

**TNI Chemistry FoPT Subcommittee  
Meeting Summary  
June 22, 2010**

1. Roll call and Meeting Minutes:

Co-Chair Carl Kircher called the Chemistry FoPT Subcommittee to order on June 22, 2010 at 12:10 pm EST. Attendance is recorded in Attachment A. There were 7 members on the call today.

A motion was made by Jeff to accept the minutes from the June 15, 2010 meeting. The motion was seconded by Stephen and unanimously approved. The minutes will be posted on the TNI website.

2. PT Board Update

Eric and Carl attended the NELAP Board call yesterday to discuss the FoPT tables. EPA has a new approved method for DW (EPA 524.3). EDB and DBCP are now approved analytes by EPA 524.3. Carl will make a correction to the DW table at the PT Board level. EDB and DBCP will be in the Purge & Trap section and the Extraction section. The footnotes will be examined and changed as needed. Jeff suggested that method references should not be listed on the table to avoid issues as methods are being updated.

The NPW table is still being reviewed by the PT Board. There are some concerns about analytes being added where all the criteria in the Limits Update SOP are not being met. Eric also discussed this topic with the NELAP Board. All of the NELAP Board representatives have been invited to the next PT Board call to discuss what to do with analytes that don't meet the SOP criteria.

The estimated effective dates for the PT Tables will probably need to be changed to 1/1/2011.

2. SCM FoPT Update

Summary of Analytes Reviewed on 6/22/10 (*provided by Jeff on 6/22/10*):

Analyte	FoPT Category	Comments
Hexachlorobutadiene	Medium Level Volatiles	No low data
Cyanide, Total	Misc Analytes	Regression
2-Methylnaphthalene	Base/Neutrals	Regression
N-Nitrosodiphenylamine	Base/Neutrals	Not moved to Accreditation Table
2,4-Dimethylphenol	Acids	Not moved to

Analyte	FoPT Category	Comments
		Accreditation Table
2,4-Dinitrophenol	Acids	Not moved to Accreditation Table
4-Methylphenol (p-Cresol)	Acids	Mean $\pm$ 3 STDEV
Toxaphene	Organochlorine Pesticides	Mean $\pm$ 3 STDEV (reviewed and verified)
Azinphos-methyl (Guthion)	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Diazinon	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Disulfoton	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Malathion	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Parathion ethyl	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Parathion methyl	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Phorate	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Ronnel	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV
Stirophos (tetrachlorovinphos)	Organophosphorus Pesticides	Mean $\pm$ 3 STDEV

Note: 2-Methyl-4,6-dinitrophenol, N-Nitrosodimethylamine and Hexachlorocyclopentadiene were reviewed, but further discussion was postponed to the next conference call.

#### Cyanide:

This compound is currently on the table at Mean  $\pm$  3 STDEV. It passes the Standard Deviation  $R^2$  evaluation. It is being recommended at a concentration range of 20-200 mg/kg.

A motion was made by Stephen to move Cyanide, Total to the accreditation table with a concentration of 20– 200 mg/kg. Limits: Linear regression equation with the c & d coefficients as presented in the table distributed by Jeff on March 3, 2010. The motion was seconded by Stacie. The motion was unanimously approved by the subcommittee members on the call.

#### Hexachlorobutadiene:

It passes all the criteria. The concentration range suggested was 2000 – 10000 ug/kg. There is no data for a low level PT. This is an additional analyte – not an experimental analyte. Jeff recommended not adding this analyte.

Adding this analyte opens the question raised at previous meetings as to whether an AB will require this analyte at both low and high concentration even though there is not a PT at a low concentration. Discussion on this analyte will be delayed pending PT Board input.

### Organophosphorus Pesticides

Carl considers these analytes on the bubble as far as adding them to the table based on the data. Malathion failed the Standard Deviation  $R^2$  evaluation. All the analytes failed the Mean  $R^2$  Evaluation and Azinphos-methyl had a check on the table for number of studies.

Dan mentioned that looking at the data, they all seem to act similarly. He questioned the value of a PT with such wide limits. Some of these analytes have stability issues. Dan asked what the environmentally relevant concentrations would be. Carl responded that it would be 0.2 to 2 ppm in soil. Stacie has a reporting limit of 1000 ug/kg and the upper calibration level is about 4000 ug/kg. The current levels are less.

These are tough analytes because they are made to degrade and the detectors are poor. Eric agreed with Dan's comments and cannot see the need for these PTs given the poor performance. Chuck noted PTs can be designed to get narrower limits. He asked: "If we go down this path to eliminate them ... what are you going to do with volatiles?" If it is not useful- eliminate it, but Wibby has other states that run them. Eric noted that the data looks better at the higher concentrations and perhaps a higher concentration range may help the next time limits are looked at.

A motion was made by Jeff to move the Organophosphorus Pesticides listed in the table above to the accreditation table with a concentration of 1000– 5000 ug/kg. Limits: Leave at mean +/- 3 standard deviations. The motion was seconded by Chuck. The motion was unanimously approved by the subcommittee members on the call.

### 2-Methylnaphthalene

There are enough data points. The data supports a regression equation. All the data above 6000 ug/kg were taken out because they were wide. Jeff is not sure why this happened. The equation that was developed is similar to naphthalene.

A motion was made by Chuck to move 2-Methylnaphthalene to the accreditation table with a concentration of 1000 – 12000 ug/kg. Limits: Linear regression equation with the c & d coefficients as presented in the table distributed by Jeff on March 3, 2010 (c = 0.02027, d = 28.7219). The motion was seconded by Eric. The motion was unanimously approved by the subcommittee members on the call.

### 4-Methylphenol (p-Cresol):

Carl recommended looking at a regression equation. A failure rate summary was sent on May 6<sup>th</sup>. The d factor is high on this analyte. With the wide acceptance limits about the mean, mean +/- 3 standard deviations could be considered. Jeff noted that when the failure rates are examined, it makes the 10% rule come into effect. The data Jeff looked at did not change with the 10% rule in effect.

A motion was made by Jeff to move 4-Methylphenol to the accreditation table with a concentration of 3000 – 15000 ug/kg. Limits: Leave at mean +/- 3 standard deviations. The motion was seconded by Stephen. The motion was unanimously approved by the subcommittee members on the call.

Stephen had to leave the call.

#### 2,4-Dimethylphenol

There is not enough data for this analyte. There were 3 studies available and when Jeff moved it to the accreditation table it would need different rules than the other analytes. The failure rate would be about 79% without different rules. He suggested not moving the analyte and Dan and Chuck were in agreement.

A motion was made by Eric to not move 2,4-Dimethylphenol over to the accreditation table. The motion was seconded by Chuck. The motion was unanimously approved by the subcommittee members on the call.

#### 2,4-Dinitrophenol

There were a dozen studies. When moved to the accreditation table, the failure rate would change from 0.4 % to 54%. Acceptance limits look like +/- 200%. Carl suggested eliminating this PT and Chuck concurred.

A motion was made by Eric to not move 2,4-Dinitrophenol over to the accreditation table. The motion was seconded by Chuck. The motion was unanimously approved by the subcommittee members on the call.

#### 2-Methyl-4,6-Dinitrophenol

There were a dozen studies. One study was taken out because the study concentration was below 3000 ug/kg and contained a high failure rate. When you apply the 10% rule the failure rate goes from 0.5% to 9.6%. Jeff recommended moving this analyte to the accreditation table with the 10% footnote. The failure rates are concentrated from about 2000-4000 ug/kg. He suggested increasing the lower concentration to at least 4,000 ug/kg. Dan looked at the information prepared by Carl (sent 6-8-10) summarizing all the data for these analytes and it looks like a 40% failure rate. Dan is not in favor of adding this analyte. Chuck's data is consistent with Jeff's discussion.

Carl reviewed the data Dan mentioned. There were 15 studies with a failure rate of 7.6% that would increase to 40% if the 10% rule were applied. There appears to be a difference in PT Provider. When discussing preparation techniques, it appears there may be a problem with one of the techniques and this data should not be considered. A few of the people on the call did not receive the information Dan received and further discussion on this analyte will be postponed to the next call.

#### Hexachlorocyclopentadiene

It passes all the criteria for c & d. It is presently at 1500 – 15000 ug/kg, but it is really wide (mean +/- 100%). If added, it should be brought over at the same limits as currently on the experimental table.

The failure rate is 0.3% and there is no change when considering the 10% rule. Dan needed some more time to look at this analyte. Further discussion on this analyte will be postponed to the next call.

#### N-Nitrosodimethylamine

With the additional data it passes all the criteria. There was convergence on the lower end and Jeff had to take a few studies out. Overall it is wide. Jeff suggested bringing it over as is from the experimental table (mean +/- 3 standard deviations, 1500 – 15000 ug/kg.) Further discussion on this analyte will be postponed to the next call.

#### N-Nitrosodiphenylamine

There was insufficient data for this analyte.

A motion was made by Eric to not move N-Nitrosodiphenylamine over to the accreditation table. The motion was seconded by Chuck. The motion was unanimously approved by the subcommittee members on the call.

#### Toxaphene

It passes all the criteria. It is +/- 95% about the mean. The concentration range is 200 - 2000 ug/kg. The regression for the upper limit is acceptable. It is currently on the accreditation table at mean +/- 3 standard deviations.

No motion was received and this analyte will be left on the accreditation table as is. The data was reviewed and no one objected.

### 3. New Items

None.

#### 4. Action Items

- Updates will be considered at the next conference call.

#### 5. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be June 29, 2010, at 12PM EST.

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

The meeting was adjourned at 1:28pmEST (Motion: Dan. Second: Eric Unanimously approved.)

## Attachment A

### Participants TNI Chemistry FoPT Subcommittee

Members	Affiliation	Contact Information
Carl Kircher, Co-Chair <b>Present</b>	Florida DOH	904-791-1574 <a href="mailto:carl_kircher@doh.state.fl.us">carl_kircher@doh.state.fl.us</a>
Brian Boling, Co-Chair <b>Absent</b>	Oregon DEQ	<a href="mailto:Boling.Brian@deq.state.or.us">Boling.Brian@deq.state.or.us</a>
Amy Doupe <b>Absent</b>	Lancaster Laboratories, Inc.	717-656-2300 x1812 <a href="mailto:aldoupe@lancasterlabs.com">aldoupe@lancasterlabs.com</a>
Jeff Lowry <b>Present</b>	ERA	303-431-8454 <a href="mailto:jlowry@eraqc.com">jlowry@eraqc.com</a>
Chuck Wibby <b>Present</b>	Wibby Environmental	303-940 -0033 <a href="mailto:cwibby@wibby.com">cwibby@wibby.com</a>
Eric Smith <b>Present</b>	TestAmerica	615-726-0177 x1238 <a href="mailto:eric.smith@testamericainc.com">eric.smith@testamericainc.com</a>
Dan Tholen <b>Absent</b>	A2LA	231-929-1721 <a href="mailto:Tholen.dan@gmail.com">Tholen.dan@gmail.com</a>
Stephen Arpie <b>Present until 1pm</b>	Absolute Standards, Inc.	203-281-2917 <a href="mailto:stephenarpie@mac.com">stephenarpie@mac.com</a>
Dan Dickinson <b>Present</b>	New York, DOH	518-485-5570 <a href="mailto:dmd15@health.state.ny.us">dmd15@health.state.ny.us</a>
Stacey Fry <b>Present</b>	E.S. BABCOCK & Sons, Inc.	951-653-3351 x238 <a href="mailto:sfry@babcocklabs.com">sfry@babcocklabs.com</a>
Jim <b>Absent</b>		860-665-5531 <a href="mailto:mousejr@nu.com">mousejr@nu.com</a>
Ilona Taunton, Program Administrator <b>Absent</b>	TNI	828-712-9242 <a href="mailto:tauntoni@msn.com">tauntoni@msn.com</a>

**Attachment B**

**Action Items – Chemistry FoPT Subcommittee**

	<b>Action Item</b>	<b>Who</b>	<b>Expected Completion</b>	<b>Actual Completion</b>
13.	Prepare letter to ABs to find out their needs on analytes that may be under consideration for deletion. <i>(3/24/09 – It was determined that these tables are used by more than just ABs. This needs to be reconsidered.)</i>	TBD	TBD	
46	Re-evaluate experimental volatile halocarbons for fixed limits when the rest of the volatile halocarbons are evaluated for an NPW table update.	All	On-going	
59	Request additional data for compounds being reconsidered.	Carl	4/26/10	2 responses. May 14 <sup>th</sup> due date. Acid extractable Soil PTs. 5/18: Carl has gotten information for 5 of the phenols. Still needs more data. 5/25: Carl will provide additional information to the subcommittee at next mtg.
62	Reconsider concentration range for DBCP Low Level.	All	6/1/10	
63	Discuss the Hexachlorobutadiene issue with the PT Board. Send request.	Carl	6/8/10	
64				

**Attachment C**

**Backburner / Reminders – Chemistry FoPT Subcommittee**

	<b>Item</b>	<b>Meeting Reference</b>	<b>Comments</b>
1	Review summary data to see if it supports a change in the acceptance criteria for DW analytes (For example, VOA, 30% instead of 20%). If data is supportive, Jeff Lowry will approach ELAB.	10-30-08	<p>3/10/09 - Jeff has approached ELAB. They would be happy to put it in a work group – and pass it along with a letter to EPA. We need to provide them with the data.</p> <p>2/23/10: Jeff will forward the VOA data. Jeff noted that the data supports the tighter limits. He will provide the information to ELAB and they will decide whether to approach EPA.</p> <p>5/4: Jeff is working with ELAB on this now.</p>
3	Consider changing the lower limit for Vanadium on WP to 50 ug/L.	6-30-09	
4	Consider nomenclature differences between the analyte codes and the FoPT tables.	2-23-10	
5	When updating the SCW FoPT Table, consider the following: Hexachlorobutadiene can be dual-purpose in the sense that laboratories analyze it both as a Volatile Organic (e.g., EPA 8260) and as a Base-Neutral Extractable Organic (e.g., EPA 8270). Pentachlorophenol is dual-purpose since laboratories determine this analyte as both an Acid Extractable Organic (EPA 8270) and as an Herbicide (EPA 8151, thus Pentachlorophenol LL?).	4-20-10	
6	From PT Board: South Carolina requested that low level EDB and DBCP (8011) be added to the NPW table.	4-15-10 PT Board Meeting	