



CHEMICAL / FACILITY AND WATER SECURITY POSITION PAPER

I. Issue Statement

For the purposes of this position paper, WWEMA is combining two Security issues, as they overlap significantly, but are largely regulated by two separate Federal agencies.¹ These are:

- 1) Chemical / Facility Security - understanding the Department of Homeland Security's (DHS) Chemical Facilities Anti-Terrorism Standards (CFATS) and the likelihood of including drinking water and wastewater facilities in its coverage, with the accompanying 'inherently safer technologies' provision;
- 2) Water Security - dealing with facility assessments and risk reduction activities undertaken by drinking water and wastewater facilities and how they integrate with current and upcoming water quality regulations overseen by the U.S. Environmental Protection Agency (EPA).

By understanding the regulatory oversight and progress in each, the industry can best influence and prepare for future regulatory changes. From WWEMA's perspective, preserving utility budgets for capital equipment and chemical expenditure is critical and unfunded mandates that are not coordinated between agencies could deplete the amount of money available.

a. Overview

Traditionally, the U.S. approached its world-wide security position and planning from a State-based assessment perspective. These security paradigms are necessarily changing as non-state actors increasingly use terrorism methods to attack non-traditional infrastructure targets. In the water sector, security planning was historically associated with natural disasters, the potential for chemical leaks and accidents, and minor sabotage scenarios. As this paradigm shifts to accommodate non-state actor threats, the conundrum is how to strengthen security and safety in a practical and transparent manner.

b. Legislation, regulations, guidelines and/or actions affecting the issue

Timeline of Security Planning Shifts and Enforcement Agencies:

- Prior to 2002: Emergency preparedness and response requirements and regulation including those that are part of US EPA Clean Air Act Risk Management Program §112(r) and Occupational Safety and Health Administration (OSHA) 29 CFR 1926.65.
- 2002: Title IV of the Federal Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act). The act required all community water systems serving populations greater than 3,300 to conduct a vulnerability assessment and complete an emergency response plan.
- 2002: Chemical Facility Anti-Terrorism Standard, Interim final rule, 72 Federal Register 17688, US DHS. This rule established risk-based performance standards for the security of chemical facilities. Currently, water and wastewater facilities are exempt from this regulation. However, it now seems likely that these facilities will be included. The debate is more over who should lead each effort - DHS, who has overall responsibility for the Nation's infrastructure and security or EPA, who is the lead agency for water infrastructure and security.
- 2007: The Water Sector-Specific Plan that was developed as part of the US DHS National Infrastructure Protection Plan (NIPP).ⁱⁱ
- 2009: AWWA G430, Security Practices for Operations and Management. The purpose of this standard is to define the minimum requirement for a protective security program for a water or wastewater system that will promote protection of employee safety, public health, public safety, and public confidence.ⁱⁱⁱ
- 2009: Selecting Disinfectants in a Security Conscious Environment. This handbook describes a step-by-step process aimed at assisting facility managers evaluate disinfection options.^{iv} It includes security, cost, supply and risk communication principles and provides two decision-analysis tools. The tools are available at the AWWA website.^v At this point in time the analysis tools are mostly weighted for cost, rather than security, but the tools include provisions to more heavily weigh security needs if needed.
- 2009: H.R. 2868 Chemical and Water Security Act of 2009 – This bill has several titles including *Title I: Chemical Facility Security - Chemical Facility Anti-Terrorism Act of 2009*, *Title II: Drinking Water Security - Drinking Water System Security Act of 2009* and *Title III: Wastewater Treatment Works Security - Wastewater Treatment Works Security Act of 2009*

Sponsor: Rep. Thompson, Bennie [MS-2] (introduced 6/15/2009)

Latest Major Action(s): 11/06/09 passed the House and referred to Senate Committee on Homeland Security and Governmental Affairs, 3/3/2010

Synopsis: Creates a new security program for drinking water and wastewater utilities under EPA. Strengthens DHS's authority to improve safety at

chemical facilities by making CFATS permanent. Would require certain high-risk facilities to use safer chemicals or processes and would give individuals the right to sue a facility or DHS for violations of the standards.

- 2009: H.R. 2883 – Wastewater Treatment Works Security Act of 2009

Sponsor: Rep. Johnson, Eddie Bernice [TX-30] (introduced 6/16/2009)

Latest Major Action: 3/3/2010 Passed the House as part of H.R. 2868; referred to Senate Committee on Homeland Security and Governmental Affairs

Synopsis: Strengthens EPA's authority to improve safety at wastewater facilities by requiring vulnerability assessments and providing \$200 million annually in grants for security enhancements and \$150 million annual in grants for technical assistance over a five-year period.

c. Macro and Micro Pros / Cons

- Macro (industry) Pros: The CFATS regulations can assist many equipment manufacturers boost sales. These include providers of safety equipment (i.e. chlorine gas scrubbers) and chemicals. Just because a certain chemical is on the list does not mean that it is banned.
- Macro (industry) Cons: New regulations, especially when administered by two different agencies, can cause confusion as implementation is worked out. The typical reaction of many facility leaders and consulting engineers is to put off new equipment sales to have more time to understand how the regulations will be implemented and perform additional assessments.
- Micro (business opportunity) Pros: Changing to inherently safer technology to minimize security or safety risk and/or adding scrubbing equipment represents a chance for increased equipment sales.
- Micro (business opportunity) Cons: If the majority of a utilities budget is used on risk and vulnerability assessments, then capital expense and O&M budgets dwindle.

II. Position

a. Recommended position:

Stay prominently involved with legislative bodies to ensure that any legislation that is made law is clearly implementable by one lead agency, with clear oversight and guidance. Limit the restriction of traditional technologies while supporting new technology that can advance the industry as a whole.

b. Rationale for WWEMA Involvement:

WWEMA should continue to push for and support legislation that will promote equipment sales and the safety of the industry, rather than unfunded mandates without clear guidance that inevitably utilize the majority of a utility budget and time with costly risk and vulnerability assessments.

III. Enforcement authority

The power to enforce lies with the following agencies or groups: OSHA, DHS, EPA, State Agencies, Local building and fire code enforcement groups.

IV. Resource links

- THOMAS, Library of Congress <http://thomas.loc.gov/>
- Environmental Protection Agency
<http://cfpub.epa.gov/safewater/watersecurity/index.cfm>
- Department of Homeland Security
http://www.dhs.gov/files/laws/gc_1166796969417.shtm
- American Water Works Association <http://www.awwa.org>
- The Chlorine Institute <http://www.chlorineinstitute.org/>
- American Chemistry Council <http://www.americanchemistry.com>

ⁱ Congressional Research Service, May 26, 2009, "Terrorism and Security Issues Facing the Water Infrastructure Sector" www.crs.gov.

ⁱⁱ EPA website and related security information
http://www.epa.gov/safewater/watersecurity/pubs/plan_security_watersectorspecificplan_brochure.pdf

ⁱⁱⁱ Available at the American Water Works Association website

^{iv} Selecting Disinfectants in a Security Conscious Environment, 2009, AWWA. Bookstore

^v AWWA website.

<http://www.awwa.org/Resources/ScienceTopics.cfm?ItemNumber=48752&navItemNumber=48910>

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