UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-20

By Facsimile & First Class Mail

Thomas P. Jacobus
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August 20, 2004

Jerry N. Johnson
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Gentlemen:

This responds to Mr. Jacobus' letter dated August 6, 2004, regarding the United States Environmental Protection Agency Region III's ("EPA") letter dated August 3, 2004. EPA's August 3, 2004 letter designated application of the corrosion inhibitor orthophosphate as the interim optimal corrosion control treatment ("OCCT") under the Lead and Copper Rule ("LCR") for the Washington Aqueduct and the District of Columbia Water and Sewer Authority ("DCWASA"). EPA's August 3 letter followed up EPA's previous modification of the OCCT dated May 28, 2004 to allow for partial system application of orthophosphate in the 4th High Pressure Zone.

Pursuant to 40 C.F.R. § 141.82, EPA's letter designated a number of interim water quality parameters ("WQP"). WQPs are intended to serve as boundaries within which the treatment system and distribution system operate to ensure optimal corrosion control. The interim WQPs designated in EPA's August 3, 2004 letter are intended to apply to the initial passivation dose. Consistent with the LCR, EPA will review monitoring results and system operation records and will establish final WQPs for the Washington Aqueduct and DCWASA for maintenance of corrosion control following passivation.

In his August 6, 2004 letter, Mr. Jacobus noted that the interim WQP for pH of 7.8-7.9 +/- 0.3 for water entering the distribution system inadvertently carried over the WQP that was set in connection with the partial system application in the 4th High Pressure Zone without accounting for differences in the way orthophosphate would be applied systemwide. Application of orthophosphate is known to cause a slight decrease in the pH of the water. During the partial system application to the 4th High Pressure Zone, the orthophosphate was added after the water had left the Washington Aqueduct's treatment facilities and had arrived at the Ft. Reno pumping

station. Accordingly, the WQP for pH leaving the Washington Aqueduct's treatment facilities was set slightly higher to account for the slight decrease in pH associated with the application of orthophosphate at Ft. Reno. Thus, the WQP for pH of 7.8-7.9 +/- 0.3 for water leaving the Washington Aqueduct's treatment facilities was intended to achieve the optimal pH of 7.7 in the 4th High Pressure Zone following application of orthophosphate at the Ft. Reno pumping station.

By contrast, during full system application, the Washington Aqueduct will adjust pH after adding orthophosphate and before the water leaves the Dalecarlia and McMillan treatment plants. The Washington Aqueduct will adjust the pH of the water entering the distribution system with a goal of achieving a pH of 7.7, the optimal level recommended by the Technical Expert Working Group. To assure consistency with the actual operations, therefore, EPA is revising the interim pH WQP and the pH WQP goal for the Washington Aqueduct applicable to water leaving the Dalecarlia and McMillan treatment plants as set forth below. The WQP is being set as a range to account for the possibility that the Washington Aqueduct may need to adjust treatment for a short period of time to respond to temporary conditions in the distribution system (such as pH shifts caused by the orthophosphate) and to allow the Washington Aqueduct to make adjustments to consistently attain WQPs in the distribution system. Please note that this revision does not affect any WQP, other than pH, for water entering the distribution system established in the August 3, 2004 letter, and that this revision does not affect any WQPs applicable to DCWASA for water in the distribution system.

Interim Water Quality Parameters for the Passivation Period

For water entering the distribution system during passivation period (These apply to the Washington Aqueduct):

	Interim WQP	WQP Goal
pH	7.7 +/- 0.3	7.7 +/- 0.1

In addition, Mr. Jacobus requested clarification regarding the monitoring period for purposes of assessing compliance with the WQPs. Pursuant to 40 C.F.R. § 141.82(g), compliance with the WQPs shall be determined every six months. DCWASA currently uses the six month periods January - June and July - December for purposes of LCR monitoring. Accordingly, it would seem to make sense administratively to use the same six month periods for assessing compliance with the WQPs, while recognizing that full system application of the orthophosphate will not commence until August 23, 2004, nearly two months into the current July - December period. This clarification does not affect DCWASA's and the Washington Aqueduct's obligation to monitor and report WQPs in conformity with 40 C.F.R. §§ 141.87 & 141.90, as modified by EPA's August 3, 2004 letter.

Thank you for your efforts to help secure a long term solution to elevated lead levels in the District of Columbia drinking water distribution system. If you or your staff require additional information, please contact Rick Rogers, Water Protection Division, EPA Region III at (215) 814-5711.

Sincerely,

Jon M. Capacasa, Director
Water Protection Division
EPA Region III

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