

substances for which there are drinking water standards. This statute would provide a “Safe Harbor” from personal injury suits as long as the water complies with “the more stringent of the primary MCLs established either pursuant to the State Regulatory body, or the Federal Safe Drinking Water Act.” Several states have already made progress in this regard, including Ohio, Arizona and California.

The initial public interest created by the filing of these cases in California has subsided, and the attorneys who filed the original suits do not seem eager to file new suits. Nonetheless, the public still holds considerable concern over contaminants in drinking water. Fairly or not, the litigious nature of our society makes utility lawsuits inevitable. **NOW** is the time to attempt to get state statutes, regulations and other mechanisms changed to reflect a more logical respect for the integrity of the regulatory and public health processes. ❖

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This particular stipulation in the proposed legislation may result in unintended consequences.

The comments contained in this article are personal comments of practicing water professionals with over 35 years of combined experience. Both authors have prepared and implemented vulnerability assessments, emergency response plans and risk management plans for multiple utilities/facilities and believe that the comments expressed are representative of many water industry professionals. ❖

For more information on the Drinking Water System Security Act of 2009 (H.R. 3258), please visit http://energycommerce.house.gov/Press_111/20090720/dwssa.pdf

Blending of Desalinated Water: Possible Regulatory Implications

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In an age of diminishing water quality, desalinated water is becoming an increasingly important source of drinking water. When brackish water or sea water sources are treated by desalination, the product water oftentimes is blended with treated water drawn from a fresh water source. Yet the water quality of a desalinated saline source is fundamentally different than that of a conventionally-treated fresh water source. Blending two fundamentally different water qualities requires great care. If improperly done, significant water quality problems can occur, some with regulatory implications.

Desalinated brackish or sea water is typically higher in bromide and chloride and lower in mineral content and pH than conventionally-treated fresh water. These differences can impact a utility’s ability to comply with the Disinfectants/Disinfection Byproducts (DBPR), Lead and Copper or Total Coliform (TCR) Rules or Secondary Maximum Contaminant Levels (SMCL) for iron and manganese. The table (right) summarizes some of these impacts.

Typically, carefully planned studies, such as pipe loop corrosion studies, or DBP formation potential tests, are required to understand the complex chemical interactions in the blended water and between the blended water and components of the distribution system. ❖

Characteristics of Desalinated Water and Their Regulatory Implications

Parameter	Characteristic of Desalinated Brackish/Seawater	Implication	Potential Regulatory Impact
Bromide	Typically higher than treated fresh water	Increased formation of brominated DBP species	Possible violation of DBPR
		Reduced stability of monochloramine residual	Possible loss of disinfectant
Chloride	Typically higher than treated fresh water	Possible increased corrosion rates	Possible Lead and Copper Rule violation
Mineral Content	Low, little alkalinity or hardness	Increased corrosion rates	Possible Lead and Copper Rule violation
		Potential for destabilization of pipe scale (Red Water)	Possible TCR violation; may exceed iron or manganese SMCL
pH	Typically low	Increased corrosion rates	Possible Lead and Copper Rule violation
		Potential for destabilization of pipe scale (Red Water)	Possible TCR violation; may exceed iron or manganese SMCL