

**TNI Chemistry FoPT Subcommittee
Meeting Summary
December 16, 2014**

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on December 16, 2014 at 12:18 ET. Attendance is recorded in Attachment A. There were 6 members on the call.

There was no meeting on December 2, 2014.

Initially there were not enough members on the call to review analytes, so the subcommittee decided to review the minutes and complaints from the PTPEC. Later another member called in so analytes could be reviewed. He also approved the minutes.

The committee reviewed the November 18, 2014 minutes. Stephen made a motion to approve the minutes. The motion was seconded by Stacey and unanimously approved.

2. Complaints

UV-254

Ilona noted that she received a complaint that will be discussed at the PTPEC meeting on Thursday. The failure rate for UV-254 was too high and complainant questioned the limits.

According to Carl, the last time the table was updated was 2010, so there have not been any recent changes to the table. It was last evaluated Nov 17, 2009. The effective date of the table was 03/01/2011. Prior to this table, there was no PT for UV-254. This was an addition. Carl plans to be on the PTPEC call and will share this information.

TDS and TSS

Maria asked for an update to a request she previously sent regarding a complaint:

Hi Carl,

I would like to follow-up on question 2 (re. re-review or re-evaluation of the acceptance criteria for TDS and TSS) in the attached e-mail. I do not remember receiving a response for question 2, at this time. Please provide an update.

Carl responded to Maria with:

Dear Maria,

These comments will reflect one person's educated opinion and does not reflect the Chem FoPT Subcommittee as a whole.

The current quality system for the PTPEC appears to suggest that "question 2" now falls under the purview of the "FoPT Table Management SOP." The effective date on the version that I have is 11/21/13. If any complaints on TDS and TSS were received after that time, the complainant needs to petition the PTPEC and get a NELAP AB sponsor AND SUBMIT PT DATA supporting the proposed revision to the FoPT Table(s). This request falls under the "Modification" option for this SOP. I am sorry if I am misinterpreting the SOP, but that is how it appears to read.

The available PT data we have for the former DW and NPW FoPT evaluations were in 2006-2010. Getting PT summary data since that time appears to be more difficult as PT Providers and PTPA's seem to be more stringent as to confidentiality issues and dealing with "ownerships" of the respective PT data. How is the "PTPA Database" subcommittee, which the PTPEC has been working on, going to address this problem? Getting PT data has been a part of the TNI Board of Directors strategic planning points from the last Milwaukee meeting. What is being done about this point?

From my personal knowledge, getting summary PT data that is segregated according to how it is packaged (Minerals ampule versus Hardness Ampule versus Residues ampule) and by matrix may be next to impossible. Even if it is possible, there will be no guarantee that there will a satisfactory number of laboratory participants in all matrix types for all PT ampule options and for ALL PT Providers for the statistical analysis to be meaningful.

As for technical merit, the Chem FoPT Subcommittee gave you our best recommendations for NPW TDS, TSS, and TS (however named) earlier. However, because of some "complaint," we relented and reverted the TSS acceptance criteria in NPW back to the previous regression equations. In retrospect, I think that was a mistake. If I had it to do over again, I would keep the acceptance criteria model that we gave you earlier ($a=1$, $b=c=0$, and $d=\text{fixed limit}$) since most of the variance was due to residue weighing variances on the balance and was largely independent of Residue concentration in the PT. If you ask me to revisit this again, that will be my recommendation to the Subcommittee PLUS changing the DW FoPT for TDS and the NPW FoPT for Volatile Residue to that same model. NPW Settleable Residue can remain with the regression equations as posted. I have the 2006-2010 data in both WS and WP to back all my statements up. As I look back at that time around 2010, it appears that the Subcommittee would have violated our acceptance criteria SOP in recommending regression equations (a,b,c,d) for TDS, TSS, and TS (and DID violate the SOP in the case of TVS). The correlation coefficients of Std. Dev. Vs. Assigned Value r -squared are WELL BELOW the SOP acceptance criteria of 0.75 for each Residue.

By the way, if "recent PT data" is a major issue, all regression equations, models, and other considerations based on the US EPA Criteria Document (issued in 2001?) should now be discounted and ignored.

Please reconfirm which FoPTs (DW or NPW, and TDS, TSS, TS, TVS, and SolSet) that you want the Subcommittee to re-examine.

I am sorry that I cannot respond to question 2 at this time, based on recent PT data. I will try to explain all this to the PTPEC at the next teleconference if you want to make this an agenda item.

He asked subcommittee members to review his note back to Maria and provide comments directly to him.

3. SCM FoPTs

Carl distributed analytes for consideration today and sent an updated Excel Summary table on November 14, 2014.

Beta - BHC

The study concentration was 5.74 - 391 mg/Kg. The PDF is dated 11-14-14. The current concentration limits are 50 – 500 mg/Kg. It did not pass criteria for fixed limits. It passed the Stdev R² Eval > 0.75.

Both Dan and Carl's graphs were distributed. Carl would recommend keeping the current regression equations and concentrations. Dan recommends that the committee take Carl's coefficients. His analysis produces a much lower standard deviation.

Andy noted that his lab statistical limits are 56-118% with an average recovery of 87%. Stacey's statistical limits are 50-100%.

A motion was made by Dan to leave the concentration limit as 50-500 mg/Kg for beta-BHC on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF file presented by Carl dated 11-14-14. The motion was seconded by Andy and passed unanimously.

Joe added into the conference call.

Delta-BHC

The study concentration was 8.02 - 339 mg/Kg. The PDF is dated 11-14-14. The current concentration limits are 50 – 500 mg/Kg. It did not pass criteria for fixed limits. It passed the Stdev R² Eval > 0.75.

Andy noted that his lab statistical limits are 47-144% with an average recovery of 78%. Stacey's average recovery is 60% and her statistical limits are 40-115%.

Andy commented that below 100 mg/Kg, the acceptance criteria gets looser.

A motion was made by Dan to leave the concentration limit as 50-500 mg/Kg for delta-BHC on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF file presented by Carl dated 11-14-14. The motion was seconded by Andy and passed unanimously.

Lindane (gamma-BHC)

The study concentration was 8- 387 mg/Kg. The PDF is dated 11-14-14. The current concentration limits are 50 – 500 mg/Kg. It did pass criteria for fixed limits at +/- 70.2%. It passed the Stdev R² Eval > 0.75. This is a much better behaving analyte.

Andy noted that his lab statistical limits are 54-126%. The average recovery is 77%. Looking at the last two years, the statistical limits are 52-103%. Stacey's labs limits are 35-113% and her average recovery is 69%.

The current limits will cause smaller standard deviations above 120, and Carl's will cause smaller standard deviations below 120.

A motion was made by Andy to leave the current limits for Lindane as they are. The motion was seconded by Stephen and passed unanimously.

4,4'-DDD

The study concentration was 17.1 - 380 mg/Kg. The PDF is dated 12-5-14. The current concentration limits are 50 – 500 mg/Kg. It did not pass criteria for fixed limits. It passed the Stdev R² Eval > 0.75.

Andy noted that his lab statistical limits are 66-141% with an average recovery of 89%. Stacey's average recovery is 86% and her statistical limits are 67-122%.

Carl recommends using the current regression equation. The new data is wider. Andy noted that his lab does not have problems failing pesticides.

A motion was made by Stephen to leave the current limits in place for 4,4'-DDD. The motion was seconded by Stacey and passed unanimously.

4,4'-DDE

The study concentration was 6.76 - 404 mg/Kg. The PDF is dated 12-5-14. The current concentration limits are 50 – 500 mg/Kg. It did not pass criteria for fixed limits. It passed the Stdev R² Eval > 0.75.

There were a number of data outliers when this was worked up. Carl prefers the current picture, but could also go with the new.

Andy noted that his lab statistical limits are 63-140% with an average recovery of 83%. Stacey's average recovery is 80% and her statistical limits are 70-120%.

A motion was made by Dan to leave the limits for 4,4''-DDE as they are on the current table. The motion was seconded by Andy and passed unanimously.

4,4'-DDT

The study concentration was 18.9- 309 mg/Kg. The PDF is dated 12-5-14. The current concentration limits are 50 – 500 mg/Kg. It did pass criteria for fixed limits at 70.6%. It passed the Stdev R^2 Eval > 0.75.

Andy noted that his lab statistical limits are 61-117% with an average recovery of 88%. Stacey's average recovery is 88% and her statistical limits are 68-130%.

Carl would prefer to keep the current regression equation. There would not be much change moving to the new data.

A motion was made by Andy to leave the limits for 4,4'-DDT on the SCM FoPT accreditation table as they are. The motion was seconded by Stephen and passed unanimously.

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 January 13, 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 (after 12:40pm Eastern) | 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 Absent | 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 | |
| 118 | Send DW FoPT table response to Maria/PTPEC. | Carl | 11/19/14 | Complete |
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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 | | | |
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