

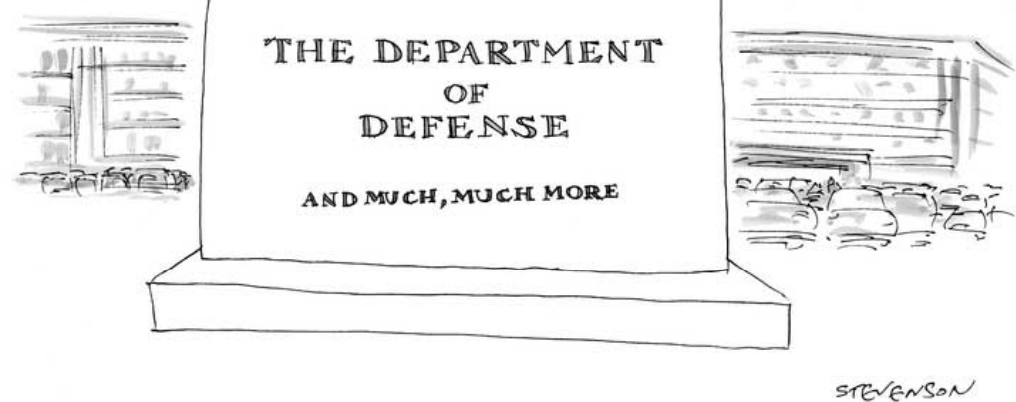


Inherently Safer Technology as a Legal Term of Art
NACWA Developments in Clean Water Law Seminar

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- IST under the existing CFATS
- IST under the CFATS reauthorization legislation
- Practical consequences for POTWs

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IST Under the Existing DHS Chemical Facility Anti-Terrorism (CFATS) Program

WHAT IS IST?

- IST is not a defined term under either Section 550 of the FY 2007 Homeland Security Appropriations Act (the CFATS enabling legislation) or DHS's CFATS rule, promulgated to implement Section 550. See 6 CFR Part 27.
- In informal guidance, DHS has defined IST as:

a routinely applied safety engineering concept that explores various methods for improving chemical process safety by reducing inventories, replacing chemicals with less toxic substitutes, changing chemical processes, reducing the pressures or temperatures of reactions, etc. DHS FAQ # 43 (Aug. 8, 2008).



IST Under the Existing DHS Chemical Facility Anti-Terrorism (CFATS) Program

HOW IS IT APPLIED?

- ➔ DHS is not allowed to disapprove a Site Security Plan “based on the presence or absence of a security measure including inherently safer technologies.” However, covered facilities have discretion “to consider IST options, and their use may reduce risk and regulatory burdens.”
- ➔ Neither DHS nor the regulated community has reached a consensus regarding the scope or implementation of IST under a reauthorized CFATS program. Among the unanswered questions:
 - *Who will be charged with the responsibility for determining how much IST is enough?*
 - *When is the cost of IST too much?*
 - *Does IST supplant other important health and safety considerations (e.g. water quality)?*
 - *How can an affected facility demonstrate that it adequately considered technology in compliance with such a subjective concept?*
 - *Is it prudent to allow a third party to dictate changes in technology or operating philosophy on a facility?*
 - *Does a third party assume the liability of that decision?*

What the *Proponents* Say in Support of Mandatory IST:

→ Reducing chemical risks through IST will make facilities less attractive targets for terrorist attacks.

→ Mandating IST would help to set a baseline for comparing one technology against another. Without this baseline, it is difficult to conclude that one technology is inherently safer than the other. *CSR, Chemical Facility Security: Reauthorization, Policy Issues, and Options for Congress* (Sept. 3, 2009).

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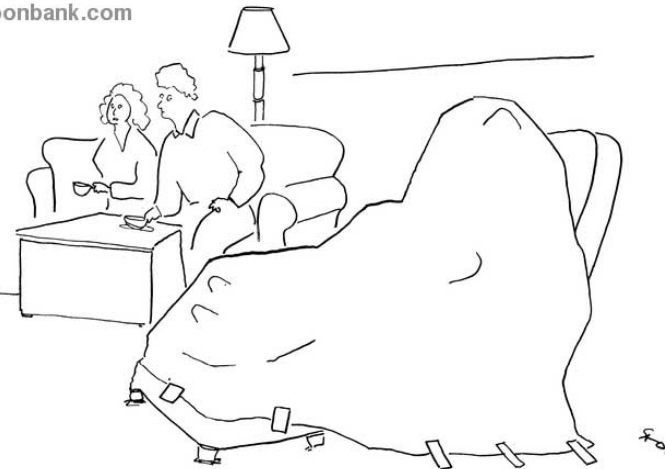


"We're from the Department of Homeland Security.
You left your damn door unlocked."

What the Opponents Say:

- IST is a safety tool that should be left to facility security officers, not DHS.
- IST may lead to unintended, adverse consequences (e.g. substitution of gaseous chlorine disinfection to chloramine disinfection can lead to increased levels of lead in drinking water due to increased corrosion).
- DHS is not equipped to decide whether an alternative approach is both practical and beneficial.
- IST decisions cannot be made across-the-board because of inherent differences that exist among facilities, in terms of chemical process, facility layout, and ability to finance implementation.

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"Father is still old-school when it comes to homeland security."

IST Under the CFATS Reauthorization Legislation

CURRENT STATE-OF-PLAY:

- ➔ Pursuant to Section 550, the CFATS program was set to expire on October 4, 2009. Congress approved a one-year extension as part of the FY 2010 Homeland Security Appropriations bill.
- ➔ On November 6, 2009, the House approved the Chemical Facility Anti-Terrorism Act of 2009 (H.R. 2868). This bill now moves to the Senate for a vote. Debate may take place on a companion bill in the Senate, rather than this one.

IST Under the CFATS Reauthorization Legislation

KEY CONCEPTS IN H.R. 2868:

- CFATS would become permanent.
- Perceived loophole for drinking water and wastewater facilities would be closed, but EPA would become the lead agency for their security.
- EPA would receive \$1 billion over five years to make grants to states, municipalities, and other entities to conduct vulnerability assessments, provide security-related training and install security improvements at POTWs.
- The riskiest facilities would be required to assess and implement IST.

In floor debate on the legislation's IST provisions, Rep. Laura Richardson (D-Calif.) remarked: *"I am a proud Representative of the Joint Water Pollution Control Plant in Carson, California. That wastewater treatment plant switched from using chlorine gas to liquid bleach disinfection. We need to do this throughout the country, and this legislation will enable us to do that."* Cong. Rec. H12407, 12413 (Nov. 5, 2009).

Practical Consequences for POTWs

- IST would force POTWs to assess “safer” chemical substitutes or other processes for gaseous chlorine.
- POTWs are unique when compared to other facilities regulated under CFATS.

POTWs serve a vital public health function in addition to environmental protection. They are heavily regulated, already, under the CWA and CAA, among other federal environmental laws. And most POTWs have developed, conducted and submitted to EPA security vulnerability assessments under the 2002 Bioterrorism Act.

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“Protect your family, protect your yard, and stop obsessing about port security.”

Practical Consequences for POTWs (*cont'd*)

→ Under the existing regulatory framework (which is likely to remain unchanged under H.R. 2868), a POTW subject to CFATS will need to navigate the multi-step CFATS process including:

- Top-screen inventory.
- Security vulnerability assessment.
- Site security plan.
- IST assessment.
- DHS inspection.

Practical Consequences for POTWs (cont'd)

- Implementation of the SSP approved security measures.
- Eliminating gaseous chlorine is not always feasible or safer.
- IST may conflict with competing health and safety priorities.

For example, in order to prepare and protect the nation from a potential health pandemic, DHS has required POTWs to store a three to four months supply of the chemicals needed for wastewater treatment. This would run contrary to a mandate to reduce chlorine inventories, and stockpiling such large quantities of a substitute, such as sodium hypochlorite, may not be feasible.

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"All I'm saying is now is the time to develop the technology to deflect an asteroid."

Practical Consequences for POTWs (*cont'd*)

- The uniqueness of POTWs extends to their siting in populated service areas and their continuous operation (i.e., POTWs cannot be shut down, even temporarily, without serious public health and environmental risks). For this reason, H.R. 2868 would exclude POTWs from the provision which provides authority to issue a shut-down order to a non-complying facility.

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"I miss the security of a walled city."

- **NACWA White Paper -- “*Chemical Security Legislation: Economic, Environmental and Public Safety Implications From a POTW Perspective*”**
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- **Hunton & Williams’ Homeland Security Practice**
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