UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

April 28, 2006

Ms. Avis M. Russell, General Counsel
District of Columbia Water and Sewer Authority
5000 Overlook Avenue
Washington, DC 20001

Re: Invalidation of Sample, July –December 2005 Monitoring Period

Dear Ms. Russell:

This letter is in response to your letter of April 25, 2006 which submits your revised 90th percentile calculation and provides additional information on three samples that were reported for the July-December 2005 monitoring period. EPA has reviewed the information submitted and is invalidating the sample for [redacted] Volta Place, NW. Therefore, the July –December 2005 determination of 90th percentile values has not been finalized. The other two samples were not invalidated. The rationale for these decisions is in Enclosure 1.

Pursuant to 40 CFR 141.86(f), EPA may invalidate a lead or copper tap water sample if, among other things, EPA learns that the sample was taken from a site that did not meet the site selection criteria of 40 CFR 141.86. For purposes of 40 CFR 141.86(f), the term "invalidate" means that the sample may not be counted to determine the lead or copper 90th percentile levels under 40 CFR 141.80(c)(3) or toward meeting the minimum monitoring requirements of 40 CFR 141.80(c). Pursuant to 40 CFR 141.90(g), data collected in addition to those data which are required by the regulations must be reported within the first ten days following the end of the applicable monitoring period, even if that data is not used to calculate the lead or copper 90th percentile requirements.

The data submitted on April 25, 2006 for [redacted]Volta Place, NW indicates that the lead service line was fully replaced in July, 2005. EPA's review of the September 30, 2005 Lead Service Line Replacement (LSLR) Report, and its November 18, 2005 addendum, indicates that the replacement for this location was not contained in these submittals. Had the replacement of the lead service line at [redacted]Volta Place, NW been reported in either report, the fact that this address is not a Tier 1 location could have been identified much sooner. EPA also is concerned because WASA has informed EPA that, prior to the current (January – June 2006) monitoring period, WASA was not verifying the service line materials in its sampling locations against its lead service line replacement data as part of its quality assurance procedures prior to sending its report to EPA.

As part of the June 17, 2004 Administrative Order for Compliance on Consent (AO), WASA was required to update its materials evaluation and lead service line inventory (paragraph 63), provide a plan for better data management (paragraph 76) and certify that information provided by WASA to EPA was "true, accurate and complete" (paragraph 98). EPA's purpose in including these requirements in the AO was, in part, to improve WASA's data management to avoid the type of situation that has occurred here. Further, despite these requirements in the AO, verification of service line materials through the replacement program was not included in WASA's quality assurance procedures in 2005.

WASA must collect a replacement sample to reach the minimum number of samples required for the monitoring period under 40 CFR 141.86(c) no later than 20 days from receipt of this letter from an appropriate tier 1 location. A replacement sample from the invalidated sample site is not appropriate because the site does not meet the tier 1 site selection requirements of 40 CFR 141.86(a)(3). Replacement samples taken after the end of the applicable monitoring period may not be used to meet the monitoring requirements of a subsequent monitoring period. The replacement sample must be taken at a location other than those already used for sampling during the July - December, 2005, monitoring period. (40 CFR 141.86(f)(4)). Given that it is already four months past the close of the July – December 2005 monitoring period, EPA is concerned that the integrity of that monitoring period be preserved to the maximum extent practicable. Because the January – June 2006 monitoring period is well underway, it is our understanding that WASA may have additional sample results taken earlier in 2006 that may be submitted as the replacement sample The March 27, 2006, submittal of replacement samples indicated that a batch of samples was sent to customers on March 5, 2006. While the regulations provide 20 days for sample collection, EPA strongly encourages WASA to respond as quickly as possible, but no later than 30 days from this letter with a revised and certified 90th percentile calculation. WASA must also include a justification for selection of the replacement sample location.

If you have any questions, I can be reached at 215-814-5445.

Sincerely,

Karen D. Johnson

Karen D. Johnson, Chief
Safe Drinking Water Act Branch

Enclosure

cc: John Dunn, Deputy General Manager, DCWASA
Rich Giani, Water Quality Manager, DCWASA

ENCLOSURE 1

Fourth invalidation of samples submitted by WASA (DC 0000002) for July-December 2005 Compliance Monitoring Period for Lead and Copper

On January 3, 2006, the District of Columbia Water and Sewer Authority (WASA) submitted the Lead and Copper Report for the July-December 2005 monitoring period. Pursuant to 40 CFR 141.90(a)(1), the water system must submit the results of all tap samples including the location and criteria under which the site was selected for the system's sampling pool. On March 27, 2006, WASA submitted data for replacement samples needed to replace 12 samples invalidated by EPA on February 22, 2006. On April 25, 2006, WASA submitted additional information on three locations reported as part of the July – December 2005 monitoring period. EPA has reviewed WASA's information, which included statements about service line materials, a Chain of Custody form, and contractor information supplied by an owner.

As stated in EPA and WASA's conference call of March 21, 2006, the best information available at the time of sampling and at the time of reporting must be used by WASA to identify tier 1 locations. Thus, if at the time of sampling, the best information available to WASA supports a determination that a particular sampling location qualifies as a tier 1 location, samples taken from that location may be analyzed with the intent to use them to determine the lead or copper 90th percentile levels under 40 CFR 141.80(c)(3) and toward meeting the minimum monitoring requirements of 40 CFR 141.86(c). However, if it is determined at a later date prior to reporting that the sampling location did not in fact qualify as a tier 1 location, then WASA should request invalidation of that sample under 141.86(f) prior to or at the time of reporting required by 40 CFR 141.90(a). EPA has determined that one of the three samples should be invalidated pursuant to 40 CFR 141.86(f). The other two addresses can be used in the July –December 2005 sampling pool, but are no longer tier 1 locations based on information submitted by customers in 2006.

The requirements for invalidation are set out in 40 CFR 141.86(f). If one or more of four conditions listed in 40 CFR 141.86(f)(i-iv) are met, the state, or EPA, may invalidate a sample. Each address is discussed below.

A. [redacted] Volta Place NW

EPA has found that the sample taken from this site did not meet the site selection criteria of 40 CFR 141.86 (40 CFR 141.86(f)(1)(ii)). At the time of reporting for the July – December 2005 monitoring period, WASA was or should have been aware that this address had a non-lead service line for the public and private portions. WASA has submitted information to EPA showing that a full service line replacement was conducted on July 15, 2005, prior to the August 3, 2005 tap sampling at this address. Because the lead service line replacement data from July 15, 2005 had not yet fully been integrated

into WASA's data bases, at the time of the sampling, the best information available to WASA was that [redacted] Volta Place, NW qualified as a tier 1 location. Thus, as of August 3, 2005, it was appropriate for WASA, based on the information available to it at the time, to conduct sampling at [redacted] Volta Place, NW with an intent to use the sample for compliance monitoring purposes. However, the best information available to WASA several months later at the time of reporting was that [redacted] Volta Place, NW did not meet the tier 1 definition set out at 40 CFR 141.86(a)(3). By January 2006 when WASA submitted its report, WASA was or should have been aware that address at the time of sampling was not served by a lead service line and did not contain lead pipes or copper pipes with lead solder installed after 1982 and before 1988. Accordingly, the sample taken at [redacted] Volta Place, NW should not have been used as part of WASA's 90th percentile lead calculation. The sample taken at this site must be invalidated, i.e., may not be counted to determine the lead or copper 90th percentile levels under 40 CFR 141.80(c)(3) or toward meeting the minimum monitoring requirements of 40 CFR 141.86(c).

B. [redacted] A Street SE

WASA has submitted a Chain of Custody form submitted with a customer-collected sample taken on March 29, 2006. The customer provided information indicating that the private portion of the service line was replaced in 2004. WASA asserts that their records during the July – December 2005 monitoring period showed that this location had a partial copper line, with the public portion having been replaced but not the private portion. The information about the private portion replacement came to WASA during the January – June 2006 monitoring period, and the best information available to WASA at the time of reporting demonstrated that this address was served by a lead service line, which meets the tier 1 definition as set in 40 CFR 141.86(a)(3). The sample for [redacted] A Street SE collected on November 1, 2005 is NOT being invalidated for the July – December 2005 monitoring period.

The information available for the January – June 2006 monitoring period, however, shows that this location does not contain a lead service line. This location should not be included in the January –June 2006 monitoring period. If the March 29, 2006 sample has been analyzed, EPA encourages WASA to submit the sample for invalidation as soon as possible.

C. [redacted] Huidekoper Place, NW

WASA has submitted information provided by the property owner on April 24, 2006 that the public portion of the service line for this location was replaced by WASA in 1991 as part of a water main project on that block. In addition, the owner submitted documentation that the private portion of the line was also replaced in 1991. WASA asserts that their records during the July – December 2005 monitoring period showed that this location had a lead service line. The chain of custody submitted by the customer with the March 6, 2006 sample indicated that no plumbing modifications had been made

after March 1987. The information about the replacement came to WASA during the January – June 2006 monitoring period, and, the best information available to WASA at the time of reporting demonstrated that this address was served by a lead service line, which meets the tier 1 definition as set in 40 CFR 141.86(a)(3). The sample collected on March 6, 2006 at [redacted] Huidekoper Place NW and submitted as a replacement sample for the July –December 2005 monitoring period is NOT being invalidated.

The information available for the January – June 2006 monitoring period, however, shows that this location does not contain a lead service line. This location should not be included in the January –June 2006 monitoring period.

Calculation of 90th Percentile for Lead and Copper

The invalidated sample cannot be used to compute the 90th percentile for the lead and copper samples. Further, a replacement sample from the invalidated sample site is not appropriate because the site does not meet the tier 1 site selection requirements of 40 CFR 141.86(a)(3). 40 CFR 141.86(f)(4) requires the water system to collect replacement samples if they have not collected the minimum number of samples required for the monitoring period. WASA was required to collect 100 samples for the July –December 2005 monitoring period. WASA collected 106 samples, three of which were invalidated by EPA in letter dated January 5, 2006, and twelve of which were invalidated by EPA in a letter dated February 22, 2006. Of the remaining 91 samples, there were 89 unique locations. On March 27, WASA submitted data showing that they collected 11 replacement samples, resulting in 102 samples with 100 unique locations. EPA withdrew invalidation of three locations and invalidated three more in a letter dated April 10, 2006. With this fourth invalidation action, WASA has 101 samples taken at 99 unique locations.

WASA is therefore required to collect a replacement sample at one (1) tier 1 location within 20 days of receipt of a letter from EPA that announces the invalidation. If WASA does not collect a sufficient number of samples within 20 days, they are subject to a violation of 40 CFR 141.86(c) for failure to collect the minimum number of samples required for a monitoring period. A 90th percentile value can still be calculated based on the number of samples collected, pursuant to a March 9, 2004 guidance memorandum "Compliance Calculation Under the Lead and Copper Rule" signed by Cynthia Dougherty, Director of the Office or Ground Water and Drinking Water.