# SUMMARY OF THE TNI CHEMISTRY EXPERT COMMITTEE MEETING

# **NOVEMBER 1, 2013**

The Committee held a conference call on Friday, November 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)	Absent
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.	Absent
(Other)	
Anand Mudambi, USEPA (Other)	Present
John Phillips, Ford Motor Co., (Other)	Present
Scott Siders, IL DEP (AB)	Present
Gary Ward, OR DPH (AB)	Absent
Ken Jackson, Program Administrator	Present

Associate Committee member present: Diana Shannon

#### 2 – Previous Minutes

It was moved by Anand and seconded by Mandi to approve the minutes of October 17, 2013. All were in favor.

## 3 – MDL Document

Richard and John had spoken with EPA representatives, who said the MDL procedure needed to be ready for publication in the Federal Register by March 2014, if it was to be included in the next method update rule. Richard asked the new committee members to become familiar with the proposed MDL procedure, and also the white paper from the EPA FAC on detection. Staff at EPA had asked Richard for a tracked version of the revised MDL procedure. Ken had made a start on this, and had then suggested he would get Jan Wlodarski to do it. However, he pointed out that the procedure language had changed do much he thought Jan would only be able to strike out the entire section and then re-write it. As an alternative, Anand volunteered to produce an annotated document that would describe the changes. He said he would have it available by the following Tuesday.

# 4 - Calibration Voting Draft Standard

Ken had updated the comments spreadsheet by cutting and pasting those comments received from voters as attachments and annotated sections of the standard. This spreadsheet was now followed.

Anand had circulated, by e-mail, the following proposed language for Section 1.7.1.1 (l) (Initial Calibration):

"for analysis of Aroclors which use a linear through origin model (or average response factor), it is acceptable to perform an initial multi-point calibration for a subset of Aroclors (e.g., 1016/1260) and to use a one-point initial calibration to determine the calibration factor and pattern recognition for the remaining Aroclors."

This revised language eliminated Toxaphene and technical Chlordane from this item. It was pertinent to several comments. The committee was in general agreement with the language.

**Tom Mascarenas** had made a comment (without identifying any specific section) on second source standards, saying it is not applicable to all calibrations. He suggested adding "where applicable". However, the committee had already made a modification to the standard that should satisfy this comment.

Charles Lyttle, Section 1.7.1.1. He had commented on the phrase: "If re-analysis of the samples is not possible, data associated with an unacceptable initial instrument calibration shall only be reported with appropriate data qualifiers." He asked for the sentence to be removed, saying there is no such thing as an "unacceptable initial calibration". Richard commented that it is not helpful to report nothing at all in such a case, since the data could still be useful. Tim added that, in a multi-component mixture, it may not be possible to keep all analytes in calibration all the time and many of them will be non-detects. Francoise added she had noted a previous concern with the word "appropriate", saying there would need to be a non-conformance plus an explanation in the records. Andrew added that saying "appropriate data qualifiers" may take away from the requirement that it must be reported as a non-conformance, and John suggested adding that. Scott added the NELAP Accreditation Council would want to see this made clear with strong language. It was agreed to add the words "non-conformance".

**Joe Slayton** had made the general comment: "The proposed changes result in greater complexity that is not justified by gains in data quality. A number of terms are not defined such as degrees of freedom, threshold testing and %RSD." John said the first part is an (arguable) opinion. He questioned if common terms always need to be defined. Richard said if some of these terms need to be defined they should go in the definitions section rather than the text.

**Leslie Wentland** had commented "I am from a small wastewater lab. From my perspective the new stuff added to this standard is not documented in known standards

like standard methods. It's seems like TNI wants to break new ground. In that case these additions should be better explained. The new stuff is 1.7.1.1 j) i and ii. I disagree with adding % residual error and relative standard error. Also in 1.7.1.1 e) it adds regression or average response/calibration. I honestly don't know what you are talking about. Google doesn't help either. Also I am not sure why you don't want to allow qualified data below the calibration range." The committee agreed these comments are non-persuasive. For the last comment about allowing qualified data below the calibration range, clarifying language had already been added.

Pam Varner's general comment was "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." The committee disagreed the use of "analytical batch" was inconsistent and ruled the comment non-persuasive.

**Greg Jones, Section 1.7.1.** This comment was identical to Pam Varner's comment that had already been dealt with.

Michelle Wade, Section 1.7.1 had commented on the paragraph: "Calibrations may be performed at the instrumental level (analytical step only) or the method level (analytical plus preparation steps). For certain methods, such as purge and trap or head space analyses, it is not possible to separate sample preparation from the analytical step. The elements presented in this Section may be applied to either instrument or method calibrations, including those where the calibration standards are processed through the sample preparation steps. Her comment was: "While this paragraph isn't inaccurate - I feel that it doesn't inherently add to the standard either. It will cause more problems and make people ask more questions about something that doesn't necessarily mean anything. If these terms had been tied into the new language below it would be different." Tim agreed the paragraph may be extraneous and could cause confusion. Anand disagreed, saying the paragraph was put in as an introduction to the standard to point out it can depend on the method which way it is done. Andrew questioned the use of "may" in the first sentence, and it was changed to "can".

Michelle Wade, Section 1.7.1.1 (first paragraph). This comment had, inadvertently, not been transposed onto the spreadsheet, so it would be considered on the next conference call.

**Lynn Boysen, Section 1.7.1.1 a).** The comment was "When ....referenced in the method SOP (add SOP to sentence for clarity???)". Richard pointed out the only change that had been made from the 2009 standard was to change "test method" to "method", so it was changed back to "test method".

**Michelle Wade, Section 1.7.1.1 c).** The comment was "I would change the wording on this whole sentence: "the laboratory shall use the most recent initial calibration analyzed prior to the analytical batch for determining analytical results". When exactly would a method not specify this? Richard said this language had already been addressed.

**Lynn Boysen, Section 1.7.1.1 c**) commented: "what do they mean "recent initial calibration standard(s)"??? Should this just say "the... most recent initial calibration curve analyzed prior...". This had already been addressed.

Michelle Wade, Section 1.7.1.1 d) commented: "So are we allowing them to drop mid points of calibration curves now? The implications of this are HUGE." This had already been dealt with by changing the language.

**Lynn Boysen, Section 1.7.1.1 d).** The comment was "this seems a little vague, it just seems like the lab can drop any point as long as they have documented criteria". This had already been dealt with by changing the language.

Michelle Wade, Section 1.7.1.1 e) commented: "We need definitions for: thresh hold testing, Degrees of Freedom. Not being a statistician I find this hard to follow - which means a lab will easily misinterpret this which can cause problems. EPA OGWDW has HUGE problems with things like cubic curves - why even open this up - it's like saying it's OK to have questionable data." John volunteered to go through the comments and the language in the standard and make a list of terms that might require definitions. Cubic curves are not mentioned as such.

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." This was fixed by re-writing the language to make it clear qualified data could be reported outside the calibration range.

**Lynn Boysen, Section 1.7.1.1 g**). The comment was: "What about when a dilution is performed. The reported concentration may be over the highest standard concentration. Needs clarification." The committee felt the intent should be clear as written, and it is essentially unchanged from the 2009 standard.

Michelle Wade, Section 1.7.1.1 i) commented: "Missing some definitions. RSD, RF and relative error should be defined somewhere." This was being dealt with by John.

Michelle Wade, Section 1.7.1.1 i) i commented: "Where did this come from? I'm not saying that it's not valid - just that I have real reserves about pulling something out of nowhere. I can see a lot of labs going this route even if the method calls for an RSD because this passes... and j doesn't specifically require them to follow the method requirements." Richard said it is now in Part 136 and SW846.

**Greg Jones, Section 1.7.1.1 k) i**. His comment was identical to that made by Pam Varner and that had already been dealt with.

The next call was scheduled for November 15, 2:00 – 3:30 pm Eastern Time.

# 5 – Adjournment

The call was adjourned at 3:30 pm EDT.