# SUMMARY OF THE TNI CHEMISTRY EXPERT COMMITTEE MEETING

## **NOVEMBER 20, 2015**

The Committee held a conference call on Friday, November 20, 2015, at 2:00 pm EST. Chair Richard Burrows led the meeting.

#### 1 - Roll call

Richard Burrows, Test America (Lab)	Present
Francoise Chauvin, NYC DEP (Lab)	Present
Brooke Connor (Other)	Present
Gale Warren, NYSDOH (Accreditation Body)	Absent
Colin Wright, Florida DEP (Lab)	Present
Anand Mudambi, USEPA (Other)	Present
John Phillips, Ford Motor Co. (Other)	Present
Scott Siders, PDC Labs (Lab)	Present
Valerie Slaven, Teklab (Lab)	Absent
Gary Ward, OR DPH (Accreditation Body)	Absent
Ken Jackson, Program Administrator	Present

Associate Committee Members present: Eric Davis; Arthur Denny; Chuck Neslund; Karen Olson.

#### 2 – Previous Minutes

It was moved by John and seconded by Francoise to approve the minutes of October 23, 2015. All were in favor, except Brooke who abstained. It was moved by Anand and seconded by Brooke to approve the minutes of November 6, 2015. All were in favor, except Brooke who abstained.

#### 3 - Interim Standard on Detection and Quantitation

Richard announced the voting was complete, and the standard would pass when any persuasive comments had been satisfactorily addressed. The committee considered the voters' comments.

**1.5.2.1.2** "The new MDL procedure can't be performed except over the course of multiple days. If the ongoing verification of the MDL fails (see the second paragraph of 1.5.2.1.2), the laboratory shall determine a new MDL. Is it the intent of this procedure that no data can be produced by this method during this timeframe, as no valid MDL would exist?" The committee felt this was a valid point, since it had not been the committee's intention to stop the laboratory performing the analysis for 3 days until the MDL had been re-determined. Scott suggested the laboratory could be told it could continue using its current MDL in the interim. Chuck said the laboratory should not be waiting until the last day of the quarter to do the verification. They should do it in advance so they have the data for the particular time period. He also pointed out the original MDL might turn out to still be valid after the re-verification. Scott was concerned the standard did not specify that. Richard suggested just saying the initial study must be repeated within 30 days without adjusting the MDL in the meantime. The committee agreed to make this change to the standard.

**Section not specified.** "I believe the TNI Standard should not require the LOQ to be at least 3 times the MDL. This is a very good rule of thumb but exceptions to this need to be made for some problematic analytes. This general rule of thumb should not be a requirement, but should have some flexibility for the labs to decide on a case by case basis. I also believe that we need to wait until the 40CFR136 MDL is officially changed before adopting these changes. The proverbial cart is being placed before the horse here......". This had not been commented on at the Voting Draft Standard (VDS) stage, so was already voted in.

**1.5.2.3** "The current requirement to verify the LOD or the LOQ for each matrix, method, and analyte annually is the only standard left in the Volume 1, Module 4 Chemistry section that explicitly specifies any kind of requirement and frequency for the accredited laboratory to prove to the Primary NELAP Accreditation Body that it can achieve accuracy, precision, sensitivity, and selectivity for EACH accredited analyte, method, and matrix on some defensible basis. Laboratories may never get a sample for certain oddball, rarely-analyzed analytes (and matrices in some cases), and the laboratory usually never agrees to relinquish accreditation voluntarily for such analytes. Therefore, I cannot approve of the proposed Section 1.5.2.3 as presented without any concurrent change to the Demonstration of Capability section to require a continuing demonstration of capability for EACH accredited matrix, method, and analyte for the laboratory on an on-going annual (or biannual?) basis. The Expert Committee apparently did not "take the hint" when I proposed the 1.6.2.2.1(e) and 1.6.2.2.2(e) sections during the Voting Draft Standard voting stage. Proposed change that would prompt me to change my vote to "Affirmative": Section 1.5.2.3: If no analyses for an accredited matrix-method-analyte Field of Accreditation were performed in a given calendar year, then the verification of the MDL/LOQ shall be performed for that Field of Accreditation within the calendar year (annually) employing all sample processing steps (e.g., digestion, dilution, distillation, extraction, cleanup, and analysis on at least one instrument) needed for the matrix-method-analyte. Alternatively, I would change my vote to "Affirmative" if the Expert Committee made the following IMMEDIATE addition to the Continuing Demonstration of Capability language in section 1.6.3.1, as an additional new last sentence (but I doubt that the Chemistry Expert Committee will be able to change this section at this time): Section 1.6.3.1 new last sentence: At a minimum, to prove on-going capability when no analyses are performed for a given accredited matrix-method-analyte Field of Accreditation in a given calendar year, at least one analyst in the laboratory (or as many analysts as needed) shall perform a Continuing DOC for that Field of Accreditation within the calendar year (annually) employing all sample processing steps (e.g., digestion, dilution, distillation, extraction, cleanup, and analysis on at least one instrument) needed for the matrix-method-analyte." Richard noted that some language had been added that would require a new initial MDL/LOO verification if no analysis had been performed within a year, so the comment had been addressed as far as possible within the LOD/LOQ section. Brooke pointed out the commenter had mentioned the Demonstration of Capability section, and the committee agreed that was the section that would need to be changed to really address that concern. However, that would have to wait until a future modification of the standard. Richard said he would contact the commenter to find if agreement could be reached.

**1.5.2.1.2** "The quarterly verification of MDLs is a burden for some multicomponent analyses such as pesticides or BNAs that have a large number of components. The burden could be alleviated to some extent by modifying this requirement to include two verifications every six months. Doing so, provides labs more flexibility in conducting the MDL verifications." This was discussed at length. The committee was sympathetic that, in the case of pesticides, a large number of analyses would be required

every quarter. Colin added a difficulty for the laboratory was the need to prepare more spike mixes. However, this could not be changed, having received no comment at the VDS stage.

**1.5.2.1** and **1.5.2.1.1** "Sections 1.5.2.1 and 1.5.2.1.1 do not require any adherence to quality control requirements such as recovery. Since you are allowing the use of low level spikes for MDL determinations, should there be a requirement to meet the accepted range for recovery of the low level spikes?" The committee had discussed this extensively while writing the standard, looking at many ways of setting recovery criteria, and had decided it could not be done. This would be inconsistent with the new EPA MDL procedure. The voter would be so notified and would be told it may be considered later.

This concluded consideration of the comments. Richard said he would write up proposed responses, and then the committee could vote on them at the next meeting.

# 4 - Next Meeting

This would be December 18.

### 6 – Adjournment

The meeting was adjourned at 3:00 pm EST.