SUMMARY OF THE
TNI CHEMISTRY EXPERT COMMITTEE MEETING

NOVEMBER 15, 2013

The Committee held a conference call on Friday, November 15, 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
Mandi Edwards, Envirochem (Lab)	Present
Tim Fitzpatrick, Florida DEP (Lab)	Present
Andrew Friedrich, Chevron (Lab)	Present
Nancy Grams, Advanced Earth Technologists, Inc. (Other)	Present
Anand Mudambi, USEPA (Other)	Present
John Phillips, Ford Motor Co., (Other)	Absent
Scott Siders, IL DEP (AB)	Absent
Gary Ward, OR DPH (AB)	Absent
Ken Jackson, Program Administrator	Absent

Associate Committee member present: Lynn Boysen; Arthur Denny; Diana Shannon; Gale Warren

2 – Previous Minutes

Ken had asked the committee to review the following item in the draft minutes of November 11, 2013: **Michelle Wade, Section 1.7.1.1 f)** and **1.7.1.1 g)** commented: "*What happened to having a requirement for defined qualifiers? Labs are still going to report data above and below their curves... the old section f was better in my opinion*." Richard said this was fixed by re-writing the language to make it clear qualified data could be reported outside the calibration range.

3 – Calibration Voting Draft Standard

The next group of comments considered by the committee concerned the linearity check sample (Section 1.7.1.1 k). Richard summarized what those methods allow. It is to establish the linear range once a year and verify it once a quarter. Then if the linear range was (say) 50 ppm, on a daily basis you would use the zero point and a single calibration standard within that range; e.g., 5 ppm to establish the calibration. If you then get a sample of 10 ppm, because the linear range has been established, that would still be reportable without qualifiers. Tim suggested changing it to say you have to establish the

linear range of the instrument over which quantitative data are to be reported. Anand pointed out several different terms are used in the various subsections of 1.7.1.1 k, and suggested only using the term 'linear range', avoiding the use of 'linear calibration range' or 'linear dynamic range'. Francoise pointed out that method 200.7 says to analyze successively higher concentrations of an analyte until the observed analyte concentration is no more than 10% below the stated concentration of the standard. However, Tim said EPA had interpreted this buy saying the intent was not to go beyond the range over which you are reporting. The section included the language that the requirements for a linear fit multipoint calibration including ins sections 1.7.1.1i and j shall be met, but Anand said LOQ is not mentioned in i or j. Richard pointed out that LOQ is subsections f and g. Francoise said it would be necessary to define the range of the annual linearity check and the range defined by the calibrations done for every batch. Tim did not see why there was a need to establish linearity to the LOQ if the laboratory never intend to report that low. Dan referred to the 2003 standard stating one of the standards shall be at the lowest quantitation level, though that does not have to be the LOQ. Nancy said maybe it needs to say you cannot report unqualified data either above or below the established linear range, but Richard pointed out that subsection k is only about the high end of the range. Following this protracted discussion, Richard proposed the following language for 1.7.1.1 k) i: "Prior to instrument calibration, the linear range over which quantitative data are to be reported shall be established by analyzing a series of standards, one of which shall be at the lowest level of quantitation. To establish linearity, the requirements for a linear fit multi-point calibration included in this section (specifically 1.7.1.1 i) and j)) shall be met. Linearity must be established annually and checked at least quarterly with a standard at the top of the linear range, or at the frequency defined by the method." He asked the committee to consider his language and to be prepared to discuss it further during the next call if anyone had a problem with it.

The remainder of the call was takenup by continuing to consider specific comments received from voters.

Michelle Wade, Section 1.7.1.1 k) iv. "*This is a dangerous blanket statement to make. There may be other REQUIRED reasons to flag the data besides an ICAL. I can see a lab saying "I didn't flag the data even if my LCS failed because the standard said if my ICAL was good I didn't have to flag."* The language had already been changed to fix this.

Greg Jones, Section 1.7.1.1 n) i. and **1.7.1.1 n) ii**. Both comments were identical to Pam Varner's comments, and these had already been fixed by removing the language.

Michelle Wade, Section 1.7.1.1n)i "*I truely hope criteria themselves don't fail! the calibration verification itself may though."* This was similar to Cathy Westerman's comment and the language had been fixed. Also, on this section Michelle commented *"maybe you should add a "see below" comment??? (Referring to "fail marginally")."*and this had similarly been fixed.

Michelle Wade, Section 1.7.1.1n (last paragraph). "*1.7.1.1 States clearly that data can not be reported if the initial calibration is not acceptable.. so which is it???*" This had been removed.

Lynn Boysen, Section 1.7.1.1 n (last paragraph). "*is this confusing?? so is this just saying non detects in methods with over 10 analytes can be reported if the demonstration of sensitivity is met, even if the calibration criteria fails marginally?"* This paragraph had already been removed.

Judy Morgan, Section 1.7.2. "*There needs to be a clear difference in what you are calling initial and continuing calibration. Since no unique terms are being used, then the stricken sentence should be left in the first sentence of the first paragraph*." The language had been clarified to make a clear distinction between initial and continuing calibration.

Lynn Boysen, Section 1.7.2 (first paragraph). "*I feel for clarity the deleted sentence should remain in the standard. Otherwise I think it means a CCV must be done even if a initial calibration is performed.*" This had already been covered in subsection d) iii.

Lynn Boysen, Section 1.7.2 d) iii. "*is this saying "You can use a second source standard as a continuing calibration standard??*" This had been re-worded extensively.

Pam Varner and Greg Jones, no section identified. "*Standard wide use of the term "analytical batch": 1. The term "analytical batch" is used throughout this standard in a manner not consistant with definition used in other parts of the TNI standards. A different term should be selected, i.e. "analytical sequence", "analytical run", etc.*
Summary: In summary, this standard represents a detailed, prescriptive procedure that is not in keeping with TNI's mandate to provide "performance based" standards. The procedures described cannot be applied routinely without direct contradiction to current regulatory method and industry standard precedent." This comment had been discussed during the previous conference call, when the committee disagreed the use of "analytical batch" was inconsistent and ruled the comment non-persuasive.

Nicole Cairns, Section 1.7.2 d) ii. "*when the defined time period for calibration or the most recent calibration verification has expired; Proposed Language - when the defined time period for calibration or the most recent continuing calibration verification has expired, continuing calibration verification shall be performed prior to further analyses. Again add the word "continuing" to ensure there is no confusion between initial calibration verification and continuing calibration verification. Also add a clarifying statement at the end of this exception. Without the clarifying statement it could be interpreted that a CCV does not have to performed at all as it is an exception from the initial statement."* It was discussed whether this section is still required. Richard thought it was a remnant that should have been removed. It was agreed to remove it.

Nicole Cairns, Section 1.7.2 d) iii. "*an instrument calibration verification (second source calibration verification) that passes the continuing calibration verification criteria may be used in place of a continuing calibration verification standard. Proposed*

Language - an instrument initial calibration verification (second source calibration verification) that passes the continuing calibration verification criteria may be used in place of a continuing calibration verification standard. Remove the word "instrument" for the same reason as stated in comment 1 and add the word "initial" to be consistent with terminology." This change had already been made.

Carl Kircher, Section 1.7.2 d) ii. "*The proposed wording implies that when a calibration or calibration verification has expired, I don't have to do a calibration verification at all. The following additional language will help me change my vote from "Negative" to "Approve": ii. when the defined time period for calibration or the most recent calibration has expired, in which case another initial instrument calibration shall be performed*;" This change had already been made.

Lynn Boysen, Section 1.7.2 d) iii. "*is this saying "You can use a second source standard as a continuing calibration standard??*". Richard said the answer is "yes". The committee did not propose any change to the standard.

Carl Kircher, Section 1.7.2 d) iv. "*The following additional language should be added to clarify the meaning and intent: iv. a laboratory control sample … calibration goes through the same process (analytical and preparation steps) as the LCS (using the continuing calibration verification acceptance criteria).*" The language had already been changed to include "calibration verification limits", but on Tim's suggestion it was changed to Carl's proposed language.

Andrew Friedrich, Section 1.7.2 d) iii & iv. "*example at 1.7.2.d.iii &iv...this criteria is for an ICV or for the "initial CCV" "where calibration has not occured on that day"-that sentenc eis critical to have*". This had been fixed already.

Greg Jones, Section 1.7.2 f) ii. This was identical to the comment made by Pam Varner on this section. The language had already been removed.

Robert DiRienzo. This referred to an attachment, and the committee had already dealt with all his comments.

Roger Kenton, no section specified. "*This section removes the allowance to use a linearity check sample to extend the calibration range for highly linear techniques such as ICP. Depending upon the project (especially for waste testing), little is gained by cutting an ICP sample and re-running if a linearity check sample was performed and acceptance criteria were met. (See discusion for Section 1.7.1.1.k below too.)*". Linearity check comments remained pending. Richard said he would circulate the updated standard and asked the committee to look at the linearity check language, and to suggest changes if they agreed it is objectionable.

Richard asked Committee members to also read the entire standard and make sure nothing had been inadvertently messed up by the changes.

John had identified the words/phrases that needed definitions, identifying those that were already defined. Richard said he would forward it to everyone, and during the next call, people could be assigned to work on those outstanding definitions. Also during the next call, the few remaining calibration comments would be dealt with. Then if time permitted, a re-introduction to the detection limit material would be undertaken. Some comments already received back from ELAB would then be considered.

Andrew reminded the committee that the TNI website had published a guide for conduct of TNI participants in committee meetings. Richard asked Ken to make sure everyone got a copy.

The next call was scheduled for November 22, 2:00 – 3:30 pm Eastern Time.

5 – Adjournment

The call was adjourned at 3:20 pm EDT.