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

April 10, 2006

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

Re: Request for Withdrawal of Invalidations and Determination of New Invalidations

Dear Ms. Russell:

This letter is in response to your requests of March 27, 2006 to withdraw the invalidation of three samples and to invalidate two additional samples from the July-December 2005 monitoring period. With respect to WASA's request that EPA withdraw its invalidation of three samples, EPA will withdraw its determination that those three samples were invalid based on the new information provided in your March 27, 2006 letter. While the three samples were correctly invalidated based on the information available to EPA and WASA as of the end of the monitoring period, EPA is withdrawing the determination that these samples were invalid based on the results of test pits conducted on March 20 and 21, 2006, and reported by WASA to EPA on March 27, 2006, that the service lines are actually lead. The rationale for this decision is in Enclosure 1.

EPA has also reviewed WASA's request for invalidation of two additional samples from the July - December 2005 monitoring period and its supporting information. EPA has determined that the two addresses for which WASA requested invalidation should be invalidated. In addition, EPA is invalidating a third sample location based on information provided in the March 27, 2006 letter and WASA's follow-up information sent April 5, 2006. The rationale for this decision is contained in Enclosure 2.

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 regulations require that WASA take replacement samples from appropriate tier 1 locations within twenty days of samples being invalidated. Because WASA submitted replacement samples for the three addresses that have been reinstated to the sampling pool, EPA is accepting the same replacement samples as replacements for the three new invalidations determined herein. These replacement samples are required to reach the minimum number of samples required for the monitoring period under 40 CFR 141.86(c).

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. According to WASA, the replacement samples have been taken at locations other than those already used for sampling during the July - December monitoring period (40 CFR 141.86(f)(4)). Based on information provided in WASA's January 3, 2006 report, the 11 replacement samples provided by WASA on March 27, 2006, and the three previously invalidated samples reinstated as a result of this letter, EPA has calculated the 90th percentile value for lead to be 0.015 mg/L and for copper to be 0.077 mg/L. Please certify the 90th percentile values for lead and copper for the July –December 2005 monitoring period, and the data and information sent on March 27 and April 5, 2006 in writing within 10 days of receipt of this letter.

In addition, Federal regulations at 40 CFR 141.86 (a)(2) direct water systems to collect information where possible to update the materials evaluation of sampling locations. WASA must update the materials evaluation and the service line inventory with respect to these locations and others where test pit or other data is different than that shown in the existing service line inventory. WASA must also update the 2006 Lead and Copper sampling plan to reflect the removal of non-tier 1 locations. WASA should be updating its materials evaluation and service line inventory expeditiously to ensure that information relied upon for the January - June 2006 monitoring period and thereafter is timely and accurate.

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

Sincerely,

Karen D. Johnson, Chief
Safe Drinking Water Act Branch

Enclosures

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

ENCLOSURE 1

March 27, 2006 Request to Withdraw Invalidations for Three Samples Submitted by WASA (DC 0000002) for July-December 2005 Compliance Monitoring Period for Lead and Copper

EPA invalidated twelve samples in a February 22, 2006 letter. On March 27, 2006, WASA requested that EPA reconsider its invalidation of three samples based upon the results of test pits conducted March 21 and 22, 2006, after EPA had invalidated samples taken from those addresses. While these three samples were correctly invalidated based on the information provided to EPA by WASA as of the end of the monitoring period that the locations in question were served by copper service lines, EPA is withdrawing the determination that the samples were invalid based on the new information that the service lines are actually lead. The addresses are as follows:

	Address	Sample Date	Reason for Invalidation
1	[redacted]V St. NW	11/2/2005	40 CFR 141.86(f)(1)(ii)
2	[redacted]Klingle NW	7/27/2005	40 CFR 141.86(f)(1)(ii)
3	[redacted]13th St. NW	9/1/2005	40 CFR 141.86(f)(1)(ii)

Withdrawal Rationale

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(a)(1)(i), the water system shall report "the results of all tap samples for lead and copper including the location of each site and the criteria under 141.86(a)(3), (4), (5), (6), and/or (7) under which the site was selected for the system's sampling pool."

On January 3, 2006, WASA submitted tap sampling data for the July – December 2005 monitoring period. During EPA's review, questions were raised related to the validity of 12 samples, and their inclusion in the sampling pool as tier 1 locations. After receiving information from WASA on February 3 and 10, 2006, EPA concluded in a letter of February 22, 2006 that the 12 locations were not tier 1 and thus 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).

The test pit results for the three addresses listed above, collected on March 21 and 22, 2006, show that the service line material is lead on both the private and public side. The test pit results contradict the service line information that WASA submitted on January 3, 2006 pursuant

to 40 CFR 141.90(a)(1)(ii). While EPA believes that a correct decision was made in its February 22, 2006 letter invalidating these samples, EPA believes that it is appropriate for EPA to consider the results of the test pits because they were submitted along with the replacement samples required by 40 CFR 141.86(f). In addition, withdrawing the invalidation of these three samples based upon the test pit results serves to maintain the integrity of the monitoring period by using these tier 1 samples that were taken during the monitoring period to calculate the 90th percentile values for lead and copper.

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 so as to avoid the type of situation that has occurred here. EPA remains very concerned that, despite these requirements in the AO, these three sites were reported and certified by WASA as tier 1 locations even though WASA's materials evaluation and lead service line inventory identified these addresses as served by copper lines. The fact that subsequent test pit results ultimately demonstrated that the materials evaluation and lead service line inventory information was incorrect does not alleviate EPA's concern that WASA's January 3, 2006 report was inconsistent with the information available to WASA at the time of the report.

ENCLOSURE 2

Third 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. WASA's March 27, 2006 letter also requested that EPA invalidate two additional samples because WASA had determined that the locations do not meet the criteria for tier 1 samples. EPA requested additional information regarding a third sample mentioned in the letter to make a determination on that address also. (See electronic message of March 31, 2006 from EPA to WASA.) EPA has reviewed WASA's supporting information, submitted in letters dated March 27 and April 5, 2006, which included field reports from contractors conducting tests pits to determine service line materials and has concluded that there is insufficient evidence to support selection of these 3 samples as tier 1 locations, as described below. For that reason, EPA has determined that these three samples should be invalidated pursuant to 40 CFR 141.86(f).

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.

Invalidated Samples

	Address	Sample date	Test Pit date/material	Reason for invalidation
1	[redacted] D Street, NE	9/30/2005	8/30/05 Copper	40 CFR 141.86(f)(1)(ii)
2	[redacted] 8th Street NE	10/27/2005	9/29/05 Copper	40 CFR 141.86(f)(1)(ii)
3	[redacted] 9th Street, NE	8/3/05	11/9/05 galvanized	40 CFR 141.86(f)(1)(ii)

Invalidation Rationale

EPA has found that the samples were taken from sites that 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 these addresses had non-lead service lines (for the public and private portions.) For [redacted] D Street, NE and [redacted] 8th Street, NE, WASA has submitted information to EPA showing that test-pits were conducted on the service lines for these addresses approximately one month prior to sampling at each address. Those test pits revealed that both houses have copper service lines, on both the public and private portions. With respect to [redacted] 9th Street, NE, this location was sampled on August 3, 2005. At the time of the sampling, the best information available to WASA was that [redacted] 9th Street qualified as a tier 1 location. However, on November 9, 2005, approximately two months before WASA submitted its report on January 3, 2006, a test pit identified the service for [redacted] 9th Street as galvanized/Copper (public/private) pipe, corrected to full galvanized prior to removal on November 17, 2005. WASA did not submit information to show that any of the three houses had copper pipes with lead solder installed after 1982 and before 1988 (DC lead ban effective date). Because the best information available to WASA at the time of reporting did not demonstrate that these addresses were served by a lead service line or contain lead pipes or copper pipes with lead solder installed after 1982 and before 1988, they do not meet the tier 1 definition as set in 40 CFR 141.86(a)(3). Accordingly, the samples taken at these sites 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).

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).

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 so as to avoid the type of situation that has occurred here. EPA remains very concerned that, despite these requirements in the AO, test pit information generated months before WASA's January 3, 2006 report (and in two cases approximately one month prior to sampling) apparently was not incorporated into WASA's sampling and reporting program, thus causing WASA to report these locations

as tier 1 locations despite available information to the contrary. EPA expects that, in the future, test pit data will be reviewed prior to submittal of WASA's reports pursuant to 40 CFR 141.90 and related invalidation requests will be included with WASA's reports.

Calculation of 90th Percentile for Lead and Copper

The invalidated samples cannot be used to compute the 90th percentile for the lead and copper samples. Further, replacement samples from the invalidated sample sites are not appropriate because the sites do 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 is a letter dated February 22, 2006. Of the remaining 91 samples, there were 89 unique locations. EPA is withdrawing invalidation of three locations (see Enclosure 1). On March 27, WASA submitted data showing that they collected 11 replacement samples, resulting in 102 samples with 100 unique locations.

WASA therefore has collected the minimum number of samples required for a monitoring period pursuant to 40 CFR 141.86(c). Lead and Copper 90th percentile values have been calculated based on the number of samples collected as follows:

90th percentile for lead = 0.015 mg/l
90th percentile for copper = 0.077 mg/L