

**TNI Chemistry FoPT Subcommittee**  
**Meeting Summary**  
**May 19, 2015**

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on May 19, 2015 at 12:04 ET. Attendance is recorded in Attachment A. There were 8 members on the call.

There was no meeting on May 5, 2015.

Carl continues to maintain the updated concentrations and limits on the SCM Excel Summary table for use at each meeting.

2. SCM FoPTs

Dimethylphthalate

The study concentration was 694 - 9030 ug/Kg. The PDF is dated 2-26-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 56.9%. It passed the Stdev R<sup>2</sup> Eval > 0.75.

There were a few data points that did not have 10 or more laboratories involved in the study. The SOP was applied. There were still lots of data points left. It is a data improvement to recommend the new equation. The lower concentration range is improved.

Jeff asked why there were two different ranges? 1500 – 15000 ug/Kg and 1000 – 12000 ug/Kg. No one had an answer. Carl thought the phthalates could be changed to 1000-12000 ug/Kg.

A motion was made by Jeff to change the concentration limit to 1000-12000 ug/Kg for Dimethylphthalate on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-26-15. The motion was seconded by Joe M. and passed unanimously.

Diethylphthalate

The study concentration was 268- 10046 ug/Kg. The PDF is dated 2-26-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 58.6%. It passed the Stdev R<sup>2</sup> Eval > 0.75.

The regression is an improvement over the present regression. The concentration could be lowered for this analyte too. Jeff commented it looks a lot like the previous analyte.

A motion was made by Jeff to change the concentration limit to 1000-12000 ug/Kg for Diethylphthalate on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-26-15. The motion was seconded by Stacey and passed unanimously.

#### Di-n-butylphthalate

The study concentration was 17.1- 10200 ug/Kg. The PDF is dated 2-26-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 67.0%. It passed the Stdev  $R^2$  Eval > 0.75.

There was one study removed that was put back in because its removal caused a number of issues. There isn't any improvement in the equation. Carl would recommend keeping the current equation so the evaluation does not need to be explained. Jeff would prefer the new equation because he would like to lower the concentration.

The d value is larger in the present equation.

Stephen joined the call.

A motion was made by Jeff to change the concentration limit to 1000-12000 ug/Kg for Di-n-butylphthalate on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-26-15. The motion was seconded by Stephen and passed unanimously.

#### Butylbenzylphthalate

The study concentration was 48.1 - 10000 ug/Kg. The PDF is dated 2-26-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 62.9%. It passed the Stdev  $R^2$  Eval > 0.75.

The new regression is an improvement and the lower concentration is no problem. It behaves similarly to the phthalates considered above.

Stacey's current lab control limits for this analyte are 63-107%. Average recovery is 79.5%. Andy's limits are 59-124%.

A motion was made by Jeff to change the concentration limit to 1000-12000 ug/Kg for Butylbenzylphthalate on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the Carl PDF files dated 2-26-15. The motion was seconded by Stephen and passed unanimously.

### Bis(2-Ethylhexyl)phthalate

The study concentration was 24.8- 6940 ug/Kg. The PDF is dated 2-26-15. The current concentration limits are 1500 – 15000 ug/Kg. It did not pass criteria for fixed limits. It passed the Stdev R<sup>2</sup> Eval > 0.75.

There are not as many data points for this one as the other phthalates. It was not in the spike as often. The SOP solved the initial convergence problems.

Jeff looked at the old data for the current equation. There was twice as much data and not as many analysis problems. He would prefer to stick with the older one. At 1000 ug/Kg it hits 10%, so the concentration would need to left alone.

A motion was made by Jeff to leave the concentration limit as 1500-15000 ug/Kg for Bis(2-Ethylhexyl)phthalate on the SCM FoPT accreditation table and keep the currently posted coefficients/equation. The motion was seconded by Stephen and passed unanimously.

Andy joined in at 12:39pm.

### Di-n-octylphthalate

The study concentration was 552 - 9960 ug/Kg. The PDF is dated 2-26-15. The current concentration limits are 1500 – 15000 ug/Kg. It did not pass criteria for fixed limits. It passed the Stdev R<sup>2</sup> Eval > 0.75.

The regression is improved and the lower concentration would not be a problem.

Andy noted that his lab statistical limits are 68-108%. The recovery is 88%.

A motion was made by Jeff to change the concentration limit to 1000-12000 ug/Kg for Di-n-octylphthalate on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-26-15. The motion was seconded by Joe P. and passed unanimously.

Jeff commented that Carl recently sent him an update to the SCM Excel Summary Table. He has been looking at it and something has come to his attention. 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. He would like to think about this and then talk about whether the verification at 12.5% can really be done. There are some metals and VOAs involved. The VOAs may not be as big an issue.

Carl noted in soil metals where acceptance limits are around the study mean barium, beryllium, cobalt and copper. There are other metals where new regression equations are also within +/- 25%. Carl agreed that this needs to be looked at closely when the table is complete.

### Bis(2-Chloroethoxy)methane

The study concentration was 210 - 8103 ug/Kg. The PDF is dated 3-6-15. The current concentration limits are 1500 – 15000 ug/Kg. It did not pass criteria for fixed limits. It passed the Stdev R<sup>2</sup> Eval > 0.75.

There is data improvement at the high concentration range. The concentration range could be dropped to 1000 ug/Kg. Andy noted that the new data has points at the lower concentration.

Andy noted that his lab statistical limits are 60-103% with an average recovery of 81%.

A motion was made by Andy to change the concentration limit to 1000-12000 ug/Kg for Bis(2-Chloroethoxy)methane on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 3-6-15. The motion was seconded by Joe P. and passed unanimously.

### Bis(2-Chloroisopropyl)ether

The study concentration was 609 - 5410 ug/Kg. The PDF is dated 3-6-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 75.5%. It passed the Stdev R<sup>2</sup> Eval > 0.75.

The SOP was applied. The results look similar to the previous limits. Jeff does not think the concentration can be lowered when looking at the d coefficient and the data. Andy didn't see this as a problem. It is performing consistently and he thinks it will perform well at lower concentration range too. Jeff is concerned that someone will make the PT at 1000 ug/Kg and get a 30% recovery based on the data he looked at.

Andy noted that his lab statistical limits are 60-90% with an average recovery of 75%.

Andy commented that analyte codes and the naming convention needs to be standardized across all the tables.

A motion was made by Andy to leave the concentration limit as 1500-15000 ug/Kg for Bis(2-Chloroisopropyl)ether on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 3-6-15. The motion was seconded by Jeff.

Discussion: Andy wanted to know what the analyte will be called. Carl will confirm the correct name with Maria and update it as needed. This will be put in the parking lot.

The motion passed unanimously.

Jeff looked at the Analyte Code table online and found that analyte code 5780 no longer exists for Bis(2-Chloroisopropyl)ether. It has been renamed and has a new analyte code 4659. The subcommittee will wait to make changes until directed by the PTPEC.

#### 4-Chlorophenyl-phenylether

The study concentration was 279 - 10700 ug/Kg. The PDF is dated 3-6-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 62.3%. It passed the Stdev R<sup>2</sup> Eval > 0.75.

There were some convergence problems that required re-insertion of some data points. The new equation is not much different. It is also doable to use the lower concentration range. The old data supports going down to 1000 ug/Kg also.

Andy noted that his lab statistical limits are 66-102% with an average recovery of 84%.

A motion was made by Jeff to change the concentration limit to 1000-12000 ug/Kg for 4-Chlorophenyl-phenylether on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 3-6-15. The motion was seconded by Stacey and passed unanimously.

#### 4-Bromophenyl-phenylether

The study concentration was 262 - 9480 ug/Kg. The PDF is dated 3-18-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 58.5%. It passed the Stdev R<sup>2</sup> Eval > 0.75.

The analysis is similar to the analyte above. There is not really any data at the lower concentration range, so it is not recommended to drop the concentration.

Andy noted that his lab statistical limits are 68-104% with an average recovery of 86%.

A motion was made by Jeff to leave the concentration limit as 1500-15000 ug/Kg for 4-Bromophenyl-phenylether on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the Carl PDF files dated 3-18-15. The motion was seconded by Stacey and passed unanimously.

### 3. Action Items

See action item table in attachments.

### 4. New Business

- None.

## 5. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee has been scheduled for June 2, 2015.

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

The call was ended at 1:30 pm EST. (Motion: Stephen Second: Andy 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</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 – Joined 12:24</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>Present</b>	Pro2Serve, Inc.	423-337-3121 joe_pardue@charter.net
Dr. Andy Valkenburg <b>Present – Joined 12:39</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>
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	
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		

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	Confirm correct naming of Bis(2-Chloroisopropyl)ether and update FoPT tables as needed.	5-19-15	