

**TNI Chemistry FoPT Subcommittee  
Meeting Summary  
January 27, 2015**

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on January 27, 2015 at 12:08 ET. Attendance is recorded in Attachment A. There were 5 members on the call.

The committee will review the January 20, 2015 minutes at the next meeting. Carl continues to maintain the updated concentrations and limits on the SCM Excel Summary table for use at each meeting.

2. SCM FoPTs

Carl distributed analytes for consideration today on 12/15/14 and 1/13/15.

Methoxychlor

The study concentration was 13.1-378 ug/Kg. The PDF is dated 12-15-14. The current concentration limits are 50 – 500 ug/Kg. It did not pass criteria for fixed limits. It passed the Stdev R<sup>2</sup> Eval > 0.75.

Carl commented that the new graph does not look as good as the old one.

Andy noted that his lab statistical limits are 61-127% with an average recovery of 94%. Stacey's lab is seeing a recovery of 91% and limits of 67-136% at a spike level of 200 ug/Kg.

A motion was made by Jeff to leave the concentration limit as 50-500 mg/Kg for Methoxychlor on the SCM FoPT accreditation table and leave the current regression in place. The motion was seconded by Andy and passed unanimously.

Chlordane, Technical

The study concentration was 123-676 ug/Kg. The PDF is dated 1-13-15. The current concentration limits are 200 – 1000 ug/Kg. It did pass criteria for fixed limits at 70.7%. It passed the Stdev R<sup>2</sup> Eval > 0.75.

Carl noted that a fixed limit could be set at +/- 70%, but fixed limits have not been set for other similar analytes. The regression equation is an improvement over the current one.

Andy noted that his lab statistical limits are 54-108% with an average recovery of 80%. Stacey's lab does not run this in their normal spike mix.

Carl noted for Toxaphene the concentration recommendation was 200-2000 ug/Kg. Carl asked if the committee wanted to expand the concentration range for Technical Chlordane. Andy noted that his lab's spike concentration was 80 ug/Kg. There was no agreement to expand the range.

A motion was made by Jeff to update the concentration limit to 100-1000 mg/Kg for Chlordane, Technical on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF file presented by Carl dated 1-13-15. The motion was seconded by Andy and passed unanimously.

#### Soil Aroclors – Analyte ID #8880 - 8910

The current concentration limit is 1-50 mg/Kg. There was enough data to put this together. The study concentration was 0.54 - 31 mg/Kg according to the PDF dated 1-13-15. It did not pass criteria for fixed limits. It passed the Stdev  $R^2$  Eval  $> 0.75$ . Last time the data was pooled also. SOP criteria was met.

Carl does not think there is any real difference between keeping the old or going to the new. Jeff pointed out that the new table is actually about 5% wider than the present equation. Dan and Jeff think the current values should be kept.

Andy commented that they usually do only a 1016/1260 mix for their spiking on soils. For the 1016, his laboratory sees an 82% recovery with limits of 56-108%. On 1216 the labs sees 91% recovery and limits of 67-115%. Stacey's lab does the same thing. On 1016 her lab's recovery is 82% and the limits are 48-122%. For 1215 the labs sees 86% recovery and limits of 48-127%.

A motion was made by Dan to leave the concentration and current coefficients for c and d as they are on the current table for Soil Aroclors – Analyte ID #8880-8910. The motion was seconded by Stacey and unanimously approved.

Jeff asked if all the aroclors were represented in the group of 30 or so studies. It is not on the table. Carl looked at another Excel file. He thought there were a lot of 1254 compared to the others. Andy noted that this makes sense because this is what they see. After review of the file, Carl noted he had 2 Aroclor 1016 studies, 5 Aroclor 1221 studies, 4 Aroclor 1232 studies, 4 Aroclor 1242 studies, 3 Aroclor 1248 studies, 7 Aroclor 1254 studies and 3 Aroclor 1260 studies. Jeff would like this to be in the minutes – all Aroclor's were represented.

#### PCBs in Oil

The available Fields of Proficiency testing is somewhat odd. There is an Aroclor 1016/1242, an Aroclor 1254 and an Aroclor 1260. Jeff noted the table separates Aroclor 1016 and 1242. Carl asked why they were put together by EPA back in the day – Jeff noted it was because of packed columns. There is not a problem differentiating with today's capillary columns. Dan pooled all the data for PCBs in Oil.

The current concentration limit for Aroclors 1016, 1242, 1254 and 1260 ranges from 12-17 to 50 mg/Kg. The study concentration was 13 - 54 mg/Kg according to the PDF dated 1-13-15. It did not pass criteria for fixed limits. It passed the Stdev  $R^2$  Eval > 0.75. The SOP criteria was met.

Carl asked the group if they would like to apply the data to all 7 of the Aroclors or just work with what is currently on the table (the 4 mentioned above)?

Dan commented that how the states offer the accreditation should be considered. In NY, PCBs in Oil is only offered collectively – unlike the soils where the Aroclors are listed separately. The method is designed to report a sum. The study participants report only the 4 Aroclors on the table and if they get them correct ... they pass the study. The PT study only includes one Aroclor. They report the one that is there and the other three are ND. The method that reports them as a sum is ASTM D4059. Andy references Method 8082.

Jeff noted most of the analysis is done for power plants. He thought this made it important to distinguish the Aroclors.

Dan noted that the data does not comprise all the Aroclors – there was no data for the other 3. Jeff would like to pool the data for the 4 that are there and then suggest to the PTPEC that they consider having this PT include all 7 in the future.

Andy noted that the 8082 method does not list Aroclor 1262 or 1268. They are also Aroclors that exist. The ASTM method really only talks about the 4 mentioned above. These are the ones that are typically found.

Carl suggested voting in all 7 Aroclors. Jeff asked why someone would want to add the 3 if they are not accrediting for them? To add analytes an AB sponsor is needed. The original Excel file had the other 3 analytes in green – so they were marked as possible additions. Carl thinks what is being done today predates the FoPT table management SOP. Jeff thinks the current procedures should be followed.

Carl asked if the subcommittee thinks it is acceptable for a lab to be accredited for Aroclor 1232 in oil and not run a PT. Or perhaps they should run the Soil PT because this is the only PT available.

Andy noted that in his lab, they do a dilute and shoot with an 82% recovery for Aroclor 1016 with a range of recovery of 56-108%. For Aroclor 1260 is a 91% recovery and a range of 67-115%.

Jeff is good for approving the 4 Aroclors, but would like the PT Providers to look back at old data and see what the failure rates would be with the new equation. He feels secure about 1254 and 1260, but would like to examine 1016 and 1242.

Dan noted that he looked at how the standard deviation and assigned value would plot out for each Arochlor based on Carl's information. He compared it to the pooled data. It is pretty tight. Dan will send this information to everyone.

A motion was made by Dan to change the concentration limit to 10-50 mg/Kg for the new combined Aroclors PCB in Oil (4 Aroclors – 1016, 1242, 1254, and 1260) on the SCM FoPT accreditation table and using the new pooled abcd coefficients as presented on the PDF file dated 1-13-15.

Jeff asked Dan to add a friendly amendment to add that the historical data be viewed using the new regression equation to see if it will work for the four Aroclors. He wants to be sure there is not a substantial increase in rejection rates. Dan was in agreement. This is added to the motion. The acceptance of this new regression equation is pending looking at the failure rates of old data using the new regression equation.

The motion with the friendly amendment was seconded by Jeff. The motion passed unanimously.

Jeff, Dan, Joe and Stephen will be asked by Carl to do the comparison discussed above. This will take a few weeks. Dan noted that he doesn't have any historical data – this is new to his program.

There was some further discussion on different methods used to analyze PCBs in Oil.

### 3. Action Items

See action item table in attachments.

Carl and Ilona will still need to meet to work on the issue with the 7/15/14 minutes.

### 4. New Business

- None.

### 5. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be scheduled for February 24, 2015.

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

The call was adjourned at 1:20 pm EST. (Motion – Andy, Second – Stacey Unanimously approved.)

Attachment A

**Participants**  
**TNI**  
**Chemistry FoPT Subcommittee**

<b>Members</b>	<b>Affiliation</b>	<b>Contact Information</b>
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>Absent</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>Absent</b>	Absolute Standards, Inc.	<a href="mailto:stephenarpie@mac.com">stephenarpie@mac.com</a>
Dan Dickinson <b>Present</b>	New York, DOH	daniel.dickinson@health.ny.gov
Stacey Fry <b>Present</b>	E.S. BABCOCK & Sons, Inc.	<a href="mailto:sfry@babcocklabs.com">sfry@babcocklabs.com</a>
Joe Pardue <b>Absent</b>	Pro2Serve, Inc.	423-337-3121 joe_pardue@charter.net
Dr. Andy Valkenburg <b>Present</b>	Energy Laboratories, Inc.	avalkenburg@energylab.com 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>
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	
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	

**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			