# TNI Chemistry FoPT Subcommittee Meeting Summary October 27, 2009

#### 1. Roll call and Meeting Minutes:

Co-Chair Carl Kircher called the Chemistry FoPT Subcommittee to order on October 27, 2009, at 12pm EST. Attendance is recorded in Attachment A.

The minutes from the October 20, 2009 meeting were reviewed. We need to add that Eric made the motion to accept the limits for DIPE and that it was seconded by Carl. A motion was made by Dan Tholan to accept the minutes with the addition and it was seconded by Eric. The minutes were approved with one abstention and will be provided to the webmaster for posting.

## 2. PT Acceptance Limits

#### **DW VOLATILE ORGANICS**

## Regulated Low Level Halogenated HC

Discussion centered around whether DBCP and EDB can be run by 524.2. There are some labs running these analytes by 524.2 and this data is now mixed in with the 504 data. The committee could look at non-potable water and see if there is something that would help set limits for 524.2, but the committee will focus on 504.1 today.

#### DBCP for 504.1

Concentration: 0.1 - 2 ppb Limits: Fixed  $\pm 40\% < 10$  ppb  $\pm 30\% \ge 10$  ppb

Motion: Jeff Second: Dan D. Vote: 6 Approvals and 1 abstention

#### EDB by 504.1

MCL is 0.05. Shouldn't the concentration range be lowered.

Concentration: 0.05 - 2 ppb Limits: Fixed  $\pm 40\%$  Motion: Dan D. Second: Steve Vote: Unanimous

#### **Unregulated Tetrahalogenated HC**

#### 1,1,1,2-Tetrachloroethane and 1,1,2,2-Tetrachloroethane

Dan would prefer to see that limits are left as they are. Arguing that the LCS passed does not mean that a PT will necessarily pass.

After much discussion a motion was made for a concentration range of 2-20 ppb and +/- 30% fixed limits. After additional discussion the motion was withdrawn and a new motion was made for 2-20 ppb concentration and fixed limits  $\pm$  40% < 10 ppb  $\pm$  30%  $\geq$  10 ppb.

Concentration: 2-20ppb Limit: Fixed  $\pm$  40% < 10 ppb  $\pm$  30%  $\geq$  10 ppb Motion: Jeff Second: Eric Vote: 6 – Approve 1 – Disapprove Motion carried.

Dan Dickinson commented that the effect of lowering laboratory PT failure rates for the Unregulated Volatile Organics could be perceived as less challenge imposed on laboratories in doing the PT's, and that point would be difficult to justify to Dan's NYSDOH upper management. Dan agreed to re-compute the failure rate and resend the table he sent previously based only on studies with an AV< 20ug/L. Carl agreed to write-up some points to explain the reasoning for setting these limits. These will be included in the minutes as an addition:

#### 10/27/09 Addition from Carl:

- 1. The concentration ranges for many Unregulated Volatile Organics will decrease to more environmentally relevant Drinking Water concentration ranges, namely 2-20 ug/L.
- 2. The PT data was evaluated from PT studies over the past 2 years with multiple laboratory participants from across the United States. As near as can be statistically tested, there appear to be no statistical significances with respect to United States region, time (no seasonal cycles or sequential progression from past to present), PT provider, or laboratory test method (EPA 502.2 or 524.2).
- 3. The new failure rates are consistent with failure rates for most Regulated Volatile Organics, Metals, and General Chemistry analytes evaluated thus far in Drinking Water.
- 4. The EPA Methods do mention 80-120% as LCS acceptance criteria, but SDW Technical Notes expand that to 70-130%. Apparently, EPA thought that the wider limits would more realistically reflect the expected recovery for a given LCS for a batch of samples run by the approved methods performed correctly. The 80-120% mean recovery for the IDOC represents the acceptance criteria for mean recoveries of analytes calculated from 4 or more replicates (not a single analysis).
- 5. The PT acceptance limits of segmented 40%-30% reflect a reasonable estimate of interlaboratory variability of analyzing PT's compared to intralaboratory (single-laboratory) variability of 30% in analyzing LCS samples.
- 6. If the NELAP Board expresses no problem with expressing PT acceptance limits for DW as +/- 3 standard deviations instead of +/- 2 standard deviations, to be consistent with the Non-Potable Water limits (the question is still before the NELAP

Board because of the experimental FoPT question and has not yet been answered), then the recommended acceptance limits for the Unregulated Volatiles cover this contingency and no re-evaluation is needed.

# **Unregulated Gases:**

## Chloroethane and Trichloroflouromethane

Concentration: 5- 50 ppb Limits: Fixed  $\pm$  40%

Motion: Eric Second: Steve Vote to approve: Unanimous

#### Bromomethane and Dichlorodiflouromethane

Jeff noted that the failure rate is 25% for dichlorodifluoromethane, but he believes it is due to lab problems.

Concentration: 5- 50 ppb Limits: Fixed ± 40% Motion: Dan Tholan Second: Jeff Vote: Unanimous

#### Chloromethane

Failure rate is about 8%.

Concentration: 5- 50 ppb Limits: Fixed ± 40% Motion: Dan Tholan Second: Jeff Vote: Unanimous

## **Unregulated Ether/Alcohol:**

## **MTBE**

Concentration: 5-50ppb Limit: Fixed  $\pm 40\% < 10$  ppb  $\pm 30\% \ge 10$  ppb

Motion: Jeff Second: Dan Tholan Vote: Unanimous

# **Unregulated Hexahalogenated HC:**

#### Hexachlorobutadiene

Concentration: 5-50ppb Limit: Fixed  $\pm 40\% < 10$  ppb  $\pm 30\% \ge 10$  ppb

Motion: Jeff Second: Eric Vote: Unanimous

#### 3. New Items

None.

## 4. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be November 3, 2009, at 12PM EST. We will be meeting weekly until the limit updates are complete.

Jeff will provide tables with only Experimental Analytes for the next meeting. If we run out of experimental analytes to work on at this meeting, we can go back and try to finish up a few more of the accredited analytes.

Action Items are included in Attachment B and Attachment C includes a listing of reminders.

The meeting ended at 1:45pm EST

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# Attachment A

# Participants TNI Chemistry FoPT Subcommittee

Members	Affiliation	Contact Information	
Carl Kircher,	Florida DOH	904-791-1574	
Co-Chair		carl_kircher@doh.state.fl.us	
Present			
Brian Boling,	Oregon DEQ		
Co-Chai		Boling.Brian@deq.state.or.us	
Absent			
Amy Doupe	Lancaster Laboratories,	717-656-2300 x1812	
	Inc.	aldoupe@lancasterlabs.com	
Absent			
Jeff Lowry	ERA	303-431-8454	
Present		jlowry@eraqc.com	
Chuck Wibby	Wibby Environmental	303-940 -0033	
•		cwibby@wibby.com	
Present			
Eric Smith	TestAmerica	615-726-0177 x1238	
		eric.smith@testamericainc.com	
Present			
Dan Tholen	A2LA	231-929-1721	
		Tholen.dan@gmail.com	
Present			
Stephen Arpie	Absolute Standards, Inc.	203-281-2917	
		stephenarpie@mac.com	
Present			
Dan Dickinson	New York, DOH	518-485-5570	
		dmd15@health.state.ny.us	
Present			
Stacey Fry	E.S. BABCOCK & Sons,	951-653-3351 x238	
	Inc.	sfry@babcocklabs.com	
Absent			
Jim		mousejr@nu.com	
Absent			
Ilona Taunton,	TNI	828-712-9242	
Program Administrator		tauntoni@msn.com	
Present			

# **Attachment B**

**Action Items – Chemistry FoPT Subcommittee** 

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	<b>Action Item</b>	Who	Completion	Completion	
13.	Prepare letter to ABs to find out their needs on analytes that may be under consideration for deletion. (3/24/09 – It was determined that these tables are used by more than just ABs. This needs to be reconsidered.)	TBD	TBD		
19.	Request the final revision of the SOP #4-001 Guidelines for Calculation of Acceptance Limits from the TNI PT Board.	Eric/Carl	5/5/09	PT Board is reviewing it for finalization by next mtg.	
22.	Prepare for upcoming meetings by reviewing evaluation files that Jeff will send every 2 weeks.	All	Ongoing	, ,	
26.	Carl will distribute the list of potential problem analytes for the group to review and comment on. What should be removed from the table and a reason for why it should be removed. Ilona will compile any comments received.	Carl Ilona	9/22/09	No comments were received. Will postpone.	
34	Prepare tables with Experimental Analyte data.	Jeff	11/2/09		
35	Prepare limit comparison on failure rates.	Dan Dickinson	10/26/09	Complete	
36	Re-compute the failure rates and re-send the table he sent previously based only on studies with an AV< 20ug/L.	Dan Dickinson	11/2/09	Complete	
37	Write-up some points to explain the reasoning behind some of the changes to the DW Volatile limits.	Carl	11/2/09	Complete	

# **Attachment C**

**Backburner / Reminders – Chemistry FoPT Subcommittee** 

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	Item	Meeting	Comments						
		Reference							
1	Review summary data to see if it supports a change in the acceptance criteria for DW analytes (For example, VOA, 30% instead of 20%). If data is supportive, Jeff Lowry will approach ELAB.	10-30-08	3/10/09 - Jeff has approached ELAB. They would be happy to put it in a work group – and pass it along with a letter to EPA. We need to provide them with the data.						
3	Consider changing the lower limit for Vanadium on WP to 50 ug/L.	6-30-09							
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