# TNI Chemistry FoPT Subcommittee
# Meeting Summary
# July 31, 2012

1. Roll call and Meeting Minutes:

   Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on July 17, 2012 at noon EST. Attendance is recorded in Attachment A.

   The minutes from the July 17, 2012 meeting minutes were reviewed. Dan motioned to approve the minutes with addition of Jeff Lowry's e-mail regarding Boron and the motion was seconded by Stacey. They were unanimously approved.

2. SOP 4-101

   Additional votes were recorded on the call:

   Joe – For
   Stephen – For
   Stacey – For

   The motion to approve the DRAFT SOP for establishing limits has been approved. Carl will be sending this on to the PT Program Executive Committee.

3. Review of Analytes

   Non-Filterable Residue (TSS)

   From Carl: *This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 20-100 mg/L. Another good reason to reconsider this FoPT would be to consider acceptance criteria where a=1, b=c=0, and d fixed at 3.0. The pdf file dated 11/19/2010 shows nearly horizontal plots of Standard Deviation vs. Mean and Standard Deviation vs. Assigned Value. These plots were also observed for TDS and for Total Residue, and we recommended acceptance criteria of a=1, b=c=0, and fixed d values for these Residues. My recommendation is to keep the concentration range of 20-100 mg/L, but I am fine with either recommendations for acceptance criteria. For consistency with TDS and TS, I might prefer the fixed-d value option for TSS.*

   Dan asked if the committee would consider d equal to 2.5?

A motion was made by Stephen to use a concentration limit of 20 - 100 ug/L for Non-Filterable Residue (TSS) on the NPW FoPT accreditation table and *acceptance criteria where a=1, b=c=0, and d fixed at 2.5.* The motion was seconded by Joe and unanimously approved.

Orthophosphate at P:

Carl provided the following comments: *This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 0.5 – 5.5 mg/L. The pdf file dated 11/19/2010 shows plots where a fixed limit of AV +/- 20% fixed could be recommended, but I would recommend retaining our previous approval of the currently-posted a,b,c,d coefficients and 0.5-5.5 mg/L concentration range to be consistent with regression equations recommended for other NPW Nutrients and Anions.*

Dan is seeing values in his data that are closer to the new values and approximates fixed limits of +/- 15%. He could also support 20%.

A motion was made by Stephen to use a concentration limit of 0.5 - 5.5 mg/L for Orthophospate at P on the NPW FoPT accreditation table and fixed limits of +/- 15%. The motion was seconded by Dan and unanimously approved.

MBAS Surfactants

Carl provided the following comments: *This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 0.2 – 1.0 mg/L. The pdf file is dated 11/22/2012, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

A motion was made by Stephen to maintain the current concentration limit of 0.2 – 1.0 mg/L for MBAS Surfactants on the NPW FoPT accreditation table and leave current abcd coefficients in place on the FoPT table. The motion was seconded by Dan and unanimously approved.

Sulfide

Carl provided the following comments: *This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was*

*keeping the currently-posted a,b,c,d regression coefficients and concentration range 2-10 mg/L. The pdf file is dated 11/12/2010, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

A motion was made by Dan to use the current concentration limit of 2-10 mg/L for Sulfide on the NPW FoPT accreditation table and use of the current abcd coefficients on the FoPT table. The motion was seconded by Stephen and unanimously approved.

BASE-NEUTRAL EXTRACTABLE ORGANICS

*Carl provided the following information:*

*BENZO(k)FLUORANTHENE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 20-200 ug/L. The pdf file dated 10/14/2010 produces some really weird observations. Prior to outlier removal, the regression equations fulfill all our SOP criteria but cause convergence at the lower concentrations. After outlier removal, the convergence problem is solved, but the correlation coefficient is worsened as described above. Therefore, I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

*DIBENZOFURAN: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 30-200 ug/L. The pdf file is dated 10/18/2010, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

*DIETHYL PHTHALATE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 50-200 ug/L. The pdf file is dated 10/19/2010, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

*DIMETHYL PHTHALATE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the*

*currently-posted a,b,c,d regression coefficients and concentration range 50-200 ug/L. The pdf file is dated 10/19/2010, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

*HEXACHLOROBUTADIENE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 50-200 ug/L. The pdf file is dated 10/18/2010, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

*N-NITROSODIMETHYLAMINE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous approval for this FoPT was keeping the currently-posted a,b,c,d regression coefficients and concentration range 75-200 ug/L. The pdf file is dated 10/27/2010, but I recommend re-approval of this concentration range and of the present regression equations and keeping the a,b,c,d coefficients as currently posted.*

*HEXACHLOROCYCLOPENTADIENE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail BOTH evaluation SOP criteria for the correlation coefficients of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75) and of Mean vs. Assigned Value (i.e., not greater than 0.90). The previous recommendation was to DELETE this analyte as a NPW FoPT. The pdf file is dated 10/18/2010. I recommend re-instating approval of this analyte at a concentration range of 50-200 ug/L but keeping the present regression equations and the a,b,c,d coefficients as currently posted. This analyte serves as a Priority Pollutant for the US EPA Clean Water Act.*

*3,3'-DICHLOROBENZIDINE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Standard Deviation vs. Assigned Value (i.e., not greater than 0.75). The previous recommendation for this FoPT was to DELETE this analyte as a NPW FoPT. The pdf file is dated 10/27/2010. I recommend re-instating approval of this analyte at a concentration range 50-200 ug/L but keeping the present regression equations and the a,b,c,d coefficients as currently posted. This analyte serves as a Priority Pollutant for the US Safe Drinking Water Act.*

*BENZIDINE: This FoPT is being reconsidered because the analysis of PT data produces linear regression equations with a,b,c,d coefficients that fail our evaluation SOP criteria for the correlation coefficient of Mean vs. Assigned Value (i.e., not greater than 0.90). The previous recommendation for this FoPT was to DELETE this analyte as a NPW*

*FoPT. The pdf file is dated 10/27/2010. I recommend re-instating approval of this analyte at the present concentration range 200-1000 ug/L and keeping the present regression equations and the a,b,c,d coefficients as currently posted. This analyte serves as a Priority Pollutant for the US Safe Drinking Water Act. Alternatively, since the correlation coefficient of Standard Deviation vs. Assigned Value passes the SOP criteria, I would be willing to reconsider a re-analysis of the PT data based on Study Mean (e.g., Is the correlation coefficient for the linear regression of Standard Deviation vs. Mean greater than 0.75?) and recommend acceptance criteria of "Study Mean and c,d coefficients" as re-evaluated.*

Benzo(k)Flouranthene:

Dan found that the correlation coefficients were very close to the new data and his initial preference would be to use the new data.

A motion was made by Dan to use a concentration limit of 20 - 200 ug/L for Benzo(k)Flouranthene on the NPW FoPT accreditation table and leave the correlation coefficients as currently tabulated in place. The motion was seconded by Stephen and unanimously approved.

Dibenzofuran

Dan likes the new data and the r-squared is not that far off.

A motion was made by Dan to use a concentration limit of 30 - 200 ug/L for Benzo(k)Flouranthene on the NPW FoPT accreditation table and use the new correlation coefficients. It should be noted that there is a violation of the SOP. The motion was seconded by Stephen and unanimously approved.

Diethyl Phthalate and Dimethyl Phthalate

A motion was made by Dan to use the current concentration for Diethyl Phthalate and Dimethyl Phthalate on the NPW FoPT accreditation table and leave the correlation coefficients as currently tabulated in place. The motion was seconded by Stephen and unanimously approved.

Hexachlrobutadiene

Dan would prefer to keep the currently posted coefficients.

A motion was made by Dan to use the current concentration limit of 50 - 200 ug/L for Hexachlorbutadiene on the NPW FoPT accreditation table and leave the correlation coefficients as currently tabulated in place. The motion was seconded by Stephen and unanimously approved.

N-NitorosoDi MethylAmine

A motion was made by Dan to use the current concentration limit of 50 - 200 ug/L for N-Nitrosodimethylamine on the NPW FoPT accreditation table and use the new correlation coefficients as tabulated. The motion was seconded by Stephen and unanimously approved.

This is a departure from our SOP, but it is only a slight failure.

Hexachlorcyclopentadiene

A motion was made by Dan to reinstate Hexachorcyclopentadiene at 50 – 200 ug/L on the NPW FoPT accreditation table and use the old correlation coefficients as tabulated on the current table. The motion was seconded by Joe and unanimously approved.

3,3'- Dichlrobenzidine

A motion was made by Dan to reinstate 3.3'-Dichlorobenzidine at 50 – 200 ug/L on the NPW FoPT accreditation table and use the old correlation coefficients as tabulated on the current table. The motion was seconded by Joe and unanimously approved.

Benzidine

Dan motioned that the previous decision be left in place and that this analyte be removed from the Chemistry FoPT table. The motion was seconded by Joe and unanimously approved.

4. Action Items

See action item table in attachments.

5. New Business

None.

6. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee will be August 13, 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 1:30 pm EST.

**Attachment A**

**Participants**
**TNI**
**Chemistry FoPT Subcommittee**

| Members | Affiliation | Contact Information |
|---|---|---|
| Carl Kircher,<br>Chair<br>**Present** | Florida DOH | 904-791-1574<br>carl_kircher@doh.state.fl.us |
| Joe Marotti<br><br>**Present** | Sigma-Aldrich RTC | 307-721-5485<br>jmorotti@sial.com |
| Amy Doupe<br><br>**Absent** | Lancaster Laboratories, Inc. | 717-656-2300 x1812<br>aldoupe@lancasterlabs.com |
| Jeff Lowry<br><br>**Absent** | Wibby Environmental | 720-560-2232<br>Jlowry@wibby.com |
| Eric Smith<br><br>**Absent** | TestAmerica | 615-726-0177 x1238<br>eric.smith@testamericainc.com |
| Stephen Arpie<br><br>**Present** | Absolute Standards, Inc. | 203-281-2917<br>stephenarpie@mac.com |
| Dan Dickinson<br><br>**Present** | New York, DOH | 518-485-5570<br>dmd15@health.state.ny.us |
| Stacey Fry<br><br>**Present** | E.S. BABCOCK & Sons, Inc. | 951-653-3351 x238<br>sfry@babcocklabs.com |
| Ilona Taunton,<br>Program Administrator<br>**Present** | TNI | 828-712-9242<br>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. *(3/24/09 – It was determined that these tables are used by more than just ABs. This needs to be reconsidered.)* | TBD | Ongoing | |
| 87 | Discuss views on dropping problem analytes with the PTP EC. | Carl | Next PTP EC Meeting | |
| 89 | Final review SOP. Submit comments to Carl. | All | 7/17/12 | Complete |
| 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 | |
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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 | | | |