DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032
OFFICE OF THE GENERAL MANAGER
TEL: 202-787-2609
FAX: 202-787-2333

March 28, 2005

The Honorable David M. Walker
Comptroller General of the United States
The Government Accountability Office
441 G St., NW
Washington, DC 20548

Subject: The District of Columbia's Drinking Water – A Report by the United States Government Accountability Office ("GAO") to the House Committee on Energy and Commerce Subcommittee on Environment, and Hazardous Materials

Dear Mr. Walker:

The District of Columbia Water and Sewer Authority ("the Authority") has worked diligently to fully reply to the inquiries received from the GAO pertaining to the above referenced Report. The Authority has responded by making staff, data and documentation freely available. Following are abbreviated comments addressing a limited number of issues that are either not fully explored in the Report, or which we believe warrant amplification.

The Intent of the Lead and Copper Rule ("LCR")

The Report notes that the LCR is deficient with respect to public education requirements. The Report also notes that interviewed experts indicate there are only limited studies on the health effects of low levels of lead in drinking water, and that the Environmental Protection Agency ("EPA") Office of Water and Office of Research and Development plan to address information gaps about health risks of lead and drinking water. It is noteworthy that the very specific and comprehensive provisions in the Administrative Order ("AO") now governing the Authority's program significantly exceed the requirements of the LCR, yet the Environmental Protection Agency ("EPA"), has not chosen to toughen the LCR based on the requirements of the Authority's AO with the EPA. The EPA's approach in addressing these issues (identifying potential deficiencies and proposing modifications, or by providing to the public a clear and direct justification for the existing provisions) seems to lack a sense of urgency.

EPA has not provided in the language of the LCR, in its regulatory guidance, community education programs or relevant testimony, a clear statement of what the LCR is intended to achieve and what it is not intended to achieve. There is a public perception that the LCR includes a health-based standard or maximum contaminant level. The LCR is generally interpreted by water systems as a water treatment and monitoring regime intended to minimize the potential for lead to leach into drinking water supplies.

In fact, provisions in the LCR suggest only a loose connection between lead in drinking water and a specific health threat to individuals, and other provisions appear to contradict a presumption that the LCR will protect the health of an individual. The EPA must clearly address the specific intent of the LCR, including the intended effect and consequences of certain provisions in the regulations, including for example:

1) A "sentinel" compliance regime for determining an exceedance -- the use of the 90th percentile as a compliance measure, rather than establishing a maximum contaminant level (MCL)
2) Permitting 10 percent of compliance samples to exceed the 15 ppb action level, regardless of how high the lead concentration level may be in the highest 10 percent of samples collected
3) No requirement to provide test results to compliance sample program participants, including those that exceed the 15 ppb action level
4) Allowing wide variations in water system responsibility for physical replacement of lead service lines
5) Requiring physical replacement only when the action level is exceeded, and
6) Requiring replacement of only seven percent of lead services until the action level is no longer exceeded.

Corrosion Inhibitor – Recent Compliance Sample and Lead Action Level Trends

As of March 2005, the District's drinking water continues to exceed the "90th percentile action level", and the Authority continues to advise consumers to follow precautions such as the flushing advice. However, the Washington Aqueduct, the wholesale supplier of drinking water to the Authority, began implementing a new optimal corrosion control treatment in August 2004, with the application of orthophosphate. With respect to the level of lead concentrations in the Authority's compliance samples, the trends were very encouraging at the end 2004 and the first quarter of 2005 (with 51 percent of compliance samples collected for the January to June 2005 reporting period, the 90th percentile level is approximately 14 ppb.)

Innovations in Managing an Exceedance of the Lead Action Level

The Report notes the wide range of responses by water systems to an exceedance of the lead action level. Innovative, community-specific strategies are the optimal approach for managing both community concerns and the minimal LCR regulatory program requirements. The Authority has taken several such steps, including:

1. engaging the George Washington University School of Medicine Department of Environmental and Occupational Health to advise the Authority on risk communication and specific health matters
2. entering into an MOU with the District Department of Health ("DOH") to fund program activities, ensure appropriate information exchange and coordinate joint projects (the Report does not acknowledge the lead program MOU as an antecedent to the current partnership between the Authority and DOH
3. hosting a national symposium for peer organizations, health officials, consumer advocates and regulators to discuss best practices, challenges implementing the LCR, risk communication, and a case study of the District experience

4. providing test results of compliance testing to residents
5. offering customers password-protected internet access (pipe material/test results)
6. initiating a Lead Services Information Hotline in 2002
7. financial support for a Department of Health outreach effort, including environmental assessments, blood lead level testing, and data management
8. working with Wachovia to make equity loans for private replacements available
9. establishing a special rate for private service line replacement
10. offering an extended payment plan option for replacement using customer bills
11. pledging to remove all lead services by 2010 ($300-370 million).

The Authority's efforts are having a measurable effect. In 2003 and 2004, even with extremely intense local and national media attention, only a small number of residents (approximately 2 percent) chose to replace their private side of the lead service line. As of March 2005, approximately 20 percent of public lead service physical replacement program participants have chosen to replace the private portion of the lead service.

Health Effects of Lead/EPA Model Used to Assess Risk of Elevated Lead Levels

The effects of lead in drinking water with respect to public health issues are very challenging, involving the integration of knowledge on water chemistry, public health, toxicology, and regulatory policy. The Authority contacted its health consultant, Tee L. Guidotti, MD, MPH, Center for Risk Science and Public Health, The George Washington University Medical Center of the George Washington University, to provide assistance on the health implications of the LCR and its specific provisions.

The District's experience provides evidence that public perceptions and assumptions about the LCR are not adequately addressed by federal regulatory authorities. These assumptions make administering a program when the action level has been exceeded more challenging. There are assumptions, for example, that:

1. drinking water contributes a sufficient quantity of lead to be substantially harmful
2. lead exposures associated with drinking water alone are generally associated with documented health effects
3. the model used by EPA to assess the risk of elevated lead levels in water is based on assumptions that fit the reality of most families (how conservative are the actual assumptions regarding when the water is drawn, whether the lead concentration stays consistently elevated, how often a child drinks water from that tap, how much lead is absorbed by the body and other factors?)
4. the risks associated with exposure to lead concentrations in drinking water in excess of 15 ppb is medically significant
5. exposure to elevated levels of lead in drinking water is typically sustained
6. an elevation of lead in drinking water is a violation of the Safe Drinking Water Act
7. an exceedance of the lead action level is equivalent to the breach of a maximum contaminant level or other established health standard.

Often, these assumptions are not clearly stated or understood. As a result, the public discussion focuses on health effects (digestive effects, death, kidney problems) seen at levels associated with traditional "lead poisoning" which have not been identified as related to drinking water in the District. In fact, there is no evidence at this time that elevated lead levels in drinking water have caused any health effects in the District.

Thank you for your attention to these important issues. The Authority continues to work to fulfill its commitments to the residents of this community. As we continue to address the challenge of providing world-class services for our customers, we are also committed to participating in the national discussion on the LCR and the future course of regulatory oversight and enforcement.

Sincerely,

Jerry N. Johnson
General Manager