SUMMARY OF THE TNI CHEMISTRY EXPERT COMMITTEE MEETING

FEBRUARY 1, 2013

The Committee held a conference call on Friday, February 1, 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)	Present	
Nancy Grams, Advanced Earth Technologists, Inc.	Present	
(Other)		
Anand Mudambi, USEPA (Other)	Present	
John Phillips, Ford Motor Co., (Other)	Present	
Lee Wolf, Columbia Analytical Services (Lab)	Present	
Ken Jackson, Program Administrator	Present	

Associate Committee Members present: Arthur Denny; Diana Shannon; Gale Warren

2 – Minutes from January 4

It was moved by Francoise and seconded by Anand to approve the minutes as presented. All were in favor. The minutes were therefore approved.

3 – Calibration Modified Working Draft Standard

The discussion of this draft standard during the Forum on Laboratory Accreditation on January 16 resulted in further draft changes. The committee worked through these changes.

All changes through Section **1.7.1** were accepted.

In Section 1.7.2 (d) i, it was questioned what "used" means. Although analytical batch is defined elsewhere in the standard, it was questioned what is a "group". After further discussion the wording under 1.7.2 (d) and 1.7.2 (d) i was changed to:

"Instrument continuing calibration verification shall be performed at the beginning and end of each analytical batch, and at the frequency defined in the method except: i. If an internal standard is used, only the CCV immediately preceding a group of samples is used;" In Section 1.7.2 (d) iii it was stated that an ICV that passes the CCV limits can be used any time. The wording of this section was changed to:

"an ICV (second source calibration verification) that also passes the CCV limits may be used in place of a continuing calibration verification immediately after an initial calibration."

In Denver, discussion of Section **1.7.2** (**f**) **iii** suggested a limit should be added. Also, in the last sentence it was suggested reporting should be qualified. Therefore, the Section was modified to read:

"non-detected analytes that marginally fail the continuing calibration verification low (not to exceed an additional 10%, for example 60% recovery where the CCV low limit is 70%) may be reported without qualification for a CCV failure if a successful demonstration of adequate sensitivity (see section n of the Initial Calibration section for criteria and reporting) has been performed within the same analytical batch. For methods that require bracketing continuing calibration verification standards, successful bracketing demonstrations of sensitivity are also required. Otherwise the samples affected by the unacceptable continuing calibration verification shall be re-analyzed after a new calibration curve has been established, evaluated and accepted, or if necessary, reported with qualification."

On December 7, 2012, Francoise and John had submitted comments on the WDS. These could not be addressed in time before the deadline for publication on the TNI website, so the committee had agreed to address them later. These comments were now addressed.

Section 1.7.1.1

Francoise had noted the following text had been inadvertently removed from 1.7.1.1.i):

"If the initial instrument calibration results are outside established acceptance criteria, corrective actions shall be performed and all associated samples re-analyzed. If reanalysis of the samples is not possible, data associated with an unacceptable initial instrument calibration shall be reported with appropriate data qualifiers."

It was discussed where to re-insert this text, and it was agreed it should be at the beginning of the section (immediately before "The following items are essential elements of initial instrument calibration

Section 1.7.1.1 (h) i and Section 1.71.1 (k) i

John had suggested replacing LOQ (in 4 places) with "lowest concentration for which quantitative data are to be reported". It was noted that LOQ is already defined in V1M2. Therefore, the Committee decided to leave LOQ in, but noted to re-visit this issue if LOQ is re-defined.

Section 1.7.1.1 (h) i

The equation for % Residual error was checked and it was assured the x_i and x'_i terms were in the right order.

Section 1.7.1.1 (n)

Francoise had questioned: how often must the sensitivity check standard be analyzed? (1.7.2.f.iii specifies it, but that section applies to a failed continuing calibration verification, not to a failed ICAL). The Committee agreed this issue had already been addressed.

Section 1.7.2 (c)

Francoise had suggested inserting "one of", to read:

"The concentration of one of the calibration verification standards shall be equal to or less than the mid-point of the calibration range (as determined by the average of the highest and lowest calibration standard)."

However, it was argued that this is method-specific and putting those words in might imply there should always be more than one calibration verification standard. Therefore, the text remained unchanged.

4 – Next Steps

Richard said he would circulate the amended MWDS to let everyone check it for the last time. Then it could be voted out of committee during the next conference call.

He also asked Ken to check which Committee Members' terms expired at the end of 2012.

Committee members were asked to look at the latest MDL document in preparation for the next call.

5– Adjournment

The meeting was adjourned at 3:35 pm EST. The next meeting will be on February 15, 2013.

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	12/14/12
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.		