

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

SEPTEMBER 19, 2014

The Committee held a conference call on Friday, September 19, 2014, at 2:30 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) | Present |
| Brooke Connor (Other) | Present |
| 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) | Absent |
| John Phillips, Ford Motor Co., (Other) | Present |
| Scott Siders, IL DEP (AB) | Absent |
| Gary Ward, OR DPH (AB) | Present |
| Ken Jackson, Program Administrator | Absent |

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

2 – Previous Minutes

It was moved by Nancy and seconded by Francoise to approve the minutes of September 5, 2014. All were in favor.

3 – Meeting with the Laboratory Accreditation System Executive Committee (LASEC)

The previous day several Committee members had met, by conference call, with members of LASEC. The purpose was to discuss LASEC's comments on the Chemistry Interim Standard. Richard said some of the comments were new, raising issues that had not been raised by voters on the Voting Draft Standard (VDS). The Committee was powerless to address them, since the Interim Standard can only address the Committee's response to voters' comments made on the VDS. It had been agreed at the meeting that the Committee would, therefore, provide responses on only the latter type of comments. Francoise suggested tabling some of the comments until the next round of standards development. She also said she would help Richard prepare the responses to Aaron Alger and LASEC.

4 – Quantitation

Tim had sent by e-mail data on inorganics (Al and Fe by method 200.7; As, Cu and Pb by method 200.8, Hg by method 1631, total P by method 365.1, and ammonia). He showed how he had tested for normality, and calculations of MDL_b from blank data, MDL_s from low-level spikes near the LOQ, and the 99th percentile of the method blanks. For all analytes, the 3x MDL criterion looked reasonable for the LOQ. Some of the analytes (Al, Fe, Pb, and Hg) showed a non-normal distribution and Nancy and Dan questioned if it was appropriate to have used non-robust statistics. However, Richard observed that, even in those cases, the MDL_b was still falling visually in about the right place. Tim said he also had some cyanide and nitrate data he would look at. John announced he was preparing a template for the data analysis he conducted earlier, and it would be available in about a week. He would then circulate it to the call participants, inviting them to put in and evaluate their data against the different criteria. He stressed more data would make the case for the criterion choice even stronger. Richard said he had received enough Committee Members' votes to adopt the 3xMDL criterion, and the committee should next continue with the LOQ procedural language, and start work on a presentation of the LOQ and new MDL and how they would tie together. This could be presented as a webinar. Nancy volunteered to work on the language, and John and Brooke said they would help with the presentation.

A discussion of Richard's initial draft of the LOQ procedural language followed. Richard summarized the procedure as the laboratory first selecting what it wants for its LOQ, and then verifying it. The initial and then continuing verification were written in a very similar way to the MDL procedure, with the idea that people should be able to use the spikes used for the MDL to also verify the LOQ. It was noted if the MDL changes the laboratory would have to verify that the LOQ was still at least 3x the MDL. John added that most people would use the LOQ for the continuing verification and then draw their precision and bias from those data. Richard pointed out if the spike is below the claimed LOQ, the precision and accuracy will not be quite as good as they can be (though close). Nancy was concerned that the standard does not state a laboratory must evaluate its LOD. She said at the end of the year the laboratory is just making sure the spiking concentration for the LOQ is still at least 3x the MDL, and the MDL may have come from these samples or it may not. Tim added that a laboratory only doing RCRA work would not have to use the MDL procedure, and would not necessarily have an LOD. However, Richard said the laboratory would likely have clients who still wanted an LOD for RCRA work. Richard referred to the current standard that if a laboratory does not report data below its quantitation limit, it does not need an LOD. Also, if the laboratory has calculated an LOD, it does not have to do anything to verify its quantitation limit. He questioned if that should be taken out and if it should be required to have an LOD (not necessarily through the MDL procedure) and an LOQ. Nancy wondered if there could be an option for a laboratory not having to do an LOD if it has really good precision at its LOQ and never reports below it. Richard and John agreed that could be put in, and Richard added it would have to be shown that blanks are under control and well below the LOQ. Nancy said she would include this option in her draft.

5 – New Committee Member Application

An application had been received from a colleague of Dan. This person could only be added as a replacement for Dan, since the rules preclude more than one Committee Member from the same organization. The application would be considered during a future closed session of the Committee Members.

6 – Adjournment

The meeting was adjourned at 4:00 pm EDT, with the next meeting to be scheduled on October 3 at 2:00 pm.