

**AMERICAN WATER WORKS ASSOCIATION  
BEFORE THE  
COMMITTEE ON GOVERNMENT REFORM  
U. S. HOUSE OF REPRESENTATIVES**

**STATEMENT ON**

**LEAD CONTAMINATION IN THE DISTRICT OF COLUMBIA'S  
WATER SUPPLY**

**MARCH 11, 2005**

**PRESENTED BY  
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BOSTON, MASSACHUSETTS**

**INTRODUCTION**

Good morning Mr. Chairman. I am Stephen Estes-Smargiassi, Director of Planning, Massachusetts Water Resources Authority (MWRA), in Boston, Massachusetts. MWRA is the wholesale provider of water and wastewater services to 61 cities and towns in eastern and central Massachusetts, serving a total of about 2.5 million people and over 5,000 businesses. Our supplies come from two very large and well protected reservoirs in central Massachusetts, and we provide all water treatment and water quality analysis for our customer communities. I am here today on behalf of the American Water Works Association (AWWA). AWWA and its members commend you for holding this hearing and appreciate the opportunity to present its views on lead contamination of drinking water.

Founded in 1881, AWWA is the world's largest and oldest scientific and educational association representing drinking water supply professionals. The association's 57,000 members are comprised of administrators, utility operators, professional engineers, contractors, manufacturers, scientists, professors and health professionals. The association's membership includes almost 4,800 utilities that provide over 80 percent of the nation's drinking water. AWWA and its members are dedicated to providing safe, reliable drinking water to the American people.

AWWA utility members are regulated under the Safe Drinking Water Act (SDWA) and other statutes. AWWA believes few environmental activities are more important to the health of this country than assuring the protection of water supply sources, and the treatment, distribution and consumption of a safe, healthful and adequate supply of drinking water.

**BACKGROUND**

In the past year, there has been much interest in Congress about the elevated levels of lead found in drinking water in Washington, DC. Much of the discussion has centered on the lead service lines between the distribution system and the home plumbing, and whether or not they are a significant source of lead in drinking water. We cannot speak to the specifics of the situation in Washington, DC. The matter is under investigation and AWWA has no direct knowledge of the cause of the elevated lead levels found in tests of drinking water in Washington, DC, or any remedial action that has been taken or should be taken in that instance. Nor does AWWA have any information that would suggest that the problem experienced in Washington, DC, is occurring in other public water systems across the country. In testimony before this Committee on May 21, 2004, we provided general information concerning the sources of lead in drinking water and what has been done and can be done to reduce exposure to lead in drinking water.

AWWA and its members emphatically support lead exposure reduction measures that promote public health. In our testimony last year, we outlined the following recommended measures to address lead contamination of drinking water.

1. First and most importantly, we advocate a comprehensive national approach to reducing lead contamination in drinking water from all sources. This should involve a program of research and public education concerning the sources of, dangers of, and protection against lead contamination from all sources such as paint, dust, drinking water, and others. It is important that the program not be limited to drinking water, since drinking water is not the major source of lead exposure.
2. We advocate the use of corrosion control treatment techniques by all utilities to reduce exposure to lead in drinking water.

3. We support replacement of lead service lines that significantly contribute to high lead levels in the home.
4. We advocate a “holistic” approach to the development and implementation of drinking water regulations to minimize the extent to which regulations can interfere with each other and potentially increase health risks.

Since AWWA testified to this Committee in May last year, we have organized workshops, webcasts, and sessions at national and regional conferences on managing lead exposure. Our peer-reviewed journal has published new research. We direct mailed information to raise member utility awareness about lead in drinking water at homes and in schools, as well as incorporated practical advise on addressing lead into our routine publications. We have also taken a number of steps beyond raising awareness about the lead in drinking water issue. In today’s testimony, we will highlight several key activities that have occurred since our last testimony.

## **HOLISTIC APPROACH TO WATER QUALITY MANAGEMENT**

Lead contamination of drinking water is primarily the result of lead in home plumbing and fixtures, which is beyond the control of a drinking water utility. The means available to drinking water systems to mitigate the degradation of water passing through pipes and fixtures in home plumbing involves controlling the water’s corrosivity. With this in mind, in our testimony to this committee last year AWWA advocated the treatment technique of optimizing corrosion control as the best way of reducing exposure from lead in drinking water. AWWA continues to believe that this recommendation is sound. Recognizing that managing the corrosivity of drinking water is complex and sometimes in conflict with utility efforts to meet other important water quality objectives, AWWA undertook development of a management framework to help drinking water utilities proactively evaluate changes in treatment or operations which might impact corrosivity and other related water quality parameters. The framework is now completing peer review, a process that has included the participation of recognized academic and engineering experts as well as state and federal drinking water regulators. We anticipate distribution to member utilities early this spring.

## **LEAD SERVICE LINES**

The importance of corrosion control and holistic approach to water quality is emphasized by the challenges posed in managing lead service lines. Lead service lines represent one source of lead that must be considered when attempting to control lead in tap water at an individual home, child care facility, or school. AWWA advocates lead service line removal as a means of reducing lead contamination in drinking water when the lead service line is significantly contributing to lead contamination. However, lead service line replacement is complicated by the ownership of the lead service lines. In some instances, the water utility owns the entire line. In others, the property owner owns the entire service line. And in the majority of other cases, part of the lead service line is owned by the utility and part by the property owner. A public water system can only be held legally liable for replacing that part of the service line owned by the utility. A public water system has no legal means to compel a property owner to replace a lead service line or portion of a lead service line. Requiring a water utility to remove privately owned lead service lines raises constitutional and legal issues with regard to private property and eminent domain. All agree that partial replacement of lead service lines increases lead levels in water and should be avoided. Further, removing a lead service line may not reduce lead contamination of drinking water. Tests have revealed high lead levels in homes that have no lead service line and low or no measurable lead contamination in homes with lead service lines.

Recognizing that engaging property owners in changing their portion of a lead service line in conjunction with their public drinking water utility can be challenging, AWWA is preparing a guide for drinking water utility managers. This guide both encourages public water systems to undertake full lead service line replacement and provides helpful guidance on how to develop such a program. We anticipate distribution of this guide to member utilities early this spring.

## **PLUMBING MATERIALS**

In the mid-1980’s AWWA launched the “Get the Lead Out” campaign to raise the level of lead contamination awareness among consumers. In 2004 AWWA renewed its efforts to create informational material for utilities to give their customers and provide information directly to the public on lead contamination. We now have consumer information about lead contamination in drinking water on the AWWA website ([www.drinktap.org](http://www.drinktap.org)).

AWWA is a multi-faceted organization and one of its roles in the drinking water community is as a consensus standards organization. In this capacity AWWA’s standards are now being reviewed and revised with the explicit goal of identifying any remaining lead containing components in products encompassed by AWWA standards. When lead containing components are identified, if there is a technically sound low-lead material for that component, the standards will be modified to ensure that alternative low-lead materials may be specified by utilities, engineers, and manufacturers that rely on those standards. Significant reductions in lead content in distribution system components were achieved in the 1980s and 1990s but we will continue to facilitate further reductions where they are possible.

Assuring that current “lead-free” expectations are met by plumbing product manufacturers relies in large part on testing under NSF/ANSI Standard 61 for whether contaminants, including lead, leach or migrate from the product/material into the drinking water are above acceptable levels. AWWA will be an active stakeholder in NSF’s recently initiated review of its toxics leaching protocol. NSF has initiated a review of its procedures to ensure that the testing protocol is sufficient to ensure that plumbing products do not contribute an excessive amount of lead to drinking water.

## **LEAD IN DRINKING WATER AT SCHOOLS AND CHILD CARE FACILITIES**

Recognizing the importance of minimizing lead exposure in schools and child care facilities, the U.S. Congress passed the Lead Contamination Control Act (LCCA) of 1988. The LCCA provided for repairing or replacing lead-lined water coolers and guidance to schools and child care facilities on methods to test and reduce lead exposure in drinking water. Compliance with the LCCA on the part of schools is voluntary, in sharp contrast to the mandated provisions of the Lead and Copper Rule, which applies to public water systems.

Differences between the LCCA guidance and the LCR requirements are a source of confusion. It is essential that utility personnel have a thorough understanding of the differences between the two rules and an awareness of lead in drinking water issues in schools and child care facilities in their communities. Toward that end, AWWA is preparing a guide that summarizes the LCCA guidance and the LCR requirements and highlights the distinguishing differences; describes the steps school systems and day-child care facilities may take to effectively manage lead levels in the water supplies in their facilities; and provides drinking water suppliers with information and tools they may use to assist school and child care administrators in addressing lead in drinking water. We think of the drinking water utility as the best source of local information about the drinking water supply. We hope that by preparing our members we will set the stage for schools and child care facility administrators to engage in monitoring to identify facilities with unacceptable lead levels and invest in necessary changes to reduce that exposure. AWWA is looking forward to working with EPA and other partners in a coordinated effort to assist in ensuring appropriate monitoring for lead and lead reduction measures in schools and child care facilities are being implemented.

## **RESEARCH**

The recent events in Washington D.C. illustrated that additional drinking water research is critical to ensuring that water systems have the information they need about materials science, water treatment chemistry, and other facets of monitoring and managing the corrosivity of distributed water. AWWA and its members have a long history of promoting research to eliminate or reduce exposure to lead through drinking water. The American Water Works Association Research Foundation (AwwaRF) maintains an active research program. Through AwwaRF, public water supplies have spent approximately \$3.4 million dollars on ongoing and past research projects related to lead and copper corrosion and plan to spend over \$900,000 on new planned research for a total of \$4.3 million. An overview of AwwaRF projects related to the Lead and Copper Rule is attached to this statement.

## **CONCLUSION**

AWWA and its members thank you for holding this hearing concerning lead contamination of drinking water. AWWA pledges to continue to work with the Congress and the US Environmental Protection Agency to address this important issue. We thank you for your consideration of our views.

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This concludes the AWWA statement on lead contamination in drinking water. I would be pleased to answer any questions or provide additional material for the committee.