

## DEPARTMENT OF THE ARMY

## WASHINGTON AQUEDUCT U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT 5900 MACARTHUR BOULEVARD, N.W. WASHINGTON, D.C. 20016-2514

November 30, 2004

Office of the General Manager

Mr. John M. Capacasa, Director Water Protection Division EPA Region III 1650 Arch Street Philadelphia, PA 19103

Dear Mr. Capacasa:

With this letter I am transmitting to you a report on pH control strategies that are designed to achieve the WQP goal for pH of 7.7 +/- 0.1 as stated in your August 3, 2004 letter to us (as amended by your August 20, 2004 letter to us) that established interim OCCT for Washington Aqueduct as the supplier to the District of Columbia distribution system (and the distribution systems in Northern Virginia as well). This report is submitted in fulfillment of the requirement of the aforementioned August 3 letter.

The report outlines improvements to the current method of introducing lime as well as consideration of using caustic soda for either complete replacement of lime or for final pH trimming.

We believe the report offers useful recommendations for us to use to achieve a smaller variance around the target of 7.7 pH units.

After you have had an opportunity to evaluate this report, we would like to meet with your staff to discuss what we believe are the most practical options from operability and budgetary standpoints and a timeline that we might adopt to reach the desired WQP.

We can tell you that we are committed to installing a mixer in the 30 mg clearwell at Dalecarlia in the spring of 2005. Based on analytical calculations and physical testing we believe that will greatly help reduce finished water turbidly caused by lime precipitation in local pockets of high pH.

At this time we believe that the way forward in through the use of caustic soda for trimming after the addition of lime rather than complete replacement of the lime system. The timing of this conversion and its relationship to other process changes, specifically the decision to convert from free chlorine to sodium hypochlorite as an FY06 capital construction project, is one of the issues we will want to discuss with you at the meeting I have suggested.

Thank you for your effort working with us to improve the OCCT for our treatment plants.

Thomas P. Jacobus

General Manager

Sincerely.

Enclosure