

## SUMMARY

### TNI CHEMISTRY EXPERT COMMITTEE MEETING

The Chemistry Expert Committee (CEC) held a conference call on Wednesday, March 6, 2019. Committee Chair Valerie Slaven led the meeting. The agenda for the meeting is presented as Attachment 1.

#### 1. Roll Call

|   |         |
|---|---------|
| Valerie Slaven, Consulting Services (Other) - Chair | Present |
| Jay Armstrong, VA DGS (AB)                          | Present |
| Paula Blaze, NJ DEP (AB)                            | Present |
| Eric Davis, Austin Water Utility (Lab)              | Present |
| Deb Gaynor, Independent Consultant (Other)          | Present |
| Shawn Kassner, Neptune (Other)                      | Present |
| Max Patterson, UT DOH (AB)                          | Absent  |
| Charles Neslund, Eurofins (Lab)                     | Absent  |
| Colin Wright, Florida DEP (Lab)                     | Present |
| Calista Daigle, Quality Consulting (Other)          | Absent  |
| Chad Stoike, ALS Global (Lab)                       | Absent  |
| Robert Wyeth, Program Administrator                 | Present |

Associate member Nicole Cairns was also present. Paul Junio confirmed his resignation from the Chemistry Expert Committee. He will continue as an associate member and will participate to the extent he can. A quorum was present and the meeting commenced.

#### 2. Approval of January Face-to-Face Meeting Minutes

After a few minor corrections, a motion to approve was made by Shawn and seconded by Eric. With a unanimous vote the minutes were approved and will be posted.

#### 3. Standard Interpretation Requests (SIRs)

The following SIR's (297, 282, 339, and 340) were addressed during the meeting.

SIR 297 (Attachment 2)

- Previously addressed by the committee. Request concerned if DOC specific to every method, matrix and analyte. Discussed in detail and initial response to SIR was that the DOC is specific to each method,

matrix and analyte combination. AC comment was that this doesn't address their problem which is fundamentally with the CDOC. The CEC accepts that the standard as currently written does not specifically address this issue and understands that the use of an LCS or PT, as it does not contain all analytes included under accreditation, is somewhat contradictory within the standard that clearly in other sections states the requirement for method, matrix, and analyte. The CEC response was essentially allowing the states to accept whatever approach they felt was required. Some ACs are apparently allowing ongoing an continuing DOC to utilize LCS and/or PT data to suffice for compliance while others are requiring all analytes per matrix and method to prove compliance. This issue will be addressed in the next revision of the standard. A formal second response will be prepared by Valerie and presented to the CEC for consideration during the April meeting.

#### SIR 282 (Attachment 3)

- This SIR addresses the use of MS data to supplement a failing LCS. CEC response is that in no case would an MS be used to supplement a failing LSC. Eric will prepare this response and it will be presented to the CEC for consideration during the April meeting.

#### SIR 339 (Attachment 4)

- Relates to use of ongoing DOC, after timely and continued use by the lab, PT/LCS as an acceptable substitute for an IDOC. Committee consensus was that this substitution is only acceptable if the analytes for which accreditation is being sought is contained within the ongoing DOC data. Clarification needs to be provided in the re-write of the standard. Deb is to prepare this response to the SIR and it will be presented to the CEC for consideration during the April meeting.

#### SIR 340 (Attachment 5)

- Concerns the MDL process; the SIR seeks clarification on when to verify at or below the LOQ and when to use the same spiking concentration as in the original study. Colin is to prepare this response to the SIR and it will be presented to the CEC for consideration during the April meeting.

The CEC meeting adjourned at 3:20 PM ET on a motion by Shawn and seconded by Colin. The next CEC conference call is scheduled for April 3, 2019 at 2:00 PM ET.

## **Attachment 1**

### **CEC Meeting Agenda**

**March 6,2019**

1. Roll call
2. Paul Junio
3. January meeting minutes
4. SIRs
  - a. 282
  - b. 297
  - c. 339
  - d. 340

## Attachment 2

SIR 297

|                                     |  |
|-------------------------------------|--|
| <b>Standard</b>                     | 2009 TNI   |
| <b>Volume and Module (eg. V1M2)</b> | V1M4   |
| <b>Section (eg. C.4.1.7.4)</b>      | 1.6.2 and 1.6.3  |
| <b>Describe the problem:</b>        | Are the DOC requirements in V1M4 sections 1.6.2 and 1.6.3 specific to each Matrix-Method-Analyte combination for which a laboratory seeks or maintains accreditation? The language implies that they are, and because laboratories are accredited by Matrix-Method-Analyte, should be, but it is not explicit enough to preclude another interpretation. (Richard Burrows is aware of the issue and is expecting the SIR.) |
| <b>Comments:</b>                    | Section 1.6.2 is specific to the matrix-method-analyte combination as illustrated by the references to analytes in 1.6.2.2.a and "all parameters" in 1.6.2.2.d. Therefore, if no other analysis is performed for a matrix-method-analyte combination within a 12 month period, a new IDOC would be required per the last sentence in 1.6.2.  |
| <b>Response:</b>                    | Section 1.6.2 (IDOC) is specific to each matrix-method-analyte combination. Section 1.6.3 is not specific to each matrix-method-analyte combination. It is the responsibility of the laboratory to document a procedure describing the ongoing DOC and it's adequacy per 1.6.3.1.  |

### **Comments from the AC Regarding CEC Response to SIR 297(above)**

This interpretation does not solve the problem of laboratories not demonstrating continued competence for FoAs that are rarely run, the most recent data is over 1-2 years old (often when the IDOC was done), and the lab refusing to relinquish accreditation for those analytes that lack the on-going, continuing capability demonstrations. Again, we believe that since NELAP defines FoA as matrix-method-analyte, then V1M4, Sec. 1.6.3 must apply at the analyte level as well.

The lab must perform ongoing DOC for each matrix-method-analyte combination on their scope to maintain accreditation. They can either perform another IDOC or a PT, but must have some form of ongoing DOC. The response seems to imply that the lab can choose not to have ongoing DOCs for methods that are run infrequently.

CDOCs are required per analyte. Something should be included to ensure labs are aware that all analytes/parameters require a CDOC. If a PT is used for the CDOC any parameters not included in the PT, that the lab is accredited for, must have an alternate procedure detailed for CDOCs for those parameters.

This response implies that the lab can determine how, when, and what a CDOC can be and they can decide it's anything. Meaning that they don't have to do a CDOC per FOA, but that they can say they demonstrated chromium by EPA ICP and that counts for Flame, Furnace, and ICP-MS. Or they could choose to say acceptable performance for an LCS for methylene chloride in DW counts for all VOCs analyzed by GC-MS (regardless of method or matrix)

## Attachment 3

SIR 282

To the Chemistry Committee from LASEC SIR Subcommittee:

We tried to write Implementation Guidance for this SIR, as it was determined not to be a valid SIR back in 2014 when it was submitted. We learned from Silky that the language goes back to the early NELAC Standards but that the way it's now been put into practice is now what the old Quality Systems Committee intended when they wrote the language. Apparently, the language has been carried forward for two decades now, without really being examined.

Please coordinate your response with the Quality Systems Expert Committee. For this one, normal timeframes have long since been abandoned. Thank you!

|                                     |                    |
|-------------------------------------|--------------------|
| <b>Standard</b>                     | 2009 TNI Standard  |
| <b>Volume and Module (eg. V1M2)</b> | V1M4               |
| <b>Section (eg. C.4.1.7.4)</b>      | 1.7.3.2.3 and Note |

The language in the note under Section 1.7.3.2.3 is as follows, "The matrix spike may be used in place of this control as long as the acceptance criteria are as stringent as for the LCS" seems to indirectly indicate that an analyte in the MS which meets the LCS acceptance criteria may be used in place of the same analyte in the LCS that does not pass the LCS criteria.

**Describe the problem:**

In short, if an analyte in the LCS fails the LCS acceptance criteria can you use the same analyte from the MS instead if it meets the LCS acceptance criteria.

My interpretation is that this is not the intent of the note in this section of the standard to allow this however I have received questions from several sources regarding the applicability of the above requiring further explanation.

I look forward to your response.

**Committee Comments:**

**Response:**

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## Attachment 4

SIR 339

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Standard</b>                     | 2016 TNI Standard |
| <b>Volume and Module (eg. V1M2)</b> | V1M4              |
| <b>Section (eg. C.4.1.7.4)</b>      | 1.6.1 c)          |

**Describe the problem:**

c) In cases where an individual has prepared and/or analyzed samples using a method that has been in use by the laboratory for at least one (1) year prior to applying for accreditation, and there have been no significant changes in instrument type or method, the ongoing DOC shall be acceptable as an initial DOC. The laboratory shall have records on file to demonstrate that an initial DOC is not required.

Question: Would like clarification on the wording in this section. Is the section saying that if a lab applies to add accreditation for a method the lab has been performing in house for at least one year, the analyst performing the test can submit an On-going DOC for accreditation rather than an Initial DOC? The wording almost suggests that the analyst does not need an IDOC for a test method the lab has held certification for over one year, only an On-going.

Thank You

**Committee Comments:**

**Response:**

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## Attachment 5

SIR 340

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Standard</b>                     | 2016 TNI Standard |
| <b>Volume and Module (eg. V1M2)</b> | V1M4              |
| <b>Section (eg. C.4.1.7.4)</b>      | 1.5.2.1.2         |

**Describe the problem:**

40 CFR 136 Appendix B (3) (a) "During any quarter in which samples are being analyzed, prepare and analyze a minimum of two spiked samples on each instrument, in separate batches, using the same spiking concentration used in Section 2." If the variation in the spiking concentration is used to calculate the MDL ( $MDL = t(n-1, 1-\alpha = 0.99)S_s$ ), and the lab uses the MDL to calculate a LOQ (maintaining that the  $LOQ \geq$  the lowest calibration concentration), this may not be "a spike at or below the LOQ" as prescribed in TNI V1M4-2016 §1.5.2.1.2 because the concentration value does not play a role in calculating the MDL (DL). It seems the TNI ongoing verification definition differs from 40 CFR. If the lab were to use a concentration at or below the LOQ, this would not always satisfy 40 CFR 136 Appendix B (4) (b) "Include data generated within the last twenty four months, but only data with the same spiking level." The lab seeks clarification on when to verify at or below the LOQ and when to use the same spiking concentration as in the original study. Thank you.

**Committee Comments:**

**Response:**

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