

**TNI Chemistry FoPT Subcommittee  
Meeting Summary  
October 21, 2014**

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on October 21, 2014 at 12:07 ET. Attendance is recorded in Attachment A. There were 6 members on the call.

2. E-mail from Maria – Chair of PTPEC

Maria sent the following email to the subcommittee on October 13<sup>th</sup>:

*Hi Carl,*

*Based on discussions on the PTPEC teleconference of 9-18-2014, I would like to request the Chemistry FoPT Subcommittee to do the following:*

*Review the DW FoPT Table footnotes and determine if there are any inconsistencies between those footnotes and the requirements contained in the "National Standards for Water Proficiency Testing Studies Criteria Document," issued by US EPA on January 31, 2001 under document number 600/R-00/082 (attached). Please prepare a report to the PTPEC summarizing any inconsistencies. If any inconsistencies are found, provide recommendations to the PTPEC on what changes, if any, should be made to the DW FoPT Table footnotes to resolve those inconsistencies.*

*Attached also please find the latest draft version of the DW FoPT. Note that the criteria document was also e-mailed to the entire PTPEC members on 9-18-2014.*

*Thank you.*

*Attachments: EPA Criteria Document, DW FoPT Table*

Carl and Jeff spoke earlier and were concerned by the request – acceptance criteria have been improved compared to the historical EPA data and thus there are numerous differences. Reporting structure is different. They can confirm that the footnotes are consistent with the formulation criteria and footnotes in the Criteria document.

Jeff was trying to understand the reason for the request. Ilona offered to forward the portion of the PTPEC minutes that is relevant to this discussion.

Carl will draft a response to Maria and share it with the subcommittee before sending it to Maria.

### 3. SCM FoPT Table

#### Aluminum

The study concentration was 2630 - 26300 mg/Kg. The PDF is dated 9-17-14. The current concentration limits are 1000 – 25000 mg/Kg. All SOP criteria was met except for Mean R<sup>2</sup> Eval > 0.9. It did not pass criteria for fixed limits. There were some outliers removed. It barely passes SOP correlation coefficient SOP Criteria. Using the study mean and new cd coefficients would be an improvement over the current table.

Andy commented his lab limits are 56-147 and 50-131. They are hitting these numbers fairly consistently. Jeff noted that Aluminum is one of the elements that shows a big difference between hot plate and microwave digestions. He suggests wider limits. Dan thinks the lower limit should be raised from 1000 to 2500 mg/Kg. None of the data is down to 1000 mg/Kg and the background may be too high.

A motion was made by Dan to change the concentration limit to 2500-25000 mg/Kg for Aluminum on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF file dated 9-17-14. The motion was seconded by Joe P. and passed unanimously.

#### Hexavalent Chromium

The study concentration was 65 - 275 mg/Kg. The PDF is dated 5-1-14. The current concentration limits are 40 – 300 mg/Kg. All SOP criteria was not met for Mean R<sup>2</sup> Eval > 0.9 and Stdev R<sup>2</sup> Eval > 0.75. It did not pass criteria for fixed limits.

Carl would prefer to see a 10 fold change in concentration. This analyte did not work well. Despite eliminating outliers, there were issues with this element meeting the SOP criteria. Carl recommends keeping the limits as they are or using study mean +/- 3 standard deviations.

Jeff noted that this analysis is very dependent on the solid being used. He does not agree with the removal of all the outliers in the current evaluation and would prefer that the current limits be maintained.

Most labs do a water leach style prep instead of using prep method 3060. Andy, Stacey and Jeff agreed. Andy emphasized that PT Providers are not maintaining prep methods used by the labs for analysis.

A motion was made by Jeff to maintain the current limits on the FoPT table for Hexavalent Chromium. The motion was seconded by Andy and passed unanimously.

### Ignitability/Flash Point

The study range was 106-190 degrees F. The PDF is dated 10-1-14. The current concentration limits are 100 – 200 degrees F. All SOP criteria was not met for Mean  $R^2$  Eval  $> 0.9$  and Stdev  $R^2$  Eval  $> 0.75$ . It did not pass criteria for fixed limits.

Dan commented that the d coefficient when multiplied by 3 is 16 and the current fixed limit is 17 degrees F.

The PT Providers on the call discussed how the assigned values are determined. They are handling it similarly. Closed cup value.

Andy noted that his control limits are stated in percent recovery: 97-102%. He also noted that the limits being discussed are wider than the method control limits. Andy noted that some labs may not be looking at barometric pressure.

The upper 3 flashpoints at the top of the table were outliers because of an insufficient number of participants.

A motion was made by Andy to leave the concentration limit of 100-200 degrees F for Ignitability on the SCM FoPT accreditation table using fixed limits based the new d coefficient as presented on the PDF file dated 10-1-14. The new tabulation on the FoPT table would read Fixed +/- 16 degrees F. The motion was seconded by Jeff and passed unanimously.

### Soil pH / Corrosivity

The study range was 3.51-10.3 SU. The PDF is dated 10-1-14. The current concentration limits are 2-12 SU. All SOP criteria was not met for Mean  $R^2$  Eval  $> 0.9$  and Stdev  $R^2$  Eval  $> 0.75$ . It did not pass criteria for fixed limits.

Carl would like to change the name to Soil pH (Corrosivity) instead of Corrosivity (Soil pH). This is based on the regulatory definition of Corrosivity.

A motion was made by Jeff to leave the concentration limit of 2-12 SU for Soil pH (Corrosivity) on the SCM FoPT accreditation table and use fixed limits +/- 0.66 SU based on the new data presented in the PDF dated 10-1-14. The motion was seconded by Joe P.

Discussion:

Carl confirmed no one had a problem adding a second significant figure.

The motion passed unanimously.

Carl will update the SCM Evaluation Excel file and send it to all committee members.

Carl reviewed what will be coming up next. Hexane extractable Oil and Grease – no one is using IR anymore. Carl will provide information for Oil and Grease and TPH. TPH will be an additional PT to the table. It was questioned whether this needs to go through the analyte addition process. A decision was made to provide the data and then let the PTPEC decide if it needs to be sponsored to be added. Carl thought the data for TPH was developed before the SOP and so it would not need to follow the current SOP and could be added to the table.

Jeff asked that when Carl and Dan review Toxaphene, they look at it very carefully because it is currently tabulated as mean +/- three standard deviations. This sparked a conversation about using current data to determine limits. The data currently being used to establish limits was collected before 2009. Dan asked if data could be requested from PT Providers from 2009 to present for Pesticides and PAHs. Carl will request it and he will ask for it in a specific format that Jeff will provide. This process often takes 3-5 months. Using new data allows the subcommittee to benefit from improved technologies over the last 5 years. The subcommittee compromised and decided to request new data for the PAHs while they go ahead and use the data they have for Pesticides because these have remained consistent.

#### 4. Action Items

See action item table in attachments.

#### 5. New Business

- None.

#### 6. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee has been scheduled for November 4, 2014.

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

The call was ended at 1:17pm EST. Motion – Andy Second - Joe P. Unanimously approved.

## Attachment A

### Participants TNI Chemistry FoPT Subcommittee

| Members   | Affiliation                    | Contact Information  |
|---|--------------------------------|--|
| Carl Kircher,<br>Chair<br><b>Present</b>                  | Florida DOH                    | <a href="mailto:carl_kircher@doh.state.fl.us">carl_kircher@doh.state.fl.us</a>                           |
| Joe Morotti<br><br><b>Absent</b>                          | Sigma-Aldrich RTC              | Joe.morotti@sial.com   |
| Melanie Ollila<br><br><b>Absent</b>                       | Pace Analytical Services, Inc. | MOllila@pacelabs.com   |
| Jeff Lowry<br><br><b>Present</b>                          | Phenova                        | JeffL@phenova.com  |
| Stephen Arpie<br><br><b>Absent</b>                        | Absolute Standards, Inc.       | <a href="mailto:stephenarpie@mac.com">stephenarpie@mac.com</a>   |
| Dan Dickinson<br><br><b>Present</b>                       | New York, DOH                  | daniel.dickinson@health.ny.gov   |
| Stacey Fry<br><br><b>Present</b>                          | E.S. BABCOCK & Sons,<br>Inc.   | <a href="mailto:sfry@babcocklabs.com">sfry@babcocklabs.com</a>   |
| Joe Pardue<br><br><b>Present</b>                          | Pro2Serve, Inc.                | 423-337-3121<br>joe_pardue@charter.net   |
| Dr. Andy Valkenburg<br><br><b>Present</b>                 | Energy Laboratories, Inc.      | avalkenburg@energylab.com<br>406-869-6254  |
| Ilona Taunton,<br>Program Administrator<br><b>Present</b> | TNI                            | <a href="mailto:ilona.taunton@nelac-institute.org">ilona.taunton@nelac-institute.org</a><br>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> |
|-----|--|------------|----------------------------|--------------------------|
| 111 | Receive info on Class 1 Ozone Exemption from Joe M. and forward to Michella.   | Carl       | 6/16/14                    |                          |
| 113 | Send updated Excel Summary table to subcommittee members.  | Carl       | 10/20/14                   | Complete                 |
| 114 | Respond to Maria's request about footnote comparisons to the EPA Criteria Document and send to subcommittee for review before sending. | Carl       | 10/28/14                   |                          |
| 115 | Update the SCM Excel table and distribute to Subcommittee.   | Carl       | 10/28/14                   |                          |
|     |  |            |                            |                          |
|     |  |            |                            |                          |
|     |  |            |                            |                          |

**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 |  |                          |                 |
|    |  |                          |                 |