SUMMARY OF THE
TNI CHEMISTRY EXPERT COMMITTEE MEETING

SEPTEMBER 5, 2013

The Committee held a conference call on Thursday, September 5, 2013, at 1:00 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)	Absent
Anand Mudambi, USEPA (Other)	Absent
John Phillips, Ford Motor Co., (Other)	Present
Scott Siders, IL DEP (AB)	Present
Gary Ward, OR DPH (AB)	Present
Ken Jackson, Program Administrator	Absent

Associate Committee member present: Arthur Denny

2 – Previous Minutes

Ken had circulated draft minutes from the San Antonio meeting on August 6, 2013, and some changes were suggested. On page 1, the header was changed to reflect the correct date. On the 9th line of Judy Morgan, Section 1.7.1.1 e on page 5, "4 standards" was changed to "3 standards". With these changes it was moved by John and seconded by Francoise to approve the minutes. All were in favor and the minutes were approved.

It was moved by Tim and seconded by Brooke to accept the minutes of the last call (August 29, 2013). All were in favor and the minutes were approved.

3 – Calibration Voting Draft Standard

The committee continued working through the voters' comments on the VDS. Line numbers refer to the comments spreadsheet the committee was working from. The comments are in italics.

Line 77: Carl Kircher, Section 1.7.1.1 n. *The proposed wording suggests that once the method has 10 or more target analytes, ALL of them can have calibration criteria or*

verification criteria that "fail marginally." Adding the Table in Section 1.7.4.2(b) on the maximum allowable number of marginal exceedences to this section might help change my vote from "Negative" to "Approve."

Richard agreed the standard did not state how many analytes could fail. Scott agreed it could suggest as Carl stated, so the comment was ruled persuasive. Francoise agreed with Carl's suggestion of going with the marginal exceedances in Module 4, Section 1.7.4.2.b. Richard said this section has been controversial all along, and it must be remembered it is only for non-detect results in the sample. Scott said the concept of marginal failure for the ICAL and CCV is not consistent with approved methodology and present day users' expectations for instrument calibration. He said many of the comments bring forth a consistent theme, and he was concerned this concept may not be adopted by the NELAP AC, and it needs more refinement. He was also concerned it could favor false negatives out of the ICAL. Richard said it was put in partly because the concept of a demonstration of sensitivity for something that failed for non-detects is in the latest version of Method 8000. Richard said in San Antonio the committee had suggested as a possibility to just say something along the lines that if the method allows for calibration failures with demonstration of sensitivity then this standard would not prohibit it. That would limit it to those methods where it was specifically allowed. Andrew agreed with this approach. Richard added that a difficulty with Method 8270, with a lot of analytes, is the ICAL criteria have become much tighter, and EPA says it is expected that some analytes will fail. Scott felt the problem is that data would now be allowed to be reported unqualified when the ICAL failed. John felt, as more analytes are being added to the methods, a non-detect should be able to be reported if the sensitivity check was satisfactory. Scott said the committee could address Carl's concern that it appears all analytes could fail marginally, require the failed data to be qualified, and require corrective action for cases where the same compound fails repeatedly. John presented a scenario of 200 analytes in a semi-volatiles run, but the laboratory was only interested in 50 of them, and most of those were unlikely to be seen. The laboratory could then run standards as normal and if a compound they don't normally see shows up and everything passes they can go ahead and quantify it. However, if they don't show up, couldn't the laboratory just use instead of a calibration curve, a single calibration using the lowest standard or sensitivity level standard and just say the compound is a non-detect? That way they would not be required to always have a passing full calibration for non-detects, and this would get away from accepting calibrations that are marginal. Dan was concerned there could be an interference in the spikes that would suppress the signal resulting in a false negative. He wanted to add an assurance for the ABs that laboratories will have to think about false negatives because of interferences.

At this point Richard summarized the discussion by presenting the following options: take the language out altogether; leave the language mostly in but limit the number of marginal exceedances; or lastly take most of the language out, but put in a statement that if the method allows for calibration exceedances with a demonstration of sensitivity and qualified data, then the standard shall not prohibit it. There was general consensus to go with the last option. Richard volunteered to draft language for that option, and then the committee would re-visit it on the next call. The committee agreed the re-write should satisfy comments 77 through 86.

Line 87: Andrew Friedrich, Section 1.7.2. *Should not eliminate that first sentence. It is critical to the actual understanding of the intent of a CCV..."when instruments are not calibrated on the day of analysis". It is critical to the currently stated actions at TNI 2009 1.7.2 e.)-which are being eliminated at the draft as well.*

Andrew said his comment was no longer valid, so he withdrew it.

Line 88: Nicole Cairns, Section 1.7.2 *The validity of the initial calibration shall be verified prior to sample analyses by a continuing instrument calibration verification with each analytical batch. The following items are essential elements of continuing instrument calibration verification. Proposed Language - The validity of the initial calibration shall be verified prior to sample analyses by a continuing ~~instrument~~ calibration verification with each analytical batch. The following items are essential elements of continuing ~~instrument~~ calibration verification. Same as comment 1.*

This point was already dealt with.

Line 89: Bob Di Rienzo, Section 1.7.2.1 c. *Referring to the Standard Language: "The concentration of the calibration verification standard 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)." Comment: If the laboratory is using a linear range on ICP and the range is 10 to 50000 is the CCV be at 25000 Suggestion: Make this a multiple of the reporting limits like not to exceed 20 to 100 times the reporting limit.*

Andrew suggested there is confusion over the calibration range and the linear range. The committee ruled this non-persuasive because it refers to the calibration range and not the linear range. However, it was decided to revise Section 1.7.1.1 k to clear up any confusion over calibration range vs. linear range. Anand was already assigned to work on that section.

Line 90: Bob Di Rienzo, Section 1.7.2.1.f. *Referring to the Standard Language: "for methods with more than 10 analytes, non-detected analytes that marginally fail the continuing calibration verification low may be reported without qualification for a continuing calibration verification 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 qualified or re-analyzed." Comment: This concept was introduced for LCS in the NELAC 2003 standard. The one difference is the marginal exceedences for LCS must be RANDOM. Can the same analyte always fail? Suggestion: Remove or changed to random events.*

The comment is persuasive. Richard suggested leaving this marginal exceedance in, but adding language similar to that in the LCS section. Francoise said the marginal

exceedance will probably not be random in practice, and others agreed. The committee was undecided on the action to be taken, so it was decided to defer it until the next call.

4 – Future meetings

The next call was scheduled for September 19, 1:00 – 2:30 pm. The call after that would be October 3, 2:00 – 3:30 Eastern Time.

5 – Adjournment

The call was adjourned at 2:30 pm EDT