TNI Chemistry FoPT Subcommittee
Meeting Summary
November 24, 2015

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on November 24, 2015 at 12:05 ET. Attendance is recorded in Attachment A. There were 6 members on the call.

Minutes will be reviewed and voted on at the next meeting.

2. Analyte Request Application (ARA)

Carl submitted an application to the PTPEC to add mid-level cis-1,3-Dichloropropene and trans-1,3-Dichloropropene. He also sent PDFs to the subcommittee to review and approve. The data is from the Florida PT database and includes data from three PT Providers (past 4 years). He reviewed data from 4 providers, but one never spiked these analytes. Dan provided some comments by email:

I limited my analysis to the data that was originally supplied. So, by comparison, I think the newer data is helpful. The main caveats will be that we may not have all PT Providers represented and we don't know the number of participants in these newer studies.

For the trans isomer, I wasn't able to eliminate the convergence on the 'a & b' equation in my data set. Nor was I able to get a satisfactory r^2 for the 'c' coefficient. I could eliminate the convergence on the 'a & b' equation but at the further sacrifice of the r^2. on the 'c' coefficient. I could have one or the other pass, but not both at the same time. Your new data eliminated these problems. The main concern I have with your analysis of the trans isomer is that it fails the fixed limit test on the 'b' coefficient. Also, I think 40% may be too liberal for your data set. Maybe, 35% would be better? Otherwise, 40% is about right for my more limited data set.

For the cis isomer, neither of us could eliminate the convergence on the 'a & b' equation . Although the magnitude on mine is not as large. Again, the main concern is the fixed limit test failure. For the cis isomer, both of your equations fail based on the 5% rule on the 'b' and 'd' coefficients. With this one, I also think that 40% is too liberal. I think 30% is a better estimate for both of our data sets.

For both of these isomers, to use fixed limits would require a documented exception to the SOP. I think we can use the newer data because it does help with the convergence and fit issues. But it may be too much of a stretch to suggest the use of fixed limits. The newer data, in both cases, adds to the (dare I say) "heteroscedasticity" of the data sets. Safer to recommend LREs for these.

The application has been forwarded to the NELAP AC by the PTPEC. He does not expect any issues, so he would like to go ahead to review the data.

Mid-level cis-1,3-Dichloropropene

The regression equation easily meets SOP criteria for correlation coefficient for mean verses assigned value (>0.9) and standard deviation verses assigned value (>0.75). Fixed limits were recommended for the low level and Carl initially recommended using fixed limits for the mid-level, but Dan made different recommendations (above). Carl thinks fixed limits of +/- 40% should be considered since a majority of similar analytes were recommended for fixed limits. The typical concentration range for similar analytes is 1000 – 10,000 ug/Kg. The available data supports 2000 – 10000 ug/Kg. This was an experimental analyte. (PDF dated 10/30/15.)

Andy commented that during the last PTPEC meeting there was a concern that the data only included Florida labs and more data should be considered in the review. Carl noted that he does not think he can receive more data because he does not know the current process for receiving more data from PT Providers. Ilona noted that Maria was planning to request this data after the NELAP AC approves the ARA. Carl noted that the data being provided today does not give information about number of participants, so this could be a vulnerability of the data.

Andy is concerned that the limits are considerably tighter after removal of the outliers. There are numerous points off the line, so he wouldn't be comfortable going any tighter than +/- 40%.

Dan questioned voting on either cis or trans-1,3-Dichloropropene today if the PTPEC has not sent the request to the subcommittee. Ilona noted Maria is planning to request more data if the NELAP AC approves the ARA and this data will need to be considered by the subcommittee before final limits can be determined for these analytes. Carl is concerned that more data will not be obtained.

Ilona noted that if these analytes are voted on today, they cannot be added to the SCM FoPT table without notifying the PTPEC. The PTPEC will follow the ARA process for these analytes and will not consider these analytes for inclusion on the table until the process is complete. Carl prefers to include them on the table and let the PTPEC decide to have them removed if it is not appropriate.

Dan noted that his review of the data showed that the newer data was better and he would like to see more data as suggested by the PTPEC. Carl commented that some PT Providers don't spike it. Stephen noted that the analyte can be received as a pure isomer or a combination. He thinks this is relevant and it is important to be sure the PT Provider data is for the same material.

After review of both graphs for cis and trans-1,3-Dichloropropene , Andy made a motion to establish a concentration limit of 2000-10000 ug/Kg for both cis and trans-1,3-

Dichloropropene on the SCM FoPT accreditation table and fixed limits of +/- 40%. The addition of these analytes to the FoPT table would be contingent on the outcome of the NELAP AC review/approval of the ARA. The motion was seconded by Stephen and unanimously approved.

Carl will add these to the FoPT table and highlight this to the PTPEC.

Dan noted that NY has not spiked these compounds at mid-level in the past.

3. Review of SCM FoPT Table

Dan provided comments on the table distributed by Carl and Carl provided the following responses:

(a) I have confirmed Dan's comment that the low-level 1,2,3-TCPa should be AV +/- 50% fixed. I have corrected that on the SCM FoPT Table.

(b) Dan's comment about Fluoranthene low-level is more complicated. Apparently the minutes file from the March 10, 2015 teleconference was corrupted, and we had to re-motion and re-approve the 3/10/15 business on September 1, 2015. To complicate this further, my notes indicate that it was Indeno(1,2,3-cd)pyrene that was recommended with the regressions prior to outlier removal rather than Fluoranthene. I have therefore attached the PDFs for both analytes for Subcommittee re-review. I want us to review these files and re-evaluate low-level Fluoranthene and Indeno(1,2,3-cd)pyrene at our next teleconference.

(c) The red fonts and green fonts on the huge Excel file have been in place since the SCM PT data was first reviewed, with the Experimental FoPTs first, back in year 2010. We have only now completed review of all the FoPT analytes. I think it's okay to keep these as currently colored on the huge Excel file. If explanation is needed to the PTPEC or whomever else, I can provide it. FYI, I was not in charge of making changes to the FoPT Table until Jeff Lowry "passed the baton" to me in year-2013.

(d) We can consider abbreviating the PCB in Oil into one row on the SCM FoPT Table, but I am not in favor myself of this consolidation. My opinion is that the FoPTs are analyte-specific, as defined in the TNI Standards, so a consolidation would be confusing the ABs and labs as to what the FoPTs are. Maybe there is another PTPEC FoPT Table Subcommittee that is or should be taking up that question?

(e) To refresh our memories, our Subcommittee did review and approve SCM Organophosphorus Pesticides and Low-Level Nitroaromatics and Nitramines (explosives). Since Dan has brought up this point, and Jeff Lowry brought it up with me privately in May 7 this year, should we add these FoPTs to the SCM Table? We should be aware that there were no approvable corresponding NPW FoPTs for these analytes, due to insufficient data (even per our SOP), so these FoPTs would be for SCM only. Also, many SCM studies had at least 10 participating labs but few had over 20 participants to satisfy the

2003 NELAC Standards in vogue at the time. The SCM PT data, incidentally, came from only one PT Provider. Thus, I would like to entertain any comments you have about these SCM FoPTs. However, given our current procedures, we may need a Table Management petition to add SCM OP Pesticides and Explosives at this time.

Based on the above:

a) OK

b) Carl recommended re-looking at the data he attached to the agenda and re-voting.

Fluoranthene

The study concentration was 46.6 - 657 ug/Kg. The PDF is dated 2-3-15. The current concentration limits are 100 – 1000 ug/Kg. It did not pass criteria for fixed limits. It passed the Stdev R^2 Eval > 0.75.

Andy stated that the regression equation after outlier removal is consistent with what happens in his lab. Andy reviewed his lab data and shows statistical limits of 59-115 %.

Andy made a motion that the limits be updated to be consistent with the notes provided by Carl Kircher above in item b). For Fluoranthene, use the concentration limit of 50-500 ug/Kg on the SCM FoPT table and use the study mean and the new cd coefficients as presented on the PDF file presented by Carl and dated 2-9-15 (after outlier removal). The motion was seconded by Joe Pardue and unanimously approved.

Indeno(1,2,3-cd)pyrene

The study concentration was 43.8 - 317 ug/Kg. The PDF is dated 2-24-15. The current concentration limits are 50 – 500 ug/Kg. It did not pass criteria for fixed limits. It passed the Stdev R^2 Eval > 0.75.

Andy reviewed his lab data and shows statistical limits of 52-114%.

Carl wanted to point out that if the subcommittee looks at page 5 of the PDF, prior to outlier removal means all the data points where there wasn't a lot of participants where it says raw – those were removed. The regression after the outlier removal reflects the raws along with the two and level three outliers were removed.

Dan thinks it is only slightly worse with the outliers and he prefers to go with the SOP procedure.

A motion was made by Dan for Indeno(1,2,3-cd)pyrene to maintain a concentration limit of 50-500 ug/Kg on the SCM FoPT table and use the study mean and the new cd coefficients as presented on the PDF file presented by Carl and dated 2-9-15, after outlier

removal. This is consistent with what was in the minutes on 3-10-15. The motion was seconded by Joe Pardue and unanimously approved.

c) Dan reviewed Carl's response. He thinks the colors are confusing and he had trouble matching things up. Carl said the colors on the SCM FoPT Table have nothing to do with the colors on the Excel spreadsheet summary. Dan asked who will look at the Excel spreadsheet and Carl answered that it will be provided to the PTPEC. It will be part of the archive too.

   Dan suggested that there should be a table tracking the negative decisions too – not just the positive. The negatives are captured in the minutes.

   It was decided to leave the table as it currently stands. Dan was fine with this.

d) Andy has always used separate PTs for PCBs in Oil. There was discussion about laboratories analyzing PCB samples for Aroclors 1262 and 1268, but it was decided that these Aroclors should not be considered at this time since they have never been spiked into a PT sample. After further discussion it was decided to leave each of the seven Aroclors listed individually on the SCM FoPT Table as presented.

e) Carl noted that the data back in 2010 was from only one PT Provider. Carl raised the issue about whether it is OK to have compounds on the SCM table that are not on the NPW table – for example, Malathion.

   Andy commented that there are numerous analytes they run that are not on the table. He would like to see more experimental analytes put back on the FoPT tables.

   Carl will look through his current resources and see if there are more analytes he should submit an ARA for.

4. Action Items

   See action item table in attachments.

5. New Business

   - Carl will reach out to Jeff Lowry to see what his intentions are to continue to work with the committee.

6. Next Meeting

   The next meeting of the Chemistry FoPT Subcommittee has been scheduled for December 15, 2015.

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

The call was ended at 1:34 pm EST. (Motion: Andy Second: Dan Unanimously approved.)

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 **Absent**	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 – 12:15.**	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
119	Use new PCB in Oil regression equation on historical data to confirm there is no substantial increase in failure rates.	Joe, Dan, Stephen, Jeff	2-26-15	Complete
120	Look at Jeff's comments on the 5-19-15 meeting in the next few weeks: For several of the analytes the committee set acceptance limits at +/-25% of the mean of the study. PT Providers have to verify the spiked matrix to half of that – 12.5%. This gets tougher in soil matrices. Does this make sense?	All	TBD	
121	Update the Excel Summary Table and SCM FoPT Table. Distribute for committee review.	Carl	10/27/15	
122	Review current resources and see if there are more analytes that should be added to the table. Submit an ARA for all analytes that can be added.	Carl	TBD	
123	Update FoPT table and Excel spreadsheet with information discussed on 11/24/15 call.	Carl	11/31/15	
124	Check in with Jeff Lowry. Status.	Carl	12/15/15	
125				

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 6-2-15	