

LEAD EXPOSURE IN D.C.: PREVENTION, PROTECTION AND POTENTIAL PRESCRIPTIONS

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
SUBCOMMITTEE ON FEDERAL WORKFORCE, POSTAL SERVICE
AND THE DISTRICT OF COLUMBIA

HON. STEPHEN F. LYNCH, CHAIRMAN



TESTIMONY OF GEORGE S. HAWKINS, ESQ.
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RAYBURN HOUSE OFFICE BUILDING, ROOM 2154

Good afternoon Chairman Lynch, Congresswoman Norton and members of the Subcommittee on Federal Workforce, Postal Service and the District of Columbia. My name is George Hawkins and I am the General Manager of the District of Columbia Water and Sewer Authority. Known throughout its 16-year history as DC WASA, the agency just today began doing business as DC Water. (More on that in a moment.) I'd like to thank you for inviting me to testify today on the challenge of eliminating lead poisoning. This is a critical public health question and one in which DC Water must play an active role.

First, by way of background, DC Water purchases treated drinking water at wholesale from our federal partner, the Washington Aqueduct, which is a unit of the U.S. Army Corps of Engineers. We then deliver this water through our pumping stations and pipes to our retail customers in the District of Columbia. We also operate the world's largest advanced wastewater treatment plant, at Blue Plains, for the benefit of our customers in the District and several suburban jurisdictions.

Today I'd like to discuss some of the principal issues associated with limiting lead exposure, as well as the steps DC Water is taking to address those issues. To date, my involvement in lead issues in the District has been on two fronts. Prior to becoming General Manager at DC Water, I served as the Director of the District Department of the Environment (DDOE), which is the primary coordinating agency for the District's response to lead poisoning cases. DDOE also oversees efforts to prevent lead poisoning and limit exposure. In this capacity, I became familiar with the many exposure sources, as well as the efforts needed to reduce them. Much of DDOE's work and enforcement authority at the time related to lead-based paint and dust sources. The agency was responsible for implementing the District's 2008 Lead-Based Paint Prevention Act, as well as the Environmental Protection Agency's (EPA's) Renovation, Repair and Painting Rule. During my time at DDOE, I'm proud to say that we built a comprehensive lead and healthy housing program, which consolidated efforts and resources previously spread across agencies to respond more effectively to poisoning cases and to address lead-based hazards preemptively.

I arrived at the Water and Sewer Authority knowing that addressing the threat of lead in the drinking water must be a top priority of the enterprise. It is my view that the events from 2000 to 2004 severely undermined customer confidence in our system and did not adequately focus on the public health implications of the crisis. The recent congressional investigation into the 2004 Centers for Disease Control (CDC) study highlighted the extent to which questions still linger and the importance of providing accurate and proactive information to the public. I want to be absolutely clear here: I am acutely aware of our agency's past history on the lead-in-water issue, and of my responsibility to move us forward in a new direction. Public health and public service demand nothing less.

Lead poisoning is known to cause learning and behavioral disabilities, nervous system and kidney damage, slowed growth and, in extreme cases, seizures or death. However, perhaps the most troubling characteristic is that lead poisoning cases are absolutely preventable. By aggressively identifying and eliminating hazards from all sources – paint, dust, water, soil and tainted consumer products – we can successfully counter the needless poisoning of District children.

Since the initial exceedance of lead levels in the District's water, DC Water has undertaken a number of actions in response. Our response strategy evolved as new information became available on the effects of lead in water. In 2002, once the Authority exceeded the lead levels prescribed by the EPA's Lead and Copper Rule (LCR), we began the mandated replacement of public lead service lines, at the rate of seven percent annually. This program continued until 2008, when new information emerged on the potential harm of partial pipe replacements. At that time, our Board of Directors passed a resolution that severely curtailed the rate of partial pipe replacements. In addition, since the 2004 chemistry change aimed at lowering lead levels in District water, DC Water sampling under the LCR has remained below the action level of 15 parts per billion. DC Water continues to conduct sampling twice annually and has remained in compliance since 2005. In fact, under the terms of the LCR, DC Water is eligible to apply for reduced monitoring, in which a smaller number of homes would be tested only once a year, and

has elected not to do so. We believe that a higher frequency of sampling is necessary to instill customer confidence and adequately track the state of our water.

However, I believe that DC Water can and must go further in actively addressing lead and water issues. To that end, we are currently focusing our efforts on three main areas: pipe replacements; public information; and sampling and research. A concerted effort on each of these fronts will have a tremendous impact on reducing exposure to lead sources and restoring the confidence of our customers.

Pipe replacements have been the largest component of DC Water's response strategy to date. In addition to being a federally-mandated part of the LCR, replacing lead service lines remains one of the primary ways to reduce potential lead sources. However, recent data demonstrates that partial pipe replacements, in which only the public portion of a lead service line is replaced, can cause a lead "spike" – a temporary elevation of lead levels in the affected property. This elevation may last anywhere from days to years and varies home by home, often dependent on a multitude of factors. As a result, the 2008 Board of Directors resolution limits partial pipe replacements to situations in which the Authority is replacing a water main and at this time, residents are encouraged to replace the private side service line. In addition, we replace service lines if a property owner elects to replace the private portion at the same time, thus avoiding a partial. The impact of the resolution was immediate. In FY2008, the Authority completed 2,404 partial pipe replacements. In FY2009, following the resolution, partial pipe replacements fell to 372.

Limiting partial pipe replacements from the outset will certainly be an important step. However, in late 2009, the CDC alerted us to preliminary research showing that children in homes that undergo a partial pipe replacement have a higher risk of elevated blood lead levels. As a result, DC Water has implemented a program in which homes that are subject to a partial replacement receive a six-month supply of filters, as well as follow-up testing to assess whether a lead spike exists after replacement. We also provide information to property owners with tips to reduce exposure, such as flushing faucets, using certified filters and methods for identifying other household sources that may contribute to lead in water. While budgets are always an issue for an agency funded

primarily by ratepayers, we are openly exploring different ways to reduce potential lead exposure for all customers – and new funding strategies for these efforts.

The next major response element is the need for accurate public information. The challenge in designing an effective public outreach campaign is the differing circumstances from home to home. We believe the responsibility for reducing exposure to lead in water is a shared one – among the agencies that collect, treat and distribute the water, and the owners and occupants of the buildings where the water is used. In addition to exposure through lead service lines, plumbing fixtures and solder within homes can contribute to lead levels in water. This means that even if water chemistry is optimal *and* service lines are replaced, there is a risk of exposure within homes with these lead-containing elements. The solution is to provide public information that enables homeowners to understand their individualized risk of exposure, as well as empowers them with steps they can take to limit that exposure. This includes developing profiles of homes that may be more likely to contain these elements; providing information to interested customers about the composition of their service lines; and offering sampling to concerned homeowners, so they can verify lead levels and take appropriate action if needed. I'm pleased to report that DC Water is working toward all of the above steps. We've also begun a productive collaboration with community advocates and public health focused non-profits – especially those who have been sharply critical of our agency in the past – to refine our existing messages and ensure that we are reaching wider audiences.

In addition to providing more specialized information, DC Water must serve as a trusted and accurate source of general information about lead and water, potential exposure routes and prevention strategies. A major challenge in this regard is our ability to reach the entirety of the customer base. Of the millions of people who drink DC Water on a daily basis, only about 130,000 customers receive a bill. Without monthly access to all of those mailboxes, we are left to communicate with everyone else through other means. To that end, we are finding new media for customer communications – including Facebook, Twitter and YouTube. We are revamping our website, partnering with community groups and non-profits to reach new populations, and proactively

communicating any notice of potential problems through news outlets. Reporters, editors and customers alike have already praised this new approach for its openness in contrast to the way this agency has done business in the past. While DC Water has not had a system-wide lead exceedance since the initial crisis, we have acted quickly in a number of other scenarios with potential impacts on public health – including boil-water alerts and “do not use” advisories. In any case where public health questions have arisen, the Authority has taken a stance of releasing as much information as possible in a short timeframe, so that the public may take the appropriate precautions. Should water quality issues occur in the future, we are prepared to do the same, having learned valuable lessons from 2004.

Earlier in my testimony, I mentioned that the District of Columbia Water and Sewer Authority is now known as DC Water. We decided to make that change, along with adopting a new tagline, “Water is life,” as of today. While the timing of the rebranding announcement on the same day as this hearing is purely coincidental, I believe this very moment is an important opportunity to explain how the team and I are taking this agency in a different direction. We chose DC Water because water is at the heart of everything we do, and because it refers both to the organization and the life-giving resource we provide every minute of every day. The 1,000-plus employees of the Authority, whom I refer to as Team Blue, and I, are absolutely committed to restoring public confidence in the District’s drinking water. To do so, we must raise our profile, so the public thinks about us when everything is going right and not just when we have a problem. The residents, employees and visitors of the nation’s capital should be as proud of their water supply as anyone in any major city of the United States, and I believe we will get there in time. We also aim to continue bringing local attention to the nationwide problem of aging water infrastructure, along with the need for federal investment in this area.

Finally, DC Water is committed to supporting good science and strong methodologies, which will yield better information about the nature of exposure routes. While our current sampling protocol has shown lead levels to be below the LCR action level, important questions have been raised about the usefulness of the LCR and its protocols from a public health perspective. Specifically, the LCR is designed to measure

corrosion within a system, not the public health impacts of lead levels. It is widely acknowledged that no level of lead is safe. Indeed, this is a goal for all water systems to strive to achieve. However, in the short-term, we are investigating sampling options that might provide a fuller picture of the lead in water profile at selected homes.

It is also critical that the Authority continues to contribute to research on this topic, to develop insights into the many outstanding questions about lead exposure. In September 2009, we announced findings of a long-running study of the relationship between lead levels and galvanized iron plumbing. Our research unearthed a previously unexamined correlation, in which the presence of galvanized iron appears linked to the likelihood of higher lead levels. These findings allow us to provide better information to the public, by isolating yet another property characteristic that may indicate relative risk of higher lead. We continue to participate in studies conducted through CDC and professional associations. In addition to conducting research, we're seeking ways to introduce greater transparency into the data produced, so as to spark scientific dialogue and promote greater confidence in the state of the District's drinking water.

In a system-wide sense, lead levels in the District's water have been improving since the 2004 chemistry change. However, as public health advocates will readily tell you, the only good lead in water is no lead. DC Water and our federal, local, and community partners must continue to focus on the public health impacts that stem from individual property conditions, relative risk, and a lack of clear information. Through a blend of effective policy solutions and public outreach, we are committed to reducing lead in water and protecting the health of our customers.

Mr. Chairman, members of the Subcommittee, this concludes my prepared remarks. Thank you again for the opportunity to testify, and I look forward to answering any questions you may have.