

Testing Subcommittee Meeting
May 2, 2006
DHSS Environmental Laboratory
Ewing, NJ

DWQI Testing Subcommittee Members Present: Steve Jenniss, Barker Hamill, Jean Matteo, Ann Marie Fournier

Support Members Present: Diane Pupa & Linda Bonnette: DEP-Water Supply, and Lee Lippincott: DEP- DSRT

Opening Remarks

Steve opened meeting at 10:15 A.M. and asked members to review the minutes from the prior meeting on Jan 24, 2006. Two minor revisions were suggested. The members voted and approved the minutes with the proposed revisions. BSDW agreed to make the revisions to the minutes ASAP.

Review of Action Items from Last Meeting

The action items from the last meeting were listed in a handout and reviewed item by item beginning with the first two chemicals listed: Hexane & Formaldehyde.

After conducting some research, there are still no new methods for analyzing formaldehyde. However, since formaldehyde is a by-product of Ozonation Treatment, B. Hamill offered to contact Stig Regli of EPA to try to gather any Information Collection Rule (ICR) formaldehyde data. Since the ICR was an early 1990's rule, some current surface water systems in NJ may not have been ozonating at that time and therefore gathering data may be limited. United Water (Haworth), Passaic Valley Water Commission, NJ American (Delran), Water Supply Authority (Manasquan) and NJ American Elizabethtown (Canal Road) were mentioned as possible candidates. J. Matteo offered to contact United Water to see if she can help in gathering some formaldehyde ICR data. D. Pupa agreed to follow-up with the other water systems for any historical formaldehyde data they may have.

In reviewing the Site Remediation Program (SRP) data distributed, SW846 Method 8315 was the most frequently used method in analyzing formaldehyde. EPA Method 556.1 was also mentioned as method to analyze for formaldehyde and L. Lippincott offered to bring in details about both methods at the next subcommittee meeting.

In reviewing the n-Hexane SRP data, SW846 Method 8260B was the most frequently used method, however, EPA Method 524.2 and 502.2 were used often as well. The subcommittee will ask B. Wilk of DEP's Office of Quality Assurance (OQA) to determine the number of certified labs that analyze drinking water compounds using gas chromatography (GC) methods vs the number of certified labs that use gas chromatography-mass spec (GC/MS) Methods. The subcommittee also would like DHSS to verify if n-hexane can be calibrated for 502.2 and/or 524.2 methods, similar to how tert-butyl-alcohol (TBA) is analyzed. In addition, since there isn't a method for n-hexane that OQA certifies a lab to perform, it was suggested that the Testing Subcommittee may request OQA to certify labs for n-hexane if it can be run by Methods 502.2 and/or 524.2.

It was also mentioned that formaldehyde degrades quickly in water and that within approximately two days the concentration would be half of the original concentration, therefore detections may be a bit misleading.

PCBs

It was reported that the health based studies reviewed by Gloria Post-DEP, DSRT for PCBs was only for "total" congeners and not single congeners. It was also reported that SRP did not provide any site data for these chemicals although BSDW did request it. Concern was also raised that the "traditional" methods for Total PCBs are not sensitive enough to detect single congeners. The pros and cons of several methods were discussed (1668B, 505, 508A, 508, 508.1 and 1668A) and it was decided that Method 1668B is a more sensitive method and although not perfect, it is capable of quantitating PCB congeners however, this approach would be very costly (\$800-\$1500). A possibility would be to screen for Arochlors 1254 and 1260 using 1668B without requesting quantitation.

BSDW agreed to try to obtain some PCB & Chlordane occurrence data by collecting approximately 100 samples in areas with known/existing problems. It was recommended that BSDW test for Arochlor congeners 1254 and 1260 since they are the most common in the environment. Three surface water systems were mentioned (Passaic Valley, Rahway and Trenton) as possible sampling locations since they may have intakes with upgradient sources of PCBs. The four labs involved with the Newark Bay Project were suggested to perform the analyses.

It was suggested that OQA identify what labs are running Method 1668B and what the sensitivity of the method is. B. Hamill also agreed to reach out to NY DEC water staff to see if anyone else in the US is researching PCB issues.

Chlordane:

DSRT reported that there is nothing new analytically with respect to chlordane and it's lack occurrence in the environment, and therefore recommended that no further action by the subcommittee is necessary.

****UPDATE:**** SRP did provide some PCB and Chlordane occurrence data after the May 2nd meeting and BSDW is currently evaluating it and will provide a summary at the next Testing Subcommittee meeting (date TBD)

Carbon Tetrachloride & 1,2 Dichloroethane

BSDW reported that approximately 22,000 occurrence data records (1999-2005) were reviewed and four labs performed most of the analytical work. The median MDLs were 0.3 ppb therefore the PQLs would be 1.5 (2 if rounded). The current NJ MCL for both chemicals is 2ppb, therefore it was suggested that the Testing Subcommittee wait until the NJQL Rule is finalized and review the sensitivity of the methods at that time.

Tetrachloroethylene (PCE)

In reviewing the same BSDW occurrence data, PCE results indicated an MDL 0.2 -0.3 ppb. The current MDL in NJ is 1ppb.

DSRT reported that EPA is more concerned with labs obtaining the lowest calibration and appears to be easing off some of the MDL requirements. EPA is encouraging labs to find new ways to find the lowest point in the calibration curve and report that value.

Action Items for Next Meeting:

BSDW:

Revise 1/24 meeting minutes-done

Contact CWS w/ Ozonation and obtain formaldehyde data, if available through ICR

Obtain some PCB occurrence data from SW Systems listed

Poll NY DEC on any known/current PCB research

NEW: Review SRP PCB & Chlordane Data

DSRT:

Provide information of Methods 8315, 556.1

OQA:

Obtain the number of labs that perform GC only and GC/MS

Identify the number of labs performing Method 1668B and report sensitivities

Minutes prepared by: Diane Pupa

NJDEP-BSDW

May 4th, 2006

Updated: May 18, 2006