution's security measures against current threats. In 2013, NACD added a specific Security Code to Responsible Distribution that consolidated many prior requirements and enhanced others. These requirements apply to all NACD members, including those who do not

have facilities subject to the CFATS regulations. Over the past 16 years, NACD members – both CFATS-regulated and non-CFATS-regulated companies – have made substantial investments to make their facilities more secure.

Brown Chemical Supports Long-Term Reauthorization of CFATS

Brown Chemical supports a long-term reauthorization of CFATS. I believe the CFATS program has made the chemical industry and our nation much more secure. Since the program's establishment in 2007, the industry has invested significant capital and training resources towards enhanced or augmented security measures at our facilities. While these resources did not necessarily assist in growing business, they were nonetheless important to ensure the security of my company, employees, and community.

A Collaborative Approach Has Led to Success

From the beginning, the Department of Homeland Security (DHS) has taken a collaborative, commonsense approach in implementing the CFATS regulations. Despite being dependent on temporary appropriations measures during the first seven years of the program, the agency did a commendable job in writing the regulations and setting up the internal infrastructure to be able to implement and enforce the new standards. It is undeniable there were growing pains in the first few years of CFATS. By listening to and learning about industry, DHS was able to use this information to make improvements to run the program more efficiently.

One reason for the success of the CFATS program is the fact that DHS has taken the time to truly learn about the diversity of the chemical industry and work with companies on security measures that meet the CFATS Risk Based Performance Standards while providing flexibility to each unique chemical facility in doing so. DHS has excelled in outreach to the industry by publishing numerous fact sheets and "lessons learned" documents; interacting with facility owners and operators during the Chemical Sector Security Summits and other industry meetings; and always making inspectors and headquarters personnel available to talk through issues and answer questions.

In addition, DHS worked with NACD and the American Chemistry Council (ACC) to develop a CFATS Alternative Security Program (ASP) Guidance Document and Template to enhance the process for submitting site security plans. The ASP provides DHS with an alternate format to gain clarity about regulated facilities' security measures and how they meet or exceed CFATS

requirements, while simplifying the compliance process and giving facility owners and operators a comprehensive security document to follow. Our firm has not utilized the ASP format, but I am aware of several firms in our trade association that have and have had good experiences in doing so.

The Diverse World of Chemical Facilities - Ensuring Different Industries Are Aware of CFATS Obligations

Following the tragic 2013 West Fertilizer fire and explosion, DHS doubled down on efforts to reach "outliers," those facilities that may not be aware of their obligations to inform the agency about their possession of chemicals of interest (COI) by filing Top Screens. Because chemical distributors sell COI to so many diverse industries, NACD agreed to assist DHS with this effort by sharing CFATS information with these customers through distribution of a special flyer to voluntarily inform members' customers about CFATS.

Regulatory Certainty Needed for Efficiency

The "Protecting and Securing Chemical Facilities from Terrorist Attacks Act" of 2014 (P.L. 113-254), which for the first time provided CFATS a multi-year authorization, further enhanced security efforts by providing regulatory certainty to both industry and DHS. This stability allowed DHS to increase efficiencies in the program while streamlining the information submission process for regulated facilities.

For example, in 2016, DHS rolled out an enhanced risk tiering methodology to identify more accurately high-risk facilities and assign them to appropriate risk tiers. DHS notified all facilities with threshold quantities of CFATS chemicals of interest that they must submit new Top Screen surveys to the agency. At the same time, the agency launched version 2.0 of the Chemical Security Assessment Tool (CSAT 2.0), the online portal facilities use to submit Top Screens, Security Vulnerability Assessments, and Site Security Plans/ASPs. My experience has been that CSAT 2.0, which allows facilities to submit their information and DHS to analyze the material more easily, is much more streamlined and user friendly than the prior version. DHS completed the re-tiering process in a timely and efficient manner and is now conducting authorization inspections and compliance inspections of facilities assigned to different tiers as well as newly regulated facilities.

CFATS Going Forward

I believe the CFATS program is strong and needs minimal change other than a multi-year reauthorization. One priority I can recommend is to make sure any changes to the Appendix A list of chemicals remain subject to notice and comment rulemaking. Changes to the COI list could have major impacts on many companies' businesses and security investments. While changes may be needed upon discovery of new threat information, it remains important to give the regulated community the opportunity to provide information to the DHS and explain the impacts of any proposed changes.

I would also support the creation of a program under which DHS would recognize companies that meet certain criteria such as participation in an environmental, health, safety, and security program such as Responsible Distribution. NACD members have made a strong commitment to operate their facilities safely and securely. Recognizing such responsible companies through measures such as less frequent inspections would allow DHS to prioritize resources to concentrate on the "outliers" or bad actors that may pose a greater security risk to themselves or the population at large.

Conclusion

Brown Chemical supports the CFATS program and looks forward to working with the subcommittee on legislation to reauthorize this important security regulation in the coming weeks and months. A multi-year reauthorization of CFATS would provide needed certainty and enhance the security of chemical facilities and our nation.

On behalf of Brown Chemical, I appreciate this opportunity to present our views on this important issue. I look forward to your questions.

Mr. MCKINLEY. Thank you, Mr. Brown.

And then next on the panel, Mr. Wilson with BlueGreen Alliance—your opening statement, please.

STATEMENT OF MIKE WILSON

Mr. WILSON. Thank you, Mr. Chairman, Ranking Member Tonko, and distinguished members.

My name is Michael Wilson. I am the National Director for Occupational and Environmental Health at the BlueGreen Alliance.

On behalf of our organization, our national labor and environmental partners, and the millions of members and supporters they represent, I want to thank you for convening the hearing today and for your interest in chemical safety and security.

I am familiar with the risks of industrial hazards because I had the privilege of working for 13 years as a professional firefighter, paramedic, and EMT, during which time I responded to about 10,000 emergency calls.

I worked in a city with heavy industry centered around agriculture, so there were many facilities that used chlorine and ammonia and other agricultural chemicals. Responding to an incident at one of these facilities meant grappling with a lot of uncertainty because the facilities weren't required to invite us in and involve us in planning or training for an emergency.

In general, I would say they relied on us if they had an emergency but they were reluctant to help us improve the safety and effectiveness of our response. Without a doubt, emergency response is a necessary aspect of chemical safety and security. But it's an indicator of a failure. It's a measure of last resort where thoughtful planning and prevention have broken down.

EPA reported this year that most serious chemical accidents are preventable if the necessary precautions and actions are taken and yet serious industrial chemical accidents continue to occur every 2 ½ days across our nation.

Last year, EPA estimated that about 177 million Americans live close enough to an industrial facility to be affected by a chemical accident and that these risks fall disproportionately on low-income and minority communities.

CFATS responds to this problem by requiring companies to surround dangerous chemicals with security measures and yet, as many experts have noted, these measures require continual updating to thwart the efforts of a motivated actor. Perhaps it is in response to this challenge with security measures that thousands of facilities seem to be shifting to prevention strategies.

DHS noted last year that companies reported taking action to prevent risks on about 250 dangerous chemicals by replacing those chemicals with safer ones, reducing the quantities held on site, or switching to less concentrated formulations.

If DHS is confident in the veracity of these claims, these actions do more than manage risks. They actually reduce the risk footprint, and in this way they provide protection not only from an intentional attack but also from an extreme weather event, earthquake, power outage, or mechanical failure risks that we've heard from several members today.

On the other hand, there are about 3,400 facilities that have remained in the CFATS high-risk tier and which pose a substantial risk to workers and communities.

Changes to the CFATS program are needed to reward the leaders and move the laggards up. CFATS could be strengthened with updated requirements in four areas: one, risk management; two, risk prevention; three, meaningful participation by rank and file worker representatives; and four, emergency response.

The State of California, the third largest refining state in the country, adopted these approaches last year in a sweeping new refinery safety regulation, which was motivated by a large flammable vapor explosion at the Richmond Chevron refinery. That incident created a 100 square meter vapor cloud that ignited and endangered the lives of 19 workers and caused some 15,000 people downwind of the plant to seek medical attention.

California's comprehensive new regulation is informed by the industry's own best engineering and management practices developed over the last 20 years and largely shifts from a risk management to risk prevention framework. While California is improving the safety of refineries in communities, however, U.S. EPA is proposing to substantially weaken the Federal chemical disaster rule by rolling back most of its key provisions, including all 10 of its prevention requirements.

These changes will endanger the lives of my former co-workers in the U.S. Fire Service. They will endanger workers and millions of community members and their families who live around our nation's chemical facilities. The chemical disaster rule should be retained in its original form, not weakened or delayed, as the administration has proposed.

We can and must prevent chemical accidents. I urge you to use the reauthorization of CFATS as an opportunity to strengthen the program. The results would be fewer explosions, fewer injuries and deaths, and a far more resilient industrial infrastructure.

In closing, I would like to thank you again for this hearing and for granting me the opportunity to appear, and I will be happy to answer any questions.

Thank you.

[The prepared statement of Mr. Wilson follows:]

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

TESTIMONY

Michael P. Wilson, Ph.D., MPH
National Director for Occupational and Environmental Health
BlueGreen Alliance
Before the 115th United States Congress, House Committee on Energy and Commerce, Subcommittee on Environment
The Chemical Facilities Anti-Terrorism Standards Program (CFATS): A Progress Report
Rayburn House Office Building, Room 2123
Thursday, June 14, 2018

Thank you Chairman Shimkus, Ranking Member Tonko, and distinguished members for inviting me here today. My name is Michael Wilson, and I am the national director for occupational and environmental health at the BlueGreen Alliance. On behalf of my organization, our national labor and environmental partners, and the millions of members and supporters they represent, I want to thank you for convening the hearing today and for your interest in chemical safety and security.

When you take action to protect against the risk of chemical releases, fires, and explosions in industrial facilities, you are making your districts safer and protecting the health of every person in your district. The BlueGreen Alliance's partners represent thousands of workers in these facilities, as well as teachers, health care workers, construction workers, scientists, and citizens in communities across the country. Each one of our coalition's members wants to come home at the end of the day and live in a safe community.

I'm familiar with hazardous industrial facilities because I worked for 13 years as a professional firefighter, paramedic, and EMT, during which time I responded to about 10,000 emergency calls.

When my engine company was dispatched for a fire or chemical release at an industrial facility, we typically had very little information about the chemicals inside the building. There was a lot of uncertainty. At one industrial fire, we were preparing to enter when an explosion occurred inside the building and a 55-gallon drum burst through the roof, landing in a nearby parking lot. Another call came in as "a worker experiencing chest pain," so we entered the facility without putting on our self-contained breathing apparatus (SCBA), only to find when we got inside that there were several very anxious workers experiencing shortness of breath and nausea from exposure to chlorine gas.

So I understand why the firefighters who responded to the April 17, 2013, report of a structure fire at the West Fertilizer Co. in West, Texas, were standing in the blast zone when a stockpile of 50 tons of fertilizer grade ammonium nitrate detonated: They didn't know it was there. There was no law that required the transmission of that information from the company managers who knew about it, to the first responders who needed to know about it. As a result, 12 first responders and 3 local residents died and 260 other people were injured.[i]

Unfortunately, this situation was exceptional, but not unique. Data from the U.S Environmental Protection Agency (EPA) show that serious industrial chemical accidents

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occur every two-and-a-half days in communities across the nation.[ii] In the 10 years leading up to the West, Texas, explosion, there were 1,500 major industrial chemical fires, explosions, or chemical releases at U.S. companies, causing more than 17,000 injuries and 58 deaths, along with $2 billion in property damage. [iii]

Millions of Americans live in the vulnerability zone of an industrial chemical release, and one in three school children attend school in such an area.[iv] African Americans, Latinos, and lower-income communities continue to be at greatest risk.[v] The U.S. Chemical Safety and Hazard Investigation Board (CSB), EPA, and the Occupational Safety and Health Administration (OSHA) have all pointed out that these are risks that we know how to reduce; they are preventable through modern engineering and management practices that the industry itself has developed and recommended. This Committee and this Congress could take action to ensure that these practices are deployed throughout our nation's chemical facilities.

The Chemical Facility Anti-Terrorism Standards (CFATS) program is one of the federal programs designed to lower industrial chemicals risks by requiring a range of chemical security measures. And there is some evidence that CFATS is working. The Department of Homeland Security (DHS) reports that thousands of high-risk facilities have chosen to meet their chemical security obligations not only through traditional security measures, but also by implementing risk reduction strategies. These have included (1) consolidating chemicals from multiple sites into one or two sites; (2) replacing a hazardous chemical with a less hazardous one; (3) reducing the total quantity of a chemical held onsite; or (4) switching to

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a less concentrated form of the chemical. Each of these actions, done right, does more than manage the risk—it actually *lowers* the risk of a deadly explosion or fire or release of a poisonous substance in the event not only of a terrorist attack, but also of an extreme weather event or earthquake, power outage, or mechanical failure. Assuming DHS is confident in the veracity of these claims, and is taking steps to validate them, I would submit to you that they represent a sound approach to meeting the industrial safety and security goals we are discussing today, and they demonstrate these types of approaches are feasible in existing industrial chemical processes.

On the other hand, there are about 3,500 other facilities that have remained in the high-risk tier and that pose a substantive risk to the safety of workers and nearby communities.[vi] Changes to the CFATS program are needed to reward and reinforce the leaders, and to require the laggards to come up to the mark.

A reauthorized and strengthened CFATS can do this in at least four ways: (1) by expanding the requirements pertaining to information, training, planning, and resource sharing with emergency responders; (2) by ensuring the rights of workers and their representatives to participate meaningfully in chemical safety and security decision making; (3) by strengthening certain risk management provisions, such as those related to emerging threats; and (4) by adding new provisions that aim to move facilities from risk management to risk reduction. The Center for Chemical Process Safety describes risk reduction strategies as those that minimize the use of hazardous chemicals, or substitute them with safer chemicals, or that simplify or modify chemical processes to make them less

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vulnerable to failure. Using cars as an analogy, risk reduction provisions require the driver to follow the vehicle's preventive maintenance schedule, rather than driving the car until the wheels fall off or the engine blows up.

This brings me to our experiences in California. In August 2012, Chevron's oil refinery in Richmond was the scene of an industrial disaster. An 8-inch-diameter pipe carrying hot fuel oil failed catastrophically, releasing a torrent of flammable vapors that quickly expanded 100 meters in all directions, and engulfed 19 refinery workers who managed to escape just moments before the vapor cloud ignited into a massive fireball. Some 15,000 people in the communities downwind of the plant sought medical attention for symptoms of exposure to the plume of smoke and toxic gases that spread over the northeastern Bay Area.[vii]

The CSB's investigation later found that the incident could have been prevented if Chevron's managers had followed the recommendations of their own engineers, who had issued at least six reports over a period of several years calling attention to the problem of sulfidation corrosion and recommending a more aggressive pipe inspection and replacement program.[viii] The engineers made these recommendations against a backdrop of catastrophic sulfidation corrosion fires, some of which caused worker fatalities, at Chevron's El Paso, Texas refinery (1988), Chevron's Pascagoula, Mississippi refinery (1988 and 1993), Chevron's Salt Lake City, Utah refinery (2002), the Richmond, Chevron refinery itself (2007), the Silver Eagle refinery in Woods Cross, Utah (2009), the Regina Saskatchewan, Canada refinery (2011), and the BP Cherry Point, Washington refinery (2012). By 2009, Chevron's engineers warned of the potential for a catastrophic failure,

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and still management chose not to act. The pipe finally failed in 2012 exactly as the engineers predicted it would, and 19 people nearly lost their lives.[ix]

I began serving as chief scientist in California's Department of Industrial Relations around this time, and we recognized that if worker representatives had been in management's pipe corrosion meetings, and if they had been given the engineer's reports to read, they would almost certainly have demanded corrective action, then and there. Workers need strong regulatory language to gain a seat at the decision-making table. Once there, they provide experience and expertise, as well as accountability and transparency—they can play a key role in mitigating poor decisions and lopsided priorities that can result behind closed doors. Provisions that allow for this in CFATS would improve its effectiveness, and the ability of facility engineers to have their views heard, and even adopted into practice.

What does the 2012 Chevron fire teach us about the need for stronger first responder provisions in CFATS? Firefighters responding from Richmond and nearby cities discovered they were not able to communicate with the refinery incident commander because the plant operated on a different radio frequency from municipal fire departments. The result was a fairly high degree of chaos and uncertainty on the scene, and it was dangerous for everyone involved. If there had been a requirement for more frequent communication and training between the Chevron refinery and local first responders, this problem would have been discovered and corrected.

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Largely in response to the Chevron fire, the State of California adopted a sweeping revision to its Process Safety Management (PSM) regulations for the state's 14 oil refineries.[x] California is the third largest refining state after Texas and Louisiana.[xi] A task force convened by the governor's office concluded that a new regulatory framework could improve refinery safety in the four areas I've noted for CFATS: emergency response, workers' rights, risk management, and risk reduction. The resulting 10,000-word regulation took five years and much consultation with industry and labor to develop, and it is now in force. We are now finding that when the best practices of an inherently hazardous industry are translated into regulation, it levels the playing field between leaders and laggards.

The principles embodied in the new California rule—and the approach we took in manifesting those principles into regulatory language—are worth investigating as a model for CFATS, especially those that pertain to risk reduction. With regard to today's hearing, California's new PSM regulation explicitly shifts the focus of chemical safety from a risk management to a risk prevention framework. It includes essential new rights of workers and their representatives to participate throughout all phases of PSM decision-making, and it includes many of the industry's own recommended best practices in the areas of human factors, the hierarchy of controls, safety culture, managing organizational change, and learning from near misses.

While California is in its first year of improving the safety of refineries and surrounding communities, the U.S. EPA is at the same time proposing to substantially weaken the

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federal Chemical Disaster Rule, by rolling back some of its most life-protecting and disaster-preventing provisions. On May 17, 2018, the EPA proposed to:

- Roll back language on training and planning coordination between emergency responders and at-risk facilities;
- Eliminate a requirement for facilities to learn from their mistakes by looking back at accidents or near-misses to assess how to prevent them in the future;
- End information sharing with local communities around hazards at the facility and emergency preparedness and evacuation procedures;
- Eliminate requirements to assure incident investigation reports are completed effectively, within twelve months;
- Eliminate requirements for worker training at certain facilities, so that supervisors and workers involved in operating processes need not have basic safety training;
- Eliminate a requirement for independent audits for serious chemical accidents; and
- Eliminate a requirement for the most dangerous subset of facilities to assess the applicability of safer technologies and practices so that if a problem occurs (whatever the cause), fewer people will be killed or injured.

The May EPA rollback proposal explicitly states that it would put low-income communities and communities of color at increased risk of chemical disasters.[xii] EPA's proposal reflects a disregard for the safety of American workers, who are hurt "first and worst" when a refinery or chemical facility owner fails to invest in modern engineering practices to prevent a fire, explosion or release, or to respond to workers' concerns about the need for maintenance or corrective action. This Congress can do the right thing and direct EPA to do

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its job. The Chemical Disaster Rule will genuinely improve public safety and national security and should be pushed forward in its original form, not weakened or delayed as the administration has proposed.

Clearly, we need to prevent chemical accidents. We need to ensure that workers, first responders, and communities have the information and resources they need to protect themselves and everyone else. We need rules based on best practices that don't allow the laggards to hold back the leaders. These are our workers, our communities, our first responders. When we know what to do to protect them, as we do in the case of chemical accidents, it is our duty to act.

Whether unintentional or due to terrorism, we have learned that a chemical fire, explosion, or release can devastate the lives of workers, families, and entire communities. Rather than follow EPA's path with the Chemical Disaster Rule, which will undoubtedly weaken our nation's protections against chemical disasters, I urge you to use the reauthorization of CFATS as an opportunity to strengthen the program and promote risk reduction. The result would be fewer explosions, fewer deaths and hospitalizations, and a far more resilient industrial infrastructure.

In closing, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee, thank you again for your important work and for granting me the opportunity to appear at today's hearing.

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TESTIMONY – SUMMARY OF MAIN POINTS

Michael P. Wilson, Ph.D., MPH
National Director for Occupational and Environmental Health
BlueGreen Alliance
Before the 115th United States Congress, House Committee on Energy and Commerce, Subcommittee on Environment
The Chemical Facilities Anti-Terrorism Standards Program (CFATS): A Progress Report
Rayburn House Office Building, Room 2123
Thursday, June 14, 2018

- Serious industrial chemical accidents occur every two-and-a-half days. Millions of Americans live in the vulnerability zone of an industrial chemical release, and one in three school children attend school in such an area. African Americans, Latinos, and lower-income communities continue to be at greatest risk.
- CFATS applies security measures to *manage* the risks of dangerous chemicals. But there is evidence that CFATS is also motivating thousands of facilities to *reduce* these risks by taking action on about 250 chemicals of interest by replacing them with safer ones; reducing their total quantity held onsite; or switching to less concentrated forms.
- There are at least 3,500 facilities that have remained in the high-risk tier and pose a substantive risk to workers and communities. Improvements to the CFATS program are needed in four areas: (1) emergency response; (2) workers rights; (3) management of emerging threats; and (4) risk reduction practices.
- U.S. EPA is simultaneously proposing to substantially weaken the federal Chemical Disaster Rule, by rolling back some of its most important provisions. The Chemical Disaster Rule should be retained in its original form, not weakened or delayed as the administration has proposed.
- We can and must prevent chemical accidents. We urge you to use the reauthorization of CFATS as an opportunity to strengthen the program. The result would be fewer explosions, fewer deaths and hospitalizations, and a far more resilient industrial infrastructure.

Mr. HARPER [presiding]. Thank you, Dr. Wilson.

The chair will now recognize Mr. Roberts for the purposes of an opening statement. You're recognized for 5 minutes.

STATEMENT OF STEVE ROBERTS

Mr. ROBERTS. Thank you. Good afternoon, Mr. Chairman, Ranking Member Tonko, and other distinguished members of the subcommittee.

As a security consultant and lawyer, I've been fortunate to participate and work in the CFATS program from the very beginning since 2007, more than 11 years ago now, and have seen during that time and have participated in dozens of refineries, chemical plants, paint and coating manufacturers, agricultural facilities, aerospace and defense—a range of CFATS facilities that Mr. Wulf spoke about earlier in this testimony.

Against this backdrop, I am pleased to offer the following comments for the committee's consideration: first, reauthorize CFATS for multiple years; second, further enhance the transparency of the risk tiering process; third, update the CFATS rulemaking process; and fourth, ensure that there is greater consistency among inspectors and the inspection process.

First, reauthorize CFATS. When the first standalone CFATS legislation was introduced 4 years ago, we find ourselves back now at the same time, as that legislation nears the end of its life. I can certainly say that industry needs the certainty of CFATS and reauthorization of CFATS to continue to make its investments in the program and continue to implement the program. I think DHS also needs the certainty of CFATS to ensure its long-term viability of programmatic changes.

Second, with respect to transparency and risk determination process, which we've heard about quite a bit today, ISCD has certainly improved the transparency of its risk process. They have done many things to help the regulated community understand why they may be tiered or not tiered, and includes things like webinars, fact sheets, and the like.

Most significantly—and the agency should get a lot of credit—you are willing to call up the agency and have a so-called technical consultation, essentially asking why am I tiered, is there something that I could do, is there something I need to know, is there something that's correct or perhaps incorrect in this process. And while often that doesn't change the needle, unless there was some kind of error omission, the mere process of being able to have that conversation with the agency is very helpful and welcome.

That sort of dialogue was not welcome many years ago at the beginning of the CFATS program and I think the current leadership has a lot to do with that and should be recognized.

That's not to suggest that I or the facilities for which I work always agree with the process. In fact, many times, especially with respect to the most recent CSAT 2.0 resteering process, companies have said to me, why am I tiered—can I appeal that tiering decision—and the answer is no. The regulation does not provide for any kind of appeal mechanism.

In fact, allowing a straight appeal would probably swallow the regulation. DHS would spend all of its time on appeals and not

being able to articulate and move forward with the program. So I don't think a straight appeal would be appropriate.

But something more formal than a technical consultation but something less than a formal appeal would certainly help facilities to understand is there something they can do, especially on the consequence side of the house, for sites that have release flammable or toxic inhalation hazard materials—to bring that risk down, re-file a top-screen, and perhaps get a different result. Right now, we are not able to effectively do that beyond the technical consultation.

Third, the rulemaking process—as we've noted today, CFATS has been around for now 11 years. The regulations have not changed one word in that 11-year period, and whether it be Appendix A or other key aspects of the rule, in order to change that rule, to update it, to align it to certain things, that process would need to go through the rulemaking process.

DHS started that process in the summer of 2014 through an advanced notice of proposed rulemaking. But that process has now stalled. If we take a look at the current rulemaking agenda for the Department of Homeland Security just published recently, we now see CFATS has been moved to the list of long-term actions.

I would urge the committee to require that rulemaking occur so we can update the program necessarily in very material ways that need to occur for both, in my view, industry and for DHS.

Fourth, as we've heard a little bit and including from Mr. Currie, ISCD should opt to make authorization inspections—compliance inspections more consistent, more uniform—ensure that the same level of knowledge, of rigor, of completeness of those processes.

ISCD has done a lot toward that and I certainly think—and have worked with many of these inspectors—they are professional, they are courteous, they are very easy going many times and friendly.

However, that does not always translate into the same process from site to site, from region to region, even within the same region. That inconsistency sometimes and lack of—differences in knowledge, understanding the actual tools that DHS uses, the CSAT process, the different approaches to how an inspection actually occurs—the level of detail or lack thereof—is an ongoing source of frustration for many businesses, many companies, especially those that operate facilities from region to region and very clearly see and question why we see so many differences boots on the ground among the inspection team.

DHS has recognized that. We hear from them that they are going to take steps and are taking steps, as the GAO has also recognized, to improve and enhance that process, going forward.

But I think more is needed. I think further training is needed—minimum standards and better consistency horizontally between the regions and vertically between headquarters and the regions themselves.

So with that, I appreciate the opportunity to testify, holding this important hearing, and be pleased to answer any questions you may have.

[The prepared statement of Mr. Roberts follows:]

Chemical Security Group LLC

STATEMENT OF STEVE ROBERTS
CHEMICAL SECURITY GROUP, LLC

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENVIRONMENT

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THE CHEMICAL FACILITY ANTI-TERRORISM STANDARDS (CFATS) PROGRAM – A PROGRESS REPORT

JUNE 14, 2018

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Chairman Shimkus, Ranking Member Tonko, and distinguished members of the Subcommittee, thank you for convening today's hearing on the Chemical Facility Anti-Terrorism Standards (CFATS). I appreciate participating as a witness on this important topic.

As a security consultant and lawyer, I have been fortunate to assist and visit many CFATS-regulated facilities since the very beginning of the program in 2007. Together with my colleagues, I have seen the development and practical application of CFATS at dozens of chemical plants, oil refineries, chemical and petroleum terminals, paint and coatings facilities, food and agriculture operations, aerospace and defense locations, and chemical distributors in the last eleven years. Most of these facilities are owned and operated by larger corporations, but my experience has also included smaller businesses. Against this backdrop, I am pleased to offer the following comments, observations, and suggestions:

I. REAUTHORIZE CFATS FOR MULTIPLE YEARS

The *Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014* (P.L. 113-254) was the first standalone CFATS legislation, but will end by its own terms in the coming months. It is imperative that Congress reauthorize the program for multiple years and not allow CFATS to lapse. Industry requires the certainty of multi-year CFATS reauthorization to ensure the continuity of CFATS-driven security measures and to make investments in new ones. Multi-year reauthorization will also give the Department of Homeland Security (DHS), and, specifically, the Infrastructure Security Compliance Division (ISCD), the sustainability it needs for programmatic development.

Continuity is particularly important now – since ISCD initiated the Chemical Security Assessment Tool (CSAT) 2.0 process in September 2016, the number of CFATS-affected facilities has increased from approximately 2,962 as of September 2016 to approximately 3,389 as of May 2018. Of these 427 facilities, many have recently implemented (or are in the process of

implementing) CFATS site security plans that require additional measures to protect one or more Chemicals of Interest (COIs). From direct and recent experience, the ability of facilities to commit capital (which often must be allocated and budgeted over one or more fiscal years) for CFATS security measures, such as fencing, cages, cameras, access control systems, or alarms, would be impeded if the underlying CFATS program lapsed, expired, or otherwise had an uncertain future.

Because the CSAT 2.0 risk tiering process has resulted in an increase in the number of facilities regulated for a Release COI (and, specifically, for Toxic Inhalation Hazard chemicals such as Chlorine, Ammonia, and Hydrogen Fluoride), the nature of the security enhancements necessary to meet the applicable Risk-Based Performance Standards (RBPSs) may be larger or more complex. For example, a facility regulated only for a Theft and Diversion COI (such as cylinders of Chlorine) could meet certain physical security RBPSs metrics simply by locking the cylinders in a metal cage and implementing robust access control. The same facility, now also regulated for Chlorine stored in large aboveground tanks as a Release COI, may require enhanced security measures at the facility's perimeter. These security projects are more complex, costly, and often can take one year or more to complete.

The increase in the number of CFATS-regulated facilities, and the changes in tier rankings and COI Security Issues experienced by many facilities, result directly from ISCD's execution of what Congress directed. The CSAT 2.0 process implements the requirement for ISCD to "...develop a security risk assessment approach and corresponding tiering methodology for covered chemical facilities that incorporates the relevant elements of risk, including threat, vulnerability, and consequence" that was imposed by the *Protecting and Securing Chemical Facilities from Terrorist Attack Act of 2014*. It would be unreasonable to require these facilities, many of which have recently developed new or updated CFATS-compliant security plans and have

committed to security enhancements just in the last 18 months, to operate under a cloud of legislative uncertainty.

II. FURTHER ENHANCE TRANSPARENCY IN RISK TIER DETERMINATIONS

The launch of CFATS in 2007 and the ensuing several years were replete with programmatic challenges, a poor software interface, and often long periods of silence between the time a facility submitted CFATS materials to ISCD and when it received a response. In contrast, CSAT 2.0 represents significant progress. It is easier to use, facilitates program management for companies with multiple CFATS-regulated facilities, and is more efficient (e.g., user role changes are completely electronic; previously, facilities had to print, sign, and fax certain information to ISCD).

Through CSAT 2.0, ISCD has also improved the transparency of its risk determination process to help the regulated community better understand why a facility may be tiered. In addition to a *CFATS Tiering Results Update* webinar and a *Tiering Methodology Fact Sheet*, ISCD is willing to provide a "technical consultation" to discuss, at a high-level, the factors used to make tiering decisions. While this does not change the outcome (i.e., the facility still must develop a CFATS security plan unless there was a mistake in the data submission or analysis), the mere fact that ISCD is willing to engage in dialogue is constructive and helpful. Dialogue and engagement were not readily possible or welcomed by ISCD in the initial years of the program.

This is not to suggest that I, or the facilities for which I work, always agree with ISCD's perception of risk, especially in the context of Release COIs that are Toxic Inhalation Hazards. I have had many discussions with facilities now deemed high-risk for a Release-Toxic COI (e.g., Ammonia) as a result of ISCD's new CSAT 2.0 process. Under CSAT 1.0, ISCD did not consider these facilities high-risk or, if they were high-risk, ISCD assigned them to a more favorable risk-

tier. When facility management asks whether it can challenge a facility's risk tier assignment, I must advise that the CFATS regulation does not permit a facility to appeal a tiering decision.

Additional transparency regarding how CSAT 2.0 calculates risk "scores" in a particular instance, however, might result in fewer regulated facilities and a more focused application of resources – and lower overall risk. By way of example, if a facility knew that the presence of secondary containment would revert a facility to its prior (non-CFATS) status, then management could make an informed business decision: does the cost of constructing secondary containment to mitigate the consequence of a Toxic Inhalation Hazard release to the facility and the surrounding area justify the benefit of less regulation?

Toward this end, a tiering review process that is more formal than a technical consultation, but less than an outright appeal (which could possibly swallow ISCD's ability to implement the program), would be beneficial for facilities with good cause and would complement the other CSAT 2.0 improvements. Currently, the statute says that "[t]he Secretary shall share with the owner or operator of a covered chemical facility any information that the owner or operator needs to comply with this section." Congress might expand this language to create a clear obligation for ISCD to share with a facility a more precise reason for its tier assignment.

III. A CFATS RULEMAKING IS REQUIRED TO UPDATE THE REGULATION

The CFATS regulation has not changed since it was first published in April 2007. Despite this, the practical and operational application of CFATS has changed in the ensuing eleven years. While ISCD issued a CFATS *Advance Notice of Proposed Rulemaking* in August 2014, a *Notice of Proposed Rulemaking* has still not been issued. According to the Spring 2018 *Unified Agenda of Regulatory and Deregulatory Actions*, this rulemaking has been relegated to DHS's list of Long-Term Actions. Congress can and should accelerate this process by directing DHS to publish

proposed and final CFATS rules – or a determination that no changes are necessary – by dates certain. Otherwise, the prospect of regulatory updates before 2020 (at the earliest) is unlikely.

Because a rulemaking has not occurred, ISCD and industry are both disadvantaged. ISCD must rely on instructions, guidance, a handful of advisory opinions, and awareness materials to implement its evolving policy priorities, while certain regulatory questions important to industry remain unresolved. For example, RBPS 9 of the CFATS regulation requires a facility to "[d]evelop and exercise an emergency plan to respond to security incidents internally and with assistance of local law enforcement and first responders." Because CFATS is a performance-based regulatory scheme, DHS cannot be prescriptive in interpreting the meaning of the phrase, "with the assistance of local law enforcement and first responders."

For the last several years, however, ISCD has made law enforcement outreach and engagement between a regulated facility and the law enforcement agency with primary response jurisdiction a policy priority. As recently as May 2018, ISCD released a new Fact Sheet on *Resources for Law Enforcement and First Responders*. Whether and to what extent a CFATS-regulated facility has engaged its local police department or sheriff's office is a recurring inspection question. This is done for good reason and with near universal support of CFATS-regulated facilities – but ISCD cannot direct that a facility do so in a specific manner or at a specific frequency. It is certainly reasonable to assume that many within the regulated community would support ISCD including, in a future rulemaking, a more direct (and prescriptive) requirement for a CFATS-regulated facility to engage local law enforcement on a recurring basis.

As another example, the CFATS regulation states that, "[i]f a covered facility makes material modifications to its operations or site, the covered facility must complete and submit a revised Top-Screen to the Department within 60 days of the material modification." Since the inception of the CFATS program, industry has sought clarification of what constitutes a "material

modification." It is clear that the reduction of a COI below its Appendix A reporting trigger (or the complete removal of a COI) is a "material modification." When to file a Top-Screen – and when not to file a Top-Screen – at other times remains opaque.

For example, CFATS requires a facility to file a Top-Screen if it has 400 pounds or more of Hydrogen Peroxide at or above 35% concentration in a transportation package (e.g., a drum). Consider a facility that needs 500 pounds of 50% Hydrogen Peroxide for a short-term pilot project, thereby triggering a Top-Screen filing. Assume that the facility acquires the chemical on June 1. By June 8, all of the Hydrogen Peroxide has been consumed. By regulation, a facility must file a Top-Screen to report a new COI within 60 days, or by August 1 in this example, even though the Hydrogen Peroxide has not been onsite for weeks. The facility must then file a superseding Top-Screen indicating that the COI is gone. This example has been perplexing for years and is one, among many, that highlights the need to update the regulation to clarify key operational aspects of the rule.

Similarly, the list of COIs, contained in Appendix A to the rules, has not changed since its publication in November 2007. A new rulemaking would enable ISCD to make adjustments to the COIs, including amounts and concentrations, based on updated risk profiles and objective standards. Certain oxidizers, such as Hydrogen Peroxide, may be adjusted downward if ISCD has a reason to justify that they may be used as an effective Improvised Explosive Device precursor at an amount or in a concentration less than what was identified in 2007.

Alternatively, industry would expect some COIs to drop from the Appendix A list entirely or experience other changes in their reportable amounts. ISCD set the reporting trigger for all but one Release-Flammable COI at 10,000 pounds. Yet, under CSAT 2.0, I have yet to see ISCD tier a facility for a Release-Flammable COI unless the facility possesses *many times* that amount.

Whether adding, modifying, or removing COIs, it is critical that Appendix A changes occur through the rulemaking process. Such changes also must be transparent in application, evenly applied, and objectively considered. Though not directly tied to CFATS, the recently published study on *Reducing the Threat of Improvised Explosive Device Attacks by Restricting Access to Explosive Precursor Chemicals* by the National Academies of Sciences, Engineering, and Medicine applied strict ranking principles to determine what chemicals posed the greatest risk – but also showed a degree of arbitrariness. Despite acknowledging that Urea Ammonium Nitrate (UAN) "has not been used historically to produce explosives," the National Academies departed from "a strict application of the committee's [chemical] ranking principles" and included UAN in its highest risk category without objective justification. ISCD must be careful not to act in such an arbitrary fashion.

IV. ISCD SHOULD CONTINUE TO ENHANCE THE CONSISTENCY OF AUTHORIZATION INSPECTIONS AND COMPLIANCE INSPECTIONS AMONG ITS INSPECTION PERSONNEL

Together with my colleagues, I have directly participated in or have knowledge of hundreds of Authorization Inspections (AIs) and Compliance Inspections (CIs). These activities span all 10 ISCD inspector regions, across all CFATS risk tiers (i.e., Tier 1 – Tier 4), and at all types of regulated facilities, from the very large to the very small, over many years.

While a diverse Chemical Security Inspector (CSI) cadre is an asset, the manner and detail of how CSIs conduct their work varies from region-to-region, and even within the same region. This inconsistency continues to stymie the program and is a source of ongoing frustration for many facilities and businesses (especially those that operate CFATS facilities across multiple regions and receive uneven information and divergent direction from region-to-region). With very rare and limited exception, all CSIs are very friendly and courteous. Many have prior law enforcement or military experience and arrive at ISCD from other branches of the federal government.

Some CSIs are very knowledgeable regarding the CFATS program and the application of a performance-based regulation, but others are not. Some CSIs spend considerable time reviewing the accuracy and completeness of a facility's CFATS program during their time at a facility, but others do not. Some CSIs understand and apply ISCD's "corporate approach program" (whereby security measures that apply to all of a company's CFATS-regulated facilities are reviewed and approved once at a corporate level but applied broadly at the facility level), but other CSIs have little knowledge or awareness of those (already institutionalized) measures when arriving onsite.

ISCD leadership has acknowledged this and has taken steps to drive standardization and increase technical knowledge. Specifically, ISCD now has a Chief of Regulatory Compliance (CRC) in each of the 10 CFATS regions. The CRCs help manage and oversee CFATS compliance activities in their respective regions. All new CSIs must attend training at ISCD headquarters and participate in a specific number of AIs and/or CIs with an experienced CSI before leading either. Next year, ISCD is developing a new internal audit process that will enhance AI and CI uniformity.

These are steps in the right direction, but more is needed. Considering that CFATS is a performance-based regulatory program, ISCD should ensure that all personnel possess baseline CFATS knowledge, understand the interplay between regulation and guidance, and conduct AIs and CIs to the same level of completeness, precision, and rigor. There should be a mechanism by which horizontal consistency is ensured between and within regions and vertical consistency is ensured between headquarters and the regions.

ISCD's use of contractors to review CFATS security plan submissions has resulted in unnecessary administrative burdens and confusion. For example, on several occasions, contract analysts have interpreted guidance documents as regulatory requirements, insisted that all questions addressed in the Site Security Plan questionnaire be applied to facilities using an Alternative Security Program, and inserted novel criteria into plan reviews (e.g., asking a facility

to list protective measures that the facility expressly decided to remove when submitting its updated security plan). If ISCD must continue to use contractors, then it should provide additional training to these personnel and institute more (or stronger) internal controls.

V. CONCLUSION

CFATS has made great strides and has improved significantly from its rocky start more than a decade ago. Many facilities are in a regular cycle of compliance and have institutionalized CFATS as part of their operating tempo. CSAT 2.0 has brought new facilities into the program, which will benefit from lessons learned. Like any complex regulatory program, the opportunities for improvement and further refinement always exist. Congress should proceed with a multi-year reauthorization and use this time to consider what further legislative changes are needed to ensure continued success and sustainability.

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Thank you for holding this important hearing. I would be happy to answer any questions you may have.

Mr. HARPER. Thank you, Mr. Roberts. We appreciate that.

And Mr. Conrad, we'll now recognize you for 5 minutes for the purposes of an opening statement.

Thank you.

Mr. Conrad, could you pull that microphone around in front of you a little bit? Thank you.

STATEMENT OF JAMES CONRAD

Mr. CONRAD. The button. There we go.

For over a decade, I have been counsel to the Society for Chemical Manufacturers and Affiliates, the only U.S.-based trade association dedicated solely to the specialty and fine chemical industry.

For the previous 14 years, I was an in-house lawyer at the American Chemistry Council and so I've been working on chemical facility security since before 9/11 and I've been continuously involved in the CFATS process since it was first enacted in 2006.

I've also chaired the ABA's administrative law and regulatory practice section. I am pleased to be able to provide today with SOCMA's perspective on CFATS. CFATS protects high-risk chemical facilities and their surrounding communities by ensuring that security measures are in place to reduce the risk of successful terrorist acts.

More than half of SOCMA's 115 manufacturing members are regulated under the program. We strongly supported and we urge Congress to reauthorize the program now before its authorization expires this coming January.

A 1-year reauthorization, however, is not desirable because regulatory certainty is crucial to business planning. Complying with CFATS is expensive and time consuming, especially for small businesses. SOCMA's members want the program to be consistent and predictable, and a multi-year reauthorization would give them that assurance.

Through the years, the CFATS program has undergone dramatic changes. The early years were a significant challenge for everyone, but the program has vastly improved under the direction of Deputy Assistant Secretary Wulf, whose earlier accomplishments gave Congress the confidence to reauthorize CFATS for 4 years in 2014.

SOCMA believes that the program's continued progress is directly attributable to Mr. Wulf's leadership and justifies another reauthorization for a comparable period of years.

The most significant recent improvement in CFATS is Version 2.0 of the Chemical Security Assessment Tool, or CSAT. The original CSAT process was clunky and difficult to use, took significant amounts of time and resources to complete.

The number-one recommendation of SOCMA's CFATS comments in 2014 was that DHS fix it, and DHS has now done that dramatically, and our members uniformly report that it's much easier to use and far less resource intensive while still giving DHS the information it needs.

This improvement is extremely important for SOCMA members, 70 percent of which are small businesses. Most of these businesses cannot afford to have dedicated regulatory compliance staff nor can they afford to hire consultants to do the job for them.

While I've thus far applauded DHS's efforts, SOCMA does have some concerns. It first relates to how DHS tiers or assigns risk levels to facilities based on their CSAT submissions.

When Congress reauthorized CFATS, it instructed DHS to "share with the owner or operator of a covered chemical facility any information that the owner or operator needs to comply with this section."

Congress could revise this language to create a clearer obligation for DHS to share with the facility the exact reason for its tier assignment. That would help them understand how they could lower their risk tiers.

The second concern is the personnel surety program. Currently, PSP only applies to tier one and two facilities, but DHS is considering applying it to tiers three and four.

SOCMA believes this is premature. These facilities, by definition, pose lower risks and the PSP program continues to impose burdens in terms of time and delay.

SOCMA believes DHS should work with the Department of Justice and the FBI to rigorously assess both what risks are avoided and what costs are imposed by the process, and we think such a multi-agency review is necessary before we expand it further.

We also believe CFATS should recognize voluntary industry programs that enhance the safety and security of hazardous chemicals and thus complement what the CFATS program does.

The leading chemical industry trade associations have organized and implementing demanding stewardship initiatives such as SOCMA's ChemStewards to manage and improve environmental health, safety, and security performance—a public-private partnership that leveraged these industry stewardship programs like ChemStewards to benefit both chemical facilities and the public.

And then last, I will emphasize a point that's been made before about the continuing importance to use rulemaking in amending Appendix A, and I will agree with Director Wulf.

Currently, the Administrative Procedure Act requires Appendix A to be changed through rulemaking because it's already part of the rule, and so that will continue to be the case, unless that were to be changed by new legislation, which we would not support because it's important for facilities to be able to get the information to the DHS that it needs to understand them. The bottom line is that CFATS is working and working far more successfully and efficiently than a lot of other regulatory programs.

CFATS inspectors generally interact well with facilities and the agency has an effective compliance assistance program. Facilities are more secure and the public is safer today because of this program.

Congress should reauthorize it to maintain that progress.

Thank you.

[The prepared statement of Mr. Conrad follows:]

Testimony of

James W. Conrad, Jr.

Principal

Conrad Law & Policy Counsel

on behalf of

Society of Chemical Manufacturers and Affiliates

before the

House Committee on Energy and Commerce

Subcommittee on Environment

on

The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report

June 14, 2018

Good morning Chairman Shimkus, Ranking Member Tonko, and members of the Subcommittee. My name is Jamie Conrad. For over a decade, I have been policy counsel to the Society of Chemical Manufacturers and Affiliates, or SOCMA, which is the only U.S.-based trade association dedicated solely to the specialty and fine chemical industry. For the previous 14 years, I was an in-house counsel at the American Chemistry Council. I have worked on chemical facility security issues since before 9/11, and I have been continuously involved in the CFATS program since the law was first enacted in 2006. I have also chaired the ABA's Section of Administrative Law & Regulatory Practice. I'm pleased to be here today to provide SOCMA's perspective on CFATS.

SOCMA strongly supports the CFATS program, and we urge Congress to develop and pass legislation to reauthorize it before its authorization expires next January. CFATS protects high-risk chemical facilities and their surrounding communities by ensuring that security measures are in place to reduce the risk of successful terrorist attacks. More than half of SOCMA's 115 manufacturing members are regulated under the CFATS program.

SOCMA urges you to reauthorize CFATS for some period of years, because regulatory certainty is integral to our operations. CFATS is an expensive and time-consuming program with which to comply, especially for small businesses. Responsible companies like those in our membership want the CFATS program – but they need it to be consistent and predictable to be able to plan their business futures. A multi-year reauthorization would give SOCMA members that assurance.

The CFATS program has gone through dramatic changes through the years. Without dwelling on the past, the early years of the CFATS program were a significant challenge for everyone. The program has vastly improved under the direction of the Deputy Assistant Secretary for Infrastructure Protection, David Wulf. His early accomplishments were what gave Congress the confidence to reauthorize the program in 2014 for four years. SOCMA believes the program's continued progress is directly

attributable to Mr. Wulf's leadership and justifies another reauthorization for some additional period of years.

The most significant recent improvement in the CFATS program is version 2.0 of the Chemical Security Assessment Tool, or CSAT, which was released in September 2016. CSAT is an integrated online portal that enables facilities to submit information for the initial Top-Screen, the Security Vulnerability Assessment and the Site Security Plan.

The original CSAT process was clunky and difficult to use, and took a significant amount of time and energy to complete. The number one recommendation in SOCMA's CFATS comments in 2014 was that DHS fix it. DHS has now improved the tool dramatically, and our members uniformly report that it is much easier to use and far less resource intensive – while still providing DHS the information it needs.

This improvement is extremely important for SOCMA members, 70% of which are small businesses. These businesses cannot afford to have dedicated staff for these kinds of processes, nor can they afford to hire consultants to do it for them. Oftentimes, a single individual is responsible for all regulatory compliance – environmental, security, FDA, etc. These kinds of improvements are thus highly valuable.

While I have thus far applauded DHS's efforts, SOCMA does have some concerns. The first is related to how DHS "tiers," or assigns risk levels to, facilities based on their CSAT submissions. When Congress reauthorized CFATS, it instructed DHS to "share with the owner or operator of a covered chemical facility any information that the owner or operator needs to comply with this section." 6 U.S.C. § 622(d)(3). Congress might expand this language to create a clearer obligation for DHS to share with a facility the exact reason for its tier assignment. That would better enable facilities to understand what they might do to lower their risk tier.

A second concern is the Personnel Surety Program, or PSP. PSP requires that facility personnel and visitors be vetted in specific ways. Currently this program only applies to Tier 1 and 2 facilities, but

DHS is considering expanding the program to Tier 3 and 4 facilities. SOCMA believes that it is premature to expand PSP to Tier 3 and 4 facilities. These facilities are by definition lower risk facilities, and PSP imposes real burdens in terms of personnel time and delay. SOCMA believes that DHS should complete a rigorous assessment, in conjunction with the Department of Justice and the FBI, of the risks avoided and costs imposed by the PSP process. A multi-agency review of the effectiveness of PSP is necessary to really understand these costs and benefits before expanding this program to Tiers 3 and 4.

SOCMA also believes there is a place within CFATS for a program that would recognize voluntary industry programs to enhance security and, as a result, the CFATS program. The leading chemical industry trade and technical organizations have developed and implemented demanding industry stewardship programs, such as SOCMA's ChemStewards, an environmental, health, safety and security (EHS&S) management program designed to help facilities optimize performance, save money and enhance their role as a good corporate citizen. A public/private sector partnership that leverages industry stewardship programs like ChemStewards to further enhance the safety and security of hazardous chemicals could benefit both chemical facilities and the public.

Last, I should emphasize the importance of using the rulemaking process to amend Appendix A, the list of chemicals of interest that triggers the applicability of the CFATS program. Chemicals on and off Appendix A are central to our members' businesses and to our economy. Prior public notice and opportunity to comment have been, and should remain, a prerequisite to amending Appendix A. Facilities impacted by changes to Appendix A must have ample opportunity to supply DHS all of the pertinent information it needs to decide whether to list a chemical and at what quantities and concentrations.

The bottom line is that the CFATS program is working, and working far more successfully and efficiently than many other regulatory programs. CFATS inspectors do a good job of working with facilities. The agency has an aggressive compliance assistance program, and that program has largely

enabled it to resolve potential non-compliance issues without having to resort to fines and enforcement actions. And DHS has worked with industry to improve the program, recognizing that such a regulatory system cannot be developed in a bubble, but must incorporate information that only regulated facilities possess. Facilities are more secure, and the public safer, today because of this program. Congress should reauthorize it to maintain that progress.

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

Mr. HARPER. Thank you, Mr. Conrad.

The chair will now recognize Ms. Arellano for 5 minutes for the purposes of an opening statement.

Welcome.

STATEMENT OF YVETTE ARELLANO

Ms. ARELLANO. Thank you, Chairs and Ranking Members, of the Energy and Commerce Committee and Subcommittee on the Environment.

Thank you for this opportunity to speak on the proposed rule to roll back and eliminate critical protections for my community in Houston Texas that are part of EPA's 2017 chemical disaster rule.

I am disappointed that the EPA and its rulemaking has chosen to only hold one hearing in Washington, D.C., making it difficult for voices like those in my community to be heard.

But I am relieved that I can bring my experience to this hearing. My name is Yvette Arellano. I am here on behalf of Texas Environmental Justice Advocacy Services.

We are a nonprofit working to educate and mobilize our community in southeast Houston, including Manchester and the surrounding neighborhoods, which have high concentrations of chemical facilities.

The EPA is required to regulate effectively under the risk management plan and CFATS. This exposes our communities which include significant communities of color and low-income families to more toxic air, pollution, and disproportionate harm from chemical disasters.

As illustrated too well from Hurricane Harvey, too often we experience a toxic flood on top of the threats we already face from hurricanes and heavy rains. That comes on top of disparate health and safety impacts we already face around the year because EPA refuses to do its job to protect us from the frequent toxic releases and pollution these facilities send across the fence line into our communities.

At Hartman Park, which is right across the street from the Valero refinery, communities painted a mural reflecting that nearly every child that plays in the park is in the shadow of a nearby chemical facility—a far cry from what people at this hearing see out of their window in Capitol Hill and D.C.

Communities in Manchester never know which incident requires evacuation or sheltering in place. We hear the sirens go off. I heard the sirens go off, or alarms go off, for a vote and that sent my stress levels high.

People live in constant fear of releases or incidences while their children are playing outside. In hurricane seasons, it's bad enough that families have to prepare for their lights to go out and ensuring that they have enough food and water.

No one should have to shelter in place due to a hurricane as toxic chemicals flood their homes, wondering what to do if facilities down the street will have a catastrophic explosion, chemical fire, chemical release, as what happened in our community and neighborhoods during Harvey. People deserve the right to know the information necessary to make informed decisions for them and their families.

The chemical disaster rule contains important safeguards that would help communities like mine and across the country with common sense provisions, most importantly, for our already over exposed communities.

We need this fully effective right now and we need to require facilities to take action to prevent fires, explosions, and disasters including by ensuring they actually look for safer ways to operate before a disaster starts. It also would have increased the availability of basic information we need to know, like chemical safety data sheets and emergency response contacts so communities can try to find ways to protect ourselves if a serious incident happens.

Community members should get the information from each incident they're exposed to without delay and it's essential for facilities to do real incident investigation reports that they cannot ignore in planning to prevent future problems.

I want to highlight that the rule finalized in early 2019 and came afterward by the EPA and after over a hundred groups working with TEJAS called for action, starting in 2011, as disasters were happening across the country and people in Washington, D.C. didn't seem to pay attention.

It also provided for a better coordination through sharing information first responders need and assuring practice notification and exercises happen to prepare without delay.

EPA cannot justify repealing all of the prevention and weakening other important requirements and it has refused to face the fact that it's taking away protections meant to save lives and prevent harm, especially to communities like ours, right across the fence line from chemical facilities.

These rollbacks don't come without community costs as fires, toxic releases across the country on this administration's watch, especially the Arkema explosion in Crosby after Hurricane Harvey, demonstrated.

A lack of information puts the surrounding community and first responders in jeopardy. First responders on the scene had to be evacuated and received medical treatment for inhaling dangerous chemicals from the blast.

Community members are still dealing with the aftermath of chemical debris which is visible on their lawns and cars. The Valero refinery and other nearby facilities released a spike of benzene and other toxic chemicals. But most of these were missed because EPA and states turned off or moved most of the air monitors.

I urge this committee to consider the impacts on your neighbors, on our neighbors, our families, without critical protections like those in the chemical disaster rule and ask you to call on President Trump and the administration and Administrator Pruitt to drop the hazardous plan that the EPA is considering which would revoke lifesaving protections for communities across the country, preventing children and vulnerable communities from chemical disasters.

The way EPA originally found was necessary should not be a partisan issue and we call on Congress and EPA to protect communities, not chemical companies.

Communities across the country remain in harm's way and this is especially scary as we drive around Houston with billboards saying hurricane season has begun—be prepared.

[The prepared statement of Ms. Arellano follows:]

Thank you for this opportunity to speak on the proposed rule to rollback and eliminate critical protections for my community in Houston, TX that are part of EPA's 2017 Chemical Disaster Rule. I am disappointed that the EPA has chosen to only hold one hearing in Washington, DC making it difficult for voices like those in my community to be heard.

My name is Yvette Arellano. I am here on behalf of the Texas Environmental Advocacy Services (TEJAS). We are a non-profit organization working to educate and mobilize our community in southeast Houston, TX, Manchester and surrounding neighborhoods, which have a high concentration of chemical facilities that EPA is required to regulate effectively under the Risk Management Program. This exposes our communities, which include significant communities of color and low-income families, to more toxic air pollution and disproportionate harm from chemical disasters. As illustrated too well from Hurricane Harvey, too often, we experience a toxic flood on top of the threats we already face from hurricanes and heavy rains. That comes on top of the disparate health and safety impacts we already face around the year, because of EPA's refusal to do its job to protect us from the frequent toxic releases and pollution these facilities send across the fenceline into our communities. At Hartman Park which is right across the street from the Valero Refinery, communities painted a mural reflecting that nearly every day children play in the shadow of these nearby chemical facilities, a far cry from what people at this hearing see out of our window here in Capitol Hill in Washington, D.C.

Communities in Manchester never know which incident requires evacuation or sheltering in place when we hear the sirens go off. People live in constant fear of releases or incidents while their children are playing outside. In hurricane season, it's bad enough that families have to prepare for their lights to go out and ensuring they have enough food and water. No one should have to shelter in place due to a hurricane, as toxic chemicals flood their homes, wondering what to do if the facility down the street will have a catastrophic explosion, chemical release, or fire, as happened in our community and neighboring parts of Texas during Hurricane Harvey. People deserve the right to know the information necessary to make informed decisions for them and their family.

The Chemical Disaster Rule contains important safeguards that would help communities like mine and across the country with common sense provisions – most importantly for our already over-exposed community, we need this in full effect now to require facilities to take action to prevent fires, explosions, and other disasters, including by ensuring they actually look for safer ways to operate before a disaster starts. It also would have increased the availability of basic information we need to know, like chemical safety data sheets and emergency response contacts so communities can try to find ways to protect ourselves if a serious incident happens. Community members should get information from each incident they are exposed to, without delay, and it's essential for facilities to do real incident investigation reports that they cannot ignore in planning to prevent future problems. I want to highlight that the rule finalized in early 2017 came after years of work by EPA and after over 100 groups working with TEJAS called for action starting in 2011, as disasters were happening around the country and people in Washington, D.C. did not seem to be paying attention.[i] It also provided for better coordination through sharing information first-responders need, and ensuring practice notification and exercises happen to prepare without delay. EPA cannot justify repealing all of the prevention or weakening other important requirements and it has refused to face the fact that it is taking away protections meant to save lives and prevent harm especially to communities like ours right across the fenceline from chemical facilities.

These rollbacks don't come without a community cost. As the fires, toxic releases around the country on this Administration's watch, and especially the Arkema explosion in neighboring Crosby, TX after Hurricane Harvey demonstrated, lack of information puts the surrounding community and first responders in jeopardy. First-responders on the scene had to be evacuated and receive medical treatment for inhaling dangerous chemicals from the blast.[ii] Community members are still dealing with the aftermath of chemical debris which is visible on their lawns and cars. The Valero refinery and other nearby facilities released spikes in benzene and other toxic chemicals but most of these were missed because EPA and states turned off or moved most of the air monitors.[iii]

I urge this committee to consider the impacts on your neighbors and family without critical protections like those in the Chemical Disaster Rule and ask you to call on President Trump and Administrator Pruitt to drop the hazardous plan that EPA is considering which would revoke life-saving protections for communities across the country. Preventing children and vulnerable communities from chemical disasters, the way EPA originally found was necessary should not be a partisan issue, and we call on Congress and EPA to protect communities, not chemical companies. Communities around the country remain in harm's way and it's especially scary as we drive around Houston with billboards saying *Hurricane season has begun. Be prepared.* But how can we prepare when EPA is refusing to keep basic safeguards in place – safeguards it found were necessary to reduce deaths, injuries, and the need for communities like Manchester to have to shelter in place or evacuate? I urge you to also consider increasing community trust in chemical facility regulatory programs by adding dual languages to information sharing, requiring the implementation of safer technologies in facilities to mitigate a future disaster, and to consider the cumulative impacts of exposures to multiple chemical facility sources. Our communities feel powerless in the event of a chemical disaster and I hope this committee works to restore power and protection to the people of these communities.

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[i] https://www.documentcloud.org/documents/332037-blue-green-coalition-letter-to-obama-june-21-2011.html
[ii] https://www.reuters.com/article/us-storm-harvey-arkema-lawsuit/police-and-emts-sue-arkema-over-chemical-plant-fire-after-harvey-idUSKCN1BI2P0
[iii] https://www.houstonchronicle.com/news/houston-texas/houston/article/After-Harvey-a-second-storm-of-air-12795260.php

Mr. HARPER. Your time has expired. I apologize.

We'll give you opportunity during the questioning. Thank you very much.

It's now time for the members to ask questions. I want to thank each of you for your appearance here and for your insight and the experience that you bring.

And Mr. Roberts, I would like to ask you a question first. We've from GAO that one of the challenges faced by DHS with the implementation of CFATS is compliance enforcement.

Your written testimony points out that there's inconsistency with inspections and enforcement from region to region. Can you elaborate some on that and perhaps give us some suggestions on how to correct that?

Mr. ROBERTS. Certainly. Let me emphasize again the inspectors are, almost without fail, are extremely helpful.

They're friendly, professional, but there continues to be a lack of, it seems, consistent knowledge in various areas of the program, including the specific way the regulation itself may work—the confusion oftentimes between what regulation is and implementing guidance.

As we know, CFATS is a risk-based performance standard. That means that DHS can't prescribe the particularly security measure a facility must implement or may not—or does not need to implement for plan approval, and we've had many instances over the years, especially as DHS has upticked, obviously, it's compliance inspections in the last few years where the specific manner and nature of those inspections simply is not the same region to region and even within the same region.

Some of that may go back to training. Some of it may go back to the prior biases or lack thereof of the inspector who may come from a prior Federal background.

Some of that goes to, on a positive side, with familiarity of an inspector with the site so they may not feel the need to continue to go very deeply sometimes.

But the way a particular inspector assesses things seems to lack any real consistency from site to site, region to region.

Mr. HARPER. And I appreciate the way you have elaborated on that. So is this a training issue that we are talking about or is it just something that, because of the different experiences, we can't correct?

Mr. ROBERTS. No, I think it absolutely is a couple of things. One is training around the actual rule—training around the CSAT portal—how it works.

We've had instances where inspectors would ask a facility to do something in their top-screen that is not possible because the top-screen doesn't allow that type of data to be inputted. So that just shows me that that particular inspector may not understand how the top-screen itself works.

Certainly, training of the regulation—the top-screen tool, the CSAT suite of tools that Mr. Wulf mentioned—certainly, the guidance—difference between guidance and regulation, and I think, as DHS has indicated, as GAO has indicated, as DHS has said in other occasions, they are putting together some more specific directives, some more specific guidance material for their inspectors.

I think this is one area where actually a checklist would be helpful in terms of understanding what an inspection should do, what we should look for, the level and detail an inspection should occur, site to site, region to region, regardless of the particular nuances of the facility. There are some basic things that should occur every time.

Mr. HARPER. Thanks, Mr. Roberts.

Mr. Conrad, if I may ask you—I know we've had some that would argue that information from CFATS-regulated facilities is not available to people who should know it. What would be your response to that?

Mr. CONRAD. I would say that if that's true it's because the systems we have in place to make that happen aren't working. There is a statute, the EPCRA—the Environmental—the Emergency Planning and Community Right to Know Act—that originated in this committee whose sole focus is to make sure that state and local emergency planning bodies and fire departments are provided with all the information that they need to plan for emergencies of whatever sort—natural as well as security related—and to be able to respond to them, and the statute couldn't be clearer that, for example, those facilities shall promptly provide information necessary for developing and implementing the emergency plan.

So it's not qualified, and it requires submission of lists of safety data sheets or the safety data sheets themselves, inventories of chemicals, or, upon request, the maximum and average amounts of a chemical on the site, where it's stored, how it's stored, and that information, in turn, can be made available to the public.

And specifically with respect to fire departments, it says that the owner or operator with the facility shall allow the fire department to conduct an on-site inspection of the facility and shall provide to the fire department specific location information on hazardous chemicals at the facility.

So we think the statute is sound. It may well be appropriate for this committee to conduct oversight on why it is the LEPAS perform more or less well in certain areas. But the CFATS program doesn't restrict any of that.

To the contrary, the statute that you all passed 4 years ago expressly preserves all those sorts of information disclosure statutes from any effect by a result of the CFATS program.

In fact, this is the CVI guidance from DHS from the Bush administration, no less, state—note, state, local, and tribal officials including first responders must have access to any information that is necessary to plan for and respond to an emergency event at a chemical facility.

It's equally important that this information is available in a form that is readily accessible and easily disseminated. In most cases, a facility can provide this information that contains all necessary operational and facility-specific information and excludes CVI.

But then, as Mr. Wulf said, there's a way for sharing CVI, too. So the systems that—the legal system, I think, is sound. It's just a question of whether it's really working well.

Mr. HARPER. Thank you very much, Mr. Conrad.

The chair will now recognize the gentleman from New York, Mr. Tonko, the ranking member of the subcommittee.

Mr. Tonko.

Mr. TONKO. Thank you, Mr. Chair.

I believe we must acknowledge that the CFATS program is not comprehensive and that security gaps do indeed exist.

Director Currie, can you give us a sense of the quality of information given to first responders near CFATS facilities?

Mr. CURRIE. Yes, sir.

So actually in our ongoing review that we'll issue a report on next month we are looking at that very issue and it relates to what Mr. Conrad is saying.

He's right that there's never been an assessment of the process itself under CFATS for how well they're coordinating with the local emergency planning committees and what they're providing.

That's exactly what we are looking at. We are digging into that process to figure out how they're coordinating with those committees and what information specifically those committees and first responders are actually getting.

And so, we'll report on that next month.

Mr. TONKO. You will share that with this committee?

Mr. CURRIE. Yes, sir.

Mr. TONKO. The subcommittee, please.

Have they always had all the information in preparation necessary to respond to incidents at these facilities?

Mr. CURRIE. Well, I think one of the things we are looking at, as we've talked about today, the CFATS program has only been around 10 years and some of these other programs have been around much longer.

So, in the early stages of the program that was not the focus. The focus was getting facilities enrolled and things like that.

So, this is something that's evolved over time. Nobody's really looked at it, and so that's why we are taking a look at it.

It's an extremely important issue. These are life and death situations and it's important they have the information they need to respond.

Mr. TONKO. Thank you. If first responders do not have all the necessary information, it makes those security gaps even worse.

Dr. Wilson, what is your sense on some of the security gaps in the CFATS program? Do you have any thoughts on the exemptions that exist in the program?

Mr. WILSON. Sure. I think with regard to exemptions, we heard earlier around waste treatment nuclear and maritime, and I think it's worth assessing whether and to what extent security is an element of the safety programs in those sectors.

And the reason I say that is that in practice, I think there's a cultural and operational divide between safety engineering and security provisions and yet security and engineering are interrelated. So good engineering design drives down both safety and security risks but security is often missing from engineering practice.

So last month, the American Institute of Chemical Engineers had its conference with a keynote address by the FBI, and the reason for that appearance by FBI was to encourage engineers to include security in their scope of practice rather than relegating it, in a way, to traditional barriers, monitoring, and response approaches.

And so I think it would be worth evaluating if these exempted sectors are meeting the CFATS 18 performance standards and if they're effectively integrating security into engineering practice.

Mr. TONKO. So, from that, I can assume that first responders often—that they may not know exactly what is at a facility before having to respond to the incident?

Mr. WILSON. I would say it's a perennial problem. Despite the requirements of the Emergency Planning Community Right to Know Act, there are gaps in information, in particular in transmitting information to first responders.

One of the problems with the local emergency planning committee structure is that the members of those committees are serving voluntarily and yet there is a lot asked of those members.

I served as the state's representative—the state Department of Industrial Relations representative—to our state emergency response committee in California and saw firsthand the difficulty that those members of the local committees—the challenges that they carried in trying to implement the requirements of a EPCRA and transmitting information effectively and so forth.

Mr. TONKO. I have concerns with EPA's recent decisions around the RMP rule. Can you discuss some of the provisions that were delayed and what would be rolled back from the latest RMP proposal?

Mr. WILSON. There are 10 provisions having to do with incident prevention that are being proposed for removal from the program, and we could go through and catalog each of those.

They are, I think, the most fundamental and most sort of protective aspects of the RMP that have been proposed.

And as I said earlier, one of the reasons I am very concerned about that is because of the fact that prevention elements provide protection against multiple threats, and we've heard from many members today about not only the threat of an intentional attack against a facility but the very real threat of a natural disaster, of an earthquake—as we are in California—of a mechanical failure, and we heard of power outage and so forth.

And so prevention elements or prevention requirements drive down that risk footprint in the face of all of those threats. Those are proposed to be thoroughly removed under the RMP proposal that we are hearing from the administration.

Mr. TONKO. Thank you, Dr. Wilson.

With that, I yield back.

Mr. HARPER. The gentleman yields back.

The chair will now recognize the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman. I want to thank our panel for being here today.

As I said earlier in our first witness, CFATS was created because of what happened in West Texas. But as we found out that—and I think the last thing I heard that that was arson and still being investigated—but our real challenge is from natural disasters, like you just said—earthquakes in California, hurricanes and tropical storms in the Gulf of Mexico. That's what I would like to focus more on and see how we can correct it.

I have a district in East Harris County, and Ms. Arellano is very correct—Manchester has a chemical plant on the west side, a thank farm on the north side before the Houston ship channel, and a refinery to the east side, and on the south they're covered by railroad tracks.

And that's where Houston literally started back in the 1830s and 1840s. The Manchester area was actually called Harrisburg before there was a city of Houston.

And so we see a lot of these challenges in urban areas where industry is literally right next door to people who have lived there and it's in Manchester for 50 years. I know two generations at least in that community.

One of the concerns I had was that during our Hurricane Harvey—and I guess I should understand that when it was coming in, our air monitors were shut down.

I've been told that I have probably the most air monitored district in the country because we have EPA. We have the city of Houston there they have jurisdiction. We have the county of Harris with a pollution control agency and, of course, the State of Texas, and it's not just the air monitors but the other issue is that most of the rising water was literally on the bottom of those plants and refineries and chemical plants because of the 55 inches of rain in four days—how can you do it?

The other problem, though—and I hope the industry is listening because we've talked about it—is that we have huge tanks that hold product, either crude oil or refined product, and the way they're filled up is that they have floating roofs.

The problem is when you get that much water on that roof, those rooves actually turn and you end up—whatever the emissions come from that, but it also can overflow because of the heavy rain.

So we've got a lot of challenges in our area and to keep working with it, but we used to have community groups, and I hardly hear about them anymore—Manchester, Pasadena, Bay Town—the community groups, and I would go to those meetings sometimes and the industry would come in and sit down with their neighbors along the fence line, and I am not so sure those are still going. Is that still active in other parts of the country and maybe not in our area?

Mr. WILSON. Is that question to me?

Mr. GREEN. Yes.

Mr. WILSON. I am not aware of those kinds of meetings taking place but I absolutely agree with your characterization of the problem.

One of the things that California has done in its refinery safety regulations has required companies to look at inherently safer technologies wherever feasible and it has also required, and I think in the example that you have just given, risk management strategies that require redundancy and independence of safeguards to prevent a cascade of failures so, for example, in the event of a power failure, losing safeguards, one after the other.

And of course, California is the third largest refining state and is, you know, producing jet fuel and gasoline. It's inherently hazardous, and so we felt it was important to be very clear about the

importance of introducing and requiring, actually, independence and——

Mr. GREEN. I only have 26 seconds.

Mr. WILSON. Sorry.

Mr. GREEN. And I agree, because even with the Arkema problem—wasn't in our district but the redundancies weren't there. In fact, our Harris County district attorney has launched an investigation into that plant and see why it didn't.

Ms. Arellano, in your testimony, you talked a lot about how communities like ours in Houston face additional challenges during natural disasters due to their proximity to these plants.

What recommendations would you do for industry to improve their relationship with community groups and civic clubs, because I visit Manchester civic club as often as I can and, typically, one of our refinery staff is there to answer questions.

What are some of the suggestions TEJAS would tell us that we could do and inform people in the neighborhood but also, just how we can do this better? Because those refineries and chemical plants are probably not going to move because they've been there for 50 years.

Ms. ARELLANO. These industry partners, they do come out to the civic associations. But they talk about scholarships. They talk about fire, indoor air pollutants. They'll hand out fire detectors.

But they won't talk about the latest expansion. They won't talk about a permit notice they had out—like the one they have out that would increase hydrogen cyanide from 52 tons to 512 tons.

They'll go ahead and they'll speak about a backpack giveaway event but not give any real information. So I would say having true and real information going between industry partners and neighboring communities is vital to this process.

The other thing that I would like people to consider is a cumulative analysis of the TCQ is supposed to have some sort of cumulative analysis program.

It's important for us to know exactly the impacts of all the neighbors. Just like you said, there is Contanda Chemical, it's 87 CO carbon storage tanks with a capacity of a thousand to 74,000 barrels of chemical product. At Valero Refining, it has 164,000 barrels per calendar day of refining, and then the sulfuric acid plant that's Eco Services, original Rhodia.

So it's important for us to know the impacts of all of these aggregated together. RMP facilities have these radiuses.

But we are not accounting for the toxic impacts on the communities, and adding all that information, to not say that four facilities are exposing the community to 10 cancer-causing substances but instead saying this community is exposed to 40, and taking into account that all of them have safety hazards and all of them have chemical releases, they all are exposed to fires and incidences whether it is—people keep talking about these terrorist attacks but the communities are exposed to daily toxics.

They're more frequently exposed to fires from chemical releases and fugitive emissions than they are a terror attack.

So I would hope that this committee considers these everyday problems with community members in the decision to keep going

forward and give people the opportunity to make their own decisions—safe ones for them and their families.

Mr. HARPER. The gentleman's time has expired.

Seeing that there are no further members wishing to ask questions, I want to thank each of you for being here today and for the knowledge and information that you have shared with us. It's very, very helpful.

Before we conclude, I would like to ask for unanimous consent to submit the following document for the record—a letter from the Chemical Facility Anti-Terrorism Standards Coalition.

Without objection, so ordered.

[The information appears at the conclusion of the hearing]

Mr. HARPER. And pursuant to committee rules, I remind members that they have 10 business days to submit additional questions for the record, and should you get any of those questions I would ask that you submit your responses within 10 business days from the receipt of such questions.

Without objection, the subcommittee is adjourned.

[Whereupon, at 12:44 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]

June 14, 2018

The Honorable John Shimkus
Chairman
House Subcommittee on Environment
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Paul Tonko
Ranking Member
House Subcommittee on Environment
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Shimkus and Ranking Member Tonko:

The Chemical Facility Anti-Terrorism Standards (CFATS) Coalition comprises a diverse group of trade associations and companies impacted by the CFATS regulations. Coalition members represent major sectors of the American economy, including chemical production, chemical distribution and storage, manufacturing, oil and gas refining, utilities, mining, and agricultural goods and services. The businesses we represent are vital to the American economy. A multi-year reauthorization would provide our industries with the regulatory certainty we need to efficiently meet compliance requirements and enable the Department of Homeland Security (DHS) to effectively run the CFATS program.

The CFATS Coalition requests that you make multi-year reauthorization of CFATS an immediate priority in your committee. The current CFATS authorization will sunset in January 2019. With a full congressional calendar in 2018, it is critical for your committee to take up CFATS reauthorization legislation as soon as possible so it can proceed to the full U.S. Senate and U.S. House of Representatives for consideration and approval.

The CFATS program has focused our industries on security, helping to make our nation more secure. Since its establishment in 2007, our industries have invested millions of dollars and instituted thousands of new security measures at our facilities. The "Protecting and Securing Chemical Facilities from Terrorist Attacks Act" of 2014 (P.L. 113-254), which for the first time provided CFATS a multi-year authorization, further enhanced these efforts by providing regulatory certainty to both industry and DHS. This stability allowed DHS to increase efficiencies in the program while streamlining the information submission process for regulated facilities.

A multi-year reauthorization of CFATS in the next few months would allow for the continuation of this positive momentum. We urge you to move CFATS reauthorization through the legislative process as soon as possible. Doing so will enhance the security of our products, our people, and our nation.

Sincerely,

Agricultural Retailers Association
American Chemistry Council
American Fuel & Petrochemical Manufacturers
American Gas Association
American Petroleum Institute
Institute of Makers of Explosives
International Liquid Terminals Association
Interstate Natural Gas Association of America

National Association of Chemical Distributors
National Association of Manufacturers
National Mining Association
Society of Chemical Manufacturers & Affiliates
The Fertilizer Institute

cc: The Honorable Greg Walden, Chairman, House Committee on Energy and Commerce
The Honorable Frank Pallone, Ranking Member, House Committee on Energy and Commerce

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225-2927
Minority (202) 225-3641

July 16, 2018

Mr. Dave Wulf
Acting Deputy Assistant Secretary, Infrastructure Protection
U.S. Department of Homeland Security
245 Murray Lane, S.W.
Washington, DC 20528

Dear Mr. Wulf:

Thank you for appearing before the Subcommittee on Environment on June 14, 2018, to testify at the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. Also attached are Member requests made during the hearing. To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Monday, July 30, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to kelly.collins@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

John Shimkus
Chairman
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachments

Question#:	1
Topic:	Drinking Water Facility Attack
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable Janice D. Schakowsky
Committee:	ENERGY & COMMERCE (HOUSE)

Question: In 1998, pursuant to Presidential Decision Directive 63 on Critical Infrastructure Protection, the Environmental Protection Agency (EPA) has served as the designated agency for the water supply sector.

In 2000, EPA established a partnership with the Association of Metropolitan Water Agencies (AMWA) and American Water Works Association (AWWA) to jointly undertake measures to safeguard water supplies from terrorist acts. AWWA's Research Foundation contracted with the Department of Energy's Sandia National Laboratory to develop a vulnerability assessment tool for water systems (as an extension of methodology for assessing federal dams). EPA supported a project with the Sandia Lab to pilot test the physical vulnerability assessment tool and develop a cyber vulnerability assessment tool. This effort took on added importance after September 11, 2001.

On June 12, 2002, President George W. Bush signed into Public Law 107-188, the Public Health Security and Bioterrorism Prevention and Preparedness Act. Title IV of this Act established requirements on drinking water systems to conduct vulnerability assessments and create emergency response plans to prevent intentional acts to introduce biological, chemical, or radiological contamination into public water supplies. An Information Sharing and Analysis Center supported by an EPA grant became operational under AMWA's leadership in December 2002, allowing for dissemination of alerts to drinking water utilities about potential threats or vulnerabilities to the integrity of their operations that have been detected and viable resolutions to problems.

On December 17, 2003, President George W. Bush issued Homeland Security Presidential Directive 7. This directive, issued 11 months after the creation of the Department of Homeland Security (DHS) and 22 months after DHS's predecessor, the Office of Homeland Security, established EPA as the Sector Specific Agency for drinking water systems because this sector possessed "unique characteristics and operating models." Subsequent presidential directives have affirmed this designation and responsibility for the security of the sector, including the latest one, Presidential Policy Directive 21 from February 12, 2013, relating to Critical Infrastructure and Resilience.

When Congress, in 2006, established the Chemical Facility Anti-Terrorism Standards (CFATS) program in section 550 of Public Law 109-295, Congress recognized this would be the first regulatory authority DHS would be given on its own - rather than inherit from legacy agencies - and that CFATS should not cover security at facilities already subject to another regime. In the case of drinking water, Congress not only

Question#:	1
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Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable Janice D. Schakowsky
Committee:	ENERGY & COMMERCE (HOUSE)

understood that facilities were subject to Title IV of Public Law 107-188, but that chemicals were an integral part of disinfecting pathogens and the public health dimension of drinking water made a chemical control program - focused on only the security dimension of the plant -- an ill-suited replacement for the needs of this sector. For this reason, Congress has routinely rejected calls to make drinking water systems subject to CFATS or substitute DHS for EPA as the sector specific lead.

Has there been a successful terrorist attack at a drinking water facility with EPA as the lead agency for this sector?

Is EPA incapable of carrying out congressional or executive branch requirements?

Response: The EPA has consistently demonstrated a robust capability to carry out congressional and executive branch requirements. To date, no successful physical terrorist attacks have been executed on drinking water facilities in the United States. However, EPA and DHS have established that water and wastewater systems in the United States are vulnerable to terrorist attacks, and the methods, means, and capabilities to carry out such attacks are readily available. Further, terrorist attacks on drinking water systems in foreign countries have been reported, including the use of techniques that could be applicable to drinking water systems in the United States. DHS and the EPA would be glad to provide additional information in response to this question in a classified briefing.

Question#:	2
Topic:	CFATS Expansion
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

Question: Past Subcommittee hearings have demonstrated how DHS has struggled with getting CFATS up and running since its inception in 2006. Currently, DHS regulates 3,556 facilities under CFATS. Adding just those drinking water utilities serving more than 10,000 persons would more than double CFATS's coverage universe by more than 4,100.

Please state how DHS would manage a CFATS program of nearly double its size that has public health and engineering questions that must be managed daily?

Response: The Department recommends a joint DHS-EPA gap analysis study to examine this issue and to inform any future congressional consideration of the prospect of changing the statute to remove the current exclusion of public water systems and treatment works. *See* 33 USC 1292 and 42 USC 300f. If, upon conclusion of the study, Congress amends the statute and no longer exempts water systems and treatment work facilities from CFATS requirements, then the number of facilities that must report their holdings of chemicals of interest would increase; however, the size of the population required to report their chemical holdings would depend on any parameters set in the statute.

DHS and EPA would work together to implement CFATS requirements for water and wastewater systems recognizing the critical role of these systems for public health protection.

Question: How long would DHS need to ramp up to be in technically proficient enough to competently execute security reviews and inspections at these unique facilities under CFATS?

Response: As stated above, the Department and EPA recommend a joint gap analysis study to examine this issue and to inform any future congressional consideration on the prospect of changing the statute to remove the current exclusion of public water systems and treatment works. CFATS is a highly flexible, non-prescriptive regulation that is being effectively applied to a wide variety of facilities possessing chemicals of interest. The Risk-Based Performance Standards allow for security plans to be tailored to a facility's unique circumstances, and chemical security inspectors are trained to provide compliance assistance to facilities as they develop those security plans.

Question#:	2
Topic:	CFATS Expansion
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

DHS and EPA would work together to determine the best way to implement CFATS requirements for water and wastewater systems while minimizing start-up time.

Question: Recognizing that - due to practical and policy considerations -- previous presidential directives and congressional enactments have consistently placed the lead for drinking water system security with EPA and DHS providing support to EPA, please state why that was the wrong position for those administrations and congresses to take?

Response: The Department has no reason to question previous presidential directives or Congressional enactments. As stated above, the Department and EPA recommend a joint gap analysis study to examine this issue and to inform any future congressional exclusion of public water systems and treatment works. If CFATS were extended to water and wastewater systems, DHS and EPA would work together to implement CFATS requirements for those systems recognizing their critical role for public health protection.

Question#:	3
Topic:	CFATS Tiering
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

Question: Is CFATS tiering objective if DHS personnel can override it?

Response: DHS has invested significant time and expertise in developing a scientifically-supported approach to calculating facilities' risk as a function of terrorist threat, inherent vulnerabilities, and the potential consequences of a terrorist attack. The approach was the result of three years of work by DHS risk experts, developed in coordination with industry and government partners. A panel of external experts reviewed the methodology, and it was independently verified and validated by Sandia National Laboratories.

DHS is committed to ensuring that the data used in the methodology is accurate and complete in order to form the best possible assessment of risk. Experts review the data entered by a facility on its Top-Screen, which is used in the tiering determination, for quality assurance. Additionally, if there are inconsistencies or questions about the data used in the tiering methodology, DHS works with facilities to ensure that all data is accurate and complete.

Question#:	4
Topic:	New Methodology
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

Question: Mr. Wulf, your written testimony notes that all facilities with holdings of chemicals of interest have been asked to resubmit information to inform a risk-assessment using the new methodology. Has the tiering for any of these facilities changed because of the new methodology?

Response: The improved risk methodology considers a facility's consequence, vulnerability, and threat in its high-risk determination. The methodology has several new components within each of the elements of risk which resulted in some facilities seeing a change in their tiering results. Changes at previously high-risk facilities are set forth below:

- Approximately 36% of the previous high-risk population remained at the same tier. For example, a tier 2 facility that remained a tier 2.
- Approximately 48% of the previous high-risk population moved from one high-risk tier to another high-risk tier. For example, a tier 2 facility that became a tier 3.
- Approximately 15% of the previous high-risk population has been determined not to be high-risk. For example, a tier 4 facility that is no longer tiered.

Finally, approximately 4% of the previous not-high-risk population (approximately 24,000) have been determined to be high-risk (e.g. a previously-untiered facility that is now a tier 4).[1]

These percentages are very similar to the projections DHS briefed to industry in April 2017.

Question: What has been the reaction by the regulated stakeholders to the new methodology?

Response: The response from industry has been overwhelmingly positive. Industry representatives have expressed appreciation for the more-streamlined and user-friendly tools and for the transparency in the new tiering methodology. When questions have

[1] Note: The first three numbers – 36%, 48%, and 15% – add up to 99% due to rounding. This represents the entirety of the high-risk population prior to the enhanced methodology. The fourth number – 4% – should not be added to this calculation, as it represents 4% of a separate population--facilities that were previously not high-risk.

Question#:	4
Topic:	New Methodology
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

been raised by industry, DHS has offered technical consultations or in-person compliance assistance visits to resolve any concerns.

Question#:	5
Topic:	Appendix A Chemical Security
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

Question: Over the last 11 years, how has CFATS impacted the security of Appendix A chemicals at facilities containing them above threshold levels?

Response: In order to comply with CFATS and the Risk-Based Performance Standards (RBPS), high-risk facilities have implemented tens of thousands of security measures to enhance the security surrounding their chemicals of interest. DHS has determined that 75% of facilities have implemented, at a minimum, one enhancement to their security in order to satisfy the RBPS. These enhancements include measures such as:

- Detection measures – Facilities have added intrusion detection systems, cameras or personnel-based monitoring to their perimeter and/or storage locations for the chemicals of interest.
- Delay measures – Facilities have added layers of delay measures through locked cages, buildings, or rooms in order to create additional barriers of protection and reduce the number of individuals which have access to the chemicals of interest.
- Personnel Surety – Facilities are conducting background investigations on all individuals with access to the chemicals of interest and, as applicable, are implementing escort procedures for visitors.
- Training – Facilities have developed and are conducting security awareness training, drills, and/or exercises related to potential threats and attack scenarios.
- Response – Facilities have developed and are implementing security response plans and coordinate regular/recurring outreach with local law enforcement and first responders.

Question#:	6
Topic:	Personnel Surety
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

Question: As you know, personnel surety is an issue that never seems to go away. Your testimony mentioned that DHS is preparing to address personnel surety for Tier 3 and 4 sites. Recognizing that Tier 3 and 4 sites do not pose as high a risk as Tier 1 and 2 sites - suggesting they need a littler touch - how is DHS applying this principle in thinking about PSP regulations at Tier 3 and 4 sites?

Response: Tier 3 and 4 facilities are still considered high-risk, and an attack on them or using their chemicals of interest could cause significant loss of life. DHS believes that due to these facilities' risk levels they should be required to implement all applicable Risk-Based Performance Standards, including RBPS 12(iv) – screening for terrorist ties. All high-risk facilities with approved site security plans are currently implementing2 the other portions of RBPS 12—checks on identity, legal authorization to work, and criminal history. RBPS-12(iv), however, known as the CFATS Personnel Surety Program, has been implemented only at Tier 1 and Tier 2 facilities. Since December 2015, DHS has been collecting best practices and lessons learned from deploying the Personnel Surety Program to Tier 1 and 2 facilities and is ready to implement the program at all high-risk chemical facilities.

The Department is in the process of requesting approval, through the Paperwork Reduction Act (PRA) process, to collect information about individuals with/or seeking access to high-risk chemical facilities for all four Tiers by August 2018. In anticipation of this request, the Department published a 60-day notice in December of 2017 and a 30-day notice in June 2018.

Consistent with other performance standards, the Department places a priority on affording facilities flexibility in how they tailor their security plans to comply with RBPS 12(iv). While other RBPS—such as those focused on delaying and detecting terrorist attacks—are scalable based on a facility's tier, there is no comparable way to scale the conduct of terrorist-ties checks that are designed to address insider threat. Nonetheless, DHS affords facilities four options from which a facility may choose to satisfy the personnel surety requirement.

- Option 1: Direct vetting, via the Chemical Security Assessment Tool (CSAT) Personnel Surety Program application

[2] IN this case implementing could also include having a planned measure in place.

Question#:	6
Topic:	Personnel Surety
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

- Option 2: Leveraging vetting conducted under other credential programs, which allows for submission of other credential information via the CSAT Personnel Surety Program application;
- Option 3: Electronic Verification of a Transportation Worker Identification Credential (TWIC), using a TWIC reader
- Option 4: Visual verification of credentials.

Facilities also are invited to propose other options to ensure screening of terrorist ties for facility personnel and unescorted visitors. It also bears noting that facilities can decide to restrict access to critical assets completely for some facility personnel or require escorts for visitors in order to reduce the number of individuals required to be vetted. The Department plans to provide additional resources and assistance to Tier 3 and 4 facilities based on the lessons learned to date and plans also to continue allowing facilities to avail themselves of multiple options. Accordingly, and in view of the continuing threat of chemical terrorism, we believe it is appropriate to extend the Personnel Surety Program to high-risk facilities in Tiers 3 and 4.

Question#:	7
Topic:	Precursor Chemical Gaps
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

Question: You were asked, due to existing regulations but the Bureau of Alcohol Tobacco and Firearms and the Department of Transportation, about whether a statutory exemption from CFATS was warranted for facilities manufacturing explosives. You stated that there was a great deal of overlap between ATF and CFATS, but that you would be concerned that gaps would exist for precursor chemicals if such a statutory exemption was granted by Congress.

Under Section 3(d) of Executive Order 13777, DHS was required to identify regulations that could be modified to reduce unnecessary regulatory burden, including instances of duplication. In addition, CFATS gives DHS the ability to permit compliance with approved alternate security programs to satisfy some or all CFATS requirements.

Has DHS taken action pursuant to Executive Order 13777 or under Alternate Security Program provisions in the Homeland Security Act to eliminate the duplication between CFATS and ATF while at the same time permit CFATS to cover articulated gaps in law for precursor chemicals? If not, why not?

Response: While I did state that there is some overlap between ATF's requirements and CFATS, it would be an overstatement to say that there is a great deal of overlap. Both ATF and DHS have the authority to regulate facilities that possess explosive materials, but there are notable differences between the programs. The CFATS reporting requirements apply to facilities with holdings of screening threshold quantities of Chemicals of Interest as set forth in the CFATS regulation; however, only those facilities that are subsequently assessed as high-risk are required to implement security plans addressing the 18 CFATS risk-based performance standards. ATF regulations require both safety and security measures, to include requirements related to the conduct of inventories, the reporting of thefts/losses, and magazine-locking standards. CFATS facilities are encouraged to include the applicable security and safety measures they have in place, such as those implemented due to ATF regulation, in their CFATS site security plan or alternative security program. Because coverage under the CFATS regulation applies only to the highest-risk chemical facilities, DHS feels it is appropriate that the monitoring and detection standards required of high-risk facilities are more robust than those required under the ATF regulations that apply to all persons who store these materials.

Question#:	7
Topic:	Precursor Chemical Gaps
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable John M. Shimkus
Committee:	ENERGY & COMMERCE (HOUSE)

DHS is concerned that a wholesale exclusion from CFATS for facilities that are regulated by ATF would leave a security gap with regard to precursor chemicals that exist at those sites. ATF regulations apply to materials whose primary or common purpose is to function by explosion. ATF does not regulate Improvised Explosive Device (IED) precursor chemicals, such as ammonium nitrate. CFATS does apply to these IED precursor chemicals. They are often stored on the same site, but have no security or safe-storage requirements under ATF regulations.

There are very few high-risk CFATS facilities that are covered only for explosive materials regulated by ATF; the majority that have been determined to be high risk for explosives are considered high-risk in part because of their holdings of other chemicals of interest that are not regulated by ATF.

Appendix A to the CFATS regulation is the list of chemicals, concentrations, and quantities that must be reported to DHS. In order to add, remove, or modify a chemical of interest on Appendix A, DHS would be required to go through rulemaking

Question#:	8
Topic:	Appendix A List Modifications
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable Paul Tonko
Committee:	ENERGY & COMMERCE (HOUSE)

Question: What is the current process to add, remove, or modify a chemical of interest on the Appendix A list?

Response: In order to add, remove, or modify a chemical of interest (COI) on Appendix A, DHS is required to go through notice-and-comment rulemaking. This process would provide industry and the public with the ability to comment on any proposed changes to Appendix A prior to additions, removals or modifications becoming final.

Question: How many chemicals of interest have been added, removed, and modified on the Appendix A list in each year since the program's creation?

Response: To date, DHS has not revised Appendix A since its publication on November 20, 2007. See 72 FR 65396.

Question#:	9
Topic:	Drinking and Waste Water Facility Security
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable Paul Tonko
Committee:	ENERGY & COMMERCE (HOUSE)

Question: There are very different security and regulatory regimes at nuclear facilities, federal facilities, and other sites that received exemptions. But in the past, DHS has expressed concerns over the gaps created by these exemptions. A number of years ago, DHS testified that the administration's position to support closing security gap at drinking water facilities, is that still the administration's position?

Response: As noted above, the Department and EPA recommend a joint gap analysis study to examine this issue and to inform any future congressional decision-making with regard to the prospect of changing or removing the current exclusion of public water systems and treatment works.

Question: Does the administration still support maintaining EPA as the lead agency for drinking water and waste water facility security with the DHS supporting EPA's efforts?

Response: As stated above, the Department and EPA recommend a joint gap analysis study to examine this issue and to inform any future congressional decision-making with regard to the prospect of changing or removing the current exclusion of public water systems and treatment works.

Should Congress revoke the exclusion, DHS and EPA would work together to determine the best way to implement the CFATS program for water and wastewater systems recognizing the critical role of these systems for public health protection.

Question#:	10
Topic:	Secure Power Supply
Hearing:	The Chemical Facilities Anti-Terrorism Standards Program (CFATS) - A Progress Report
Primary:	The Honorable Diana DeGette
Committee:	ENERGY & COMMERCE (HOUSE)

Question: Does DHS have specific recommendations for providing a secure power supply under CFATS?

Response: Because CFATS is a non-prescriptive program and based on risk-based performance standards (RBPS), DHS does not provide specific recommendations. However, under RBPS 10 (Monitoring) facilities are required to implement security measures to:

i. Ensure that security systems and equipment are in good working order and inspected, tested, calibrated and otherwise maintained;

ii. Regularly test security systems, note deficiencies, correct detected deficiencies and record results; and

iii. Promptly identify and respond to security system and equipment failures or malfunctions.

Therefore under this RBPS, DHS ensures facilities have appropriate temporary or compensatory measures for system outages and failures—for instance measures that may include a secure power supply or backup power supply.

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
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ONE HUNDRED FIFTEENTH CONGRESS

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July 16, 2018

Mr. Chris P. Currie
Director, Emergency Management; National Preparedness;
and Critical Infrastructure Protection
Homeland Security and Justice Team
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20226

Dear Mr. Currie:

Thank you for appearing before the Subcommittee on Environment on June 14, 2018, to testify at the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 30, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to kelly.collins@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

John Shimkus
Chairman
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

GAO U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

July 30, 2018

The Honorable John Shimkus
Chairman
Subcommittee on Environment
Committee on Energy and Commerce
House of Representatives

Chemical Facility Anti-Terrorism Standards Program: Responses to Posthearing Questions for the Record

Dear Mr. Chairman:

On June 14, 2018, I testified before the Committee on Energy and Commerce's Subcommittee on Environment on progress and challenges in the Department of Homeland Security's (DHS) management of its Chemical Facility Anti-Terrorism Standards (CFATS) program. Subsequent to the hearing, you provided us a letter dated July 16, 2018, requesting a response to additional questions to be submitted for the record. This letter responds to the questions for the record that you posed.

If you have any questions about this letter or need additional information, please contact me at (404) 679-1875 or curriec@gao.gov.

Sincerely yours,

Chris P. Currie
Director, Homeland Security and Justice

Enclosure

Questions for the Record
June 14, 2018 Hearing on "The Chemical Facilities Anti-Terrorism Standards (CFATS) Program—A Progress Report" before The Subcommittee on Environment, House Committee on Energy and Commerce

1. **Mr. Currie, your testimony overall seems pretty positive about the changes that DHS has made to the CFATS program. What would you say are the most notable improvements DHS has made to date regarding the implementation of the program?**

   As noted in my statement, some of the most notable improvements DHS has made, to date, regarding implementation of the program are strengthening of the accuracy of the data used to identify high-risk facilities; eliminating the backlog of site security plans needing approval; implementing the Expedited Approval Program (EAP); and developing and using a questionnaire to solicit feedback on outreach with industry stakeholders.

   a. **What are the most notable areas where DHS still needs to improve its implementation of the program?**

      In April 2013, we reported that DHS's risk assessment approach did not consider all of the elements of threat, vulnerability, and consequence associated with a terrorist attack involving certain chemicals.[1] At that time, DHS's risk assessment was based primarily on consequences from human casualties, but did not consider economic consequences, as called for by the National Infrastructure Protection Plan and the CFATS regulation. We also found that (1) DHS's approach was not consistent with the NIPP because it treated every facility as equally vulnerable to a terrorist attack regardless of location or on-site security and (2) DHS was not using threat data for 90 percent of the tiered facilities—those tiered for the risk of theft or diversion—and using 5-year-old threat data for the remaining 10 percent of those facilities that were tiered for the risks of release or sabotage. We recommended that DHS enhance its risk assessment approach to incorporate all elements of risk and conduct a peer review after doing so.

      As noted in my statement, DHS has taken actions to better assess regulated facilities' risks in order to place the facilities into the appropriate risk tier. We are currently reviewing relevant technical reports, plans, and assessments describing changes made to revise DHS's risk assessment methodology as part of our ongoing work and will report on the results of this work later this summer.

2. **Mr. Currie, your written testimony highlights the fact that DHS has eliminated the backlog for the Agency's reviews of site security plans and visits to facilities to ensure that security measures meet DHS standards. Based on its analysis, is it GAO's understanding that DHS appropriately completed all of the reviews and site visits?**

   We have not reviewed whether DHS appropriately completed all of the reviews of site security plans and site visits to facilities to ensure that security measures meet DHS standards. However DHS data shows that DHS has eliminated the backlog of reviews and

[1]GAO, *Critical Infrastructure Protection: DHS Efforts to Assess Chemical Security Risk and Gather Feedback on Facility Outreach Can Be Strengthened*, GAO-13-353 (Washington, D.C.: Apr. 5, 2013).

visits to facilities. Regarding the latter, DHS is currently updating its guidance for the conduct of facility site visits.

a. **Does GAO have any recommendations regarding DHS's handling of site security plans?**

In 2015, we found that DHS had made improvements to its processes for reviewing and approving site security plans and have no outstanding recommendations related to these plans.[2] For example, these improvements included (1) distributing updated internal guidance and lessons learned on plan approvals to inspectors and plan reviewers; (2) distributing updated guidance to facilities to help them improve their site security plans; and (3) implementing changes to inspection processes, such as employing smaller inspection teams, conducting preinspection phone calls with facilities to help them prepare for inspections, and enabling inspectors to help facility personnel edit their site security plans during inspections.

3. **Mr. Currie, one of the issues raised in your testimony where DHS may have room for improvements is regarding compliance inspections. Your written testimony notes that as of July 2015 DHS had conducted compliance inspections at only 83 of the 1,727 facilities with approved security plans. Do you know what the current number of facilities for which DHS has conducted compliance inspections?**

We are currently examining compliance inspections as part of our ongoing work with a focus on, among other things, the extent to which the CFATS program has taken action to conduct chemical facility inspections since we first examined this area in 2015. In addition to examining changes made to the program's compliance inspection process and related procedures and guidance, we also obtained data on the numbers of completed compliance inspections per year and will report on the results of our work in our report later this summer.

a. **Your written testimony also noted that of the small number of facilities for which DHS had conducted compliance inspections, nearly half of the facilities were not compliant with their approved security plans and that DHS did not have documented procedures for managing compliance. Based on GAO's analysis of the current situation, has DHS improved in this area?**

As noted in my statement, DHS updated its CFATS Enforcement Standard Operating Procedure (SOP) and has made progress on the new CFATS Inspections SOP. Once completed these two documents collectively are expected to formally document the processes and procedures currently being used to track noncompliant facilities and ensure they implement planned measures as outlined in their approved site security plans, according to ISCD officials. DHS officials stated they expect to finalize these procedures by the end of fiscal year 2018.

4. **Mr. Currie, your written testimony discusses the need for DHS to better coordinate and share data with states and other federal agencies, such as EPA, to better identify facilities that had failed to report information to comply with CFATS. Based on GAO's**

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[2]GAO, *Critical Infrastructure Protection: DHS Action Needed to Verify Some Chemical Facility Information and Manage Compliance Process*, GAO-15-614 (Washington, D.C., July 22, 2015).

recent analysis of the CFATS program, is DHS doing a better job of working with state and other federal agencies?

As noted in my statement, DHS has taken action to better identify facilities that had failed to report information to comply with CFATS. Specifically, DHS compared DHS data with data from other federal agencies, such as EPA, as well as member states from the Chemical Facility Safety and Security Working Group to identify potentially noncompliant facilities. As a result of this effort, in July 2015, DHS officials reported that they had identified about 1,000 additional facilities that should have reported information to comply with CFATS and subsequently contacted these facilities to ensure compliance. DHS officials told us that they continue to engage with states to identify potentially non-compliant facilities.

5. **Mr. Currie, you noted that DHS has made progress better assessing the risks at regulated facilities in order to place facilities in the appropriate risk tier. Would you please elaborate?**
   a. **GAO previously recommended that DHS incorporate all elements of risk in its risk assessment approach. Based on GAO's most recent analysis, does GAO believe that DHS is incorporating all elements of risk?**
   b. **Does GAO have any initial feedback it can share regarding the model DHS developed with Sandia National Laboratories regarding the elimination of the economic consequences of a chemical attack?**
   c. **What about the model that DHS developed with Oak Ridge National Laboratory to devise a new tiering methodology?**

As noted in my statement, DHS has made progress towards addressing our recommendations that it enhance its risk assessment approach to incorporate all elements of risk and conduct a peer review after doing so, and we are currently assessing these actions as part of our ongoing work. For example, DHS worked with Sandia National Laboratories to develop a model to estimate the economic consequences of a chemical attack. In addition, DHS worked with Oak Ridge National Laboratory to devise a new tiering methodology, called the Second Generation Risk Engine. In so doing, DHS revised the CFATS threat, vulnerability, and consequence scoring methods to better cover the range of CFATS security issues. Additionally, DHS conducted peer reviews and technical reviews with government organizations and facility owners and operators, and worked with Sandia National Laboratories to verify and validate the new tiering approach. We are currently reviewing relevant technical reports, plans, and assessments describing changes made to revise DHS's risk assessment methodology as part of our ongoing work and will report on the results of this work later this summer.

6. **Mr. Currie, your written testimony discusses the Expedited Approval Program that Congress in the CFATS Act of 2014 directed DHS to create as another option that tier 3 and tier 4 chemical facilities scan use to develop and submit security plans. Your written testimony notes that only 8 of the 3,152 facilities eligible to use the Expedited Approval Program opted to use it. Could you walk through why GAO thinks that is?**

As noted in my statement, DHS officials we interviewed attributed the low participation to several possible factors including:

- DHS had implemented the expedited program after most eligible facilities already submitted standard (non-expedited) security plans to DHS;
- facilities may consider the expedited program's security measures to be too strict and prescriptive, not providing facilities the flexibility of the standard process; and
- the lack of an authorization inspection may discourage some facilities from using the expedited program because this inspection provides useful information about a facility's security.[3]

We also found in 2017 that recent changes made to the CFATS program could affect the future use of the expedited program.[4] As discussed previously, DHS has revised its methodology for determining the level of each facility's security risk, which could affect a facility's eligibility to participate in the EAP. DHS continues to apply the revised methodology to facilities regulated under the CFATS program and but it is too early to assess the impact on participation in the EAP.

7. Mr. Currie, based on GAO's analysis of DHS's handling of compliance inspections and enforcement—Does GAO have any recommendations for DHS?

As noted in my statement, in our July 2015 report, we found that DHS began conducting compliance inspections in September 2013, and by April 2015, had conducted inspections of 83 of the 1,727 facilities that had approved security plans.[5] We found, among other things, that DHS did not have documented processes and procedures for managing the compliance of facilities that had not implemented planned measures by the deadlines outlined in their plans. We recommended that DHS document processes and procedures for managing compliance to provide more reasonable assurance that facilities implement planned measures and address security gaps. DHS agreed and has taken steps toward implementing this recommendation. Specifically, DHS has updated its CFATS Enforcement Standard Operating Procedure (SOP). Also, DHS has made progress on the new CFATS Inspections SOP. DHS officials stated they expect to finalize these procedures by the end of fiscal year 2018. Once completed these two documents collectively are expected to formally document the processes and procedures currently being used to track noncompliant facilities and ensure they implement planned measures as outlined in their approved site security plans, according to ISCD officials. We are examining compliance inspections, including progress on the new inspection process, as part of our ongoing work and will report on the results of our work in our report later this summer.

a. What about the issuance of penalties as a method of ensuring compliance, has GAO recommended to DHS that they issue penalties?

With regard to penalties, our July 2015 report showed that nearly half of the 83 facilities that had undergone a compliance inspection at that time were not fully compliant with their approved site security plans and that DHS had not used its authority to issue penalties because DHS officials found it more productive to work with facilities to bring

[3]An authorization inspection consists of an initial, physical review of the facility to determine if the Top-Screen, security vulnerability assessment, and site security plan accurately represent and address the risks for the facility.

[4]GAO, *Critical Infrastructure Protection: DHS Has Implemented Its Chemical Security Expedited Approval Program, and Participation To Date Has Been Limited*, GAO-17-502 (Washington, D.C.: June 29, 2017).

[5]GAO-15-614.

them in compliance.[6] We are examining compliance inspections and the use of penalties as part of our ongoing work and will report on the results of our work in our report later this summer.

8. **Mr. Currie, in past oversight hearings regarding CFATS, we discussed that a systematic approach to soliciting feedback on DHS's outreach efforts would improve the CFATS program. Are you familiar with whether DHS has improved its approach to obtaining systematic feedback on its outreach activities to facility owners and operators?**

   In our 2013 report, we recommended that DHS take action to solicit and document feedback on facility outreach consistent with DHS efforts to develop a strategic communication plan. DHS agreed and implemented this recommendation by developing a questionnaire to solicit feedback on outreach with industry stakeholders and began using the questionnaire in October 2016.[7]

   a. **Your written testimony notes that DHS agreed to take action to solicit and document feedback from the regulated community—to your knowledge has DHS done this?**

      As discussed above, DHS implemented this recommendation by developing a questionnaire to solicit feedback from the regulated community. According to ISCD officials, they intended to implement the questionnaire during various outreach engagements with stakeholders, including meetings and conferences, contact with ISCD's Knowledge Center, and during compliance assistance visits by ISCD inspectors.

   b. **Your written testimony mentions a questionnaire to solicit feedback on outreach with industry stakeholders and notes that DHS began using the questionnaire in October 2016. Does GAO have any information regarding the effectiveness of the questionnaire?**

      In early 2017, ISCD officials reported that they had begun to compile and analyze the data provided by stakeholders when using the questionnaire. However, we have not examined DHS's efforts to implement the questionnaire or the results associated with the data provided by stakeholders.

9. **One of the questions I have is how does Congress objectively know whether the CFATS program has over time been increasing security at regulated facilities.**

   a. **Can you tell me, from an objective standpoint, whether the CFATS program has increased security at regulated facilities?**

      In our July 2015 report, we found that DHS's performance measure for the Chemical Facility Anti-Terrorism Standards (CFATS) program, which was intended to reflect the overall impact of the CFATS regulation on facility security, did not solely capture security

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[6]GAO-15-614.

[7]GAO-13-353.

measures that were implemented by facilities and verified by ISCD.[8] Instead, the performance measure reflected both existing security measures and planned security measures that facilities intended to implement within the fiscal year. We recommended that the Director of ISCD improve the measurement and reporting of the CFATS program performance by developing a performance measure that includes only planned measures that have been implemented and verified. In December 2015, ISCD finalized its fiscal year 2016 annual operating plan that included verification requirements for the performance measure. Specifically, the new requirement requires that ISCD officials verify that planned measures have been implemented in accordance with the approved site security plan (or alternative security program) by compliance inspection other means before inclusion in the performance measure calculation. ISCD's actions to improve the performance measure verification are consistent with our recommendation. We are examining DHS effort to measure program performance as part of our ongoing work and will report on the results of our work in our report later this summer.

b. Can you give me some practical examples, including incidents prevented or security risks avoided?

We have not specifically examined examples of incidents prevented or security risks avoided, if any. However, we are examining DHS effort to measure program performance as part of our ongoing work and will report on the results of our work in our report later this summer.

c. What types of security metrics are critical to this objective evaluation?

In our July 2015 report, we stated that the National Infrastructure Protection Plan calls for evaluating the effectiveness of risk management efforts by collecting performance data to assess progress in achieving identified outputs and outcomes. In addition, the purpose of CFATS, as stated in its regulation, is to enhance national security by furthering DHS's mission and lowering the risk posed by certain chemical facilities. Measuring the effectiveness of the CFATS program requires that facilities implement planned security measures identified as necessary to address vulnerabilities and that DHS evaluate implementation of these measures against CFATS performance standards.

However, we further reported that, because ISCD's performance measure at that time reflected both existing security measures that had not necessarily been implemented in response to CFATS and planned security measures that had not yet been verified as implemented, ISCD's performance measure did not reflect the value of the CFATS program and its impact on reducing risk at facilities, as stated in performance reports.[9] We stated that, as the CFATS program matures and ISCD conducts compliance inspections in greater numbers, revising current performance measures or adding new ones to accurately reflect only security measures that have been implemented and verified would help provide a more accurate picture of ISCD's progress and help ISCD ensure that the program is meeting its goals.

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[8]GAO-15-614.

[9]GAO-15-614.

We are examining DHS effort to measure program performance as part of our ongoing work and will report on the results of our work in our report later this summer.

10. **Not every member of a Local Emergency Planning Committee (LEPC) is a first responder or local elected official. In fact, Section 301(c) of the Emergency Planning and Community Right to Know Act (EPCRA) mandates other parties, including the media constitute minimum composition of the LEPC. Section 2103 of the Homeland Security Act provides first responders and local elected officials' access to relevant chemical vulnerability information to respond to incidents.**

    a. **Do you think non-first responders and non-elected officials should be entitled access to CVI? If so, who and why?**

    We have not examined who should and who should not be provided access to CVI.

    b. **Do you think CVI training should be a pre-requisite to anyone seeking CVI? If so, why?**

    We have not examined the training requirements associated with gaining CVI access.

GREG WALDEN, OREGON
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July 16, 2018

Mr. Doug Brown
President and COO
Brown Chemical Company
302 West Oakland Avenue
Oakland, NJ 07436

Dear Mr. Brown:

Thank you for appearing before the Subcommittee on Environment on June 14, 2018, to testify at the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 30, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to kelly.collins@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

John Shimkus
Chairman
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

PO Box 440
Oakland, NJ 07436

Responses to Additional Questions for the Record

of

Douglas A. Brown
President and Chief Executive Officer
Brown Chemical Company, Inc.

to the

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

on

The Chemical Facility Anti-Terrorism Standards

July 30, 2018

T: 201-337-0900 **Fax: 201-337-9026**

www.brownchem.com

1. Your testimony acknowledges the existing CFATS Alternate Security Program or ASP and that firms in your trade association have had good experience using it. Yet, you also testify that you want DHS to give credit for using your trade association's safety and security code.

    a. If DHS has already issued an ASP that is being successfully deployed in your industry, what extra element are you seeking that the ASP does not give you?

    Answer:
    The CFATS Alternative Security Program for Chemical Distribution Facilities that NACD developed along with the American Chemistry Council is more of a template a facility can use as an alternative to the DHS Site Security Plan (SSP). It provides a way for facilities to describe their security measures in a narrative format and minimizes the duplication that was a problem with the original DHS SSP. Another advantage of the ASP over the DHS SSP is that it provides an actual plan for personnel reference and training. DHS treats facility ASPs just as they do SSPs. They review each ASP individually and inspect on the same schedule as facilities that use the DHS SSP.

    Our objective for an industry recognition program is to create a way to leverage programs such as NACD Responsible Distribution® by giving credit to facilities that participate in these programs.

    b. How would this work?

    Answer:
    Under such a recognition program, DHS would create an application and review process to determine eligibility of industry stewardship programs that meet certain performance criteria and provide incentives for participation. DHS would establish specific eligibility criteria and facility performance requirements and would determine program credit incentives. CFATS facilities could then request individually or collectively by their sponsoring organization to participate in the recognition program.

2. Your testimony applauds DHS's operation of the CFATS program and makes oblique references to problems the program had, including a risk assessment and tiering process that was not based on threat or vulnerability levels.

a. Was this methodology ever a concern for you in the past?
Answer:
Yes. The initial CSAT process was cumbersome and had many duplicative elements.

b. If yes, how had changes in CSAT 2.0 made a difference for your firm?
Answer:
My experience has been that CSAT 2.0, which allows facilities to submit their information and DHS to analyze the material more easily, is much more streamlined and user friendly than the prior version.

3. Where would you say CFATS has made the most improvements over the last four years?
Answer:
Following the 2014 four-year reauthorization, DHS was afforded the stability to increase efficiencies in the program while streamlining the information submission process for regulated facilities. In 2016, DHS developed an enhanced risk tiering methodology to identify more accurately high-risk facilities and assign them to appropriate risk tiers. In doing so, DHS notified all facilities with threshold quantities of CFATS chemicals of interest that they must submit new Top Screen surveys to the agency. At the same time, the agency launched CSAT 2.0. DHS implemented the re-tiering process in a timely and efficient manner and is now conducting authorization inspections and compliance inspections of facilities assigned to different tiers as well as newly regulated facilities. CSAT 2.0 is much more user friendly and minimizes the duplication that was a concern in the old DHS Security Vulnerability Assessment and SSP.

4. Recently, there was discussion about removing Tier 4 facilities from the CFATS program.

a. Would you be concerned that taking such a step would encourage DHS to expand the universe for what constitutes a Tier 3 facility, thereby moving former Tier 4 sites in a more heavily regulated category?
Answer:

Yes, I would be concerned with taking that step.

b. Why or why not.
Answer:
The largest percentage of CFATS-covered facilities are assigned at the Tier 4 level. My concern is that DHS would be hesitant to eliminate such a large percentage of facilities out of the CFATS program and, therefore, DHS would develop new methodology to bring many of those facilities into the CFATS program at the Tier 3 level. This action would likely increase the program requirements for facilities previously at the Tier 4 level.

5. Do you support allowing non-first responders and local elected officials to have access to Chemical Vulnerability Information for their official duties? If not, is it because you believe it is a bad idea to broadly share this information among the public?
Answer:
I do not support allowing non-first responders and local elected officials to have access to Chemical-terrorism Vulnerability Information (CVI) unless they have a need to know or obtain and maintain the required security clearances to possess such information. Facilities must protect sensitive information from individuals who might pose a threat to employees, property, or surrounding communities. Sensitive information – such as SSPs/ASPs, worst case scenario discharge data, Chemicals of Interest records, CVI, and tactical response information for emergency personnel – could threaten security if it falls into the wrong hands. The membership roles of local community first responder organizations very often comprise volunteers and change over quite frequently. This would, in my opinion, present an unreasonable risk to the secure information.

6. Is your Local Emergency Planning Commission only comprised of first-responders or the mayor?
Answer:
No. The NJ Civilian Defense and Disaster Control Act (N.J.S.A. App. A:9_33) and NJ Executive Order 161 signed in 1987, require New Jersey LEPCs to include representation from elected and local officials, local media representatives,

local environmental and transportation agencies, and community groups, among others.

7. Some people would like to see workers Federally-required to be part of the creation of a facility's security vulnerability assessment and site security plan.

    a. Do you think this should be mandated or do you think this interaction is better left to the collect bargaining process between workers and their employer? Why?

    Answer:
    Under the current statute, at least one facility employee and one union representative are required (to the greatest extent practicable) to be involved in the development of an SSP or ASP – so long as these individuals have appropriate training and experience. Due to the sensitive nature of an SSP or ASP, the language in the current statute should not be amended to expand the scope or intent of this provision. The inclusion of additional employees and/or union members in the development of an SSP or ASP should be left to the discretion of facility owners/operators.

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
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Majority (202) 225-2927
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July 16, 2018

Dr. Mike Wilson
National Director, Occupational and Environmental Health
BlueGreen Alliance
369 Pine Street; Suite 700
San Francisco, CA 94104

Dear Dr. Wilson:

Thank you for appearing before the Subcommittee on Environment on June 14, 2018, to testify at the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 30, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to kelly.collins@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

John Shimkus
Chairman
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

FOLLOW-UP RESPONSES

July 30, 2018

Michael P. Wilson, Ph.D., MPH
National Director for Occupational and Environmental Health
BlueGreen Alliance
Before the 115th United States Congress, House Committee on Energy and Commerce, Subcommittee on Environment
The Chemical Facilities Anti-Terrorism Standards Program (CFATS): A Progress Report
Rayburn House Office Building, Room 2123
Thursday, June 14, 2018

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1) ***In your written testimony, you discussed your previous experience as Chief Scientist in California's Department of Industrial Relations, including the important lessons you learned about including workers in risk management and response. You wrote that industrial employees bring experience, expertise, accountability, and transparency, and added that "workers need strong regulatory language to gain a seat at the decision-making table."***

a) ***Do you believe that the CFATS program, in its current form, is well-suited to give workers a seat at the table?***

I. Summary response

The requirements pertaining to employee input in CFATS represent an important step forward, but much more is needed. To be effective, CFATS needs to include the following additional requirements of employers, each of which is contained in California's 2017 process safety management (PSM) regulations for petroleum refineries:

(1) the right of employees to participate throughout all phases of CFATS decision-making, from design to implementation, training, evaluation and maintenance;

2) the right of employees to select their representatives who participate in management's CFATS decision-making processes;
(3) access by employees to documents or information relevant to CFATS decision-making, including information that might be subject to protection as a trade secret;
(4) the right of employees to anonymously report site security weaknesses; and,
(5) the obligation of employers to maintain a record of all employee reports of site security weaknesses.

II. Detailed response

CFATS section 2102(b)(2) on Employee Input requires that, "to the greatest extent practicable, a facility's security vulnerability assessment and site security plan shall include input from at least 1 facility employee and, where applicable, 1 employee representative from the bargaining agent at that facility, each of whom possesses, in the determination of the facility's security officer, relevant knowledge, experience, training, or education as pertains to matters of site security."

Industry recognizes that employees must have a meaningful decision-making role in process safety.

In its *Guidelines for Risk Based Process Safety*, the chemical process industry's Center for Chemical Process Safety (CCPS) lists workforce involvement as one of 20 management systems necessary to reduce process safety risks and prevent chemical accidents, pointing out that:[1]

> "...workers are potentially the most knowledgeable people with respect to the day-to-day details of operating the process and maintaining the equipment and facilities, and may be the sole source for some types of knowledge gained through their unique experiences. Workforce involvement provides management a formalized mechanism for tapping into this valuable expertise."

The CCPS defines "workforce involvement" as a "system for enabling the active participation of company and contractor workers in the design, development, implementation, and continuous improvement of the Risk Based Process Safety

[1] Center for Chemical Process Safety (CCPS) American Institute of Chemical Engineers (2007). *Guidelines for Risk Based Process Safety*. Wiley and Sons. (p. 124).

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management system."[2] This same definition could be applied to the role of employees in facility security systems.

The CCPS *Guidelines* were developed and reviewed by experts from many of the nation's leading chemical process companies, including Dow, DuPont, ExxonMobil, Chevron Energy Technology Company, 3M, Air Product and Chemicals Inc, Shell Chemical, BP, Olin Corporation, Bayer Material Science and others.[3]

The evidence suggests that the 2012 Richmond, Chevron refinery fire might have been prevented if managers had been required to involve employee representatives in process safety decision-making.

Evidence identified by the CSB points to a lack of employee participation in process safety decision-making as a key factor leading up to the 2102 Richmond, Chevron refinery fire, which endangered the lives of 19 worker and caused some 15,000 are residents to seek medical attention for symptoms related to smoke and fire gas exposure.

The CSB's interim report of that incident shows that it would have been prevented if Chevron's managers had followed the recommendations of their own engineers. The fact that they did not resulted in part because Chevron employee representatives were *excluded* from management's decision-making process.

Over a period of several years leading up to the catastrophic pipe failure and fire, Chevron's engineers issued at least six reports calling attention to the problem of sulfidation corrosion in the crude unit and recommending a more aggressive pipe inspection and monitoring program. As the CSB's report pointed out, Chevron's engineers made these recommendations against a backdrop of serious sulfidation corrosion incidents in the U.S. refinery sector that occurred at Chevron's El Paso, Texas refinery (1988), Chevron's Pascagoula, Mississippi refinery (1988 and 1993), Chevron's Salt Lake City, Utah refinery (2002), the Richmond, California refinery itself (2007), the Silver Eagle refinery in Woods Cross, Utah (2009), the Regina Saskatchewan, Canada refinery (2011), and the BP Cherry Point, Washington refinery (2012).[4]

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[2] CCPS, *op cit.* (p. 124).
[3] CCPS, *op cit.* (Preface).

[4] U.S. Chemical Safety and Hazard Investigation Board (CSB) (April 2013). *Interim Investigation Report.* Chevron Richmond Refinery Fire of August 6, 2012. (pp. 24-27) (Available: https://www.csb.gov/chevron-refinery-fire/). Accessed June 27, 2018.

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By 2009, Chevron's engineers warned of the potential for a catastrophic pipe failure, and still management chose not to act. The pipe finally failed in 2012 as the engineers predicted it would, and 19 workers nearly lost their lives.

Had Chevron been required to involve employee representatives in management's pipe corrosion assessments, those representatives would likely have been aware of the engineers' reports, and they would almost certainly have requested that the engineers' recommendations be implemented. In taking those actions, the serious state of corrosion in the crude unit would have become apparent. This would likely have resulted in a shut-down of the unit to replace damaged sections of pipe, thereby preventing the catastrophic failure that ultimately occurred in August 2012.

b) In your opinion, how could the employee input requirements of CFATS be strengthened to guarantee that employee voices are heard?

I. Summary response

Employees and their representatives will not normally be invited to participate with any real authority in management's decision-making committees, including those focused on plant safety and security. At a minimum—including with a unionized workforce—employees need regulatory authority to obtain a seat at the table. For employee participation to be meaningful, however, that authority must provide much more than the basic right to participate; it must provide for at least seven key elements described below.

II. Detailed response

The perspectives of rank-and-file employees are invaluable in site security decision-making, but only if they are given the right to meaningfully participate.

The requirement for employee input is critical to the success of CFATS and should be expanded. Experienced employees often have a deep understanding of the practical workings of a plant, and they can apply this experience in helping to set priorities and determine if a proposed security measure will function as intended. Employees have a direct stake in protecting the safety of the facility. As the CSB identified in the Chevron, Richmond incident, effective employee participation can improve the transparency and accountability of management

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decision-making, which can otherwise be skewed by production and financial pressures.

To be effective, employee input into site security must be underpinned by clear regulatory requirements of owners or operators to:

(1) allow employees to select their representatives, either through their collective bargaining agent, where present, or by a transparent process established by the employer;
(2) ensure and document employee participation, to the greatest extent practicable, throughout all phases of site security decision-making, not simply as a final "rubber stamp" to management's proposals;
(3) provide for ongoing participation in the implementation and maintenance of security measures, not simply during the final decision-making phase;
(4) provide for participation in the training and evaluation of site security measures;
(5) provide a means for anonymous reporting of site security problems, and an obligation of owners or operators to maintain a record of such reports;
(6) provide a means for confidential input by employees to regulators during CFATS audits and inspections; and,
(7) provide a means to certify that employee input has been received and integrated to the greatest extent practicable into plant security measures.

California's 2017 refinery safety regulations include new rights of employees and their representatives to participate in process safety decision-making.

Employees and their representatives will not normally be invited to participate with any real authority in management's decision-making committees, including committees that work on plant safety and security problems. At a minimum—including with a unionized workforce—employees need regulatory authority to obtain a seat at the table. For employee participation to be meaningful, however, that authority must provide much more than the basic right to participate; it must provide for the seven elements listed above.

In recognition of this fact, the 2017 California Process Safety Management (PSM) and Accidental Release Program (Cal/ARP) regulations include employee participation rights that require the first five of the elements noted above, while also providing for the right of employees to refuse unsafe work; request that a

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process be shut down; and—for operators—actually shut down a refinery process.

Each of these elements could be included in CFATS to improve the effectiveness of its employee input provisions.

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2) It was mentioned during the hearing that the communication and emergency response requirements of CFATS are adequate, and any deficiencies could be attributed to the Emergency Planning and Community Right to Know Act (EPCRA)

a) Please describe the areas, if any, where the emergency planning and response elements of EPCRA overlap with CFATS.

I. Summary response

The statement noted in this question was made by the representative from the Society of Chemical Manufacturers and Affiliates (SOCMA) and is misleading. While it is true that the intended emergency response outcomes of EPCRA have not materialized, it is also true that the emergency response provisions of CFATS are even less robust than those of EPCRA; in fact, they are woefully inadequate. CFATS needs to do much more to enable effective emergency planning, preparedness and response.[5]

II. Detailed response

EPCRA has had limited success in improving emergency planning and response.

Congress passed EPCRA in 1986 in response to the Bhopal disaster and other U.S. industrial chemical accidents. It consists of three major elements: the Toxics Release Inventory (TRI); an emergency planning provision; and a citizen suit provision.

Under its emergency planning provisions, EPCRA requires industry to provide chemical information to responders through Local Emergency Planning

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[5] In addition to the references cited, the author's responses also take into account his experiences from 13 years in the emergency services as a firefighter, paramedic and EMT; seven years with the U.S. Coast Guard Reserve; five years as a hazardous materials specialist with FEMA USAR Task Force 4; and service as the representative of the California Department of Industrial Relations to the State Emergency Response Commission.

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Committees (LEPC) and State Emergency Response Commissions (SERC), and to local fire departments, either by submitting copies of Material Safety Data Sheets (MSDS) or by providing a list of chemicals that are used and stored on site. EPCRA requires the LEPCs to update this information annually, and it requires them to develop annual emergency response plans to be used during a major chemical accident. It requires facilities (under section 311) to submit an annual Emergency and Hazardous Chemical Inventory Form with information on how and where chemicals are stored on site.

EPCRA certainly improved industry transparency with regard to the production and release of hazardous chemicals, and it represents an important step forward for emergency planning and response. Its contributions to improving actual emergency operations, however, have been constrained by a lack of resources; limited capacity among fire departments to assimilate and act on industry information; an outdated informational architecture; and uneven enforcement.

EPCRA's reliance on LEPCs is particularly problematic because the LEPCs are voluntary entities that do not possess the capacity to receive and organize complex industrial chemical information and update and distribute emergency planning documents. Chemical information from facilities must be curated and formatted to be useful to fire departments and other emergency responders. Fire departments are not well suited—due to insufficient training and capacity—to organize, assimilate and act on chemical hazard information provided by companies. There is limited evidence that U.S. EPA is enforcing violations of EPCRA's information and planning requirements.[6]

The sparse CFATS emergency response provisions do not compensate for the weaknesses of EPCRA.

CFATS sections 2103(b) and (c) pertain to the sharing of information by the secretary with first responders, in order to improve their "situational awareness" in responding to a chemical release.[7] While this requirement is useful, it is far

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[6] Purifoy DM (Summer 2013). EPCRA: A Retrospective on the Environmental Right-to-Know Act. *Yale J. Health Policy Law Ethics* 2013 13(2):375-417 (Available: https://www.ncbi.nlm.nih.gov/pubmed/2434082). Accessed June 27, 2018.

[7] Public Law 113-254 (Dec 18, 2014). Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014. itle XXI—Chemical Facility Anti-Terrorism Standards. 6 USC 621, Section 2103, Protection and Sharing of Information, at (b) *Sharing of Information with States and Local Governments,* and at (c) *Sharing of Information with First Responders.*

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from sufficient to meet the stated objective. It will almost certainly have the same limited outcome as similar requirements under EPCRA; that is, even when the information is provided by facilities to the secretary and transmitted to fire departments, it will be difficult for departments to apply the information in actual response planning. The information in and of itself will be of limited value without additional site-specific information, coordination and training. For fire departments, chemical information about a facility is essential, but it is not enough to execute an effective emergency response.

Curated information, combined with appropriate resources and ongoing coordination, planning and training, are key to an effective emergency response.

To be useful to responders, information needs to be facility-specific and continuously updated, and it needs to be part of a broader coordination, planning and training effort between the facility and responders. All of this requires financial and human resources.

In responding to a chemical release at an industrial facility, responders need to have trained sufficiently with the facility in order to quickly answer several questions, including the following:

(1) the identity of the chemical substance(s) involved in the release;
(2) the scale of the release;
(3) physical-chemical properties of the substance(s);
(4) the health hazards of exposure to the substance(s);
(5) the anticipated plume size and direction;
(6) safe operating and evacuation distances;
(7) appropriate suppression, containment and extinguishing practices;
(8) the potential for escalation to nearby vessels or piping;
(9) appropriate personal protective equipment; and,
(10) on-scene conditions, including actions taken by the facility to contain and mitigate the release, numbers of persons injured or trapped, and any associated hazards.

These types of questions can only be answered by knowledge and experience gained through: (1) curated, facility-specific chemical information, as well as site lay-out and structure; (2) planning and training with the facility; (3) appropriate technical skills, personnel and equipment; (4) effective mutual aid systems; and (5) technical training on plume modeling, evacuation perimeters, hazardous materials operations, and so forth.

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b) In your opinion, how could the emergency response requirements of CFATS be strengthened?

I. Summary response

CFATS could improve emergency planning and response by requiring facilities to:

(1) generate and transmit useful, facility-specific chemical hazard information directly to fire departments and other public agencies;
(2) coordinate, plan and train for a major incident with those agencies; and,
(3) correct any weaknesses identified in an assessment of the capacity of those agencies to respond to a major chemical incident.

II. Detailed response

Chemical facilities need to communicate, plan and train with responders to improve the likelihood of a more effective response to a major release.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) has identified emergency response deficiencies as a contributor to at least 14 major industrial chemical incidents. Most of the deficiencies occurred in the following areas:

(1) Training for emergency responders, including hazardous materials training;
(2) Emergency planning and community response plans and teams;
(3) Use of community notification systems;
(4) Use of an incident command system and the National Incident Management System;
(5) Conducting emergency response exercises;
(6) Sharing of information among facilities, emergency responders and the community; and
(7) Communicating during emergencies.[8]

A UC Berkeley report identified key deficiencies in coordination, planning and training between the Bay Area's industrial facilities and fire departments.

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[8] U.S. Chemical Safety and Hazard Investigation Board. *Drivers of Critical Chemical Safety Change: Emergency Planning and Response (Preparedness).* (Available: https://www.csb.gov/recommendations/emergency-response-/) Accessed June 27, 2018.

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A June 2013 evaluation by UC Berkeley of some aspects of the emergency response to the 2012 vapor cloud explosion and fire at the Richmond, Chevron oil refinery found that fire departments responding to that incident were unable to communicate with the Chevron fire department because they operated on different radio frequencies. This communication failure affected the incident command system and endangered the safety of responders and the public.[9]

More generally, the UC Berkeley report found that: (1) fire department personnel were not always provided access to an industrial facility when they arrived at the plant gate to investigate an incident reported by the public; (2) some fire departments had difficulty gaining access to industrial facilities for planning and training; and (3) there was a pervasive lack of communication between industrial facilities and fire departments with regard to response planning and training.

The UC Berkeley report also identified problems with the response capacity of other entities outside of fire departments. The Bay Air Quality Management District (BAAQMD), for example, did not have "sufficient capacity to monitor atmospheric conditions, plume travel, and real-time emissions" during the Chevron fire, nor was BAAQMD able to communicate air quality information to the public.[10] As a result, community air quality concerns were addressed in the media not by a BAAQMD official but by a Chevron spokesperson.

While the CSB later reported that some 15,000 people downwind of the fire had sought medical attention for symptoms related to smoke exposure, the UC Berkeley report found that there was no surveillance system in place to identify these individuals or track their health over time.[11] Moreover, the report found that Richmond's emergency public warning system failed to function effectively during the Chevron fire, and that there was no public agency prepared to provide regular updates to the public. This left thousands of residents in the dark about steps they should take to protect themselves and their families during the fire.

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[9] Wilson MP. *Refinery Safety in California: Labor, Community and Fire Agency Views. Summary Report* (June 4, 2013). Prepared for the Office of Governor Jerry Brown, Interagency Task Force on Refinery Safety. University of California, Berkeley (p. 9) (Available: http://lohp.org/lohp-refinery-safety-report/) Accessed June 27, 2018.
[10] Wilson MP. *Op cit.* (pp. 11-12).
[11] U.S. Chemical Safety and Hazard Investigation Board (CSB) (April 2013). *Interim Investigation Report.* Chevron Richmond Refinery Fire of August 6, 2012. (p. 6) (Available: https://www.csb.gov/chevron-refinery-fire/). Accessed June 27, 2018.

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The Chevron pipe failure occurred not as an intentional act but as a result of inattention by managers to the effects of sulfidation corrosion; the outcome, however, would likely have been the same. A refinery pipe failure that creates a large flammable vapor explosion and smoke plume will take its course regardless of its cause.

Problems with the emergency response to the Chevron fire would likely have been avoided if Chevron had been required to: (1) generate and transmit useful, facility-specific chemical information to fire departments and other public agencies; (2) plan and train for a major incident with those agencies; and (3) correct any weaknesses identified in an assessment of the Bay Area's regional response capacity.

Several measures could be included in CFATS to strengthen its emergency response elements.

The emergency response elements of CFATS could be improved by requiring facilities to:

(1) transmit specific types of chemical and facility information to fire departments and other public response agencies;
(2) conduct regular planning meetings and training exercises with fire departments and other agencies;
(3) conduct an assessment to understand the capacity of fire departments and other agencies to respond effectively to a major chemical incident; and,
(4) implement corrective actions to address gaps identified in the assessment.

These requirements would provide a foundation for improving the capacity of local fire departments and other agencies to respond effectively to a major chemical incident, whether it occurs as the result of an intentional act, an extreme weather event, a mechanical or structural failure, or a power outage.

Alongside these improvements in CFATS, there is a need for a comprehensive, national emergency planning assessment to identify at-risk communities and develop realistic response plans. Many communities—particularly those served by volunteer fire departments—have very limited capacity to respond to a major industrial chemical release.

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3) While I certainly support chemical facilities developing plans to increase security, I believe we should also be prioritizing ways to lessen the need for these security measures by minimizing the risk at chemical facilities. This can be accomplished by eliminating targets and reducing the amount of chemicals stored on site, or using "inherently safer technologies," such as shifting to a safer chemical or process.

a) Do you believe the CFATS program currently incentivizes facilities to reduce their risk instead of simply securing the facility to protect an existing risk?

I. Summary response

CFATS is a risk management—rather than risk prevention—framework; that is, it assumes that industrial chemical hazards cannot be reduced or eliminated, and that those hazards therefore need to be "surrounded" by layers of security.

CFATS could do more to motivate and require facilities to reduce chemical hazards by requiring that they investigate—and implement to the greatest extent feasible—safer chemicals and processes. The industry's Center for Chemical Process Safety (CCPS) recognizes that inherently safer systems are the most effective and enduring means of improving facility safety.

California's 2017 Process Safety Management (PSM) regulations for petroleum refineries can serve as a model for such an approach in CFATS.[12]

II. Detailed response

Millions of Americans live in the vulnerability zone of an industrial chemical release, and one in three school children attend school in such an area.[13]

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[12] California Occupational Safety and Health Standards Board, Department of Industrial Relations (May 2017). General Industry Safety Order §5189.1. *Process Safety Management for Petroleum Refineries*. (pp. 18-20) (Available: https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf) Accessed June 27, 2018.

[13] Center for Effective Government, "Kids in Danger Zones: One in Three U.S. Schoolchildren at Risk From Chemical Exposures," September 2014. Available: https://www.foreffectivegov.org/kids-in-danger-zones.

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African Americans, Latinos, and lower-income communities continue to be at greatest risk.[14]

The CSB, EPA and OSHA have all pointed out that these risks are *preventable* through modern engineering and management practices that the industry itself has developed and recommended.

There is some evidence that the risk management measures required under CFATS are causing some companies to implement risk reduction strategies. DHS reports that thousands of high-risk facilities have chosen to meet their chemical security obligations not only through traditional security measures, but also by (1) consolidating chemicals from multiple sites into one or two sites; (2) replacing a hazardous chemical with a less hazardous one; (3) reducing the total quantity of a chemical held onsite; or (4) switching to a less concentrated form of the chemical.[15]

Each of these actions does more than manage risk—it reduces risk not only from an intentional attack, but also of an extreme weather event or earthquake, a power outage, or mechanical failure.

Assuming DHS is confident in the veracity of these claims (and is taking steps to validate them) these approaches represent progress toward reducing industrial chemical risks at existing facilities.

On the other hand, there are about 3,500 other facilities that have remained in the CFATS high-risk tier and that pose a substantive risk to the safety of workers and nearby communities.[16] These facilities are presumably continuing to rely on active and procedural safeguards. Changes to the CFATS program are needed to drive down risks at these facilities.

CFATS could do this with new risk prevention—or risk reduction—requirements. The Center for Chemical Process Safety (CCPS) describes risk

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[14] Earthjustice, *Another Year Of Preventable Chemical Disasters*, April 2018. Available: https://earthjustice.org/news/press/2018/another-year-of-preventable-chemical-disasters.

[15] Suzanne E. Spaulding, DHS Under Secretary (January 11, 2017). Correspondence to the Honorable Bennie G. Thompson, ranking member, Committee on Homeland Security. See Addendum at page 6, item 12.

[16] Coalition to Prevent Chemical Disasters, "Testimony of Paul Orum, Chemical Safety Advocate," February 2018. Available: https://homeland.house.gov/wp-content/uploads/2018/02/Testimony-Orum.pdf.

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reduction strategies as those that minimize the use of hazardous chemicals, or substitute them with safer chemicals, or that simplify or modify chemical processes to make them less vulnerable to failure.

California's 2017 process safety management (PSM) regulations shift process safety from a largely reactive, risk management framework to a more proactive, risk prevention framework.

California's 2017 PSM regulations include a suite of new risk prevention elements, including a mandatory decision-making process based on the "hierarchy of controls." This approach integrates the concept of inherent safety into regulatory language in manner that is enforceable, practical and meaningful.

Following the August 2012 Richmond, Chevron fire, a February 2014 report of the Governor's Interagency Working Group on Refinery Safety, *Improving Public and Worker Safety at Oil Refineries*, found that "regulatory changes were needed to: [17]

(1) implement inherently safer systems to the greatest extent feasible;
(2) perform periodic safety culture assessments;
(3) adequately incorporate damage mechanism hazard reviews into process hazard analyses;
(4) complete root cause analyses after significant accidents or releases;
(5) explicitly account for human factors and organizational changes; and
(6) use structured methods such as layer of protection analysis to ensure adequate safeguards in process hazard analysis."

In response to the report's finding regarding the need for "inherently safer systems," the Department of Industrial Relations (DIR) and California EPA included a provision in the Process Safety Management (PSM) and California Accidental Release Program 4 (Cal/ARP) regulations, respectively, that requires refiners to conduct a "hierarchy of hazard controls analysis" for serious process safety hazards.[18]

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[17] Governor's Interagency Working Group on Refinery Safety (February 2014). *Improving Public and Worker Safety at Oil Refineries.* (Available: http://www.caloes.ca.gov/FireRescueSite/Documents/Refinery%20Rpt%20Feb%202014.pdf). Accessed June 27, 2018.
[18] California Occupational Safety and Health Standards Board, Department of Industrial Relations (May 2017). General Industry Safety Order §5189.1. *Process Safety Management for Petroleum Refineries.* (pp. 18-20) (Available:

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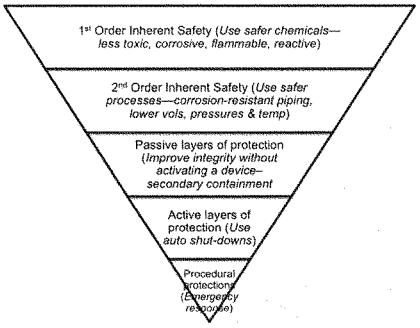
California's hierarchy of controls approach incorporates inherent safety measures as part of a logical sequence of safety decision-making.

This mandatory sequence consists of the following five elements, which are described in more detail below (Figure 1):

(1) First-order inherent safety measures;
(2) Second-order inherent safety measures;
(3) Passive safeguards;
(4) Active safeguards; and,
(5) Procedural safeguards.

Figure 1. *Framework of the California PSM and Cal/ARP Hierarchy of Hazard Controls Analysis (HCA).*



Effective October 1, 2017, California refiners are required to ensure the safety of refinery processes by applying corrective actions that follow this sequence and priority order.[19]

First-Order Inherent Safety Measure. This is a measure that

https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf) Accessed June 27, 2018.
[19] California Occupational Safety and Health Standards Board, *op cit.* (pp. 18-20). (Available: https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf) Accessed June 27, 2018.

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eliminates a hazard. Changes in the chemistry of a process that eliminate the hazards of a chemical are usually considered first-order inherent safety measures—for example, by substituting a toxic chemical with an alternative chemical that can serve the same function but is nontoxic, or less toxic.

Second-Order Inherent Safety Measure. This is a measure that effectively reduces a risk by reducing the severity of a hazard or the likelihood of a release, without the use of add-on safety devices. Changes in process variables to minimize, moderate, or simplify a process are usually considered second-order inherent safety measures—for example, by redesigning a high-pressure, high-temperature system to operate at ambient temperatures and pressures.

Passive Safeguard. This is a process or equipment design feature that minimizes a hazard by reducing either its frequency or its consequence, without the active functioning of any device—for example, by constructing a diked wall around a storage tank of flammable liquids that is intended to contain a release of the liquid, rather than allowing the spill to extend into other areas of the plant or surrounding areas.

Active Safeguard. This is a control, alarm, instrument, or other mitigation system that is used to detect and respond to deviations from normal process operations—such as a pump that is shut-off by a high-level switch.

Procedural Safeguard. This is a policy, operating procedure, training program, administrative check, employee response, or other management approach that is used to prevent incidents or minimize the effects of an incident. Examples include hot work procedures and emergency response procedures.

These requirements appear in subsection (l) of the PSM regulation, known as the Hierarchy of Hazard Controls Analysis, or HCA.[20] The HCA requires refiners to prioritize first- and second-order inherent safety measures over passive or active safeguards, which must be prioritized over procedural safeguards. This

[20] California Occupational Safety and Health Standards Board, *op cit.* (pp. 18-20). (Available: https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf) Accessed June 27, 2018

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ensures that refiners evaluate and implement the most effective approaches to protecting against a major process accident.

For example, to address pipe corrosion and thinning caused by high temperatures and sulfidation, a refiner would be required to assess a range of solutions in priority order, such as in the following example:

(1) reduce the sulfur content of the chemical feedstock materials to reduce their corrosiveness—a first-order inherent safety measure;
(2) change the process conditions, such as temperature and pressure, to reduce corrosiveness, or replace the pipe with more corrosive-resistant piping—a second-order inherent safety measure;
(3) apply welded patches over thinning sections of pipe to prevent a leak from occurring—a passive safeguard;
(4) install automated corrosion probes that continuously monitor thinning in vulnerable areas—an active safeguard; or,
(5) conduct routine inspections of the thickness of the pipe—a procedural action.

California's approach favors inherent safety measures by requiring that HCA teams recommend inherent safety approaches "to the greatest extent feasible;" it does not, however, attempt to "mandate" inherent safety measures.

b) Based on your previous experience in California, how could the CFATS program be strengthened to include both risk management and risk prevention, and encourage continuous improvement at covered facilities?

I. Summary response

The 2017 California PSM regulation offers a possible model for CFATS, in that it contains both risk management and risk prevention requirements in regulatory language that is practical, meaningful and legally enforceable.

II. Detailed response

CFATS could draw from key elements of the California Process Safety Management (PSM) regulation.

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Drafting the California PSM regulation required nearly five years of effort and hundreds of hours of meetings with refinery managers, process safety experts, and leaders of the union representing refinery workers. The resulting regulation reflects the industry's own best engineering and management practices, developed over the last 20 years.

The regulation expands the focus of refinery safety from a largely reactive, risk management framework to a more proactive, risk prevention framework. The risk management elements have been modernized and clarified. The California PSM offers a possible model for CFATS, in that it contains both risk management and risk prevention requirements in regulatory language that is practical, meaningful and legally enforceable.

Many of the PSM requirements could be applied to CFATS, including the following:

Risk Management Examples

Safeguard Protection Analysis (SPA)
Under the Process Hazard Analysis (PHA) requirements, refiners are required to conduct an SPA to ensure redundancy and independence of safeguards. This is intended to protect against a cascade of failures in a plant's safeguards after an initiating event, such as a power outage or small fire.

Management of Change (MOC)
The MOC procedures are intended to prevent refiners from introducing new process hazards when they make a change to a process or replace a piece of equipment.

Management of Organizational Change (MOOC)
The MOOC procedures require refiners to assess the effects on safety of staffing changes and other personnel stressors, such as fatigue and shift rotations.

Human Factors
Human factors analyses are required throughout the PSM regulation and are intended to integrate the limitations of human performance into safety engineering systems.

Process Hazard Analysis (PHA).

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In consultation with employee representatives, refiners are required to develop worst-case scenarios associated with chemicals and processes, and then implement corrective actions to prevent those scenarios from occurring.

Mechanical Integrity
All processes and equipment must be Refiners are required to continually inspect and certify that processes and equipment meet or exceed Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) and are fit for service.

Risk Prevention Examples

Hierarchy of Hazard Controls Analysis (HCA)
As described above, this element requires the implementation of a hierarchical decision-making framework in selecting corrective actions to address process hazards identified in the PHA.

Incident Investigation—Root Cause Analysis
Following a major incident or near miss, refiners are required to conduct a root cause analysis and implement corrective actions.

Damage Mechanism Reviews (DMR)
This is similar to a security vulnerability assessment but focused on physical damage mechanisms (such as corrosion, high temperature hydrogen attack, embrittlement etc) and on the corrective actions necessary to mitigate those mechanisms.

Process Safety Culture Assessments (PSCA)
Refiners are required to conduct a PSCA every five years, with interim corrections at the three-year mark. This could be used to assess the security culture at a facility.

Employee Participation
Collective bargaining agents have the authority to select their representatives who participate "throughout all phases" of PSM decision-making. Operators have the authority to shut-down a process in response to a process safety hazard. All employees have the right to recommend that a process be shut down; to refuse unsafe work; and to anonymously report process safety hazards. Refiners are required to promptly correct hazards that could cause death or serious physical harm to an employee, or that could lead to a major incident.

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Implementation
With certain exception, refiners are required to implement the process safety recommendations of labor-management process safety teams.

Contractors
All contractors and their employees are required to be trained in, and to understand, the hazards of the facility and the ways in which their work could jeopardize plant safety.

These and other elements of California's new PSM regulation could be reshaped for a security context and adopted by CFATS.

Continuous improvement is a foundation of an effective safety and security program that applies to nearly every aspect of management and engineering.

Continuous improvement is essential in the security setting to ensure that a plant's security protections remain current and able to effectively thwart the evolving threats of motivated actors. Under the HCA element of the California PSM regulation, refiners are required to continually improve their process safety systems by analyzing and documenting "publicly available information" on inherent safety measures and safeguards that have been "achieved in practice" by the petroleum refining industry and related industrial sectors, and that have been "required or recommended for the petroleum refining industry and related industrial sectors by a federal or state agency, or a local California agency, in a regulation or report." The PSM regulation requires refiners to report the results of this investigation as part of the rationale for their selection of corrective actions.

This requirement helps ensure that—as refiners contemplate corrective actions to prevent or mitigate process hazards—they learn from the experience of other refiners and industry sectors. This learning includes both engineering advancements and "lessons learned" from major incidents or near misses across industry. Documentation requirements improve the body of evidence in the event of a major incident.

California's requirement that refiners investigate and document industry best practices provides an impetus for refiners to continuously assess and improve the safety of their operations.

Facilities can continuously improve their safety practices by "looking outward" to

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best practices that have been adopted and accepted across the industry.

The California PSM regulation requires refiners to apply Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) in maintaining the mechanical integrity of refinery processes and equipment. The Statement of Reasons for the PSM regulation describes RAGAGEP as an "engineering, operation, or maintenance activity that has been accepted and established in a code, standard, technical report, or recommended practice and is published by a recognized and generally accepted organization. RAGAGEP is recognized by subject matter experts as the best way to perform certain engineering, inspection, or mechanical integrity activities, such as fabricating, inspecting, or maintaining a vessel."[21]

Compliance with RAGAGEP ensures that processes and process equipment are designed, constructed, installed, maintained, inspected, tested, and operated in a safe manner.

The California PSM regulation requires refiners to "document that process equipment complies with RAGAGEP, where RAGAGEP has been established for that process equipment, or with more protective internal practices that ensure safe operation," and it requires the refiner's mechanical integrity program (for all processes and equipment) to be consistent with, or to exceed, standards set forth by RAGAGEP. [22]

In an approach that differs from the interpretation of RAGAGEP by federal OSHA, the California PSM regulation does not allow a refiner to develop its own *internal* process safety practices and then claim that those practices constitute RAGAGEP. That is, while each refiner is required to demonstrate that their inspection and testing program for process equipment meets or exceeds the standards set forth by the industry through RAGAGEPs, they are not allowed under the regulation to claim that their internal inspection and testing program itself is a RAGAGEP.

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[21] California Occupational Safety and Health Standards Board, Department of Industrial Relations. Process Safety Management for Petroleum Refineries. *Initial Statement of Reasons.* p. 8). Available: https://www.dir.ca.gov/oshsb/documents/Process-Safety-Management-for-Petroleum-Refineriess-ISOR.pdf) Accessed June 27, 2018.

[22] California Occupational Safety and Health Standards Board, *op cit.* (p. 7 and pp. 15-17). (Available: https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf) Accessed June 27, 2018

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The PSM Statement of Reasons explains that this requirement is "necessary to ensure that employers meet or exceed recognized standards and implement changes in response to new or updated codes and standards that may be amended in response to process incidents in the industry. This is necessary to promote safe operation and ensure that process equipment complies with current standards."[23]

By requiring refiners to apply RAGAGEP in these ways, the California PSM regulation is intended to set a high performance standard for process safety that is continuously informed by the industry's evolving best engineering practices.

California's hierarchy of controls (HCA) requirements and its application of RAGAGEP could be applied to security measures under CFATS.

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6) The California Industrial Risk Framework

Please provide any additional information on the ways in which CFATS could adopt the risk management and risk prevention strategies of the California PSM regulation.

I. Summary response

California's PSM regulation requires oil refiners to apply a sequential, hierarchical decision-making process to eliminate, reduce, or control process hazards, based on the recommendations of labor-management PSM teams. The regulation requires refiners to implement the most effective approaches (rather than to defaulting to the most expedient, least expensive, or most familiar approaches) but it does not *mandate* any particular approach.

One year after the October 1, 2017 implementation date, it appears that this approach is working reasonably well among the state's 14 refiners. A similar approach could be considered under CFATS to drive down chemical security risks.

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[23] California Occupational Safety and Health Standards Board, Department of Industrial Relations. Process Safety Management for Petroleum Refineries. *Initial Statement of Reasons. Mechanical Integrity, J(4)* (p. 24). Available: https://www.dir.ca.gov/oshsb/documents/Process-Safety-Management-for-Petroleum-Refineriess-ISOR.pdf) Accessed June 27, 2018.

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II. Detailed response

California's hierarchy of controls favors inherent safety measures over passive, active and procedural safeguards but—within certain constraints—it leaves the refinery with final decision-making authority.

Inherent safety measures provide protection in the face of multiple threats. An inherently safer industrial system—one that is operated with safer chemicals, or under lower temperatures, pressures and volumes—is generally less vulnerable to an intentional attack, but it is also less vulnerable to an extreme weather event, a mechanical failure or a power outage.

Inherent safety is integrated into the California PSM regulation through the following provisions of subsection (l), the Hierarchy of Hazard Control (HCA) element: [24]

HCA subsection (l)(1)

Within five years of October 1, 2017 the employer must conduct an initial HCA as a standalone analysis for all existing processes; 50% of these HCAs must be conducted within three years. All HCAs must be revalidated every five years. The regulation integrates the HCA schedule with the process hazard analysis (PHA) schedule.

HCA subsection (l)(2)

Refiners must conduct an HCA in the following cases: (1) for all recommendations made by a PHA team for each scenario that identifies the potential for a major incident; (2) for all recommendations that result from the investigation of a major incident; (3) as part of a "management of change" (MOC) review, whenever a major change is proposed; and (4) during the design and review of new processes, process units, and facilities, and their related process equipment. Each of these analyses represents an opportunity to reevaluate process safety problems and consider new approaches to solving them.

HCA subsection (l)(3)

The regulation requires that HCAs be documented, performed, updated, and

[24] California Occupational Safety and Health Standards Board, *op cit.* (pp. 18-20). (Available: https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf) Accessed June 27, 2018

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revalidated by a labor-management team with specific types of expertise. The team must include one member with expertise in the HCA method being used and one operating employee who currently works on the process and has experience and knowledge specific to the process being evaluated. The regulation requires the employer to provide for employee participation on all HCA teams and for employees to select their team representatives.

HCA subsection (l)(4)

The labor-management HCA team is required to: (1) compile or develop all risk-relevant data for each process or recommendation; (2) identify, characterize, and prioritize risks posed by each process safety hazard; and (3) identify, analyze, and document all inherent safety measures and safeguards for each process safety hazard in the proper sequence and priority order.

For each process safety hazard that the HCA team has identified, the team is required to develop written recommendations for the refinery management in a manner consistent with the hierarchy of controls noted above.

The HCA team is then required to develop recommendations to "eliminate hazards to the greatest extent feasible" using first-order and second-order inherent safety measures, followed by recommendations to mitigate any residual risks by applying passive, active and procedural safeguards. This approach ensures that inherent safety measures are prioritized over other approaches that rely on safeguards.

HCA subsection (l)(5)

The HCA team is required to prepare a report within 90 days of developing the recommendations that describes the inherent safety measures and safeguards recommended by the team for each hazard. This document helps ensure accountability in the HCA decision-making process and, in the event of a major incident, could be used by regulators to determine the extent to which refinery employers accepted, altered or rejected safety recommendations made by an HCA team.

HCA subsection (l)(6)

The employer is required to implement all HCA team recommendations in accordance with requirements stipulated in subsection (x) of the regulation.

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HCA subsection (l)(7)

The employer is required to retain HCA reports for the life of each process. This enables regulators to investigate the refiner's decision-making process over time in the event of a major release.

The hierarchy of hazard controls approach used in California could be applied to security measures under CFATS.

Final considerations for the Committee.

I. Summary response

Railroad tank cars are not designed for storage of hazardous chemicals and are uniquely vulnerable to a terrorist attack. CFATS should include provisions to ensure the safety of rail cars and their appropriate use by facilities.

II. Detailed response

A 2007 report by the Center for American Progress points out that railroad tank cars containing chlorine gas could be potential targets of opportunity for a terrorist attack.[25] There is anecdotal evidence that some facilities may be relying on tank cars for temporary storage of hazardous chemicals.

When companies use safer chemicals or less hazardous chemical formulations, they are less likely to require transportation of large volumes of hazardous chemicals. Wherever appropriate, DHS should consider transportation risks under CFATS by encouraging and requiring facilities to adopt inherent safety measures, as noted above. In addition, DHS should take steps to ensure: (1) that railroad companies have equipped their tank cars with safeguards to prevent a catastrophic release in the event of a roll-over, collision, or equipment failure, such as valve or line failure; and (2) that facilities are not relying on rail cars for storage of hazardous chemicals, on or off-site.

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[25] Orum P. Toxic trains and the terrorist threat: how water utilities can get chlorine gas off the rails and out of American communities. (April 2, 2007). Center for American Progress. (Available: https://www.americanprogress.org/issues/security/reports/2007/04/02/2901/toxic-trains-and-the-terrorist-threat/). Accessed July 25, 2018

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July 16, 2018

Mr. Steve Roberts
Principal
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2234 Richmond Avenue
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Dear Mr. Roberts:

Thank you for appearing before the Subcommittee on Environment on June 14, 2018, to testify at the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 30, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to kelly.collins@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

John Shimkus
Chairman
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

Chemical Security Group LLC

ADDITIONAL QUESTIONS FOR THE RECORD

STEVE ROBERTS

CHEMICAL SECURITY GROUP, LLC

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON ENERGY AND COMMERCE

SUBCOMMITTEE ON ENVIRONMENT

***

THE CHEMICAL FACILITY ANTI-TERRORISM STANDARDS (CFATS) PROGRAM – A PROGRESS REPORT

JULY 30, 2018

STEVE ROBERTS
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Following the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report," which was held on June 14, 2018, the Subcommittee asked additional questions, and I am pleased to provide the following responses for the record:

1. **Mr. Roberts, your written testimony notes that since DHS initiated the Chemical Security Assessment Tool (CSAT) 2.0 process in September 2016, the number of CFATS-affected facilities has increased from approximately 2,962 as of September 2016 to approximately 3,389 as of May 2018. Can you walk us through why that is?**

   The general growth trend in the number of CFATS-regulated facilities from the inception of CSAT 2.0 in September 2016 to present is attributable, at least in part, to the Department of Homeland Security's (DHS's) improved tiering methodology and modeling. This has led to increases for facilities regulated for Release and Theft/Diversion Chemicals of Interest (COIs). I (as well as others) have observed that, as a result of their CSAT 2.0 Top-Screen submissions, some facilities with Release-Toxic COIs (i.e., Chlorine, Sulfur Trioxide, Bromine, Oleum, and Hydrogen Chloride, among others) that DHS did not previously consider high-risk have now been deemed high-risk (i.e., have been assigned a risk tier). The same can be said for some Theft/Diversion COIs as a result of improved tiering.

2. **Mr. Roberts, your written testimony states that the Chemical Security Assessment Tool 2.0 risk-tiering process has resulted in an increase in the number of facilities regulated for a release of a chemical of interest and that the nature of the security enhancements necessary to meet the applicable Risk-Based Performance Standards (RBPSs) may be larger or more complex. Would you help us understand why that is?**

   a. **Your testimony specifically points out that under the new process security projects are more complex, costly, and often can take one year or more to complete. Why is that?**

   b. **Is this a good thing for security at these facilities?**

   Where possible, many CFATS-regulated facilities attempt to designate the location(s) where their COIs are stored or used as discrete "Restricted Areas." By shrinking their "Restricted Area" footprint to the COI use and storage location(s), when possible, facilities can limit the compliance burden of, among other things, CFATS background checks under RBPS 12. In order to designate a discrete "Restricted Area," DHS generally requires that the facility control access to and/or monitor the location. For facilities regulated for Release COIs (which are generally stored inside large vessels, tanks, railcars, or process equipment), creating a "Restricted Area" within the facility's boundaries can be more complex. If it is possible to control access to these COI locations in the first instance, then facilities must often initiate projects that are more technical given that they may involve fencing off and/or monitoring large operations areas (e.g., tank farms, etc.).

In other instances, the Release COI is stored and/or used in multiple locations throughout the facility making it operationally impossible to designate discrete "Restricted Areas." In these cases, the facility must consider all areas within its perimeter fence-line as the "Restricted Area" and implement security measures commensurate with its risk tier along its entire perimeter, including ensuring that more personnel have been subject to CFATS background checks. While increasing security at chemical facilities is often value-added, some facilities find the increased background check requirements difficult to manage, at least initially. However, it is worth nothing that DHS is willing to discuss, in a collaborative nature, the measures that may be most appropriate in advance of a facility initiating such projects as well as permitting and encouraging facilities to take taking credit for measures that are already in place (such as process safeguards, to help address RBPSs for Release COIs in particular).

3. **Mr. Roberts, Congress directed DHS to develop a risk assessment approach and corresponding tiering methodology that incorporates all of the elements of risk, including threat, vulnerability, and consequence. In your experience, what challenges has that posed both for DHS and for regulated entities?**

While DHS's revised vulnerability, consequence, and threat considerations include more detailed metrics that help account for differences among facilities (see no.5 below), and is significantly improved relative to the prior model, the revised tiering methodology sometimes yields unexpected results. With that said, DHS has been (and continues to be) willing to discuss individual tiering results with a facility and, to the extent that an error has occurred (e.g., a facility reporting incorrect data), will permit the facility to refile a Top-Screen to re-run the tiering engine.

4. **Mr. Roberts, why is it important that Congress reauthorize CFATS?**

It is important that Congress reauthorize CFATS to demonstrate a continued commitment to the security of the nation's highest-risk chemical facilities. Since 2007, CFATS has driven security measures across regulated facilities, and industry requires the certainty and stability of multi-year CFATS reauthorization to ensure continuity and security planning. Multi-year reauthorization will also give DHS, and, specifically, the Infrastructure Security Compliance Division (ISCD), the sustainability it needs for programmatic development – to include the hiring and training of new Chemical Security Inspectors, which will help drive program consistency throughout the ISCD inspector regions.

5. Mr. Roberts, your written testimony points out that the new methodology implemented by DHS has also improved the transparency of its risk determination process to help the regulated community better understand why a facility may be tiered. Why is that?

In its September 2016 *Chemical Facility Anti-Terrorism Standards: Tiering Methodology Fact Sheet*, DHS provided additional context for its revised tiering methodology as it relates to its vulnerability, consequence, and threat considerations.

DHS's vulnerability consideration now accounts for inherent characteristics of the facility and/or asset and provides a list of factors which, depending on the COI's applicable Security Issue, can be used to reduce vulnerability to a terrorist attack. For example, in such instances where the applicable Security Issue is Theft/Diversion, DHS suggests that a facility's use of larger, less portable COI containers may reduce its vulnerability. DHS's consequence consideration now uses dispersion and blast modeling to more accurately account for onsite and offsite impacts of COI exploitation and misuse.

In much the same way as for the vulnerability variable, DHS also provides a list of factors which, depending upon the applicable Security Issue, are used to inform the consequences of a terrorist attack. For example, where the applicable Security Issue is Theft/Diversion, DHS indicates that the following may affect the consequence score: COI toxicity, COI explosive energy, COI quantity and concentration, COI storage (i.e., type of packaging), and COI precursor characteristics. Where the applicable Security Issue is Release, DHS indicates that the following may affect the consequence score: surrounding topography, exposure of surrounding population to the COI, COI toxicity, COI flammability, COI explosive energy, COI quantity and concentration, and COI storage (i.e., container location, temperature, pressure rating, and secondary containment (if any)).

And, finally, DHS's threat consideration uses factors, depending upon the applicable Security Issue, informed by the intelligence community to determine the level of threat of a terrorist attack or exploitation. Where the applicable Security Issue is Theft/Diversion, DHS indicates that the specific COI and mode of shipment are examined in determining the threat. Where the applicable Security Issue is Release, DHS indicates that the specific COI, facility type (whether chemical production facility or user/distributor), and the type of area where the COI is located (whether process unit, storage area, or transfer point) are examined in determining the threat.

DHS's additional explanation of the vulnerability, consequence, and threat considerations increases transparency from a compliance perspective. This also allows facilities to preemptively mitigate certain risks

(whether with an eye toward safety or to possibly avoid a high-risk designation altogether) and better understand why DHS may have tiered a facility differently than another facility that, at least superficially, appears to be similarly situated.

6. **Mr. Roberts, your written testimony points out that the CFATS regulation does not permit a facility to appeal a tiering decision. Why is it important that regulated facilities be able to appeal this decision by DHS?**

For the reasons described in my testimony, a tiering review process that is more formal than a technical consultation, but less formal than an outright appeal (which could possibly swallow ISCD's ability to implement the program), would be beneficial for facilities that have good cause.

7. **Your written testimony directs Congress to accelerate the rulemaking process by directing DHS to publish proposed and final CFATS rules – or a determination that no changes are necessary – by dates certain. Why is this necessary?**

While the CFATS regulation has not changed since it was first published in 2007, the practical and operational application of CFATS has changed in the ensuing 11 years – both in terms of ISCD's focus and industry's approach to compliance. This, alone, justifies a rulemaking to update the regulation. Because the CFATS Notice of Proposed Rulemaking has been relegated to DHS's list of Long-Term Actions, without direction from Congress, the prospect of regulatory updates is unlikely before 2020 (at the earliest).

8. **Mr. Roberts, your testimony raises the issue that the CFATS regulation states that, "[i]f a covered facility makes material modifications to its operations or site, the covered facility must complete and submit a revised Top-Screen to the Department within 60 days of the material modification." What constitutes a "material modification?"**

DHS has not provided official direction on what constitutes a "material modification." While some "material modifications" are obvious (e.g., the removal or reduction of a COI below its Appendix A Screening Threshold Quantity (STQ)), when a material modification has occurred is not always clear. Toward this end, for example, many facilities struggle to determine whether a significant increase in the quantity of a COI constitutes a "material modification." For example, if a facility possesses 1,500,000 pounds of a Release-Flammable COI, and then subsequently increases the quantity of that COI to 2,000,000 pounds, does the 500,000-pound increase trigger a "material modification" that requires a new Top-Screen? This is one of the areas that DHS could address in a new rulemaking or even through technical guidance to industry.

9. Your testimony points out that the ability of facilities to commit capital for CFATS security measures would be impeded if the underlying CFATS program lapsed, expired, or otherwise had an uncertain future.

a. Since, the majority of facilities have already gone through the initial round of CFATS compliance, why is that?

b. Do you have specific examples?

While the majority of facilities have already gone through the initial round of CFATS compliance, many have not. For these facilities, who are new to CFATS since ISCD initiated the CSAT 2.0 process in September 2016, certainty in the future of the program is important. Among other reasons, a facility or company that is new to CFATS may be hesitant to commit capital to implement new and additional security measures for a regulatory program that has lapsed, expired, or otherwise has an uncertain future.

For those facilities that have already gone through the initial round of CFATS compliance, a similar line of reasoning is applicable. Many CFATS security measures require maintenance, upkeep, and change management practices. These include access control systems, fencing, monitoring systems, cameras, COI-specific protection measures, CFATS-specific training programs, CFATS policies and procedures, and the CFATS personnel surety program. Like a facility or company that is new to CFATS, a facility or company that has already gone through the initial round of CFATS compliance may be hesitant to continue to commit capital and resources to maintain security measures for a regulatory program that has lapsed, expired, or otherwise has an uncertain future.

Two specific examples include: (1) a large facility that moved from untiered to tiered and is in the process of implementing a CFATS security plan as an initial matter; and (2) a large facility that was previously tiered for Theft/Diversion COIs only, but is now tiered for both Theft/Diversion and Release COIs. This facility is now in the process of implementing an updated CFATS security plan and making changes to how the security plan is implemented from a Release COI perspective.

10. Your testimony mentions inconsistency across the program and DHS regions with regard to the CFATS inspector cadre. Could you please provide some examples for me?

a. Would additional training help and what areas would you recommend that DHS focus on?

As I noted in my testimony, CFATS experience and knowledge, and the approach to conducting an inspection, may differ among inspectors. For example:

- Some inspectors tell facilities that they have to *continuously monitor* their COI storage locations whereas others tell similarly-tiered facilities that the locations must be monitored or checked at least every 12 hours, while still others indicate that the locations need only be monitored or checked once per week. Some inspectors suggest that camera monitoring is sufficient while others suggest the monitoring / checking must be conducted in-person.
- Some Inspectors may ask facilities to provide them with a current COI inventory report so that they can compare the COI quantity on-site to the COI quantity previously reported to DHS. If the facility's current COI inventory differs from the amount reported, some inspectors tell the facility it is a "material modification" and that a new Top-Screen must be submitted – even if the difference in quantity is only a few percent. Other inspectors may tell facilities to simply report to DHS the highest possible quantity the facility *could* ever possess, even if the facility has no intention of ever possessing that quantity.
- With regard to background checks, some inspectors have asked to review completed background checks of all "affected individuals" at the facility, some only ask for a random sampling, and still others are satisfied with a single letter from a Human Resource representative stating that the background checks have been completed.
- With regard to law enforcement outreach, some inspectors tell facilities that they must meet with the local law enforcement agencies in their jurisdictions at least annually while other inspectors state that facilities need only attempt to meet with local law enforcement agencies one time. Some inspectors require documentation evidencing the outreach while others do not require such documentation.
- Some inspectors have suggested that facilities are required to implement certain security measures that are less relevant to the Security Issue(s) for which the facility is tiered (e.g., an inspector suggesting a facility must conduct *inbound* vehicle inspections when the facility is only tiered for a single Theft/Diversion COI).

Additional training to ensure a consistent level of baseline knowledge and understanding of how the RBPSs are applied would be helpful. I suggest that the training is focused in the following areas:

- The performance-based nature of the RBPSs, the expectations and generally acceptable security measures to meet the RBPSs for specific tier levels, the different CFATS Security Issues (i.e.,

Theft/Diversion, Release, and Sabotage), and the overall regulation (including the COI calculation rules).

- The CSAT, which is the online portal that the regulated facilities use to submit documents and exchange correspondence with DHS. Some inspectors appear to be unfamiliar with the CSAT's functionality.

It is worth noting that DHS has indicated that it is developing additional training materials and continues to work with field inspectors to drive consistency and knowledge.

11. Recently, it was suggested that CFATS is not robustly addressing a cyber security component at these facilities.

a. Do you agree that the CFATS program is insufficiently addressing cyber issues?

b. Do inspectors need additional training to address cyber security issues at CFATS regulated facilities?

DHS has previously stated that its goal with regard to cyber security "…is to reduce the risk of attackers conducting malicious attacks on critical systems, which could result in theft, diversion, release, or sabotage of COIs." I do not believe that DHS is insufficiently addressing cyber issues. Additional cyber security training would help inspectors better communicate with the facility's cyber / IT personnel and, in that regard, would be helpful.

12. Do you think DHS is doing a good job of promoting security without presenting risk vs. risk trade-offs for companies with chemicals of interest?

Accepting risk requires inherent trade-offs, and I respectfully ask the Committee to seek further clarification on this specific question from DHS.

13. You mentioned that there is no appeal to tiering under CFATS. Please explain the trade-offs of an appeal process and the proposal you suggested?

As noted above in question six and further to my written testimony, it would be helpful if DHS were to formalize and publicize its existing practice of how tiering is reviewed and how, if presented with hypothetical changes to a facility's chemical holdings or business practices, such changes may affect a tiering decision.

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July 16, 2018

Mr. James Conrad
Principal
Conrad Law and Policy Counsel
910 17th Street, N.W.; Suite 800
Washington, DC 20006

Dear Mr. Conrad:

Thank you for appearing before the Subcommittee on Environment on June 14, 2018, to testify at the hearing entitled "The Chemical Facilities Anti-Terrorism Standards Program (CFATS) – A Progress Report."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, July 30, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to kelly.collins@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

John Shimkus
Chairman
Subcommittee on Environment

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

Attachment

1. The CFATS program was intentionally designed to promote inherent safety. The basic structure of having multiple tiers of facilities, based on risk, with increasingly demanding performance standards for each tier, was consciously developed to create incentives for facilities to reduce the risks that facilities pose, and thus move down to less-demanding tiers of regulation – or even to exit the system altogether.[1] And this design has paid off – the majority of plants that were ever tiered for CFATs purposes have managed to modify their inventories or manufacturing processes in ways that enabled them to tier out of the system. Thus, the CFATS program has been an active driver of inherent safety. Moreover, it has done so following a market-based approach – one in which individual facilities have been the ones to decide whether they want to make process changes to reduce risk, and if so, which changes to implement. The system has thus succeeded greatly while avoiding the need for DHS personnel to make decisions about inherent safety.

   Congress should not move toward a system that would impose those kinds of decision responsibilities upon government personnel, for two reasons.

   First, IST is inherently subjective and arbitrary. For example, if a proposed technology would reduce explosion hazards but pose water pollution risks, would it be inherently safer?[2] DHS's July 2010 report entitled "Definition for Inherently Safer Technology in Production, Transportation, Storage, and Use,"[3] which is the Federal government's most definitive statement on the topic of IST, explains that that what is "inherently safer" for some hazards might simultaneously be inherently less safe for others. Similarly, the 2012 National Academy of Sciences (NAS) report on "The Use and Storage of Methyl Isocyanate (MIC) at Bayer CropScience" observed that, "[a]lthough one process alternative may be inherently safer with respect to one hazard...the process may present other hazards."[4] As a result, consistent enforcement of IST is impossible because different companies and different inspectors will inevitably have differing views on specific technologies that cannot be objectively resolved.

   Second, the DHS report also notes that "there is currently no consensus on either a quantification method for IST or a scientific assessment method for evaluation of IST options."[5] The NAS concurred that there is no "set of practice protocols for identifying safer processes."[6]

   Currently, DHS inspectors work closely with facilities to reduce risks and enhance security measures. DHS will be most successful in promoting security at regulated facilities through these partnerships, as opposed to a regulatory construct that would be difficult for both

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[1] *See, e.g.,* Testimony of Richard A. Falkenrath before the Senate Homeland Security & Governmental Affairs Committee (April 27, 2005), at 16-17, available at https://www.hsgac.senate.gov/imo/media/doc/SHSGACTestimonyonHazmat042705.pdf.

[2] *See* National Academy of Sciences, "The Use and Storage of Methyl Isocyanate (MIC) at Bayer CropScience" (NAS Report) at 107; available at http://dels.nas.edu/Report/Storage-Methyl/13385?_ga=2.133359881.606789487.1533571699-861784906.1476455634.

[3] Available at https://www.aiche.org/sites/default/files/docs/embedded-pdf/ist_final_definition_report.pdf.

[4] *See* NAS Report at 4.

[5] 79 Fed. Reg. 44620.

[6] NAS Report at 6.

facilities and regulators to understand and comply with. Mandating IST would erode the partnership that exists between DHS and regulated facilities and harm the excellent relationships that have been established in recent years between DHS and the chemical industry.

2. SOCMA believes an assessment of the PSP program is necessary before expanding the program to include Tier 3 and 4 facilities. PSP information is just beginning to process through the Terrorist Screen database (TSDB) for most Tier 1 and 2 facilities. Effectively, PSP is still in its very early stages, similar to those of the pilot stage of a program. DHS should not expand the program until it can evaluate the costs and benefits of the program at Tier 1 and 2 facilities – including whether any of the individuals run through PSP actually have terrorist ties. Tier 1 and 2 facilities represent less than 10% of all CFATS facilities, and so the burden of compliance for Tier 3 and 4 facilities would, in the aggregate, be much greater than what Tier 1 and 2 facilities currently experience – while the risks posed by Tier 3 and 4 facilities are by definition lower.

   The best way to conduct this evaluation would be for DHS to collaborate with the Department of Justice (DOJ) and its Federal Bureau of Investigation (FBI) on a formal assessment of the benefits and positive outcomes of running PSP-gained information through TSDB. There is precedent for just this sort of multi-agency partnership in the evaluation of a regulatory program that implicates the interests of multiple agencies. In the late 1990s, EPA was proposing to post on its Web site the "off-site consequence analyses" (i.e., worst-case release scenarios) submitted to it by facilities regulated under the Risk Management Program rule. Even before 9/11, industry and the FBI recognized that this sort of disclosure could pose security risks. Congress responded by passing the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (CSISSFRRA), which required the President to study the benefits and risks of such disclosure.[7] The President in turn instructed EPA to assess the benefits of this disclosure and DOJ to study the risks. Based on that analysis, EPA and DOJ jointly published a regulation that provides limited public access to specific worst-case scenario data but keeps that information off the Internet.[8]

   A similar DHS/DOJ review of PSP and its application to lower-risk tier facilities would deliver a better idea of the effectiveness of PSP and may uncover new and better ways for PSP to operate. Additionally, the greater number of facilities and people that can be considered in the review the better. Hence, it may be premature even at this point to complete this analysis.

3. CSAT 2.0 has vastly improved the CFATS tiering process, especially the Top-Screen process. The process is still not completely transparent, but SOCMA members now have a much clearer picture of why they are tiered the way they are. Collaboration with DHS is again the key. SOCMA members have been able to work closely with inspectors and the DHS staff completing the tiering and retiering assessments, which has given our members greater insight into the CFATS tiering process generally and into their specific cases. DHS has also been much more willing to evaluate alternative operating scenarios and to advise facilities about how those would affect the facility's tier assignment.

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[7] 42 U.S.C. § 7412(r)(7)(H).
[8] *See* 40 C.F.R. Part 1400.

While the system and program are not perfect, and greater clarity is always appreciated, CSAT 2.0 has greatly improved the CFATS tiering process.