

## **Technical Expert Working Group Conference Call**

Friday March 5, 2010

10:00 – 11:00 a.m.

### **CALL SUMMARY**

#### **Attendees:**

EPA Region 3 and contractors: Jennie Saxe, Bill Arguto, Kathy Martel, Karen Sklenar

The Washington Aqueduct: Lloyd Stowe, Tom Jacobus, Shabir Choudhary

DCWASA: Rich Giani, Maureen Schmelling

DC Department of the Environment: Harrison Newton, William Slade, Pierre Erville,  
Monir Chowdhury

City of Falls Church: Matthew Jacobi

Arlington County: Marlee Franzen

Virginia Tech: Marc Edwards

Parents for Nontoxic Alternatives: Ralph Scott, Yanna Lambrinidou

Clean Water Action: Paul Schwartz

#### **Agenda and Housekeeping Issues**

There were no changes or additions to the agenda. The meeting agenda is included as Attachment A to this call summary. Jennie Saxe asked that everyone send her updates to the email distribution list. Some information referred to on this call is posted on the website, [www.epa.gov/dclead](http://www.epa.gov/dclead). Jennie also requested that participants send her any questions or revisions on the last call's minutes.

#### **Summary of Discussions by Topic Area**

##### **1. Washington Aqueduct Pipe Loop Update**

Mike Chicoine distributed updated lead monitoring data from the Aqueduct's control pipe loop to the TEWG prior to the conference call. Lloyd Stowe reported that recently observed lead levels are consistent with historical trends. Dissolved lead levels are low and particulate lead levels are typically higher in warm weather. Peak levels of particulate lead have decreased but are higher than desired. WA is developing plans for additional pipe loop studies, including an examination of higher particulate lead levels, and will update the TEWG at a later date.

## **2. DCWASA Pipe Loop Update**

Rich Giani distributed total lead data from DCWASA's pipe loop to the TEWG prior to the conference call. The total lead levels have remained constant over the winter months at 2 ppb, the lowest level observed.

## **3. Check-in on Temporary Free Chlorine Period**

Since the free chlorine addition was initiated about one month ago, Jennie Saxe asked DCWASA, WA, Falls Church and Arlington County to report on customer complaints, observed water quality etc. Rich Giani (DCWASA) noted that chlorine residuals have been steady and very few customer complaints have been received. Matthew Jacobi (Falls Church) reported that chlorine residuals are at satisfactory levels; nitrification indicators have not been detected; the gap between total and free chlorine levels has decreased as expected; and no color issues have been observed. Falls Church has received some taste and odor complaints but at levels similar to baseline. Falls Church is not flushing the main system at this time. Marlee (Arlington County) reported that chlorine residuals are at expected levels, there have been no discoloration issues, but taste and odor complaints have been higher than normal. Marlee also observed that no customers called during the recent snowstorms. Lloyd Stowe (WA) commented that the chlorine dose has recently been reduced from 3.7 to 3.5 mg/L and could be reduced further if warranted by the number of taste and odor complaints.

## **4. Aluminum Residuals in Hydrant Samples**

Rich Giani (DCWASA) summarized recent water quality results from hydrant samples collected from low flow areas of the distribution system. Following the February 5-19, 2010 period when no hydrant samples were collected due to the snowstorms, higher than normal aluminum levels were observed in hydrant samples. This phenomenon was not seen in tap samples. Rich asked the group for possible explanations of these results. Marc Edwards (Virginia Tech) noted that the literature reports higher aluminum carryover from coagulant use during water treatment during or following storms due to lower alkalinity levels in melted snow and stormwater runoff as well as lower water temperatures of the water entering the treatment plants. Falls Church and Arlington County had no comparable data on aluminum levels in hydrant samples.

## **5. Update on Washington Aqueduct Treatment Changes (Addition of Caustic Soda and Disinfectant Change from Chlorine Gas to Sodium Hypochlorite)**

Tom Jacobus indicated that the project is several weeks behind schedule due to weather delays and the need to relocate a valve. The treatment changes are expected to begin in mid-to-late spring and be completed by September 2010. Overall, the project is going well and a training program has been implemented.

Pierre Erville (DC Department of the Environment) asked for further information on the treatment changes' expected impact on lead levels, the monitoring plan, and plans for coordination between DCWASA and WA. Jennie Saxe agreed to send DCWASA's agreement letter and the monitoring plan to the TEWG. Further, Jennie noted that EPA Region 3 has approved the treatment changes but no other treatment decisions have been made to date. The treatment change has triggered a review of optimum corrosion control treatment parameters including pH and the orthophosphate dosage rate. On the coordination between DCWASA and WA, it was noted that the two agencies are already engaged in data sharing and other cooperative efforts, and will continue to do so even beyond the 1-½ year period stated in the agreement letter. The treatment changes are not expected to negatively impact lead levels based on findings from pipe loop studies and reviews performed by WA, EPA, and their contractors. DCWASA and WA will continue to closely monitor distribution system lead levels following the treatment changes. The treatment changes were also reviewed for impacts to disinfection efficiency. These reviews found that no adverse effects on disinfection effectiveness are anticipated.

Marc Edwards (Virginia Tech) requested that WA send him chlorite and chlorate data for the sodium hypochlorite product to review potential implications for nitrification.

The next TEWG call will be held on June 4th unless an earlier meeting is requested.

#### **Attachment A: Call Agenda**

- \* Any clarifications to last meeting's notes?
- \* Washington Aqueduct pipe loop update
- \* DCWASA pipe loop update
- \* Temporary free chlorine conversion - successes or issues to share (WA, DCWASA, Arlington Co., Falls Church)
- \* Aluminum residuals in hydrant samples (DCWASA)
- \* Caustic and hypochlorite implementation status check (WA)
- \* Next call scheduled for June 4<sup>th</sup>.