

**Committee on Government Operations and the Environment and
Committee on Public Works and Transportation**

**Joint Public Hearing on
Water Quality in the District of Columbia
February 10, 2009**

Testimony of Walter Smith
Executive Director
DC Appleseed Center

Introduction

Good morning Chairman Graham, Chairman Cheh, and other members of the Council. I am Walter Smith, the Executive Director of DC Appleseed Center, an independent non-profit advocacy organization. Thank you for the opportunity to testify at this roundtable on lead in drinking water.

We are here today because childhood lead exposure through drinking water remains a serious problem for the District. It is a health threat that carries devastating consequences for our children. The findings in the new study¹ that is the catalyst of this hearing are troubling and demonstrate that the high levels of lead in DC water residents experienced from 2001 until 2003 did irreparable harm to many District children. The findings also raise a serious question about whether the District government has done all it should to protect children from such harm today. I would like to make specific suggestions about what the District should do about this issue now.

Background

As some of you know, DC Appleseed has been concerned about lead in drinking water for some time. Our involvement with the issue began in 2004 when we were asked by Carol Schwartz – then Chair of the Environment and Public Works Committee – to investigate the crisis the city was facing concerning lead in DC’s drinking water, and to make recommendations concerning that crisis. The evidence strongly suggests and we have repeatedly testified before this Council that the federal Lead and Copper Rule (LCR) does not adequately safeguard the District’s citizens who are dependent upon DC water.

Beginning with the release of our report, DC Appleseed has advocated for stepped up local oversight of the safety of the District’s drinking water. In fact, one of the key recommendations in our December 2004 report was that a new Department of the Environment needed to be created to conduct local oversight of drinking water and that the District needed to take a much stronger role in drinking water issues.

¹ *Environmental Science and Technology*, Edwards, et al. January 27, 2009.

In our view, WASA's compliance with the federal Lead and Copper Rule (LCR) does not mean our children are safe from ingesting dangerous levels of lead in drinking water. In fact, the LCR compliance testing program as conducted by WASA is not designed to inform public health officials or the EPA about the so called lead "hot spots" that are the focus of the study we are discussing today. DC Appleaseed believes it is time the District's Department of the Environment (DDOE) takes a stronger role in protecting the safety of our drinking water and our children.

In our view, the weaknesses in LCR, combined with research confirming the harmfulness of lead in drinking water, suggests that independent testing and evaluation of drinking water by DDOE is needed. And, we believe that this new role for DDOE is already authorized by the Council's legislation that established the department.² The recent revelations underscore tests for lead in water must reflect local conditions, and should be subject to some measure of local control.

We acknowledge that WASA has taken steps to reduce lead levels in drinking water and that WASA is now technically in compliance with the LCR. These developments have prompted some, including the WASA Board Chairman, to assert that the threat posed by lead in drinking water has been addressed and that our water is safe for everyone – including our children – to drink.

We do not share that view and believe that weaknesses in the LCR – including insufficient testing requirements and a compliance standard that is not based on a health effects – means that many of our citizens continue to be exposed to unacceptable levels of lead in drinking water. Let me begin by stating why we believe the LCR is insufficient to protect the District's children and insufficient to preclude a recurrence of the harm described in the recent study.

Weaknesses of LCR Compliance Testing Requirements

For cities like the District, the LCR requires that water be tested at only 100 residences and submit the sampling results to EPA. If more than 10 percent of the samples are above the Action Level of 15 parts per billion (ppb) lead, WASA is required to take specific steps to remedy the health risk, including public notification and the replacement of some lead service lines.³ According to the rule and subsequent EPA guidance,⁴ community water systems have a duty to "sample at locations that may be particularly susceptible to high lead or copper evaluation." At the same time, the testing program should provide uniform and adequate health protection throughout the distribution system.⁵ The rule requires that only half of the samples come from

² DC Department of the Environment Establishment Act of 2005; Sections 102, 108(5), and 108(6).

³ EPA Lead and Copper Rule

⁴ November 23, 2004 letter from Benjamin Grumbles, EPA Acting Assistant Administrator, Office of Water to Regional Administrators.

sites that have lead service lines and does not mandate that residences known to have low lead levels be avoided.

The requirement that testing provide for “uniform health protection,” and provisions that allow water utilities to shift testing sites for every compliance period, means that the compliance testing standards in the federal rule are inadequate to detect and address high water lead levels that have existed in particular District neighborhoods. Nor do the standards require WASA to notify residents in those areas of the risks associated with lead in drinking water, as long as WASA is deemed by EPA to be in compliance with the LCR.

The inadequacy of the rule is amplified, we feel, by DC WASA’s continuing practice of instructing homeowners to “flush” their water system for two minutes the night before drawing samples for LCR compliance testing. The USEPA has indicated that this “pre-flushing” instruction is not technically illegal, but EPA does say the practice is not in keeping with the intent of the LCR.

Furthermore, the federal LCR testing regimen is not an effective way to assess and expose geographic areas where lead in drinking water might pose a significant risk. In fact, localized areas of high lead in water – like the areas highlighted in the recent study and by the *Washington Post* – could easily be missed by the LCR compliance testing, even if WASA conducted the testing program in full compliance with the regulations.

WASA is required to sample only 100 homes during each monitoring period. Under the LCR, WASA has a duty to sample at locations that may be particularly susceptible to high lead in water – in particular homes known to have a lead service line, lead pipes or lead solder or fixtures. But our report concludes that the rule also provides sufficient flexibility to allow a utility to test in areas deemed “high risk” that are already known by WASA to have low lead levels.

Given the small size of the sampling requirement, and the flexibility that allows a utility to target certain areas of the city, it is quite possible that many children could be consuming water that exceeds the federal action level of 15 parts per billion lead – even while WASA is technically in compliance with the LCR.

Finally, under the LCR, WASA has no obligation to notify homeowners whose compliance test results demonstrate high levels of lead in water if the utility is in compliance with federal standards.

Recommendations

⁵ EPA, February 2002, *Lead and Copper Monitoring and Reporting Guidance for Public Water Systems*.

The new study we are discussing today highlights a fact about lead in DC drinking water problem that we already knew -- some neighborhoods in DC are much more likely to have high lead in drinking water than others. As previously noted we believe the LCR does not adequately account for this variability and is, therefore, insufficient to protect children.

DC Appleseed recommends the following steps be taken to address these weaknesses:

- 1) DDOE should promptly conduct its own routine drinking water testing program that focuses on the highest risk areas already identified by WASA and EPA. The results of those tests should be shared with homeowners. The water testing program expected to occur this summer should serve as a model for future routine testing.
- 2) DDOE should conduct an independent investigation of DC WASA's LCR compliance testing program to determine whether the highest risk neighborhoods are being appropriately monitored and adequately informed of the risks from consuming lead in drinking water.
- 3) DC WASA should immediately offer free water testing under conditions consistent with typical home usage for any homeowner in the high risk zip codes identified in the study.
- 4) As part of the free testing program, DC WASA should advise individual homeowners in the high risk zip codes of steps they should take to reduce lead exposure from drinking water and provide water filters in cases where water lead levels exceed the federal action level.
- 5) The DC Council and the Mayor should urge EPA to disapprove WASA's LCR compliance program if it includes a pre-flush instruction.

The Importance of Addressing All Lead Threats

In our view, not only is the process WASA is following under the LCR insufficient to protect DC's children, but, in addition, the substantive provisions of the rule are also insufficient.

The latest scientific evidence suggests that even very small amounts of lead in the blood of children can have serious health impacts. But the LCR and the District's own lead program have not kept pace with these findings.

The federal LCR is based on a standard of 15 ppb lead in water at the tap, even though EPA itself acknowledges that there is no "safe" level of lead in drinking water.⁶ The standard was set as a corrosion control standard, not as a contaminant level sufficient to protect public health.

A growing consensus—including scientists, physicians, and the federal government itself—concludes that the current standards for acceptable lead levels must be made more stringent to protect the public health. DC can and should be a leader on this issue.

⁶ EPA Lead and Copper Rule

Researchers now agree that the risks to young children from even very low levels of lead are serious and long term.⁷ Lead exposure is toxic to blood and almost every organ system – most importantly, to the central nervous system and kidneys. According to the overwhelming weight of scientific evidence, even very small amounts of lead have been shown to permanently lower a child’s IQ and cause other developmental problems.

The latest evidence on the risks posed by lead is even more alarming than what we were told during the 2004 crisis. In 1991, the Centers for Disease Control and Prevention set a blood lead level of concern for children at 10 micrograms per deciliter. In 2007, however, the CDC revised its guidance concerning the level of lead measured in the blood of children that should prompt aggressive medical intervention. The CDC concluded that new research has shown adverse health effects in children with blood lead levels lower than 10 micrograms per deciliter.⁸ The CDC recently reiterated that no “safe” blood lead level has been identified.⁹

This updated information on adverse health effects at lower blood lead levels demonstrates just how critical it is for WASA, and for the DC government, to get it right when it comes to lead in drinking water.

Recommendation

Despite the latest science that shows BLL’s below 10 micrograms per deciliter have an irreversible and impact on IQ, DC has not revised what it considers an elevated blood lead level (EBL). DC’s EBL standard should reflect the latest scientific knowledge about lead risk. The evidence of effects on children’s IQ at levels lower than 10 mg/dl has been established by the CDC. The Lead-Hazard Prevention and Elimination Act of 2008 stipulates that the District should adopt a more stringent standard for EBL when the CDC sets a new “level of concern” for lead in blood. The recent CDC study highlights that harm to children occurs when BLLs are between 5-9 mg/dl. Therefore, the District should move forward now with establishing a new physician reporting threshold.

Thank you for allowing me to testify today. I would be happy to answer any questions you may have.

⁷ Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report*, Nov. 2, 2007 (56(RR08);1-14:16

⁸ Ibid

⁹ Ibid. See also, CDC, *Preventing Lead Poisoning in Young Children*. <http://www.cdc.gov/nceh/lead/publications/PrevLeadPoisoning.pdf>: US Department of Health and Human Services, CDC; 2005.