TNI Chemistry FoPT Subcommittee
Meeting Summary
October 20, 2009

1. Roll call and Meeting Minutes:

   Co-Chair Brian Boling called the Chemistry FoPT Subcommittee to order on October 20, 2009, at 12pm EST. Attendance is recorded in Attachment A.

   The minutes from the October 6, 2009 meeting were reviewed. A motion was made to accept the minutes by Carl and it was seconded by Stephen. The minutes were approved and will be provided to the webmaster for posting.

2. Direction from PT Board

   The following message was received from the Chair of the PT Board:

   The PT Board has decided today to modify the instruction provided below on September 21st, based on feedback from the NELAP Board on October 5th and the recommendations made by the FoPT subcommittee on October 8th.

   Please proceed with the recommended course of action outlined by Brian on behalf of the FoPT subcommittee on October 8th. Do a technical review on each Experimental analyte (instead of setting the default criteria outlined below). Please also provide a listing as soon as possible of the analytes that the Subcommittee is recommending be dropped from the Accreditation tables, so that the PT Board can review them and send to them to the NELAP Board for feedback.

   With regards to timelines, the PT Board would appreciate it if the updated Drinking Water and Non-Potable Water tables (based on the technical reviews of the Experimental analytes) could be made available to the PT Board for review by the PT Board's November 19th teleconference and the updated S&CM table made available prior to the December 17th PT Board teleconference. We are still shooting for a goal of having newly revised Accreditation Tables ready for presentation by the Chicago meeting in January, if possible, with effective dates of summer 2010.

   The PT Board would like to express our sincere appreciation for all your hard work, your commitment, and your patience as we overcome hurdles and work through this process.

   Thanks.
   Eric Smith

PT Board Chair

We hope to have the tables complete by the Chicago meeting with an implementation target of July 1, 2010.

3. Recommended Acceptance Limits 10/6/09 - VOA

Volatile Organics

Dan Dickinson is concerned that the limits are being widened. His management is reviewing their involvement in the program and he is getting questions about changing limits to a less stringent value (unregulated volatiles were approved last week for +/-30% instead of +/-20%). Their concern is whether less stringent limits will threaten public health. He sent an e-mail:

Volatiles:
I am hesitant to commit to wider acceptance limits, in general, for the "un(Federally)regulated" volatiles even though I can see the data in many cases could be used to support the change. The issues at play for me are;

- *moving to 30% fixed limits above 10 ug/L lowers the performance bar. One of the assumptions being made is that the LCS limits are +/- 30% for the volatiles methods. See section 9.6 , then 9.3.3 in EPA 524.2 Rev. 4 1992. The accuracy limits for the lab fortified blank are 80-120% for the range of 0.2 -5 ug/L. Labs routinely achieve this, so 20% above 10 is not a problem either, when the method is competently performed.*
- *In New York, I do not see large fail rates for "un(Federally)regulated" volatiles with the current fixed limits. So there is nothing in my data to suggest overall analytical performance issues for the analytes, with maybe one exception, Hexachlorobutadiene ,which tends to have low recovery. I am in favor of the proposed new limits for Hexachlorobutadiene. So there is no way I can convince my Directors that the new limits are an enhancement to public health protection, which leads to adoption issues.*

Eric sent the following e-mail:

I can appreciate these positions and can agree with the need for a certain level of challenge for PTs. However, I think this comes back in part to one of the fundamental questions as to why labs run PTs. Don't labs run PTs primarily to show that a lab can adequately perform the method within method defined tolerances? Where the method requires (in this case allows) certain fixed QC criteria, I don't believe that PTs should be tighter than those method defined limits. The 80-120 criteria is associated with IDOCs. The 70-130 criteria is associated with the daily LCS. If 80-120 were necessary to reflect sufficient ongoing daily performance of the method and ultimately, the validity of the associated client sample data, then wouldn't the EPA have set the method defined

LCS at 80-120? A laboratory can repeat a failing IDOC without penalty, but the same can not be said for PTs. In addition, the failure of a specific analyst's IDOC does not necessarily reflect the laboratory's overall ability to run the method, much like a failure of a PT does. While IDOC information can be obtained from PTs, IDOC acceptance criteria should not necessarily be considered the best PT acceptance criteria.

If labs are to be treating the PTs like samples and the subsequent PT data to be a reflection of whether or not labs can adequately perform the method on real world samples, then the PT acceptance criteria for methods with fixed limits should not be tighter than the method defined fixed QC limits (particularly the LCS limits). For these drinking water VOA methods with fixed limits, it does not make sense to me that a 125% recovery would be acceptable for a client's drinking water sample but not for a PT sample. How does that accurately portray the lab's ability to run the method? What kind of corrective action is a laboratory supposed to take on a VOA PT sample where the acceptance criteria is tighter than what is allowed in the root method?

PT acceptance criteria should never be tighter than method defined fixed QC limits. If they are, then PTs no longer reflect the ability of the laboratory to run a method within method defined acceptable tolerances.

That's my position. Thanks.

Additional comments included:

(Dan Dickinson) Carl - I responded to your recommendations on Oct. 7, 2009. Basically, I was arguing against the consideration of the method LCS limits as a basis for establishing PT acceptance limits for volatiles. You correctly pointed out that the DW Technical Notes create the allowance for 70%-130% for method QC. However, the method still expects 80%-120% criteria for MDL and IDC studies. The wider limit allowance from the Technical Notes appears to be related to recovery issues with a few problem analytes. So to apply that rule across the board to all unregulated volatiles is risky and perceived (at least by me) as a relaxation of acceptance criteria and in my opinion not justifiable, especially since the regulated volatiles limits will not be changing. Further, as I noted in my Oct. 7 email, I cannot relate this change to my Directors as an enhancement to public health protection which means it will not be implemented , if approved by the TNI PT Board, in New York

Therefore, for the record I am not in favor of relaxing the volatiles acceptance limits in Drinking Water.

(Jeff Lowry)
Dan Dickinson makes a great point. In the past at the request of the laboratories the FoPT Subcommittee started collecting information on LCS limits, reporting limits and calibration ranges. These three should be considered in developing PT

criteria. But when the LCS limits are driven by criteria from a method such as DW volatiles (70-130%), the subcommittee does not see the real performance of the LCS in the method. The criteria from the method is a minimum criteria not a individual analyte performance within the method. Therefore, the criteria from the method singles out the poor performing analytes. Reliance on method LCS criteria can result in setting PT criteria that can be questionable. Truly if benzenes LCS recovers at 71% or 129% isn't something wrong.

As we continue onto the Non-Potable Water and Solid and Chemical Waste tables, the LCS criteria comes from calculations of real LCS data for the most part.

These e-mails led to a general discussion on what PTs should be and how method QC relates to limits. Chuck confirmed with Carl that the limits he proposed are based on PT data that has been crunched and the LCS data is only for a reality check. The limits are not determined by the LCS value. Chuck agrees with what Carl is recommending – it follows the same pattern we have used for the past 10 years. Carl asked Dan if sharing the real data with his management would alleviate their fears. Dan is planning to share it, but feels there will still be concerns. Chuck commented that in the past EPA made arbitrary decisions on limits and we are now basing it off of actual data.

Brian commented on Method 524.3 – When you look at the calibration (0.5 to 40 ppb) you find that there are wider QC acceptance criteria at less than 10 ppb (40%) and tighter criteria at higher concentrations. The limits being proposed fall in line with the data and what new methods are doing.

Carl offered to attend one of New York's Friday meetings to address any management concern regarding limit changes. Dan will let him know if this is possible. The vote at the last meeting changed the limits on unregulated volatiles from 20% to 30%. Dan believes they will have a significantly lower failure rate. Why is there a difference between the regulated and unregulated? New York management will see it as an easier challenge - they are not being held to the standard they were. NY wants to be as strict as they can be. Jeff commented that the failure rate for bromobenzene is 6% with 64 studies and 5 PT providers. Jeff asked if Dan could provide data on the compounds he is concerned about and show how the new limits affect failure rates. Is there a significant difference? The subcommittee voiced concerns about evaluating what type of failure is acceptable for PT studies.

Chuck asked … given we are under a short time frame … given what Dan is concerned about … could we table the accredited analytes for now and focus on the experimental analytes. Eric pointed out that there are some experimental analytes on the tables we are looking at. This changed the direction of the meeting. The subcommittee focused on limit updates for Experimental Analytes.

4. Recommended Acceptance Limits – 10/20/09

The group reviewed Jeff Lowry's tables and concentrated on the experimental analytes (in red).

Unregulated Volatiles – Gases

Freon 113
Concentration: 5-50 ppb Limits: Fixed +/- 40%.
Motion: Carl Second: Eric Vote to approve: Unanimous

Unregulated Volatiles – Ether/Alcohol

TAME
Concentration: 5- 50 ppb Limits: Fixed ± 40% < 10 ppb ± 30% ⩾ 10 ppb
Motion: Carl Second: Steve Vote to approve: Unanimous

ETBE:
Concentration: 5- 50 ppb Limits: Fixed ± 40% < 10 ppb ± 30% ⩾ 10 ppb
Motion Carl Second Steve Vote: Unanimous

DIPE:
Concentration: 5- 50 ppb Limits: Fixed ± 40% < 10 ppb ± 30% ⩾ 10 ppb
Motion: Eric Second: Carl Vote : Unanimous

Tert-Butyl Alcohol:
Eric asked if the concentration range could be 10-100 ug/L instead of 5-50ppb and 40% fixed. This is what it is presently.
Concentration: 10-100 ug/L Limits: Fixed +/-40%
Motion: Eric Second: Chuck Vote: Unanimous

Unregulated Volatiles - Low Level Halogenated HC (For samples run by 504.1)

1,2,3 – Trichlorpropane:
Concentration: 0.2-2 ppb Limits: Fixed 40%.
Note: This analytes failure rate is 17%. Comparable components – 5.8 and 5.3% for DBCP and EDB.
Motion: Carl Second: Steve vote: 1 Abstain and Yes on all others.

Organonitrogen Pesiticides – (n⩾5)

Bromocil
Conc: ~~1-20 ppb~~ 2-40 ppb Limit: Fixed +/- 45%
Motion: Carl Second: Stacie Vote: Unanimous

(Re-evaluated the Bromocil concentration and changed it from 1-20 ppb to 2-40 ppb when the motion for Molinate was made. The motion for 2-40 ppb was made by Carl and seconded by Jeff. It was unanimously approved.)

Molinate Conc: 2-40 ppb Limit: Fixed +/- 45%
Motion: Carl Second: jeff Vote: Unanimous

Unregulated VOCs

Carbon Tetrachloride and Tetrachloroethylene
Concentration: 2-20ppb Limit: Fixed $\pm$ 40% < 10 ppb $\pm$ 20% $\geqslant$ 10 ppb
Motion: Jeff Second: Carl Unanimous

Vinyl Chloride
Concentration: 2-50 ppb Limit: Fixed +/- 40%
Motion: Carl Second: Eric Vote: 1 Abstain, all others Yes

5. New Items

None.

6. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be October 27, 2009, at 12PM EST. We will be meeting weekly until the limit updates are complete.

Jeff was asked to 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. We will also look at the information Dan Dickinson will provide on the impact of limit changes on failure rates.

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

Attachment A

Participants
TNI
Chemistry FoPT Subcommittee

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

Attachment B

Action Items – Chemistry FoPT Subcommittee

	Action Item	Who	Expected Completion	Actual 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 to next meeting.
34	Prepare tables with Experimental Analyte data.	Jeff	10/26/09	
35	Prepare limit comparison on failure rates.	Dan Dickinson	10/26/09	

Attachment C

Backburner / Reminders – Chemistry FoPT Subcommittee

	Item	Meeting Reference	Comments
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	
4			
5			