

Testimony of Carrie Lewis Superintendent Milwaukee Water Works

On Behalf of the Association of Metropolitan Water Agencies

Before the United States Senate Committee on Environment and Public Works

"Oversight Hearing on Public Health and Drinking Water Issues"

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Good morning Madame Chairman, Ranking Member Inhofe, and members of the Committee. My name is Carrie Lewis and I am the Superintendent of Milwaukee Water Works in Milwaukee, Wisconsin. The Water Works provides high-quality drinking water to more than 860,000 people in Milwaukee and fifteen surrounding communities.

I also serve on the board of directors of the Association of Metropolitan Water Agencies (AMWA), which is an organization representing the largest publicly owned drinking water utilities in the United States. AMWA's members provide clean and safe drinking water to more than 130 million Americans from Alaska to Puerto Rico.

Today I am here to discuss AMWA's view of EPA's drinking water regulatory process, as well as the approach Milwaukee Water Works takes to removing contaminants from our drinking water supplies and the testing we conduct to ensure that our water remains in compliance with all state and federal regulations. This issue has gained increased attention due to a report released by the Environmental Working Group (EWG) in December alleging that the drinking water of thirty-one cities across the United States – including Milwaukee – contains detectable levels of chromium-6. Chromium-6 is, according to EPA's draft Integrated Risk Information System (IRIS) toxicological assessment, a suspected carcinogen if ingested by humans over a lifetime. Chromium-6 is a component of total chromium, which is regulated by EPA with a maximum contaminant level (MCL) of 100 parts per billion (ppb). At this time, there is not a separate federal drinking water regulation for chromium-6, nor does EPA require drinking water systems to test their water supplies for the chemical.

Additionally, because Chairwoman Boxer has introduced S. 78 and S. 79, bills that would set timelines within which EPA would have to set enforceable drinking water

standards for perchlorate and chromium-6, respectively, I will share some thoughts as to how the water utility community believes we can work with the government to best protect public health while adhering to the regulatory process established through the Safe Drinking Water Act (SDWA) and also reasonably allocating the resources currently available to local communities.

Drinking Water Systems Prioritize Public Health Protection

Like all drinking water systems, Milwaukee Water Works is committed to protecting public health. The utility meets all state and federal requirements for safe and healthful drinking water by subjecting its Lake Michigan sourcewater to a multiple-step process to remove illness-causing microorganisms and contaminants. The water is disinfected with ozone, a highly reactive gas that destroys microorganisms, removes taste and odor, and reduces byproducts from chlorine disinfection. Coagulation, settling, and biologically active filtration remove additional particles. Fluoride is added for dental health consistent with CDC recommendations, and a phosphorous compound is added to help control corrosion of lead and copper pipes. Finally, chloramine disinfection ensures safe drinking water throughout the distribution system and at consumer faucets.

In addition to this robust treatment regime, Milwaukee complies with EPA regulations that require drinking water systems to test their water supplies for more than ninety different regulated and unregulated contaminants that are, based on the best available science, thought to pose the greatest risks to human health. But Milwaukee Water Works actually goes above and beyond this requirement, testing its source and treated drinking water for over five hundred contaminants – more than five times the number required by EPA. We voluntarily conduct this monitoring as a precaution to

ensure safe water, to collect baseline data for study, to understand how contaminants may affect public health, and to prepare for future regulations.

In 2004 Milwaukee became one of the first utilities in the United States to test its source and drinking water for endocrine-disrupting compounds (EDCs). In 2005, it was one of the first to test for pharmaceuticals and personal care products (PPCPs). To date, none of these substances have been found in Milwaukee's drinking water. In 2008, the Associated Press cited Milwaukee as one of only twenty-eight major utilities in the U.S. to test source and treated water for emerging contaminants such as EDCs and PPCPs, and Milwaukee was the first U.S. utility to post its test results on the Internet. As you can see, Milwaukee Water Works takes great pride in ensuring the safety and quality of the drinking water that is distributed to our customers.

In response to concerns about chromium-6 raised by the EWG report, in January the utility conducted independent tests for the chemical. Three rounds of samples were collected from six separate locations: untreated Lake Michigan water entering Milwaukee's two water treatment plants; fully treated water as it leaves each treatment plant; and two locations in the distribution system. Samples analyzed using EPA method 218.6 identified the presence of chromium-6 at 0.22 ppb in untreated source water, at 0.20 ppb in treated water leaving each treatment plant, and at 0.19 ppb at two points in the distribution system. We immediately communicated this information to our customers, and also confirmed to them that there is no health evidence or indication that Milwaukee's drinking water is unsafe for human consumption or use. Furthermore, there is no need for customers to purchase or install special filtration devices at faucets, water fountains, or at any other point-of-use location at homes and businesses.

While Milwaukee acted quickly following the release of EWG's report, we would have begun our own monitoring for chromium-6 sooner if EWG had shared their findings with us immediately after they tested Milwaukee's water, rather than waiting several months to release their data from across the country to the media en masse. Moreover, in the absence of additional utility testing we were concerned that public confidence in our drinking water supply would be undermined by the widely reported results of a single water sample from a single faucet, which according to EWG was collected from somewhere within our service area sometime during the past several months. This uncertainty was unacceptable to us, so we decided to move forward with our own testing.

Along these same lines, on January 11 EPA released a guidance to help water systems voluntarily sample source water, plant treated water, and water in the distribution system for chromium-6 on a quarterly basis. But while AMWA appreciates the goal of properly informing the public about the quality of drinking water using standardized scientific methods, the association has several reservations about the guidance. For example, the guidance refers to using California's certified laboratories to conduct chromium-6 analysis at a reporting level of 0.06 ppb and a holding time of up to five days. However, California currently approves this method only for a reporting level of 1.0 ppb and a 24-hour holding time. In addition, questions about proper sampling technique and sample preservation are not addressed in the guidance, which leads to uncertainty as to whether the resulting data will be valid since EPA does not officially approve the method described in the guidance.

Some of these questions have prompted some drinking water utilities to choose to not test for chromium-6 until EPA has completed its risk assessment for the contaminant,

which is expected later this year. This decision reflects the fact that, in the absence of solid human health data from EPA, it is impossible to tell the public with any certainty what exactly the results of these tests may mean. As a result, some utilities will choose to expend their limited resources focusing on testing and treating for other chemicals – those for which EPA has already established a clear human health link. Each of these approaches is valid, and they demonstrate the hazards of stirring concerns about a particular contaminant before all of the necessary research is complete.

Sensible Regulation Through the Safe Drinking Water Act

As we've heard today, reports in the news media about unregulated drinking water contaminants such as chromium-6, perchlorate, and pharmaceutical and personal care products often lead to calls that EPA should "move expeditiously" to set legal drinking water limits for emerging contaminants. To that end, the bills introduced by Chairwoman Boxer last week would require EPA to set enforceable drinking water standards for perchlorate and chromium-6 no later than one year after the enactment of each measure. But AMWA would caution against undermining the SDWA process and forcing EPA to regulate certain contaminants simply because they have been highlighted by an outside group or featured in the news media. Instead, EPA must maintain the latitude to conduct and complete sound, transparent research that determines whether, and at what level, chromium-6 and other contaminants may pose threats to human health.

This current system, put in place by the Safe Drinking Water Act amendments of 1996, is a reasonable and effective way to establish drinking water standards. Before making a determination to regulate a drinking water contaminant, EPA must consider the potential adverse effects of the contaminant on human health, the frequency and level of

the contaminant's occurrence in public drinking water systems, and whether regulation will present a meaningful opportunity to reduce public health risks. These requirements set a high bar for the Agency, but they ensure that the regulations are well vetted and that dollars subsequently spent by utilities to detect and remove these contaminants are put to good use.

SDWA requires EPA to consider regulating new contaminants on an ongoing basis, as new scientific data becomes available. Every five years, EPA must publish a Contaminant Candidate List of unregulated drinking water contaminants for which additional research will be prioritized. EPA must make a decision on whether to regulate at least five of these contaminants every five years, ensuring that the Agency has a frequent opportunity to examine the best available science for the most researched unregulated contaminants.

Every six years, EPA must review all currently regulated contaminants and make a decision on whether there are any National Primary Drinking Water Regulations for which current health effects assessments, changes in technology, or other factors provide a health or technical basis to support a regulatory revision that will maintain or strengthen public health protection. For the last Six Year Review, published in 2010, EPA stated that it was awaiting the final risk assessment for chromium-6 before making a decision about revising the total chromium regulation. The IRIS assessment for chromium-6 was released for peer review on September 30, 2010.

Finally, SDWA requires EPA to maintain an Unregulated Contaminant Monitoring Program to collect data on unregulated contaminants that are suspected to be present in drinking water supplies, and gives the EPA administrator the power to

promulgate a drinking water regulation on an expedited basis for a contaminant found to be an urgent threat to public health following consultation with the Department of Health and Human Services, the Centers for Disease Control, and the National Institutes of Health. Clearly, EPA has at its disposal the regulatory tools necessary to make informed and scientifically sound decisions about drinking water regulations.

Perhaps just as importantly, SDWA recognizes that there are occasions when it will be technologically impossible or infeasible for a drinking water utility to remove a contaminant to the point where it poses absolutely zero risk of a public health impact. Therefore, when regulating a contaminant EPA publishes both a non-enforceable "maximum contaminant level goal" (MCLG) which represents the level at which there is no known risk to human health, and an enforceable MCL, a binding limit set as close to the MCLG as is feasible after considering the best available treatment technology and cost factors. To be clear, as California's Office of Environmental Health Hazard Assessment explained in a December 31, 2010 press statement, a drinking water contaminant goal "is not meant to be the maximum 'safe' level" of a given chemical in drinking water. Instead, "it represents a stringent health-protective goal" that is used "to develop and enforceable regulatory standard."¹

Consequently, EWG's report should not be read to suggest that the drinking water of Milwaukee or any other community poses a threat to the public because its chromium-6 level meets or exceeds California's proposed public health goal for the contaminant. To the contrary, the City of Milwaukee Department of Public Health has determined that there is no evidence of an imminent public health risk or threat of acute illness due to low

¹ "OEHAA Releases Revised Draft Public Health Goal for Hexavalent Chromium," December 31, 2010. http://www.oehha.ca.gov/water/phg/pdf/Chrom6press123110.pdf.

levels of chromium-6 in the city's water supply. For these reasons, AMWA believes Congress should not force EPA to prematurely terminate its study of chromium-6 or any other emerging contaminant.

Policy Recommendations

As the committee performs important oversight of EPA's drinking water program, AMWA's message is quite simple: public health protection is paramount, and we fully support SDWA's defined process for identifying, regulating and revising drinking water contaminants. But Congress should not overreact to any outside organization's unscientific report on drinking water quality by passing legislation such as S. 78 or S. 79 and requiring EPA to regulate certain contaminants within an arbitrary period of time. If Congress were to require municipal water systems to increase their testing or alter their treatment of water supplies in response to each and every report published by an activist group, it would introduce into the process a political component that the SDWA statute was designed to exclude. Allowing Congress, not EPA, to decide when certain emerging contaminants must be regulated would irrevocably weaken the Safe Drinking Water Act, undermine public confidence in the water supply, and add significant costs to local communities – all while delivering questionable public health benefits.

Instead, AMWA believes that the best public health protections will result if Congress, as Chairwoman Boxer argued in January, respects EPA's authority to craft drinking water regulations and set environmental standards "in a measured, moderate, responsible way," and does "not interfere with the ability of the EPA and the states to act

in accordance with the law to respond to what the scientists are telling us."² If, pursuant to the requirements of the Safe Drinking Water Act, EPA research determines that the presence of a certain level of chromium-6 in drinking water presents a human health risk, then the Agency should establish an enforceable standard that can reasonably and feasibly be met by the nation's drinking water systems. The drinking water community will support and comply with standards that are the product of this established process, as we always have.

There are effective steps that AMWA urges Congress to take to ensure that utilities have the resources available to keep clean and safe drinking water flowing to all of their customers. For example, AMWA supports reauthorization of the Drinking Water State Revolving Fund (DWSRF), a federal program that offers loans to help water systems comply with federal drinking water standards. While the program largely aims to help small community water systems comply with SDWA standards (especially considering that EPA has reported that ninety-six percent of all health-based SDWA violations occur at utilities serving fewer than 10,000 people³), it could be strengthened by making more funds available for projects at very large water systems that serve nearly half of America's population. Metropolitan utilities that serve more than 100,000 people represent thirty-five percent of the drinking water infrastructure need identified in EPA's 2007 Drinking Water Needs Survey, but through 2009 had received only twenty-three

² "Senator Boxer Delivers Remarks on Protecting Our Landmark Environmental Laws and Creating Jobs," January 6, 2011.

http://epw.senate.gov/public/index.cfm?FuseAction=Majority.PressReleases&ContentRecord_id=5cc0f6df-802a-23ad-4d13-bc6e386b53fe.

³ "Testimony of Peter S. Silva, Assistant Administrator for Water, and Cynthia J. Giles, Assistant Administrator for Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, Before the Committee on Environment and Public Works, United States Senate," December 8, 2009. http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=b773e8ed-7b8a-4d87-835acf0f644ff6ef.

percent of DWSRF funds distributed since the program's inception. In addition to strengthening the DWSRF, Congress should consider new and innovative programs to help water utilities cope with rising infrastructure costs, such as a water infrastructure bank or a similar program that focuses on urban water infrastructure and public health.

Similarly, Congress should reject calls to reduce funding for the DWSRF as a means to cut federal spending. While we can all agree that the federal budget deficit needs to be addressed, the fact remains that the nation's drinking water systems will need to spend nearly \$335 billion over the next twenty years just to maintain current levels of service.⁴ These costs are not optional, and cannot be ignored without putting public health at risk. A strong DWSRF program is essential to preserve a safe and secure water supply.

Finally, AMWA supported passage of last year's "Reduction of Lead in Drinking Water Act," which was sponsored by Chairwoman Boxer and Ranking Member Inhofe and updated SDWA's statutory definition of "lead-free" as it applies to new pipes and plumbing fixtures that carry drinking water. Improving technology made a lower lead standard attainable, and the legislation won bipartisan support because it will implement the new standard in such a way that will not saddle communities with prohibitive costs. It is through such collaborative, achievable measures that Congress can best protect public health and the quality of the drinking water supply. Technical questions about whether and at what level to regulate emerging contaminants in the drinking water

⁴ "EPA's 2007 Drinking Water Infrastructure Needs Survey and Assessment Fact Sheet," February 2009. <u>http://water.epa.gov/infrastructure/drinkingwater/dwns/upload/2009_03_26_needssurvey_2007_fs_needssurvey_2007.pdf</u>.

supply, on the other hand, should continue to be considered at EPA through the transparent process outlined by Congress in the Safe Drinking Water Act.

Thank you for the opportunity to testify at this important hearing today. I look forward to answering any questions that you may have.