Monitoring Drinking Regulation

By Carlyn Meyer,
Water Quality Association

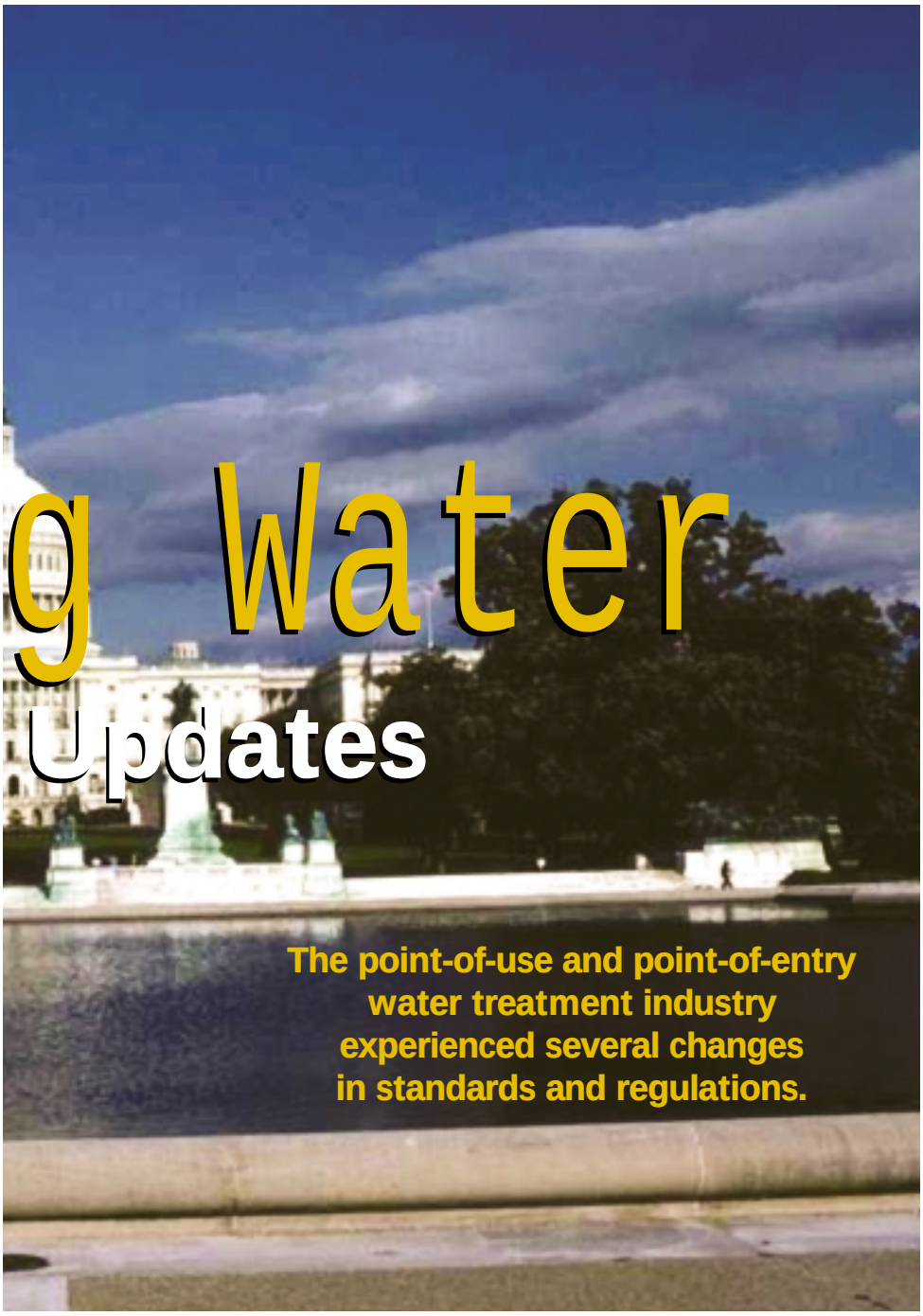
The Water Quality Association (WQA) and the point-of-use/point-of-entry (POU/POE) industry as a whole face the usual list of federal and state regulatory challenges in 2002-2003.

POU/POE Come into Their Own as EPA Compliance Options

The U.S. Environmental Protection Agency (EPA) has issued two high profile MCLs over the past two years. The first brings the radium MCL down to 5 pico curies from its previous level of 20. Public water systems must comply by December 2003, which is estimated to affect approximately 400 systems nationally.

The second rule on arsenic, which will affect 4,000 water systems, does not go into effect until 2006. However, the POU/POE industry is now preparing and partnering with the American Water Works Association Research Foundation (AWWARF) and EPA for a study using POU as a small system compliance option. WQA Technical Director Joe Harrison sits on the advisory committee for an AWWARF study entitled, "Point-of-Use/Point-of-Entry Implementation Feasibility Study for Arsenic Treatment." The research will determine the efficacy of using POU for arsenic reduction and also will address such issues as testing and monitoring home tap water and in-home treatment devices. These so-called "management" issues are crucial to solve before state governments will buy into approving POU/POE use by small community water systems as an affordable option for them to comply with federal drinking water standards.

This issue first was addressed by WQA when the association and its member companies successfully lobbied for language in the 1996 Safe Drinking Water Act reauthorization that allows small community water systems (fewer than 10,000) to use POU/POE to comply with new EPA drinking water standards. However, the market has been slow to develop because state governments want



g Water Updates

The point-of-use and point-of-entry water treatment industry experienced several changes in standards and regulations.

assurance that the EPA will accept some variances in its usual testing and monitoring guidelines that the state must implement.

In April, the EPA put out a guidance document "Appendix G: Centrally Managed Point-of-Use Compliance Strategy: Analysis of Implementation Issues," which is a virtual blueprint of compliance options the EPA will accept from the states. About the same time, WQA began to work with House Speaker Dennis Hastert regarding ways to move the POU/POE option along. Hastert's home district has more than a dozen communities that must meet EPA radium standards by December 2003, and most of those are small water systems that can't afford building expensive new centralized treatment plants.

WQA presently is working with a homeowners' group to develop a pilot project for radium removal to present to the Illinois EPA. WQA believes that if the industry can gain approval for one project from one of the most conservative state EPAs in the country, it will be a breakthrough that will drive others. It also would serve as a model for how to use POU to remove arsenic and other contaminants from small systems.

Foreign Affairs: The HPC Question

The International HPC Symposium, held April 22–24, 2002, in Geneva, Switzerland, addressed a topic of growing concern to the industry. For years, a minority of scientific opinion has held that heterotrophic plate count (HPC) build-up in water systems could be harmful to the public. The international conference was called to review the relevant science surrounding the issue and whether or not regulation of HPC should be a public health concern. The consensus coming out of the meeting was that the science does not support such a conclusion.

The World Health Organization (WHO) conducted an expert meeting immediately following the symposium to provide supporting rationale and scientific consensus for WHO guidance on the significance of HPC bacteria in drinking water. A full WHO report and guidance document will be forthcoming.

Brine, Sewers and Septic Systems

The most vexing problem the POU/POE industry faces remains the decades-long battle over brine wastewater discharge during water softener regeneration. As with most environmental concerns, this issue will never be put completely to rest. The industry will continue to fight skirmishes on the local and state levels.

On Jan. 1, 2003, the final provisions of California SB 1006 go into effect. Water districts can ban automatic water softeners if they meet a set of state-mandated criteria. Unlike the early '90s when a district could ban softeners almost on a whim, SB 1006 requires

- Softeners to be out of compliance with waste discharge or water reclamation standards;
- Districts to conduct a study to identify and take steps to reduce all sources of salt in a given service area; and
- Districts to show that banning softeners would bring the district back into compliance with waste discharge standards.

AWWARF awarded a $750,000 research contract to engineering consultants CH2M Hill to develop a methodology that water districts can use to assess all sources of TDS, sodium and chloride within their area. The study is funded by AWWARF, WateReuse Foundation, a consortium of California water districts (joined by El Paso and Phoenix) and WQA. WQA has been involved since the inception of the study and will review and comment on all reports and the conclusion coming out of the study. Five water districts will conduct pilot projects to test research methodologies: Irvine Ranch, Monterey and San Jose water districts in California, and El Paso, Texas, and Phoenix.

WQA expects one or more water districts to begin the process to ban self-regenerating water softeners in 2003, although the AWWARF study will not issue its first hard data report until March 2003. California fund contributors of the AWWARF project are hoping no water district initiates bans without a bona fide research model being developed.

In the meantime, the WQA California Issues Task Force is overseeing the industry's response to the changing conditions that confront it in California.

Over the past few years the issue of brine discharge into certain types of septic tanks has surfaced in various states, most recently, Texas. There are some manufacturers of aerobic septic tanks, also known as on-site sewage facilities (OSSF) that will not honor warranties on systems that accept water softener brine. Although no scientific data has been presented that demonstrate such brine adversely affects OSSFs, some state regulators have been swayed into believing that water softener brine interferes with the hydraulics, biodegradation or even the building integrity of these systems.

POU/POE is just beginning to be recognized by the federal government. The arsenic ruling was the first standard to look at these technologies due to compliance costs.

Photo courtesy of Ionics, Inc.

A case in point: The Texas Natural Resources Conservation Commission (TNRCC) issued a new rule prohibiting softener brine from entering an OSSF as part of a quadrennial review of all septic regulations. Technical experts from WQA and NSF International joined members of the Texas Water Quality Association in several meetings with Texas regulators aimed at clarifying the scientific basis of several studies that showed softener brine does not interfere with OSSF functions. The two associations have submitted language to amend the TNRCC septic rule and expect an answer on whether the commission will address a change by the end of summer 2002. If the TNRCC changes its rule, it could serve as a precedent for other states such as Massachusetts and Connecticut, which presently have laxly enforced rules prohibiting brine into septic tanks on the book.

The Business Environment

The reason any trade association has a government and regulatory affairs program is to help shape the environment in which the industry operates. With its limited resources, WQA focuses 90 percent of its legislative and regulatory activities on issues that immediately affect its members.

However, the association also monitors a broad array of related issues through its electronic bill tracking system and its review of trade journals, newspapers and other media. In any given year, scores of new water-related bills are introduced in the 50 states. These bills range from new proposals to stimulate wastewater reclamation (Flaorida, New Jersey and Delaware) to listing new primary drinking water contaminants (California) to tax credits for contaminant removal (New Jersey).

Nevertheless, WQA depends on its members and industry activists to keep their ears close to the ground in an attempt to identify issues before they become legislative or enter the rule-making process. Such a grassroots "early warning" system is vital to the health of the industry. WQP

About the Author

Carlyn Meyer is the director of public affairs for the Water Quality Association, Lisle, Ill. For additional information, visit www.wqa.org; 630-505-0160.

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