TNI Chemistry FoPT Subcommittee
Meeting Summary
September 15, 2015

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on September 15, 2015 at 12:05 ET. Attendance is recorded in Attachment A. There were 5 members on the call.

There is no record of who made the motion and second for the limits established for 2-Chloronaphthalene during the 6/2/15 meeting. The limits were summarized in the SCM Summary Table, but a record of the motion was not accessible because of phone line problems during the call. The subcommittee reviewed the motion and decision made on 6/2/15. Andy motioned to amend the 6/2/15 meeting minutes with a motion made to approve the motion made on 6/2/15 for 2-Chloronaphthalane. The motion was seconded by Stacey. The motion was unanimously approved. This information will be added to the minutes.

A motion was made by Dan to approve the minutes for 6/2/15 and 9/1/15 as written with the addition of the accepted motion above in the 6/2/15 minutes and the correction of the meeting date in the 9/1/15 minutes. The motion was seconded by Andy and unanimously approved.

Carl noted that the nomenclature change to the NPW and SCM FoPT tables have been approved b the NELAP AC and they have been sent back to the PTPEC for an effective date and posting.

Carl also noted that the NELAP AC has no problem with any of the three analyte petitions to make additions to the FoPT tables. This information has also been sent to the PTPEC.

Joe added in at 12:22pm and voted "For" both motions made above in Section 1.

2. SCM FoPTs

<u>2-Methylphenol (o-Cresol)</u>

The study concentration was 264 - 8190 ug/Kg. The PDF is dated 3-17-15. The current concentration limits are 3000 – 15000 ug/Kg. It did pass criteria for fixed limits at 72.6%. It passed the Stdev R^2 Eval > 0.75.

You start seeing problems at about 2000 ug/Kg when you look at the graph, so concentration should probably stay the same. This is only a semi-quantitative PT at the current concentration range.

Andy noted that his lab statistical limits are 60-104% with an average recovery of 82%. Stacey did not have data for this analyte. The limits on the Excel summary are 47-120%.

A motion was made by Andy to keep the concentration limit at 3000-15000 ug/Kg for 2-Methylpenol 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 3-17-15. The motion was seconded by Joe M. and unanimously approved.

4-Chloro-3-methylphenol

The study concentration was 285- 7720 ug/Kg. The PDF is dated 3-17-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 59.7%. It passed the Stdev R^2 Eval > 0.75.

The present regression equation narrows out at the higher concentrations. Carl would pick the newer regression equation that does not do this. It seems more representative.

Andy noted that his lab statistical limits are 63-107% with an average recovery of 85%. Matrix spike data is also passing within these limits. Stacey's lab statistical limits are 61-108% and the average recovery is 74%. The limits on Carl's table are wider.

A motion was made by Joe M. to leave the concentration limit at 1500 - 15000 ug/Kg for 4-Chloro-3-methylphenol 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 3-17-15. The motion was seconded by Andy and passed unanimously.

Phenol

The study concentration was 1940 - 8820 ug/Kg. The PDF is dated 3-17-15. The current concentration limits are 1500 – 15000 ug/Kg. It did pass criteria for fixed limits at 71.4%. It passed the Stdev R^2 Eval > 0.75.

The present regression equation looks like fixed limits. The new regression shows narrower acceptance limits. Carl would recommend the new regression equation.

Andy noted that his lab statistical limits are 60-104% with an average recovery of 82%. Stacey's lab statistical limits are 21-124% with an average recovery of 63.2%. Carl's table showed limits of 45-120%.

A motion was made by Dan to leave the concentration limit at 1500-15000 ug/Kg for Phenol 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 3-17-15. The motion was seconded by Stacey and passed unanimously.

Pentachlorophenol

The study concentration was 602 - 6808 ug/Kg. The PDF is dated 3-17-15. The current concentration limits are 3000 – 15000 ug/Kg. It did pass criteria for fixed limits at 112.5%. It passed the Stdev R^2 Eval > 0.75.

Andy noted that his lab statistical limits are 56-126% with an average recovery of 91%. Matrix spike data has numerous failures. Dan was curious what the spike level was. Andy said it is about 3000 ug/Kg.

No convergence of the data was seen. It is not a very effective PT. Results are worse than the present regression equation.

Carl recommends maintaining the higher concentration analyte. The committee approved the low concentration at mean +/- 3 standard deviations. Joe M. noted that this is seen at high levels in the west. Andy noted railroad ties are part of the issue.

Joe M. said the standard deviation they see is usually a bit wider than what is in the current table.

Carl and Dan would prefer to keep the current regression. Carl suggested if the subcommittee wanted to make a change, it should be to mean +/- 3 standard deviations.

A motion was made by Dan to leave the concentration limit at 3000-15000 ug/Kg for Phenol on the SCM FoPT accreditation table and keep the current regression equation. The motion was seconded by Stacey and passed unanimously.

2-Nitrophenol

The study concentration was 312 - 9020 ug/Kg. The PDF is dated 3-17-15. The current concentration limits are 3000 – 15000 ug/Kg. It did pass criteria for fixed limits at 75.4%. It passed the Stdev R^2 Eval > 0.75.

There were quite a few outliers after applying the SOP.

Andy's current lab control limits for this analyte are 57-99%. Average recovery is 78%. His matrix spike data is fairly good. Stacey does not have information for this analyte. Carl has 36-120% on the Excel file he inherited.

Andy thinks this analyte is easier than the Pentachlorophenol. The recoveries on the PDFs look better. Carl would recommend the new regression. The new regression equation is a little tighter for the c and d coefficients.

A motion was made by Andy to leave the concentration limit at 3000-15000 ug/Kg for 2-Nitrophenol on the SCM FoPT accreditation table and using the study mean and the new cd

coefficients as presented on the Carl PDF files dated 3-17-15. The motion was seconded by Stacey and passed unanimously.

4-Nitrophenol

The study concentration was 337 - 6810 ug/Kg. The PDF is dated 3-17-15. The current concentration limits are 3000 – 15000 ug/Kg. It did pass criteria for fixed limits at 89.5%. It passed the Stdev R^2 Eval > 0.75.

There is no convergence after the SOP is applied. There is an improvement in the acceptance criteria.

Andy's current lab control limits for this analyte are 35-132%. Average recovery is 83.3%. He noted that his control charts are horrible for this analyte. Stacey's lab control limits are 29-106% and an average recovery of 67.4%. The Excel File had 44-133%. Carl thinks this table came from the DoD.

Carl would prefer the new equation. Andy would prefer to use the more generous equation – which is the current. Dan noted that more than half of the data was rejected to produce the new limits. He would prefer to leave things as they are.

A motion was made by Dan to leave the concentration limit as 3000-15000 ug/Kg for 4-Nitrophenol on the SCM FoPT accreditation table and keep the current regression equation. The motion was seconded by Joe M. and passed unanimously.

FoPT to consider next: Diesel Range Organics (PDF dated 3-6-15) and Oil and Grease (PDF dated 4-7-15).

PCBs in Oil

Carl asked if the subcommittee would like to still look at PCBs in oil. Andy noted that the subcommittee already went through the other Aroclors, so this should be simple.

Andy made a motion that Aroclors 1221, 1232 and 1248 be added to the SCM FoPT table in Oil using the same acceptance criteria used to approve Aroclors 1016, 1242, 1254 and 1260. The motion was seconded by Stacey.

Discussion:

Andy just did an update on his control limits and the proposed limits are reasonable. He is seeing 50-115% for the Aroclors. Andy shows a lower recovery basis in oil at around 80%.

Dan has noted this bias as well. It may be due to the calibration matrix.

The motion 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 October 6, 2015 and then every two weeks after that date.

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

   The call was ended at 1:31 pm EST. (Motion: Andy Second: Joe M. 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 **Present at 12:22pm**	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 **Absent**	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
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	TBD	

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	
10	Confirm correct naming of Bis(2-Chloroisopropyl)ether and update FoPT tables as needed.	5-19-15	NELAP AC has the revised tables to vote on today (9/1/15). COMPLETE