SUMMARY OF THE
TNI CHEMISTRY EXPERT COMMITTEE MEETING

MARCH 28, 2013

The Committee held a conference call on Thursday, March 28, 2013, at 2:00 pm EDT.

1 – Roll call

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

Associate Committee Member present: Gale Warren; Chung-Rei Mao

2 – Previous Minutes

It was moved by John and seconded by Dan to approve the March 15 minutes. All were in favor except Lee who abstained. Since a quorum was not present, Richard said he would send the draft minutes out for e-mail approval.

3 – Method Detection Limit Procedure

The **second paragraph of Scope and Application** states "The MDL obtained by this procedure is used to judge the significance of a single measurement of a future sample." Richard suggested this sentence should remain, since it is current language. Chung-Rei questioned what "significance" means. Nancy said MDL is used to compare measurements by instruments for the purpose of censoring. The limitation is that you are only analyzing it once and censoring data below that point. After discussion it was agreed to clarify the statement by adding: "A result below the MDL is judged to be qualitatively unreliable while a result above the MDL is judged to be qualitatively reliable. Results above the MDL are judged to have a low probability of false positives**."** In the **third paragraph** Chung-Rei said there could be confusion with the second sentence ("To accomplish this, the procedure was made device- or instrument-independent."), since this really means this is one procedure that applies to different analytes and matrices. Lee suggested striking that sentence, and it was agreed to do so provided the first sentence was modified to read "The MDL procedure is designed to be straightforward and applicable to a broad variety of physical and chemical methods and instruments."

Procedure Section 2. Lee said specifying reagent (blank) water to be as free from analyte as possible might be interpreted that something special needs to be done in preparing the reagent water. These blanks should be prepared the same way as a method blank is prepared. It was decided the whole paragraph is unnecessary and it was deleted.

Procedure Section 3. It was agreed to put 7 blank samples before 7 spike samples.

Procedure Section 5. There was some discussion whether to remove the formula for standard deviation, since most people will use a spreadsheet function to calculate it. However, it was decided to leave it, so it would be clear the sample standard deviation and not the population standard deviation is calculated. This was also made clear in the first sentence by stating "sample" standard deviation.

Procedure Section 6d. This was a proposed new paragraph on evaluation of the LOQ in the initial determination. "6 (d) Evaluate the LOQ: If more than one result for any individual analyte from the spiked samples is below the MDL, then the LOQ (and spiking level) must be raised. Raising the spiking level by a factor of 2 is recommended, but the laboratory may use best judgment to determine how much the spiking level must be raised in order to reliably obtain results above the MDL." There was a protracted discussion on why it is assumed the spiking concentration is the LOQ. Richard pointed out it is because that is the concentration where data are available that establish the precision and accuracy. This statement was added in Section 3.

At this point, the discussion was stopped. Richard suggested, since the committee was now getting close to having the basis for a procedure, he should circulate the document as it now stood and ask everyone to review it. It could also be shared with colleagues to solicit some outside opinions. It was agreed to then provide comments to the rest of the committee by e-mail, so they could be reviewed and discussed during the next 1-2 calls.

4 – Adjournment

The meeting was adjourned at 3:30 pm EST. The next call was scheduled for April 12 at 2:00 pm 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
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	Committee	Complete (done in the

Item No.	Date Proposed	Action	Assigned to:	To be Completed by:
		analysts using the most recent calibration rather than choosing which of 2 or more curves to use.		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
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

Item No.	Date Proposed	Action	Assigned to:	To be Completed by:
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
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	Complete
26	2/1/13	In the calibration standard	Committee	Not determined

Item No.	Date Proposed	Action	Assigned to:	To be Completed by:
		Sections 1.7.1.1 (h) i and 1.71.1 (k) i, revisit the suggestion to replace LOQ with “lowest concentration for which quantitative data are to be reported”if LOQ is re-defined.		
27	2/15/13	Check on travel funding for face-to-face meeting	Ken	Complete