

**Statement for the Record
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**Before the
Committee on Homeland Security
United States House of Representatives**

“Chemical Facility Anti-Terrorism Act of 2008”

**Tuesday, February 26, 2008
Room 311, Cannon House Office Building**

Chairman Thompson, Ranking Member King, distinguished Members of the Committee, my name is Kevin Wattier, and I am the General Manager of the Long Beach Water Department, an urban, retail water supply agency of the City of Long Beach, California. I am a licensed Professional Engineer and certified Grade 5 Water Treatment Operator in the State of California. I’ve been General Manager of the Long Beach Water Department since July 2001. Over a decade of my career was spent with the Metropolitan Water District of Southern California, the largest supplier of drinking water in the country, where for part of that time I had responsibility for managing the organization’s water treatment and distribution facilities throughout southern California.

I would like to thank the Committee for its consideration of chemical security oversight at our nation’s water treatment facilities, and for inviting me to be here this morning to share my experience and opinion on this important policy matter. My testimony before you this morning will focus specifically on Department of Homeland Security regulation of chemical security practices at water treatment facilities and the handling and storage of gaseous chlorine at the Long Beach Groundwater Treatment Plant. This testimony represents my professional opinion as a licensed professional engineer and water treatment operator; and it is based on the responsibility I have as a water official for the City of Long Beach.

All water treatment plants throughout the country use some form of chlorine for at least part of their disinfection process. The disinfection of drinking water with chlorine is widely regarded as one of the greatest public health achievements of the 20th Century. While the use of gaseous chlorine is often the most cost-effective and efficient method of water disinfection, the risks associated with the handling, transport and storage of large amounts of gaseous chlorine must be considered within the broader context of current national security interests.

I have closely reviewed the draft “Chemical Facility Anti-Terrorism Act of 2008” before you today, and strongly support the proposed Department of Homeland Security risk and performance based regulation of chemical security practices at U.S. water treatment facilities. While it is imperative that this new regulation in no way interferes with the existing Safe Drinking Water Act compliance at our nation’s drinking water treatment plants, the additional expertise which the Department of Homeland Security can provide to this critical element of our nation’s infrastructure is greatly needed. Close coordination between the Department of Homeland Security, the USEPA, and the associated state and local agencies will ensure that our drinking water treatment plants will continue to provide clean, reliable, affordable drinking water while safeguarding the neighborhoods surrounding these plants.

I also believe that alternatives to the handling, transport and storage of gaseous chlorine at these facilities should be encouraged, considered, and implemented where feasible, without impairing critical operations. Federal funding to encourage the consideration and implementation of alternative disinfection treatment methods, on a voluntary basis, would provide the necessary stimulus to enable certain agencies to move toward implementation of inherently safer alternatives.

The City of Long Beach gets its water from two primary sources. Half of our supply is treated imported water we purchase from the Metropolitan Water District of Southern California, and half is local groundwater treated at our groundwater treatment facility, which is one of the largest groundwater treatment facilities in the United States, if not the largest. This facility employs conventional filtration processes, which are typical of processes used in the treatment of surface water. Our treatment operations currently utilize gaseous chlorine as the primary disinfect.

Our Groundwater Treatment Plant is located in a densely populated, urban area in California's fifth largest city. The Los Angeles/ Long Beach area is the most populated metropolitan area in the country. Our facility is immediately adjacent to the City of Long Beach Emergency Operations Command Center, the Long Beach Airport (where it sits under the flight path of incoming commercial aircraft and across the street from the control tower), the north and southbound lanes of the 405 Freeway, one of the busiest freeways in the United States, the Long Beach Unified School District food distribution center, a professional business center, the Greater Long Beach Regional Red Cross Headquarters, two medical buildings and many other business and residential units.

Like all other large water utilities throughout the country, we conducted a vulnerability assessment of our critical facilities following the terrorist attacks of September 11, 2001. While we have implemented significant security improvements to control site access, detect, deter and delay potential terrorist incidents, and numerous other security enhancements, the consequences of an intentional attack by a highly-motivated terrorist on our chlorine supplies merit further consideration.

It is clear to us in Long Beach that the most effective way to protect against such an intentional attack is to eliminate the target. We are in the process of doing just that.

To eliminate this vulnerability, the Long Beach Water Department has integrated, and since March 2004, has been conducting operations of a demonstration scale 700 lb/day on-site chlorine generation system. On-site gaseous chlorine generation is a relatively new process and I believe Long Beach may be among the first in the United States to begin integrating such a system into its water treatment operations. We are pleased with the results of our demonstration scale project and have now begun work to increase the capacity of the system to 2,000 lbs/day, which is Phase 1 of an eventual 6,000 lb/day on-site generation system. The total capital cost of completely eliminating the handling and storage of gaseous chlorine, and bringing on-site chlorine generation on-line at the Long Beach Groundwater Treatment Plant is estimated to cost between \$2 million and \$3 million.

While Long Beach is pursuing this particular alternative chlorination method, it is important for this Committee to understand that there are numerous commercially available alternative disinfection technologies that exist that have been successfully implemented at various water and wastewater treatment operations across the United States. However, numerous local considerations and other critical site specific factors must be considered, on a strict case-by-case basis, to determine feasibility of integrating any of these alternative technologies. In a few cases it may be infeasible to integrate any of these alternative technologies into treatment operations. Any consideration of alternative technologies must include assurances that maintain reliability of water systems, as well as the flexibility needed to enable water treatment operators to adhere to strict Federal and State water quality standards.

I would propose the Committee amend its current draft to include an authorization of appropriations for voluntary integration of technologies that reduce or eliminate the risk posed by transport and storage of containerized gaseous chlorine. Federal participation in voluntary demonstration scale projects of this type would have a profound impact on the United States water treatment industry.

I want to thank the Committee again for allowing me to give you my thoughts on these matters. My organization and I make ourselves available for any further discussion on these and any other matter related to the “Chemical Facility Anti-Terrorism Act of 2008” upon your request.

I would be happy to answer any of your questions.