TNI Chemistry FoPT Subcommittee
Meeting Summary
November 18, 2014

1. Roll call and Meeting Minutes:

   Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on November 18, 2014 at 12:09 ET. Attendance is recorded in Attachment A. There were 7 members on the call.

   The subcommittee reviewed a number of previous meeting minutes distributed by email. Stephen made a motion to approve the minutes for 5/20/14, 6/3/14, 6/17/14, 7/1/14, 8/26/14, 9/9/14, 9/23/14 and 10/7/14 with a correction to the motion for Sodium. The motion was seconded by Andy and unanimously approved.

   Carl will still look into the 7/15/14 minutes to figure out the discrepancy between the numbers discussed on the call and the numbers presented in the summary table.

   The minutes from the last meeting were distributed by email. Stephen motioned to approve the 11/4/14 minutes. The motion was seconded by Dan and unanimously approved.

   The meeting minutes will be posted to the TNI website.

2. Response to PTPEC Request

   Carl prepared the response to the PTPEC regarding the Drinking Water FoPT Table review request.

   Dear Maria,

   The Chemistry Fields of Proficiency Testing Subcommittee respectfully submits this response to your request from the PT Program Executive Committee to compare the Drinking Water FoPT Table footnotes with the US EPA National Standards for Water Proficiency Studies Criteria Document. The Subcommittee also submits for your approval a slightly revised DW FoPT Table for your approval, in which an additional sentence is added to Footnote 1 to reflect the expectations of US EPA for proficiency test samples for regulated analytes.

   DIFFERENCES BETWEEN THE US EPA CRITERIA DOCUMENT AND TNI DW FoPT TABLE FOOTNOTES (I do not like the word "inconsistencies")

   Footnote 1: The US EPA Criteria Document never specified the minimum number of analytes to spike into the PT. The Criteria Document does allow for the Assigned Value for an analyte to be "0".

Footnote 2: same (no differences between TNI DW FoPT Table and Criteria Document), although it is Footnote 13h that refers to EPA Method 508A for the Decachlorobiphenyl equivalents in the 7 Aroclors.

Footnote 3: same, but refer to the Criteria Document text for WS along with any table footnotes).

Footnote 4: NOT in the Criteria Document. The TNI DW FoPT Table will not reward a lab. for passing a PT when it reports 0% of the Assigned Value.

Footnote 5: NOT in the Criteria Document. The TNI DW FoPT Table will not punish a lab. for reporting a result that is equal to the verified Assigned value.

Footnote 6: NOT in the Criteria Document. The TNI DW FoPT Table will not punish a lab. for reporting a result that is equal to the verified Assigned value.

Footnote 7: PTRLs are NOT in the Criteria Document. The TNI Dw FoPT Table thus provides the participant lab. guidance to run its test method such that its routine LOQ is less than or equal to the PTRL listed.

Footnote 8: The TNI DW FoPT Table includes E. coli along with Fecal Coliforms; the Criteria Document just has Fecal Coliforms. The Criteria Document specifies "atypical colonies" that will not verify as total or fecal coliforms, but the TNI DW FoPT Table just says "negative results." However, DW FoPT Table Footnote 9 will ensure that a non-target organism is included.

Footnote 9: Criteria Document says that the 10-sample set (Microbiology) should have 3 with E. coli, 3 with Total Coliform positives but Fecal Coliform negatives, 2 with nontarget organisms, and 2 blanks. The TNI DW FoPT Table is more variable and specifies 2-4, 2-4, 1-2, and 1-2, respectively.

Footnote 10: The Criteria Document and TNI DW FoPT Table express the wording differently, but the requirements are essentially the same.

Footnote 11: There are no specifications for quantitative Microbiology PTs in the Criteria Document.

Footnote 12: There are no specifications for quantitative Microbiology PTs in the Criteria Document.

Footnote 13: The Criteria Document does not specify whether chlorinated acid herbicides are supplied in the acid or ester form (with the exception of 2,4-D). Footnote 13e in the TNI DW FoPT Table specifies the recommended PT formulation criteria for 2,4-D that matches the recommendation in the Criteria Document. Footnote 13d recommends the acid form for the other PT herbicides. All other PT formulation recommendations in the TNI DW FoPT Table match the recommendations in the Criteria Document.

Footnote 14: There is no equivalent requirement specified in the Criteria Document. However, these TNI DW FoPT requirements conform to US EPA regulations at 40 CFR Part 141.131(b)(2).

Footnote 15: The Criteria Document only lists "Total Xylenes" and does not contain any requirements for the 3 individual isomers.

Respectfully submitted,
Carl Kircher, Chair, Chem FoPT Subcommittee
904-791-1574

Andy thought a general statement that the TNI program meets or exceeds all the Criteria document requirements should be added. Stephen added that CFR requirements are also met. Carl's details provide the additional information to support these statements. Carl will add Andy's addition to the first paragraph of the letter above: The TNI Drinking Water FoPT Table meets all EPA Criteria Document requirements.

Stephen made a motion to approve the amended response written above by Carl. Stacey seconded the motion and it was unanimously approved.

3. SCM FoPTs

Carl distributed analytes for consideration today. Each analyte has two associated files – one prepared by Carl and the other by Dan.

Carl and Dan described the general procedures they followed in preparing the PDFs.

Carl explained that the files he prepared were processed to follow the SOP as closely as possible.

Dan was concerned how the limits exploded out at the lower levels. He dug a little deeper and segregated the data at the 300 ug/Kg concentration – below or higher. He found most of the outliers were at the higher end. He found influential points that affected the control limits at the lower end that don't meet outlier criteria. Every time you remove an outlier it affects the data and other outliers are identified. He went ahead and removed some points he knew would be outliers and this greatly stabilized the data. There were actually fewer outlier removals doing this.

Dan thought the range probably needs to be lowered for this group to 20 ug/Kg and not go as high as 500 ug/Kg. The higher range has problems. You would have a failing RSD above 200 ug/Kg, but not below 200 ug/Kg.

Dan noted that the outliers he removed were at the higher end. He also noted that he still included studies that had less than 10 participants because the data was consistent with what

he was saying. He thinks the range he used gives a more accurate description of the standard deviation.

In NY a few years ago – they asked labs to report their LOQs. For the pesticides being considered today, the LOQs range is 0.5 -5 ug/Kg. This supports lowering the concentration limit to 20 ug/Kg.

Carl looked at the NPW table and did some concentration comparisons. Evaluating the data in a way that is a more direct comparison, Carl found that the concentration limits between the non-potable water and the SCM are similar. Carl thinks the current concentration limits are appropriate based on this comparison. He also noted that some labs use GC/MS instead of GC/ECD for this analysis. There could be a problem with concentrations.

Andy commented his lab's reporting limit is 1.7 ug/Kg reporting limit 56-121 control limits. His average recovery is 78%.

Aldrin

Carl compared Dan and his data and only saw a couple of differences in outliers. Dan commented that there is not much difference between the two graphs when you look at the 50 ug/Kg concentration. It is 11.2 for Carl and 11.3 for Dan.

There is not a lot of change between the current limits, Dan's recommendation and Carl.

Stephen made a motion to leave the present concentration and limit as listed on the current FoPT table. The motion was seconded by Stacey.

Discussion:
Dan – keeping it the same is the worse choice because of how the regression behaves at the low end. Both Carl and Dan's PDFs are better.

Stephen commented that in the random process of selecting the range, there may not be as much of a risk that the lower end will be used given the range. Dan disagreed and commented that if it is random – any point can be chosen. Stephen agreed with Dan's comment, but said realistically the large range reduces the overall risk. He does not see the lower end concentrations.

Vote: For – 6 Against - 1 (Dan) Abstain – 0 The motion passed.

Alpha-BHC

Carl gets a large d coefficient and Dan's is smaller. The current table is between Carl and Dan's values.

The c coefficient is higher for Dan and Carl than what is currently on the FoPT table.

Andy's lab gets 74% average recovery and the statistically calculated control limits are 47-122%. Stacey's control limits are 54-108 and the average recovery is around 70%.

There is really no difference between Dan's standard deviation and the current table. There are differences between outliers used between Carl and Dan's data. Dan commented again that his analysis provides better data at the lower end and he recommends dropping the current concentration from 50.

Carl recommends keeping the current acceptance limits without any changes.

Dan's only departure from the current SOP is that he did not always drop the study if it had less than 10 participants. The data lined up with the rest of the data. Vo

Dan made a motion to leave the present concentration and limits for alpha-BHC. The motion was seconded by Stephen and unanimously passed.

Andy asked if PTRLs can still be considered. For Aldrin and alpha-BHC, the PTRLs will be 5 ug/Kg.

4. Action Items

See action item table in attachments.

Action Item #111: EPA is being very quiet about it. As far as Joe M. knows nothing has been forwarded in the Federal Register. The Montreal Protocol meeting is this week in Paris and EPA is going to see the result before they propose any rule changes. If this does not get resolved – these compounds can't be distributed after 12-31-14 – this will affect PTs. Ilona asked Joe to send her information on the issue and she will forward it to the PTPEC for informational purposes. This action item is being closed.

5. New Business

- Stephen Arpie asked Ilona to forward his email to the subcommittee so he could show his point about randomness. Please review.

6. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee has been scheduled for December 2, 2014.

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

The call was ended by FreeConference at 1:25pm EST.

Attachment A

Participants
TNI
Chemistry FoPT Subcommittee

Members	Affiliation	Contact Information
Carl Kircher, Chair **Present**	Florida DOH	carl_kircher@doh.state.fl.us
Joe Morotti **Present**	Sigma-Aldrich RTC	Joe.morotti@sial.com
Melanie Ollila **Absent**	Pace Analytical Services, Inc.	MOllila@pacelabs.com
Jeff Lowry **Absent**	Phenova	JeffL@phenova.com
Stephen Arpie **Present**	Absolute Standards, Inc.	stephenarpie@mac.com
Dan Dickinson **Present**	New York, DOH	daniel.dickinson@health.ny.gov
Stacey Fry **Present**	E.S. BABCOCK & Sons, Inc.	sfry@babcocklabs.com
Joe Pardue **Present**	Pro2Serve, Inc.	423-337-3121 joe_pardue@charter.net
Dr. Andy Valkenburg **Present**	Energy Laboratories, Inc.	avalkenburg@energylab.com 406-869-6254
Ilona Taunton, Program Administrator **Present**	TNI	Ilona.taunton@nelac-institute.org 828-712-9242

Attachment B

Action Items – Chemistry FoPT Subcommittee

	Action Item	Who	Expected Completion	Actual Completion
111	Receive info on Class 1 Ozone Exemption from Joe M. and forward to Michella.	Carl	6/16/14	Complete (Joe will forward to Ilona to forward to PTPEC.)
116	Look at 7-15-14 minutes and let Ilona know what the correct limits are for the analytes looked at that day.	Carl	11/11/14	
117	Prepare second DRAFT response to Maria's request about the EPA Criteria document. Send to subcommittee for review at next meeting.	Carl	11/11/14	Complete
118	Send DW FoPT table response to Maria/PTPEC.	Carl	11/19/14	

Attachment C

Backburner / Reminders – Chemistry FoPT Subcommittee

	Item	Meeting Reference	Comments
4	Consider nomenclature differences between the analyte codes and the FoPT tables.	2-23-10	
10			