

**SUMMARY OF THE
TNI CHEMISTRY EXPERT COMMITTEE MEETING**

JANUARY 23, 2018

The Committee met during the Forum on Laboratory Accreditation, Albuquerque, NM on Tuesday, January 23, 2018, at 8:00 am MST. Chair Valerie Slaven led the meeting.

1 – Roll call

Francoise Chauvin, NYC DEP (Lab)	Absent
Eric Davis, Austin Water Utility (Lab)	Present
Deb Gaynor, Phoenix Chemistry Services (Other)	Absent
Shawn Kassner, Neptune (Other)	Present
Scott Siders, PDC Labs (Lab)	Present
Valerie Slaven, Consulting Services (Other)	Present
Gale Warren, NYSDOH (Accreditation Body)	Absent
Colin Wright, Florida DEP (Lab)	Present
Ken Jackson, Program Administrator	Present

1 - Introductions

The committee members introduced themselves. Val explained that the meeting would focus on the guidance document for detection/quantitation that would supplement the 2016 Volume 1 Module 4

2 – Detection/Quantitation Guidance Document

Val said the committee had already drafted a document and this would be discussed. In particular, the following four major issues needed more work and with input from the audience it was hoped to be prepared to put together a final draft after this meeting.

(a) Preservation no longer required for MDL

It was decided to add language that when preservation can be done, it is a good idea to do so, though it is not a requirement unless the method mandates it. In the section “**Initial Verification of the LOQ**”, following the sentence “*Essentially, the LOQ verification spikes must be treated in the same way, and go through the same steps that are performed for sample preparation and analysis.*”, it was agreed to add a sentence that, if the MBLK and LCS are preserved, you should apply preservation to the LOQ verification spikes.

(b) Failed LOQ verification for a batch

More stringent requirements are not currently addressed for when data cannot be reported or are not qualified that the LOQ verification failed for a batch. On discussion, it was decided not to address this.

(c) Acceptance criteria for accuracy for LOQ verification spikes

This referred to clause 1.5.2.2.d) in the standard. The sentence “*The laboratory may analyze the LOQ verification spikes first, and base the recovery acceptance criteria on the results obtained.*” needed to be modified to state how to establish limits; i.e., recovery acceptance criteria should be based on comparative methods or statistical process control of the results obtained.

(d) Acceptance Criteria for the Quarterly Verification Spikes

This section applies to both LOQ and DL, so it was agreed to put in the more stringent requirement, which is LOQ. It was suggested to also put in the standard language (clause 1.5.2.1.1.d)), and to add the requirement that a new DL is required within 30 days if verification fails (clause 1.5.2.1.2). A discussion followed on the need for explanation of corrective action, where there is the widespread misconception that it means a full root-cause analysis and a corrective action report. It was suggested to give some examples of corrective action. It was then suggested to add the definition of corrective action from the new TNI glossary.

Having dealt with the above four major issues, the committee worked through the entire guidance document.

The first introductory paragraph would be modified to advise a laboratory to go to its Accreditation Body (AB) before submitting a Standard Interpretation Request (SIR).

In Section 1.5.2 (**Methods That Do Not Require an LOQ and/or a DL**), there was discussion over the examples of when a DL is not required. This applies to some gravimetric methods, but since it may be dependent on the AB the laboratory should be advised to contact its AB.

Small changes were made in the flow charts for determination of LOQ and DL, and ongoing verification of LOQ and DL.

In the section **Selection of the LOQ** it was agreed the first two sentences of the paragraph “*There is no point in attempting to verify..*” needed work.

The first paragraph under **Initial Verification of the LOQ** was discussed and re-worded for clarity.

Under the header **Evaluation of the Results of the LOQ Verification Samples**, the paragraph beginning “*Since it has been assumed..*” was modified. Also, the next paragraph, providing an example, was deleted.

It was agreed the second paragraph under the header **Calculation of the DL** needed a section on negative blanks.

The last sentence under **Ongoing Verification of the LOQ and DL** was modified to add “*or methods*” after “*regulations*”.

Added to the paragraph **Acceptance Criteria for the Quarterly Verification Spikes** was language explaining the technically valid reason shall be appropriate for the corrective action selected.

In the final section **Updating the LOQ**, the example was modified and a sentence was added: *“This example is most likely to occur when first implementing this procedure because it introduces the potential for an increased amount or variability. The potential for increased variability may come from analyzing and preparing the low level spike samples on multiple days and in multiple batches.”*

3 – Next Steps

Having completed the review, Val said she would make the agreed changes and circulate them to the committee for discussion and possible finalization during its next conference call on February 7.

4 – Adjournment

The meeting was adjourned at 12:00 pm MST