

TNI Chemistry FoPT Subcommittee
Meeting Summary
August 14, 2012

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on August 14, 2012 at noon EST. Attendance is recorded in Attachment A.

2. Review of Analytes

Minutes were taken by Carl.

The information discussed on the call today is summarized in the form of an e-mail to all subcommittee members so that they can vote as described in the July 17, 2012 minutes.

Dear Subcommittee Members:

Two motions from the August 14 teleconference today are hereby submitted for e-mail vote by those Subcommittee members who did not participate in the teleconference today. Please register your vote (by e-mail) FOR, AGAINST, or ABSTAINING each motion. DEADLINE for voting on each motion at the next Chem. FoPT teleconference. Please feel free to write or call me if you need more information behind each motion in addition to what is provided in this e-mail or in my earlier e-mail to you all last July 17.

As Chair, I am instituting the practice used by ANSI (American National Standards Institute) for its committees in which if any Subcommittee member fails to render a vote on 3 consecutive ballots (this e-mail counting as the first ballot), that member will be demoted to "Observer" status and that member's participation on this Subcommittee will no longer count toward achieving a full quorum majority on any future FoPT votes. Your opinions on this policy are invited and welcomed. If you all think this is a bad idea, please let me know.

MOTION 1: Approve 4-Nitrophenol, 2,4-Dinitrophenol, and Phenol as accreditation NPW FoPTs each at concentration ranges of 100-200 ug/L but retaining the current NELAC regression equations with the a,b,c,d coefficients as currently posted.

Background and discussion: This motion re-affirms the previous approvals that this Subcommittee made earlier for Phenol and 2,4-Dinitrophenol and proposed for 4-Nitrophenol (but the motion did not receive a second at that time). For further discussions, please see my e-mail to you all on July 17. Not much additional information was provided at today's teleconference.

Current vote tally (one vote short of approval):

Carl K. FOR
Steve A. FOR
Dan D. FOR
Stacie F. FOR

MOTION 2: Approve 24-D, 245-T, 245-TP Silvex, and Dicamba as accreditation NPW FoPTs each at concentration ranges of 2-10 ug/L (which are the current NPW PT concentration ranges) and using as acceptance criteria the new regressions provided by Jeff Lowry on the PDF files all dated November 17, 2010 with the a,b,c,d coefficients provided.

Background and discussion: The new, proposed regression equations meet our SOP criteria for the correlation coefficients of both regressions (Mean vs. AV and Std Dev. vs. AV). A resultant PTRL as low as 0.2 ug/L would not be a problem for laboratories to achieve analytically. An additional Subcommittee member joined the teleconference (late) and gave a vote that was sufficient to pass this motion. However, we are presenting to all other Subcommittee members the opportunity to record his/her votes.

Based on the bulk of the discussion accompanying this motion, we are also notifying all absent Subcommittee members that we plan to re-evaluate most of the DW FoPTs for Herbicides at the next teleconference. Please review the current DW and NPW Herbicide FoPT Tables as posted, and relevant WS and WP PDF files. The principal problem and analytical inconsistency are that the NPW Herbicides FoPTs are being approved at 2-10 ug/L but that the corresponding DW Herbicide FoPTs were approved at higher concentration ranges, such as at 10-100 ug/L or 20-100 ug/L. Normally, the relevant FoPT concentrations would be the same or lower for DW relative to NPW. However, the concentration ranges for each matrix have been generally confined to the historical ranges used by respective WS and WP PTs in the past. The acceptance limits for 3 of the DW FoPTs are set by US EPA regulations at AV +/- 50% fixed. The acceptance criteria for the other DW Herbicides were approved at AV +/- 50% fixed, for consistency, except for DW Dinoseb. To provide sufficient challenge to laboratories analyzing the DW Herbicide PTs, the upper concentration limit was raised to 100 ug/L in many cases. A suitable compromise could be to lower the concentration ranges for all DW Herbicides, except for Pentachlorophenol, to 5-50 ug/L. Pentachlorophenol has a US EPA MCL regulatory level of 1.0 ug/L. so raising the concentration range for this analyte would be detrimental to US EPA's interests (current range at 1-25 ug/L). The DW concentration range could be 2-20 ug/L for the Herbicides, but the PT plots in the WS PDF files show concaving upward at lower concentrations, below 5 ug/L.

Current vote tally (motion passes):

Carl K. FOR
Steve A. FOR
Dan D. FOR
Stacie F. FOR
Joe M. FOR

Thank you in advance for your votes.

Addition – E-mail Vote Responses:

Motion 1:

8/15/12: Joe Morotti – Vote For – Motion 1

8/15/12: Eric Smith – Vote For – Motion 1

8/30/12: Jeff Lowry – Vote For – Motion 1

Motion 2:

8/15/12: Eric Smith – Vote Against – Motion 2

I don't really have a big problem with the motion's proposed range or acceptance criteria and I realize my vote is not a show stopper since enough votes have been cast in favor. However, I do have two reasons for voting NO at this time. First, it would seem (to me anyway) that the subcommittee should go ahead and re-evaluate DW vs. NPW Herbicide ranges on the next call before voting on this motion. Second, I have an idea that I'd like to propose regarding concentration ranges for the four Herbicide analytes covered in this motion. To help reduce the inconsistency between DW & NPW ranges noted below, how about we raise the NPW concentration range for these four Herbicide analytes from 2-10 ug/L up to 3-15 ug/L and use the acceptance criteria of the new equations? The plots looked to me like they might support elevating the concentration range and that change would still keep a 5x difference between the low and high end of the spiking range. Most importantly, this would also provide us with a gradual increase in concentration for these four analytes on the NPW table, helping to further reduce the gap between the DW & NPW ranges. Just food for thought.

8/30/12: Jeff Lowry – Vote Against – Motion 2

A review as Carl did shows that the DW and NPW Chlorinated acid herbicides have similar concentration ranges with the DW using wider concentration ranges and generally plus or minus 50% (2 stdev) of the AV as the acceptance limits. These methods are not very rugged. I would suggest that the proposed NPW regression equations are much like the set limits for DW and in general are plus or minus 75% (3 stdev) (see plots).

Question: Why can't the DW and NPW concentration ranges be the same?

Suggestion: To widen the NPW range in accordance with the linear range of the instrumentation (method) used. Use the regressions or plus or minus 75% for AL.

3. Action Items

See action item table in attachments.

4. New Business

Addition 8/14/12:

The following e-mail was sent by Carl on 8-14-12:

Dear Chem. FoPT Subcommittee Members,

Once we receive votes from all of us Subcommittee members on the 2 motions made at the teleconference today (August 14), we will have completed the analysis for all the existing NPW FoPTs currently posted on the NPW FoPT Tables. Congratulations on a job well done!!

There are some additional PDF files that were presented for NPW FoPTs that we have not yet considered. Thus, below, I want to present these analytes along with the data analysis and one person's (mine) recommendations.

2-BUTANONE: The new PDF file that was presented for data exclusively for concentrations over 40 ug/L did not produce any improvement over the results from the other PDF file. The regressions still fail our SOP criteria for r-squared (std. dev.), i.e., correlation coefficient for linear regression of Std Dev versus Assigned Value was less than 0.75. Perhaps the only reason to add this as a NPW FoPT is that this analyte is on the SCM FoPT Table.

ACRYLONITRILE: Regressions fail the SOP criteria for r-squared (std. dev.).

CARBON DISULFIDE: Regressions fail the SOP criteria for r-squared (std. dev.).

CARBAZOLE: Regressions fail the SOP criteria for r-squared (std. dev.).

BENZYL ALCOHOL: This analyte could be added as a new NPW FoPT since all SOP criteria for correlation coefficients are met. Concentration range appears to be 30-200 ug/L (consistent with other Base-Neutral Extractable Organics). The resultant acceptance limits would be fairly wide, however; plots show limits about 10-130% of the Assigned Value.

ANILINE: Insufficient data based on the 2003 NELAC Standards (less than N=10 PT studies with over 20 laboratory participants in the study). Also, regressions fail the SOP criteria for r-squared (std. dev.).

PYRIDINE: Insufficient data (N=7).

4-CHLOROANILINE: Insufficient data (N=9).

2-NITROANILINE: This analyte could be added as a new NPW FoPT since there is barely enough sufficient data and SOP criteria for correlation coefficients are met. Concentration range appears to be 40-200 ug/L. However, similar analytes probably cannot be added as NPW FoPTs, so we shouldn't add this one, either??

3-NITROANILINE: Insufficient data (doesn't even come close).

4-NITROANILINE: Regressions fail the SOP criteria for r-squared (std. dev.).

BENZOIC ACID: Insufficient data.

2,3,4,6-TETRACHLOROPHENOL: Regressions fail the SOP criteria for r-squared (std. dev.).

DALAPON: Insufficient data.

2,4-DB: Insufficient data, and regressions fail the SOP criteria for r-squared (std. dev.). However, this analyte is on the SCM FoPT Table.

DICHLORPROP: Insufficient data, and regressions fail the SOP criteria for r-squared (std. dev.).

DINOSEB: An additional PDF file was submitted with the latest PT data; however, there is still "insufficient" data based on the 2003 NELAC Standards (N=7). In addition, this analyte is on the SCM FoPT Table.

Once we decide what to do with these analytes, I think we will have finished the NPW FoPT analyses, and we'll get the big Excel file and final NPW FoPT Table assembled for our final review and vote before we send it to the PTP Executive Committee.

The following responses were received by e-mail:

8/15/12: Joe

I don't believe that there is adequate data to support any of the listed analytes for addition to the table. With the elimination of the experimental category, there is no mechanism to submit additional data collected by providers to NELAC. Until a solution is found to return the experimental category, I vote no on consideration for addition on any new analytes to the NPW FoPT table.

8/15/12: Stephen

Joe makes a great point. We would need an alternate procedure to kick in. Possibly, a section called "Failed Analytes" where we set a formulation range very wide, and an acceptance range to big to fail. In this way, we capture real

data from labs and do no harm to unsuspecting participants. When it is all said and done, we may actually find something fit for use. However, some of these analytes exhibit multiple problems: poor stability, analytically challenged and low participation.

5. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be September 4, 2012, at 12:00 PM EST.

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

Joe motioned to adjourn the meeting and Dan seconded the motion. Unanimously approved. The meeting was adjourned at 1:09 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 (Added in at 12:45) | Sigma-Aldrich RTC | 307-721-5485 jmorotti@sial.com |
| Amy Doupe Absent | Lancaster Laboratories, Inc. | 717-656-2300 x1812 aldoupe@lancasterlabs.com |
| Jeff Lowry Absent | Wibby Environmental | 720-560-2232 JeffL@phenova.com |
| Eric Smith Absent | TestAmerica | 615-726-0177 x1238 eric.smith@testamericainc.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 Absent | 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 | |
| 87 | Discuss views on dropping problem analytes with the PTP EC. | Carl | Next PTP EC Meeting | |
| 90 | Confirm interest of subcommittee members that have not been on recent calls. | Carl | Next Meeting | |
| 91 | Forward SOP 4-101 to the PTP EC committee. | Carl | 8/3/12 | Complete |
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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 | |
| 7 | Review completed NPW table and look for grouped analytes that behave similarly and look for consistent criteria. Compare results to Drinking Water values too. | 11-30-10 | |
| 9 | | | |