

TNI Chemistry FoPT Subcommittee
Meeting Summary
October 18, 2011

1. Roll call and Meeting Minutes:

Chair Carl Kircher asked Eric Smith to chair the call. Eric called the Chemistry FoPT Subcommittee to order on October 18, 2011 at 12:10EST. Attendance is recorded in Attachment A. There were 6 members on the call today.

Meeting minutes were reviewed (October 4, 2011). Joe made the motion to accept and approve the minutes. Mark seconded the motion. The motion was unanimously approved and the meeting minutes will be posted on TNI website.

2. NPW FoPT Tables

The group is working off of the table that Carl e-mailed on August 10, 2011. The analyte files were sent August 18th.

Alkalinity

The study concentration was 11.4 – 120 mg/L for Conductivity. Carl would recommend keeping the limits where they are. The Stdev R² Eval > 0.75 criteria failed. Changing the concentration limits to 25-200 mg/L would make it similar to drinking water.

A motion was made by Joe to leave acceptance limits for Alkalinity on the NPW FoPT accreditation table as is and change the concentration range to 25-200 mg/L. The motion was seconded by Stephen and unanimously approved.

Total Suspended Solids (TSS)

The study concentration was 24.3 – 99.1 mg/L. It did not pass the Stdev R² Eval > 0.75 criteria. Carl suggested leaving the current regression equation in place. He would like to see the concentration limit widened. 23 mg/L on the lower end came from the old EPA criteria document.

A motion was made by Stephen to leave acceptance limits for TSS on the NPW FoPT accreditation table as is and change the concentration range to 20-100 mg/L. The motion was seconded by Eric and unanimously approved.

Total Dissolved Solids and Total Solids

The study concentration was 77.7 - 800 mg/L for TDS and 182 - 800 mg/L for TS. The new regression equation fails the Stdev R² Eval > 0.75 criteria for both analytes. Dan D. commented that there may be more to look at when reviewing these analytes.

A motion was made by Eric to leave the concentration and acceptance limits for Total Dissolved Solids and Total Solids on the NPW FoPT as currently stated. The motion was seconded by Stephen.

Discussion:

Dan D. reviewed the limit SOP and found that there is flexibility when there are problems with the standard deviation.

Vote:

Yes - 5 No - 0 Abstain - 1 (Dan is not ready to vote)

The motion did not pass.

From Dan Dickinson (10/19/11): Due to the very small 'c' coefficient coupled with the very poor COD (r²) I do not think that it is appropriate to continue to use a "c" coefficient for Total Solids and Total Dissolved Solids and perhaps even Total Suspended Solids.

The current 'c' coefficient for TDS and TSS is carried on from the EPA Criteria document (Dec. 30, 1998) and likely suffers from the same issues. The data used to generate it is much older and probably not as large a population as currently available.

The small 'c' coefficient is likely due to labs targeting a weight range (per the method) and adjusting the volume dried to meet that range (2- 200mg). The uncertainty for our analytical balance is ~0.305 mg (K=2, 95%CL) which I'm sure is typical. For example, in ELAP studies the average Total Solids and TDS SDs are 14.6 mg/L and 15.0 mg/L, both over a 'final' concentration range of 80 -600 mg/L. The RSD of the averages for each analyte is about 18%.

The poor COD (r²) suggests that the assigned value or study mean are poor predictors of the SD. The fact that these are gravimetric tests should be considered before attaching any significance to the COD in terms of our SOP (TNI SOP#4-001) process for making recommendations (section 3.0-0).

For TDS, using data from the most recent ELAP study you can see the effect of the predicted vs the actual SDs on the fail rates.

AV=546 mg/L Study Mean = 539 mg/L

SD with current LRE 41.3 mg/L Limits: 415 - 663 mg/L Failures: 1/67 1.5%

SD with Proposed LRE 27.1 mg/L Limits: 455 - 622 mg/L Failures: 1/67 1.5%

SD - Consensus 18.5 mg/L Limits: 484 - 595 mg/L Failures: 3/67 4.5%

SD - Mean Consensus 15.0 mg/L Limits: 494 - 584 mg/L Failures: 4/67 6.0%*

**This is the mean ELAP consensus SD for 23 studies.*

I change my vote from Abstain to No we should not revert to the current LRE.

A few alternatives for discussion:

- Use the consensus SD for the study.*
- Use a pooled consensus SD averaged from the PTPs so long as the RSD for each PTP is less than 20 %.*

Volatile Organics

Eric received an e-mail from Carl requesting that the following analytes be revisited:

MEK (2-Butanone): Small, limited concentration range available at 40-200 mg/L. Regression equations fail r-squared (standard deviation). Impossible to recommend a fixed limit. DO NOT ADD as FoPT.

MTBE: Recommend concentration range 15-150 ug/L, fixed acceptance limits of AV +/- 40%.

1,1-Dichloroethane: Recommend concentration range 15-150 ug/L, fixed acceptance limits of AV +/- 40%.

cis-1,2-Dichloroethene: Recommend concentration range 15-150 ug/L, fixed acceptance limits of AV +/- 40%.

MBK (2-Hexanone): Recommend keeping the regression equations that were previously recommended.

Naphthalene: Recommend keeping the regression equations that were previously recommended.

1,2,4-Trichlorobenzene: Recommend keeping the regression equations that were previously recommended.

The subcommittee preferred not to review these analytes again since they just went into effect on 10/3/11.

Eric motioned that the 7 analytes listed above not be revisited until the next routine NPW FoPT Table review. The motion was seconded by Stephen and it was unanimously approved.

3. Action Items

Updates were made directly to the Action Table.

4. New Business

None.

5. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be November 1, 2011, at 12:00 PM EST.

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

Stephen motioned to adjourn the meeting and Dan D. seconded the motion. Unanimously approved. The meeting was adjourned at 1:25 pm EST.

Attachment A

Participants TNI Chemistry FoPT Subcommittee

Members	Affiliation	Contact Information
Carl Kircher, Chair Present	Florida DOH	904-791-1574 carl_kircher@doh.state.fl.us
Joe Marotti Present	RT Corp	307-721-5485 jmorotti@rt-corp.com
Amy Doupe Absent	Lancaster Laboratories, Inc.	717-656-2300 x1812 aldoupe@lancasterlabs.com
Jeff Lowry Absent		lowjc@aol.com
Mark Mensik Absent	Wibby Environmental	303-940 -0033 MMensik@wibby.com
Eric Smith Present	TestAmerica	615-726-0177 x1238 eric.smith@testamericainc.com
Dan Tholen Absent	A2LA	231-929-1721 Tholen.dan@gmail.com
Stephen Arpie Present	Absolute Standards, Inc.	203-281-2917 stephenarpie@mac.com
Dan Dickinson Present	New York, DOH	518-485-5570 dmd15@health.state.ny.us
Stacey Fry Present	E.S. BABCOCK & Sons, Inc.	951-653-3351 x238 sfry@babcocklabs.com
Ilona Taunton, Program Administrator Present	TNI	828-712-9242 tauntoni@msn.com

Attachment B

Action Items – Chemistry FoPT Subcommittee

	Action Item	Who	Expected Completion	Actual Completion
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	Ongoing	
80	Contact ACLASS to check on possible member for subcommittee. Lab candidate can start as an associate member.	Carl	Next meeting	Carl has talked to Keith. He will follow-up and set a deadline.
84	Discuss the possibility of getting more laboratory feedback before FoPT tables are finalized.	Carl	Next Meeting	
85				

Attachment C

Backburner / Reminders – Chemistry FoPT Subcommittee

	Item	Meeting Reference	Comments
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> <p>7/19: The workgroup is continuing to work on this and should discuss this on the September 2010 call.</p> <p>9/21: No work has been done in ELAB – so this has been delayed a month.</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	
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	They were added to the solids table where they were experimental. They were not experimental on the NPW table.
7	Review completed NPW table and look for	11-30-10	

	grouped analytes that behave similarly and look for consistent criteria. Compare results to Drinking Water values too.		
9			