## Testing Subcommittee Meeting February 15<sup>th</sup>, 2007 DHSS Environmental Laboratory Ewing, NJ

Subcommittee Members Present: Steve Jenniss, Barker Hamill, Jean Matteo

**Support Members Present:** Bernie Wilk: Office of Quality Assurance, Julian Trexler: DHSS; Linda Bonnette & Diane Pupa: DEP-Water Supply

### Opening Remarks

The minutes from November 28th, 2006 were reviewed. Questions arose about using "average" MDL versus the "median" MDL when determining PQL's; the outcome was that the median MDL is preferred based on historical information. Some changes were suggested and BSDW agreed to make the revisions to the minutes as soon as possible.

# **Agenda Items:**

I. Formaldehyde & PCBs

#### Formaldehyde

The differences between SM 6252B and EPA Method 556.1 were discussed – see handout by L. Lippincott. These two methods are analytically the same; as SM 6252B was a precursor to Method 556.

A summary of the 11-19-06 ICR conference call with EPA-Ohio Lab was discussed -see handout. The QA/QC parameters of EPA Method 556 used during the ICR Project was discussed, and it was determined that Method 556 is a *standard gas* chromatography (GC)/ECD method, while EPA Method 556.1 (previously discussed last meeting) is a comparable method using '*Fast Gas Chromatography*'/*ECD*. Use of the standard gas chromatography method would be the recommendation of the subcommittee should it decide to regulate formaldehyde because the 'fast GC' method has more limitations and is not in widespread use in the laboratory community. EPA provided the SOP for Method 556 and it will be distributed via email ASAP to all members. (Sent via email dated 2/22/07)

The subcommittee reviewed some additional formaldehyde data obtained from a few systems that currently ozonate (Canal Road, Swimming River, etc.). Only a few results exceeded the 100 ppb HB MCL; most results were in the <30 ppb.

Subcommittee members also recommended that although the PQL of Formaldehyde is still under review, formaldehyde should be referred to the Treatment Subcommittee for their consideration, because the PQL will be well below the HB MCL of 100 ppb.

# PCBs

The NY DOH PCB Project (handout) was discussed and basically there are 2 methods used: EPA Method 508 an Aroclor-specific method, and a method called the Green Bay Method which is a congener-specific method. The study states that the congener specific method is best to use to determine the presence of PCB's that routinely are undetected using the aroclor method. Some members suspect that this method is analogous to Method 1668A, however, clarification as to what exactly the Green Bay Method is will be provided at the next Testing Subcommittee meeting.

The BSDW PCB Occurrence Project is moving forward; the Quality Assurance Project Plan (QAPP) is nearly completed, and sampling will begin shortly once the site list is finalized (which should be any day). Results will likely be ready April or May 2007.

II. PQL's & Chemicals Referral to Treatment

## 1,1,2-Trichloroethane, Vinyl Chloride & n-Hexane

Discussions continued from last meeting regarding the use of MDL's, PQL's, Reporting Limits (RLs), the MDL X 5 issue, and the implications of mathematically rounding these numbers. B. Hamill provided a detailed overview of what the *intentions* of EPA and the SDWA were historically regarding reporting down to 0.5 ppb for volatile organics. Although labs can detect the volatiles down to extremely low MDLs, the MDL is not intended for quantification. The PQL value is the lowest concentration for an analyte that can be reliably measured and has passed validation studies. The PQL's for 1,1,2-Trichloroethane, Vinyl Chloride and n-Hexane can be lowered based on current improved analytical capabilities, and are ready for referral to the Treatment Subcommittee during the next Full Institute meeting on March 2<sup>nd</sup>.

III. Chemicals without PQL Changes (Chlordane, Tetrachloroethylene, & 1,1,2,2-Tetrachloroethane)

Having mathematically rounding the PQL's to one significant figure (see handout) no changes in analytical capabilities exist to warrant lowering the existing PQL for these chemicals. Therefore, the Testing Subcommittee recommends that these chemicals are referred to Treatment for their consideration at the next Full Institute meeting on March  $2^{nd}$ . (Done)

IV. Chemicals on hold temporarily based on the conflicts with the Groundwater quality Standards – awaiting DEP review

1,2-Dichloroethane and carbon Tetrachloride

V. Chemical awaiting final Health Based Limit

Benzene is still under review

### VI. New Chemical for Subcommittee Review

Ethylene glycol will likely be the next chemical for the testing Subcommittee to review. The Health Effects Subcommittee is currently reviewing the HB MCL but is recommending that the Testing Subcommittee target a PQL in the range of 300-3000 ppb.

Next meeting: TBD Next Mtg 3/07 9:30AM -12:00 DHSS Ewing Lab

### Action Items:

BSDW:

- Obtain analytical/occurrence data on ethylene glycol for next meeting
- Distribute EPA method 556 and 556.1 SOP ASAP (Done via email 2/22/07)
- Update the DWQI Testing Subcommittee Chemical Review Chart
- Follow-up on the Canal Road and Swimming River Plant Formaldehyde data to ascertain the method details

Meeting Minutes prepared by: Diane Pupa Bureau of Safe Drinking Water (02/15/07) rev.3/1, 4/11, and 7/26