

TESTIMONY OF MAE WU, STAFF ATTORNEY  
NATURAL RESOURCES DEFENSE COUNCIL

BEFORE THE COUNCIL OF THE DISTRICT OF COLUMBIA  
COMMITTEE ON GOVERNMENT OPERATIONS AND THE ENVIRONMENT  
AND  
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

AT A JOINT PUBLIC HEARING ON  
WATER QUALITY IN THE DISTRICT OF COLUMBIA

February 10, 2009

Good morning, Chairman Cheh and Chairman Graham, and members of the D.C. Council. Thank you for holding this important hearing on the issue of lead in the drinking water of the District of Columbia. My name is Mae Wu, and I am an attorney in the Health and Environment program at the Natural Resources Defense Council.

Today, I would like to highlight the importance of Marc Edwards' recent study finding a correlation between lead levels in drinking water and blood lead levels and its implication, nationally, for the 30 percent of elevated blood lead levels that are not attributed to lead paint. I would also like to make some recommendations to the Council to ensure that all D.C. residents are provided with safe and clean drinking water.

The Edwards study is important for our understanding of what happened when lead levels rose in the District in 2001, because he conducted a more refined analysis of the available data to identify correlations between blood lead levels and water lead levels. There are three particular elements of the Edwards study that distinguish it from other studies on lead.

First, it looked specifically at data for children under 15 months. Other studies on lead exposure have typically pooled data on all children below two years old (or older) rather than separate out infants and toddlers, because there is little data available on infants. Why is this important? Blood lead levels are generally understood to rise rapidly between the ages of 6 months to a year, and peak at one and a half to two years and this peak is commonly attributed to lead paint. However, for infants who are drinking formula constituted with contaminated tap water, the peak in blood lead level happens before the age of two. Therefore, when studies pool all the children into one big age category, they end up missing the correlation between contaminated water and lead in the infants because of the peaks among the "older" children.

Second, the Edwards study focused exclusively on the time period when the use of chloramines to disinfect the drinking water caused the high lead levels. Other studies included data from the whole of 2000 – before chloramine was added to the water and/or from 2004 – after D.C. residents were notified about how to mitigate the lead levels. Combining data from two years when high lead levels were not likely with data from the

years with high lead levels diluted the data, and reduced the likelihood that the studies would find a correlation between the lead levels in the drinking water and the blood lead levels.

Third, Dr. Edwards divided the D.C. neighborhood data into three groups: those with a relatively high risk of having high lead levels, those with moderate risk and those with low risk. This contrasts with other studies that pooled data across the whole city and mixed together households with a low risk with households with a high risk – making it impossible to find any correlation between water lead levels and blood lead levels.

It is these important differences in methodology from previous studies that enabled the Edwards study to demonstrate the link between the rise in lead levels in the District's drinking water and the blood lead levels of some of the District's children.

The history of WASA's inadequate response to the high lead levels has been well documented here today and in the media. Given that history, it would be a mistake to simply rely upon WASA's assurance that lead is no longer a problem in the District's drinking water. Now that it has been documented that there was a correlation between lead levels in water and elevated blood lead levels, we need to be certain that there is no ongoing lead problem in the District.

With this goal in mind, we offer the following recommendations to the Council.

First, we are concerned that WASA has stopped the expedited lead service line replacement effort that has been underway since 2004. WASA has justified the suspension of the program on the grounds that the District no longer has a lead problem and has found that partial replacements were exacerbating, rather than ameliorating, the problem. However, the solution is not to stop lead line replacements, but rather to commence with expeditious replacement of the full line using federal and city general funds to augment the ratepayers' contribution: customers should not foot the entire bill. The Council should review WASA's policy and determine whether WASA is acting in the best interest of the district and its citizens.

Second, the D.C. Council has taken a good step by setting up a Water Quality Task Force. However, the urgency of the threat posed by drinking water contaminated with lead means that the task force must carefully, but quickly, provide the guidance to District Department of Environment to begin the independent testing for lead in D.C. tap water. For homes where elevated levels of lead are detected and where there are vulnerable populations such as pregnant women or infants, WASA should be required to install and maintain water filters certified to remove dissolved lead and lead particles until lead service lines are completely replaced. In addition, the Task Force should investigate the extent of lead poisoning in the District and its environmental justice implications, especially for low-income African-American and Latino households.

Third, the protocol used when testing for lead, by WASA or in the independent study designed by the Water Quality Task Force, must test for the worst case scenario – as

intended by the Lead and Copper Rule under the Safe Drinking Water Act. To that end, there are at least two important changes that need to be made to WASA's current testing protocol.

One, WASA's testing protocols cannot include an instruction to pre-flush – that is, to let the water run for two minutes the night before a sample is taken. As Dr. Edwards has noted, the two minute pre-flush before the water sits stagnant has been shown to significantly lower the lead levels in the water. However, this two minute pre-flush, does not accurately reflect the common practice of D.C. residents. To get an accurate assessment of the likely exposure of District residents to lead in their drinking water, the samples should reflect the typical water usage in a home, rather than the best case scenario – and therefore this two minute pre-flush instruction is improper and should be abandoned.

Two, WASA must take samples at all times of the year, without skipping those months which tend to have peak lead levels. In their written statement to a subcommittee of the U.S. House of Representatives, a coalition of environmental and public health non-profit groups identified, through documents obtained under the Freedom of Information Act, that over the past two years, WASA has avoided taking compliance samples during the times of the year when lead levels have been shown to peak in D.C.'s tap water. This is unacceptable and WASA must test the water all year, especially including times when the lead levels peak.

Finally, the Council should establish a citizen water board to help oversee both the city's water supply and its sewer system. This board should be wholly independent of WASA and the Washington Aqueduct. It should include independent engineering and public health experts and citizen activists interested in clean drinking water, and should issue an annual, publicly available progress report on WASA's and the Washington Aqueduct's performance, progress, and problems.

Thank you for the opportunity to testify here today.