

**SUMMARY OF THE
TNI CHEMISTRY EXPERT COMMITTEE MEETING**

AUGUST 22, 2014

The Committee held a conference call on Friday, August 22, 2014, at 2:00 pm EDT. Chair Richard Burrows led the meeting.

1 – Roll call

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| Richard Burrows, Test America (Lab) | Present |
| Francoise Chauvin, NYC DEP (Lab) | Absent |
| Brooke Connor, USGS (Other) | Absent |
| Dan Dickinson, NYSDOH (Accreditation Body) | Present |
| Mandi Edwards, Envirochem (Lab) | Present |
| Tim Fitzpatrick, Florida DEP (Lab) | Present |
| JD Gentry, ESC (Lab) | Present |
| Nancy Grams, Advanced Earth Technologists, Inc. (Other) | Present |
| Anand Mudambi, USEPA (Other) | Present |
| John Phillips, Ford Motor Co., (Other) | Present |
| Scott Siders, IL DEP (AB) | Absent |
| Gary Ward, OR DPH (AB) | Present |
| Ken Jackson, Program Administrator | Present |

Associate Committee members present: Arthur Denny; Reed Jeffrey; Dixie Marlin; Diana Shannon; Colin Wright.

2 – Previous Minutes

It was moved by Anand and seconded by John to approve the minutes of July 25, 2014. All were in favor except Nancy who abstained. Richard deferred consideration of the August 4 and 5 minutes until the next call.

3 – Number of Replicates for the MDL

Richard explained, for the on-going study, it had been realized a considerable number of replicates would be required. It was discussed if this needed to be addressed before EPA published the document out for public comment. As an example, Richard had calculated the number of replicates for some organics in his full-service laboratory would exceed 2000 runs per year. Richard suggested options would be to do nothing, or to suggest to EPA the procedure should be modified to require (say) a minimum of 7 replicates per preparation per level per mix per year, and 1-2 per instrument. Nancy asked if EPA would have an option at this stage to change the procedure, but that was not known at this stage. Tim and Anand thought EPA should be alerted by framing the issue and telling them the committee is working on draft language. Nancy suggested asking EPA if they wanted input now or

during the comment period. It was agreed to contact EPA. It was then discussed how many replicates should be required. Nancy was concerned that 7 replicates would not be enough for a laboratory with only one instrument, and modifications could perhaps be allowed when there are multiple instruments that produce the same MDL. John urged caution, however, since instruments may be replaced in a laboratory over the years. Nancy said a laboratory must have MDLs per analyte, per method, and per extraction procedure. She felt the focus should be on large laboratories. Richard said an option for small laboratories would be to change the quarterly requirement per instrument from 2 to 1 (Section 3a in the procedure). John suggested an increase in section 3b of the minimum number of replicates per year from 7 to 8. That would satisfy Nancy's concern that there would be at least 16 after the first year.

The following was moved by John and seconded by Anand: "In section 3a change from 2 spiked blanks to 1 spiked blank, and in Section 3b change from 7 spiked blanks and 7 method blanks to 8 spiked blanks and 8 method blanks." Dan said it would need to be clarified that a laboratory with only one instrument would need to run 2 spiked blanks in Section 3a. It was agreed to modify the motion to read: "In section 3a change from 2 spiked blanks to 1 spiked blank (2 if there is only one instrument), and in Section 3b change from 7 spiked blanks and 7 method blanks to 8 spiked blanks and 8 method blanks." All were in favor. Richard agreed to send the proposed language changes to EPA (Lem and Adrian) with a letter of concern.

4 – Quantitation Limit Data

John had updated his spreadsheet on the analysis of data. He had now pooled all the laboratories together to better compare them to the IDE and IQE outcomes. This also gave a much larger N for most spike concentrations, and it could be thought of as a single laboratory pooling several instruments to come up with a single QL. He said these will not be the lowest QL estimates possible, but they should give a good idea of how the procedures work. Also he had added one more quantitation parameter (whether the concentration was more than 3 times the MDL). This worked well for the metals, which he showed. An example was antimony with an MDL_b of 4.26 and an MDL_s of 4.08 ppb. The IDE for antimony was 10.6 ppb. The IQE-10 of 23.7 ppb was shown to be a reasonable level, since only at a spiked concentration of 40 ppb were all the criteria passed (quantitated). Discussion of the metals data suggested any of the proposed criteria might be usable. Richard suggested 3 times the MDL would be a very simple solution if it holds up for the semi-volatiles. John would try to get the semi-volatiles data ready for the next meeting.

5 – Calibration Interim Standard Comments

Richard had scheduled a call with Aaron Alger to discuss her comments. Gary and Dan volunteered to participate. A call would also be scheduled with the LASEC.

6 – Adjournment

The meeting was adjourned at 3:25 pm EDT.