

Drinking Water Quality Institute  
Testing Subcommittee Meeting  
Environmental and Chemical Laboratory Services Building  
West Trenton, NJ  
February 24, 2010  
1:00 pm

DWQI Members Present: Stephen Jenniss, (DHSS, ECLS), Sandra Krietzman, (NJDEP, Water Supply), Sheng-Lu Soong (United Water Haworth)

Testing Support Members Present: Linda Bonnette, NJDEP, Branden Johnson, NJDEP, Lee Lippincott, NJDEP, Julian Trexler, DHSS, Joseph Wallin, DHSS, and Bernie Wilk, NDEP

Meeting started at 1:20 pm

S. Jenniss opened the meeting and requested that the attendees introduce themselves to S. Soong, a newly appointed DWQI member and a new member of the Testing Subcommittee. S. Soong is the chief chemist for United Water and she gave a brief summary of her background and the type of work performed by the United Water Haworth Laboratory.

S. Jenniss explained the history and function of the Testing Subcommittee and summarized the work recently completed by the Testing Subcommittee as part of the DWQI Work Plan. S. Krietzman followed up by giving an update on the regulatory status of the final DWQI recommendations.

S. Jenniss explained the issue regarding the recommendations made for dacthal and degradates. The Testing Subcommittee's PQL recommendation for dacthal and degradates was included in the final DWQI document prior to the admission of the EPA that method 515.3 cannot quantitate dacthal as originally stated. It was recently determined by the EPA that method 515.3 can only quantitate the dacthal degradates. Because this was revealed after the approval of the final DWQI recommendation document, B. Johnson included a message qualifying the dacthal/degradates information which appears when the document on the DWQI website is accessed. To date, the EPA has not retracted any information regarding dacthal analysis by EPA 515.3. Since the Health Based MCL recommended by the Health Effects Subcommittee was primarily based on dacthal rather than the degradates, the Testing Subcommittee decided that it must be verified that dacthal is not present in NJ drinking water (despite the knowledge that dacthal degrades to the mono and di acids). DCPA or dacthal is a target analyte in EPA method 525.2. The DHSS laboratory has recently added dacthal to its EPA 525.2 analysis so it can be used for the SOC Waiver program and the retesting of the water systems that had significant detections of the degradates in the past. A preliminary list of sampling sites consists of approximately 15 water systems.

S. Jenniss noted that about August 2010, the DHSS laboratory will be shut down for the move into a new laboratory facility. Laboratory services will be unavailable for one to three months in order to allow for validation studies, PTs and OQA interim certifications which can be granted pending an on-site audit. In addition, new equipment/instrumentation will be set up by the vendor and timing will be dependent upon the vendors' availability.

**n- Hexane:** A 2a list A280 chemical for which the Testing Subcommittee recommended a PQL of 3 ug/L, n-hexane can be analyzed using EPA Method 524.2, however it is not a target analyte in that method. As stated in the NJ Safe Drinking Water Act, 58:12A-13, the Department does not need to establish a standard until a contaminant is present in drinking water; "No maximum contaminant level need be established for any substance identified pursuant to subsection a. or b. of this section until the presence of the substance in drinking water is established by any test required by this act." ( n-Hexane is one of 22 contaminants listed in 58:12A-13 subsection a.)

J. Trexler stated that when the Testing Subcommittee in developing a n-hexane PQL, asked him to determine the detection limit for n-hexane in 2007, the laboratory included n-hexane as a target analyte in their routine EPA 524.2 analyses. This provided the Testing Subcommittee with a source of occurrence data for developing a PQL as well as for making the determination whether n-hexane is present in NJ drinking water. There are now approximately 1300 analyses which include n-hexane in the EPA 524.2 DHSS analytical report. Most of the analyses were drinking water samples collected throughout the state from non-community water systems, the majority of which do not have VOC treatment and can therefore be considered as raw water. Since the reports have not been data managed electronically, each report must be individually reviewed. L. Bonnette will perform this review.

**Tertiary Butyl Alcohol (TBA):** TBA is an A280 2b chemical. The Health Effects Subcommittee has not referred a Health Based MCL number to the Testing Subcommittee as yet. The NJDEP Water Supply Operations does not collect TBA data and although data was requested of the Site Remediation Program, it had not been sent to date. TBA would have to occur in NJ drinking water sources in order to be regulated. Additionally, a PQL for drinking water cannot be established without data. Some laboratories will quantitate TBA using 524.2 even though it is not a target analyte in that method. It was mentioned that the new EPA method 524.3 has added a number of target analytes to the method, one of which is TBA. B. Wilk noted that to date, no laboratory has requested NJ certification for the new 524.3 method.

J. Trexler stated that he believed that the DHSS laboratory had been reporting TBA data with 524.2 for a while as requested by another NJDEP program. Upon verification that this was the case, it was determined that the 524.2 lab reports slated for review for n-hexane will also be reviewed to obtain TBA occurrence information also.

**2,4,6-Trichlorophenol**- This 2b compound was listed in the Sept 26, 1994 DWQI document with a Health Based MCL of 1 ppb. In September 2008, the Health Effects Subcommittee referred 2,4,6- trichlorophenol to the Testing Subcommittee with a higher Health Based MCL of 3 ppb. Since the NJDEP Water Supply Operations does not have any drinking water occurrence data on 2,4,6- trichlorophenol, the Testing Subcommittee had not developed a PQL for it. The Site Remediation Program gave WSO a list of remediation sites with 2,4,6- trichlorophenol detections. S. Krietzman and L. Bonnette will review these data to determine if the data is from treated water and if further sampling of drinking water in the surrounding areas is practical. Additionally, analytical methods for 2,4,6- trichlorophenol were identified as EPA 527 and SM6251B. SM6251B is also a method approved for the analysis of haloacetic acids in drinking water. L. Bonnette will contact the public water systems that use SM 6251B to determine if their laboratory also analyzes for 2,4,6- trichlorophenol. There are four laboratories with NJ certification for SM6251B.

**Hexavalent Chromium**: Hexavalent chromium is a new 2b contaminant on the current DWQI Work Plan. It is believed that the NJ Health Based MCL for Chromium-6 will be set somewhere around 70 ppt. The current approved OQA Safe Drinking Water methods that are used for chromium- 6 do not have detection limits capable of reporting down to 70 ppt. L. Lippincott, B. Wilk, S. Soong and L. Bonnette have begun looking into more sensitive hexavalent chromium water methods.

Information regarding chromium-6 occurrence was obtained from the Missouri Department of Natural Resources (DNR). A release of chromium-6 from BASF occurred on the Mississippi River near Hannibal in May 2009. When the water system intake water and finished water were tested, it was found that the finished water had higher levels of chromium- 6. This resulted in the Missouri DNR testing of water at various stages of the treatment train. The DNR determined from the study that alum and lime aggregate used in the water treatment contained chromium-6.

The California Department of Public Health has its own state unregulated monitoring program of which Cr- 6 was an analyte. Heather Collins is the contact person from California referred to S. Jenniss by G. Post. A request has been made for Chromium-6 information/data of USGS.

**PFOA**: MWH Lab had been contracted to analyze the current round of samples which consisted of samples from each of the various counties and included a control sample. B. Wilk mentioned that upon his recent audit of the laboratory, he had discovered a calibration error which required a reissue of the PFOA reports that had been previously submitted to the Division of Water Supply. The MWH Laboratories' correction will not dramatically change the value of the results, with approximately a 4-12% adjustment of the values. At the present time the NJDEP Water Supply Operations is awaiting the revised reports.

Next Meeting: April 28, 2010/ 1:00 PM/ ECLS, Ewing, NJ/Minutes drafted: 4/27/10 by L. Bonnette