

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

**JUNE 14, 2013**

The Committee held a conference call on Friday, June 14, 2013, at 2:00 pm EDT.

**1 – Roll call**

Richard Burrows, Test America (Lab)	Present
Francoise Chauvin, NYC DEP (Lab)	Present
Brooke Connor, USGS (Other)	Present
Dan Dickinson, NYSDOH (Accreditation Body)	Present
Tim Fitzpatrick, Florida DEP (Lab)	Absent
Nancy Grams, Advanced Earth Technologists, Inc. (Other)	Present
Anand Mudambi, USEPA (Other)	Present
John Phillips, Ford Motor Co., (Other)	Present
Ken Jackson, Program Administrator	Present

Associate Committee Members present: Steve Arpie; Arthur Denny; Mandi Edwards; Andrew Friedrich; Gary Ward

**2 – Previous Minutes**

The draft minutes of May 10 and May 31 were amended to show that action item 25 is complete. With this change it was moved by Brooke and seconded by Dan to approve the May 10 minutes. The minutes were approved with all in favor except Anand who abstained.

It was moved by Anand and seconded by Francoise to approve the May 31 minutes with the above change made to item 25. The minutes were approved with all in favor except Brooke who abstained.

**3 – Method Detection Limit Procedure**

There was an extended discussion on the definition of numerical result (**footnote 2**). Richard had written “A numerical result includes both positive and negative results, not results of ND commonly observed when a peak is not present in GC or GCMS analysis.” Nancy raised the problem of people entering zero and numbers rounded to zero that should have been ND, and calling it a numerical result. Also results preceded by “<” are sometimes converted to zero. Richard suggested inserting after the comma “including results below the current MDL” to discourage using zero or “<”. There was general agreement.

On the previous call, Françoise had questioned **Section 7a**, saying the text should require some action that would avoid having the wrong MDL for a year before it is checked. In response, the following **footnote 3** was crafted: “If any analytes are repeatedly not detected in the quarterly spike sample analysis, this is an indication that the spiking level is not high enough and should be adjusted upward”. Françoise felt both **footnotes (1 and 2)** should be in the main text, since they are important. Dan thought it would be auditable as footnotes, but wondered if some auditors would disagree. Anand suggested leaving as footnotes, since it stays closer to the original MDL document. It was agreed to leave as footnotes for now, and see if there are comments on it.

In **Section 7c** it had been questioned if the requirement was too tight that if less than 2% of the method blank results were above the MDL it could be left unchanged. Nancy thought it could be a problem if there was a small method blank population, but the 2% requirement could encourage people to have more data points. Anand said it might be difficult for some laboratories to get enough data points to make it meaningful; e.g., only 1 in 50 is 2%. Nancy was concerned the 2% criterion was related to the MDL<sub>b</sub> more than the MDL<sub>s</sub> and perhaps there should be different criteria for each. Richard was hesitant to do this, saying it would increase the complexity. Brooke pointed out it was not clear that the higher of the MDL<sub>b</sub> and MDL<sub>s</sub> had been selected. It was agreed to modify the first sentence to make this clear by adding a parenthetical statement in the first sentence; i.e., “If the recalculated MDL (i.e., the greater of the recalculated MDL<sub>s</sub> and MDL<sub>b</sub>) is within 1/3 to 3 times the existing MDL ...”.

**Action Item:** Brooke agreed to find some existing data, and circulate it to the committee to see if the 2% requirement was too tight.

The first sentence in **Section 7b** was questioned; i.e., “At least once per year, re-calculate MDL<sub>s</sub> and MDL<sub>b</sub> from the collected spiked blank and unspiked blank results using the equations in section 6.” After discussion it was agreed to clarify that all the method blank results are needed, and all “unspiked blanks” should be changed to “method blanks”. In the sentence “Use only data associated with acceptable calibrations and batch QC.”, it was pointed out “acceptable” was not clear. It should be made clear which samples should be included, especially method blanks. Richard agreed to write another footnote to explain what the population needs to be.

In the **Addendum** (Determination of the MDL for a specific sample matrix), Dan had suggested re-ordering the bulleted wording. The committee accepted it. There was discussion on the signal-to-noise values, and these were adjusted.

John had noticed some section numbering inconsistencies and these were fixed. Also on John’s suggestion the **reporting** section was re-labeled **documentation**. **Action item:** John would prepare a list of what should be documented.

#### **4 – Next Steps**

Richard suggested scheduling a separate call soon to discuss new member applications. He said on the next call the committee would look at the comments on the calibration standard, and would assign members to contact some of the commenters for clarification.

## 5 – Adjournment

The meeting was adjourned at 3:30 pm EDT. The next call was scheduled on June 28, 2:00 – 3:30 EDT.

### LIST OF ACTION ITEMS TO BE COMPLETED

Item No.	Date Proposed	Action	Assigned to:	To be Completed by:
1	1/31/12	Add a definition of Reporting Limit or Quantitation limit to the standard.	Committee	Defer to quantitation sections
2	1/31/12	Continue to consider the concept of routine low-level QC in the standard.	Committee	Ongoing
3	1/31/12	Review Sections 1.5 and 1.6 of the 2009 standard's chemistry module to determine if current calibration requirements are adequate.	Committee	Not determined
4	1/31/12	Spacing of calibration standards will be considered for the guidance document.	Committee	Ongoing
5	2/17/12	Draft language for items in the calibration standard	Richard (Items 1 and 2) Anand (Item 3) Nancy (Item 5) Anand and Francoise (Item 6) Tim (Item 11)	Complete
6	2/17/12	Review Volume 1 Module 4 of the 2009 standard to identify any inconsistencies with the new language	All Committee Members	Complete
7	3/2/12	Add 1-2 sentences under the header 1.7.1 to explain that method is also included in calibration.	John	Complete

<b>Item No.</b>	<b>Date Proposed</b>	<b>Action</b>	<b>Assigned to:</b>	<b>To be Completed by:</b>
8	3/2/12	Clean up the parts of Section 1.7.1 referring to initial calibration and the parts referring to continuing calibration.	Committee	Complete
9	3/2/12	Add criteria for rejection of calibration standards to the guidance document.	Committee	Not determined
10	3/2/12	Add to the guidance document discussion of analysts using the most recent calibration rather than choosing which of 2 or more curves to use.	Committee	Complete (done in the standard)
11	3/2/12	Include a paragraph in the standard that addresses a single-point calibration for P/A testing.	Committee	Complete
12	3/30/12	Check the language does not contradict the existing standard regarding meeting method requirements vs. standard requirements for calibration.	Committee	Not determined
13	3/30/12	Sections 1.7.1.1 j and k will be modified further as a result of the March 30 discussions.	Anand and Francoise	Complete
14	3/30/12	Have the guidance document consider orders of magnitude in deciding the minimum number of standards, and keep a placeholder in Section 1.7.1 to refer to it.	Committee	Not determined
15	3/30/12	Add a definition for threshold testing	Committee	Not determined
16	3/30/12	Richard's, John's and Anand's March 30 changes will be incorporated into a single document.	Ken	Complete

<b>Item No.</b>	<b>Date Proposed</b>	<b>Action</b>	<b>Assigned to:</b>	<b>To be Completed by:</b>
17	5/4/12	Add to the guidance document that Section 1.7.1.1 (g) requirements should also be applicable for average response, when you evaluate with the RSD, and that is numerically the same value as the RSE.	Committee	Not determined
18	5/4/12	Discuss in the guidance document how to check quarterly (ref. Section 1.7.1.1 (j) (i).	Committee	Not determined
19	6/1/12	Bullet points will be drafted for a proposed PowerPoint presentation	Brooke, Richard, Tim, Francoise, Anand	Complete
20	6/1/12	Bullet points will be drafted for a slide that will describe the items to be discussed in the guidance document.	John	Complete
21	7/20/12	Explain in the guidance document the difference between MDL and the true detection limit.	Committee	Not determined
22	10/5/12	A note will be appended to the draft language of Section 1.7.1.1 n until the CCV language has been written.	Anand	Complete
23	11/2/12	For the MDL document, language will be drafted in the scope to limit the use.	John	Complete
24	11/2/12	In the Scope and Application section of the edited MDL document, the sentence "To accomplish this, the procedure was made device- or instrument-independent." Will be re-worked.	John	Complete

<b>Item No.</b>	<b>Date Proposed</b>	<b>Action</b>	<b>Assigned to:</b>	<b>To be Completed by:</b>
25	11/30/12	A letter will be drafted to the EPA OW, asking what kind of stakeholder composition they want ELAB to put together for reviewing the modified MDL procedure.	John	12/14/12
26	2/1/13	In the calibration standard Sections 1.7.1.1 (h) i and 1.7.1.1 (k) i, revisit the suggestion to replace LOQ with “lowest concentration for which quantitative data are to be reported” if LOQ is re-defined.	Committee	Not determined
27	2/15/13	Check on travel funding for face-to-face meeting	Ken	Complete
28	6/14/13	Some existing data would be circulated to the committee to see if the 2% requirement in Section 7c of the MDL document was too tight.	Brooke	6/28/13
29	6/14/13	A list of items to be documented in the MDL procedure would be prepared.	John	6/28/13