

**TNI Chemistry FoPT Subcommittee  
Meeting Summary  
June 17, 2014**

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on June 17, 2014 at 12:07 ET. Attendance is recorded in Attachment A. There were 7 members on the call.

2. Letter to Maria – DW and NPW FoPT Tables

Carl sent the following to Maria on June 4<sup>th</sup>:

*Dear Maria,*

*As a result of our Chem FoPT Subcommittee Teleconference held yesterday, June 3, we are presenting the attached FoPT Tables for DW and NPW for PTPEC approval and NELAP AC ratification. We presume it will be up to your 2 groups (PTPEC and NELAP AC) to supply the Effective Date in each case. Please use the attached NPW Table for your discussion and approval rather than the one presented at the previous PTPEC teleconference last month.*

*Based on discussions with the Subcommittee (3 previous sessions) and with the NELAP AC last Monday (June 2), I strongly recommend that the PTPEC approval the FoPT Tables as presented without substantive changes or additions. I hope that I eliminated all the clerical, editorial glitches already. The Subcommittee could not agree on any substantive changes or additions to the footnotes on the Tables, so the Subcommittee approval motions covered only what is presented here. Any substantive modifications will lead to confusion from the NELAP AC members (and the PTPEC as well?), (potentially greater) inconsistent implementation by the NELAP Accreditation Bodies, and possible complaints thereby from accredited laboratories.*

*Subcommittee members, please feel free to add to or modify my comments if helpful to the approval of the Tables.*

*Ilona, please forward this e-mail and attachments to the other PTPEC Members. Thanks!*

*Respectfully submitted,  
Carl Kircher  
i-Phone 904-637-9239*

Maria will take care of forwarding this information to the PTPTEC.

### 3. SCM Analyte Considerations

Jeff asked for a conversation about matrices before further PTs are reviewed.

Jeff noted that the soil matrices for PT Providers are different. TNI does not require one matrix that is well defined between the PT Providers. The subcommittee does not have all the provider data – this is an issue for soil where the matrix is different, but not in water where the matrix is the same. Looking at the data, most data is only submitted by 3 providers. He thinks only c and d should be used because that is method specific and not a and b which is matrix specific.

Jeff is concerned that ignoring this will cause many questions after the limits are set.

Carl disagrees with this concern because labs are required to suitably digest all PTs before they are run. He also believes that the subcommittee is following the SOP requirements.

Jeff noted that he has seen data for Antimony in Soil verses Antimony in Sewage Sludge and there is a significant difference. The same lab doing the two samples gets different results.

Jeff agrees that the metal PTs already looked at are fine, but this issue still needs to be addressed. A matrix needs to be defined if a and b's are included. Ilona noted that if the subcommittee is in agreement – this should be raised with the PT SOP Subcommittee that is working on our SOP for setting limits.

Stephen expressed concerns about defining quality objectives on digestions. This is something he raised in the past to address the issue Jeff is raising. The matrix needs to be digested to a set of criteria. There is no criteria for matrix type, but there could be a criteria for performance. Stephen does not believe a matrix can be set-up that everyone must use – it would be nearly impossible to have all PT Providers homogenize one matrix and then share it between all providers.

Carl noted that solving something like this would be the responsibility of the PTPEC. This discussion should probably include the NELAP AC too. Stephen commented that some of this conversation took place in 2003/2004. NIST commented back then if they extended into Soil PTs they would need to make the matrix.

Jeff has had experience working with different Provider matrices and they are different. They recover differently. Knowing this should cause this committee to rethink this issue. Stephen commented if there is a difference and nothing is changed in how this subcommittee addresses solid PTs – should labs be required to use different PT vendors so they are using a multitude of matrices. They shouldn't keep using the same soil type.

Carl asked Stacie what types of soils she gets in her lab. She commented that they get a wide range. Carl asked if she notices particular matrices that consistently have MS/MSD issues. She has not noticed any particular issues.

Joe M. went back through some of his old data and noticed different matrices for solid and concluded that it is impossible to use a and b. He commented that looking at MS/MSDs in a lab is not realistic because they don't leave the spike on the soil for months – it is spiked and immediately digested. He agrees with Jeff and Steve's concerns. Carl asked if this is just metals or all PTs. Joe thinks it is an issue across the board. Jeff does not think it affects the volatiles and Joe M. agreed.

Carl asked if the trace metals done so far need to be re-evaluated. Jeff noted he noticed the differences between matrices in years past and to have to evaluate which PTs would be affected and which would not, would be a lot of work. He would prefer that the committee just decide to re-do the metals that have already been completed and look at c and d only.

Carl offered to do plots for both abcd and cd for all metals (including the ones already done - arsenic, beryllium, cadmium, chromium). He only provided cd plots for hexavalent chromium and antimony due to issues. Dan's recollection was that about half really needed to be considered for only cd coefficients. Carl noted in the past they were set with study mean and cd coefficients across the board. Carl was trying to improve the data and found that the use of abcd does work with many of the trace metals.

Carl will re-issue all PT evaluation data with cd coefficients if it was not previously sent out.

#### 4. SCM FoPT Table

##### Antimony

The study concentration was 84-544 mg/Kg. SOP criteria was reviewed and a check was marked for Mean  $R^2$  Eval  $> 0.9$ . The PDF is dated 4-30-14. The current concentration range is 80 – 300 mg/Kg. Carl recommends keeping the current limits or go to the new regression. There is not a lot of difference.

Dan agreed there was not difference, but he did highlight how much better his robust statistics were in NY. There was a statistical difference. Dan wondered if other Providers might be willing to look at their robust standard deviations. His matrix was a finely milled topsoil mixture that has been thoroughly dried.

Dan suggested looking at the mean +/- 3 standard deviations.

Jeff pointed out that there are too many points deleted (60%) in the chart the committee was looking at. Dan commented his charts only had 3 outliers, but this information was not distributed to the committee. It didn't make any difference – their coefficients were very similar. Upon closer examination – it turned out that Carl didn't throw out all the points. The pdf was misleading.

Stephen suggested that perhaps a discussion needs to be had with the PTPEC meeting before proceeding with more limit updates. Ilona pointed out that the PTPEC will be meeting in two

days and perhaps one of the subcommittee members can raise this at the call. There was some discussion on how to raise the issue. If the expectation is to have the PTPEC set quality criteria for preparing PTs – Carl felt this would not happen based on past history.

Carl thinks the next steps should be to start reviewing both abcd and cd coefficients when reviewing the data.

The subcommittee will further consider the discussion today at the next meeting and vote on a course of action.

#### 5. Action Items

See action item table in attachments.

#### 6. New Business

- None.

#### 7. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee has been scheduled for July 1, 2014.

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

The call was ended at 1:33pm EST. Motion – Stephen Second - Dan Unanimously approved.

## Attachment A

### Participants TNI Chemistry FoPT Subcommittee

Members	Affiliation	Contact Information
Carl Kircher, Chair <b>Present</b>	Florida DOH	<a href="mailto:carl_kircher@doh.state.fl.us">carl_kircher@doh.state.fl.us</a>
Joe Morotti  <b>Present: 12:40</b>	Sigma-Aldrich RTC	Joe.morotti@sial.com
Melanie Ollila  <b>Absent</b>	Pace Analytical Services, Inc.	MOllila@pacelabs.com
Jeff Lowry  <b>Present</b>	Phenova	JeffL@phenova.com
Stephen Arpie  <b>Present</b>	Absolute Standards, Inc.	<a href="mailto:stephenarpie@mac.com">stephenarpie@mac.com</a>
Dan Dickinson  <b>Present</b>	New York, DOH	<a href="mailto:dmd15@health.state.ny.us">dmd15@health.state.ny.us</a>
Stacey Fry  <b>Present</b>	E.S. BABCOCK & Sons, Inc.	<a href="mailto:sfry@babcocklabs.com">sfry@babcocklabs.com</a>
Joe Pardue  <b>Present</b>	Pro2Serve, Inc.	423-337-3121 <a href="mailto:joe_pardue@charter.net">joe_pardue@charter.net</a>
Dr. Andy Valkenburg  <b>Absent</b>	Energy Laboratories, Inc.	<a href="mailto:avalkenburg@energylab.com">avalkenburg@energylab.com</a> 406-869-6254
Ilona Taunton, Program Administrator <b>Present</b>	TNI	<a href="mailto:Ilona.taunton@nelac-institute.org">Ilona.taunton@nelac-institute.org</a> 828-712-9242

**Attachment B**

**Action Items – Chemistry FoPT Subcommittee**

	<b>Action Item</b>	<b>Who</b>	<b>Expected Completion</b>	<b>Actual Completion</b>
102	Data work-up when it comes in for analyte additions.	Carl	tbd	In Progress
110	Update NPW and DW FoPT tables and send back to PTPEC.	Carl	6/16/14	Complete
111	Receive info on Class 1 Ozone Exemption from Joe M. and forward to Michella.	Carl	6/16/14	
112	Send copies of plots with cd coefficients.	Carl	6/30/14	

**Attachment C**

**Backburner / Reminders – Chemistry FoPT Subcommittee**

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

Attachment D  
Email Request from Maria Friedman

Hi Carl,

First of all, thank you and the rest of your subcommittee members for the great efforts put forth in the subject recommendations. In today's (5-15-2014) PTPEC teleconference, we discussed the recommendations and decided that before we formalize our votes, we would like to request corrections to the NPW FoPT and DW FoPT Tables, as follows. Therefore, I would like to also request that these items be added as topics of discussion in your subcommittee's upcoming call on 5-20-2014:

NPW FoPT Table

- 1) Add the three proposed analytes (DBCP, EDB, and 1,2,3-TCPa) to the table's existing category called "Volatile Halocarbons." Append footnote 11 to each of these three analytes. Leave one line space after the last analyte (Vinyl chloride) in category "Volatile Hydrocarbons" before adding the new three analytes. Per the PTPEC members in the call, doing it this way will be consistent with how similar additions (of low-level concentration analytes) were added to the DW FoPT Table.
- 2) Remove the "LL" designation in the analyte codes. Footnote 11 on each analyte will explain the low-level designation.
- 3) Replace footnote 12 with footnote 11 that is appended to existing category "Low Level Analytes." This was an error that we noticed while we in the committee were examining your subcommittee's proposed analyte additions.

DW FoPT

- 1) Create new footnote with the same (or similar) verbiage as footnote 11 above (as in the NPW FoPT Table) that will be appended to the same analytes (DBCP, EDB, and 1,2,3-TCPa) under existing category "Volatile Organic Compounds (VOCs)" in the DW FoPT Table. Again, the committee members deemed it is important for consistency.
- 2) As a reminder, please also note that there is pending update to do for CN name and code, and related footnote to CN in the DW FoPT Table.

Please provide an update after your meeting. I would like to get these items voted on, if possible, via e-mail and prior to the PTPEC's next teleconference on June 19th.

Great job! Thanks again!

Maria Friedman  
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(949) 260-3201 - office (direct line)

