

### The NELAC Institute (TNI) Quality Systems Expert Committee Meeting Minutes

The Quality Systems Expert Committee of The NELAC Institute (TNI) met on June 14, 2010 at 1:00 PM EST by conference call. The agenda is attached as appendix A, action items are listed in Appendix B and the attendees listed in Appendix C.

Silky introduced the newest member of the committee, Eugene Klesta, who briefly outlined his experience and expertise. She then announced that the request for interpretations 112, 115, and 116 were complete and forwarded back to Illona. She asked again if anyone had any suggested revisions to ISO 17025 and requested that any suggestions be forwarded to Carl Kircher and her as soon as possible.

The Action Items were reviewed. All were completed with the exception of items 3, 4 and item 9. Items 3 and 4 are ongoing, as the committee has not yet identified an EPA representative. Fred was not present to report on any suggested changes to 17025.

The committee began work on the request for interpretation 119, 120, 122, and 123.

**Item 119** is identical to the previous item 112, and the identical response was added. The committee agreed that this was appropriate.

**Item 120** is an interpretation that must be asked to the state regulatory agency. The response as worded, was accepted by the committee.

**Item 122** resulted in a lively discussion as to what an appropriate matrix would be. The committee felt that a Demonstration of Capability (DOC) should be based on the preparation/cleanup/determinative method for the type of biological tissue. As an example, if the same combination was used for both fish and shellfish, only one DOC would be required.

The batch QC, however must use a CRM/QC sample that is similar to the tissue matrix. In the example above, the batch QC for fish would be different from the batch QC for shellfish.

Eugene will draft a response to be circulated to the committee members.

**Item 123** refers to items in the PT chapters. The question was forwarded back to Illona for appropriate routing.

**Item 125** resulted in some discussion. However, the committee unanimously agreed that the laboratory must obtain Certificates of Analysis when available for all chemicals, standards, reagents, media and reference materials. The committee emphasized that the laboratory may need to request such information from the manufacturer, and agreed that copies (paper or electronic) must be retained by the laboratory.

Item 126 is a question that the laboratory must have answered by the client or the regulatory authority. The committee agreed on the written response. The committee agreed that the datum must be flagged or identified in some way to indicate that the value was outside the calibration range. 061410 Minutes of the Quality System Expert Committee Page 1

Once a proposed revision to Item 122 is received, the entire set of interpretations will be routed to the committee for one final review and vote.

#### Revisions to the TNI Standards

Silky introduced the revisions by stating that the revisions that were being made were

- 1. The Tentative Interim Amendment to the Radiochemistry Technical Module
- 2. Changes to consolidate and clarify the intent of the standard. A list of the changes is attached as Appendix E.

The proposed additions to the definitions were reviewed. The definitions for "analyte" and "parameter" were added to clarify the use of the terms in the standard. In addition, where applicable, the term "analyte" was substituted for similar terminology (compound of interest, parameter, etc.)

The definition of "reference method" was removed from the body of the document and placed in the definitions.

Silky reviewed the changes related to 5.4.4 Non Standard Methods, and 5.4.5 Validation of Methods. The original iso language was inserted into the Module 2 and the similar language was deleted from the technical module (3-7). Each of the technical modules were revised to reference the relevant sections of 5.4.4 and 5.4.5.

The final change was in response to a comment in 4.1.7.2 a) regarding whether or not the technical manager needed to be a full-time position, It was pointed out that item e) required that the substitute technical manager be a full-time staff member. The committee agreed that the status of technical managers (permanent or temporary) needed to be the same.

While the standard precludes a technical manager from acting in that role for multiple accredited laboratories, in some states the individual acts as technical director for multiple laboratories (one accredited and the other non-accredited). Further, because of the volume of work, some smaller laboratories may not be open full-time, and the director is hired on a part-time basis to be present when the laboratory is open. In view of the scenarios, the committee agreed to strike "full-time" from item e).

A comment was made that some of the microbiology language did not make sense to a microbiologist, and should be changed. Silky noted that as long as the changes did not change the intent of the standard, that suggested changes would be considered. Gil and Robin will review and determine what changes might be considered

The committee was asked to review all revisions and provide comments prior to the next meeting.

As the last item of business, Silky announce that the information for the meeting in DC was on the web and that registration was open. She encouraged early registration for the meeting and the hotel. Quality Systems will be meeting on Thursday afternoon. She also polled the members for attendance. Four of the five accrediting authorities indicated that they would not be able to attend. A suggestion was made that the committee arrange a teleconference for those that were not in attendance. Silky will follow up with Jerry for the arrangement.

The meeting was adjourned at 2:30 pm EDT. The next teleconference will be on July 12, 2010 starting at 1:00 pm EDT.

| Conference Call Agenda:   |                     |  |
|---|---------------------|--|
| The NELAC Institute<br>Systems Expert Con                           | Quality<br>nmittee  | June 14, 2010 1:00 pm EDT<br>1 Hour, 55 Minutes<br>Conference Call |
| Please Call Dial-in Number: 1-219-509-8222 (East Coa                | st)                 |  |
| Your Participant Access Code is: 52518                              |                     |  |
| To Associate Members Only: Please RSVP your partici                 | pation in this call | with an email to Silky Labie at <u>elcat-</u>                      |
| Old Business:   |                     |  |
| Roll Call   | All                 | 5 Minutes  |
| Action Items (attached)   | All                 | 5 Minutes  |
| Member Status   | Silky               | 2 Minutes  |
| Status of 112. 115, 116   | Silky               | 2 Minutes  |
| Revisions to ISO 17025  | All                 | 5 minutes  |
| New Business:   |                     |  |
| Working Draft Standard V1, M2,3,4,5,6,7                             | All                 | 40 minutes   |
| Requests for Interpretation, 119, 120, 122, 123, 125,126 (attached) | All                 | 40 minutes   |
| Summer Conference   | All                 | 10 Minutes   |

#### **APPENDIX B - ACTION ITEMS**

# TNI Quality Systems Committee Meeting

| ltem<br>No. | Date<br>Proposed | Action   | Date to be<br>Completed | Date<br>Completed |
|-------------|------------------|--|-------------------------|-------------------|
| 1           | 5-10-10          | Circulate April Minutes for email approval   | 6-14-10                 | 5-10-10           |
| 2           | 5-10-10          | Circulate May Minutes for email approval   | 6-14-10                 | 5-10-10           |
| 3           | 5-10-10          | Provide additional names from EPA for<br>consideration   | 6-14-10                 | Ongoing           |
| 4           | 5-10-10          | Follow up on EPA candidates  | 6-14-10                 | Ongoing           |
| 5           | 5-10-10          | Contact current members concerning membership  | 6-14-10                 | 5-10-10           |
| 6           | 5-10-10          | Complete vote on laboratory member   | 6-14-10                 | 6-13-10           |
| 7           | 5-10-10          | Pat to draft response for interpretation request 112   | 6-14-10                 | 5-10-10           |
| 8           | 5-10-10          | Silky to draft TIA for non standard methods  | 6-14-10                 | 5-17-10           |
| 9           | 5-10-10          | Fred to poll others concerning changes to 17025  | 6-14-10                 | Ongoing           |
| 10          | 6-14-10          | Eugene to draft a response to Item 122   | 6-17-10                 | 6-21-10           |
| 11          | 6-14-10          | Gil and Robin to review the microbiology module for language changes                                     | 7-12-10                 |                   |
| 12          | 6-14-10          | All – review revisions and provide<br>relevant comments  | 7-12-10                 |                   |
| 13          | 6-14-10          | Silky to follow-up with Jerry on arranging<br>teleconferencing capabilities during the<br>August meeting | 7-12-10                 | 6-15-10           |
| 14          |                  |  |                         |                   |

## **APPENDIX C - PARTICIPANTS**

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|                           |   |  |

#### Attachment D Requests for Standards Interpretation 119, 120, 122, 123, 125,126

| #119                     | ,,,,,,  |
|--------------------------|---|
| Section (e.g. C.4.1.7.4) | TNI V1M4, Section 1.7.4.c   |
| Describe the problem:    | What was the intent of the QS Committee in requiring "results reported from analyses with surrogate recoveries outside the acceptance criteria shall include appropriate data qualifiers"? The wording suggests that the sample data be qualified as is required for toerh QC failures. Since there has never been any 1 to 1 relationship established between surrogates and targets, is it an "all or nothing qualification"? Is the lab free to develop its own policy for qualficiation of results? This provision need clarification.                      |
| Comments                 |   |
| Response                 | The NELAC standard requires that the laboratory report any<br>data performance issues to the client that may impact the<br>data quality. However, there is no set protocol for handling<br>surrogates that applies universally, and comments on how<br>individual surrogate apply to individual analytes is beyond the<br>scope of the NELAC standard. Therefore in the "evaluation<br>for the effect" of a surrogate failure, the laboratory should<br>consider compliance with client requirements, compliance<br>with the method requirements and compliance |

## # 120

| Section (e.g. C.4.1.7.4) | Appendix D.1.2.1 (c)  |
|--------------------------|---|
| Describe the problem:    | For ICP analyses when using a "0" std and a single point std-<br>may the determined LOQ, or Report limit, however named, be<br>considered to be a minmum level of Calibration (ML).<br>In short, our permit has required ML's. does a LOQ constitute<br>an ML for ICP work?     |
| Comments                 | 2003 NELAC Standards  |
| Response                 | The Quality Systems Expert Committee cannot respond to<br>this question. The question must be posed to the inquirer's<br>regulatory authority and their interpretation of the relationship<br>between LOQ as defined by NELAC and ML as defined by<br>the regulatory authority. |

| #122                     |  |
|--------------------------|--|
| Section (e.g. C.4.1.7.4) | Appendix A - Glossary, Matrix & 2003 Standards, 5.5.4.2.2  |
|                          | FoA Matrix states, "these matrix definitions shall be used<br>when accrediting a laboratory"<br>"Biological Tissue: any sample of a biological origin such as<br>fish tissue, shellfish, or plant material. Such samples shall be<br>grouped according to origin."   |
| Describe the problem:    | And, from the 2003 standards, Section 5.5.4.2.2<br>"Prior to acceptance and institution of any method,<br>satisfactory demonstration of method capability is required.<br>(See Appendix C and 5.5.2.6.b) In general, this<br>demonstration does not test the performance of the method in<br>real world samples, but in the applicable and available clean<br>quality system matrix sample (a quality system matrix in<br>which no target analytes or interferences are present at<br>concentrations that impact the results of a specific test<br>method), e.g., drinking water, solids, biological tissue and air."  |
|                          | The statement, "such samples shall be grouped according to<br>their orign", confuses categorization. If a lab seeks<br>accreditation for biological tissue matrix, is a DOC required<br>for shellfish, plant, fish tissue, etc.? (Assuming the lab will be<br>analyzing various types of biological tissue.)   |
|                          | CRM for shellfish samples, a fish CRM for fish samples, etc.?  |
| Comments                 | Note, while the FOA matrix and Quality System Matrix use<br>the same definition for biological tissue, the inquirer should be<br>aware of the difference between the two.<br>Section 5.5.4.2.2.a of the 2003 NELAC Standard states:<br><i>Prior to acceptance and institution of any method, satisfactory</i><br><i>demonstration of method capability is required.</i> (See<br><i>Appendix C and 5.5.2.6.b) In general, this demonstration</i><br><i>does not test the performance of the method in real world</i><br><i>samples, but in the applicable and available clean quality</i><br><i>system matrix sample (a quality system matrix in which no</i><br><i>target analytes or interferences are present at concentrations</i><br><i>that impact the results of a specific test method), e.g.,</i><br><i>drinking water, solids, biological tissue and air. In addition,</i><br><i>for analytes which do not lend themselves to spiking, the</i><br><i>demonstration of capability may be performed using quality</i><br><i>control samples</i> |
| Response                 | When all real world materials contain target analytes and/or interferences, a "representative" matrix may be used for a given test method and analyst. If the test method as defined by the combination of preparation, cleanup and determinative  |

| methods for a given biological tissue is different from the test<br>method (preparation, cleanup and determinative method) for<br>another biological tissue, then separate DOCs are expected.  |
|--|
| With regard to batch QC, it is highly improbable that CRMs<br>exist for all biological tissues that could be analyzed.<br>However, when available a CRM that matches the tissue type<br>(e.g., shellfish, fish, etc.) should be used. A representative<br>material may be used for laboratory control spikes as long as<br>the material used follows all steps of the test method. |
|  |

| #123                     |  |
|--------------------------|--|
| Section (e.g. C.4.1.7.4) | D.9. , A.4.7   |
| Describe the problem:    | We are looking to develop a "Laboratory Ethics"<br>workshop/course for individuals wanted to meet the<br>NELAC/NELAP standard. What are the requirements for such<br>a course? |
| Comments                 | These references are from the PT chapter   |
| Response                 | No Response  |

#125

| #125                     |   |
|--------------------------|---|
| Section (e.g. C.4.1.7.4) | 5.5.6.4   |
| Describe the problem:    | For subsection a), I would like an interpretation of the requirement to obtain the manufacturer's Certificate of Analysis for reagents. Does this mean just "ready-made" reagents (e.g. the color reagent for a test) or does this also include pure chemicals (e.g. a bottle of sodium chloride crystals)? |
| Comments                 | a) The laboratory shall retain records for all standards, reagents, reference materials and media including the manufacturer/vendor, the manufacturer's Certificate of Analysis or purity (if supplied),  |
| Response                 | The standard requires that Certificates of Analysis be<br>obtained for all reagents. This does not mean that the C of A<br>is automatically supplied. In some cases, you may need to<br>request such information from a manufacturer. This includes<br>both "ready-made" and pure (neat) chemicals.         |

#126

| Section (e.g. C.4.1.7.4) | 5.5.5.2.2.1 h)  |
|--------------------------|---|
| Describe the problem:    | In the analysis of samples for pHour buffer range is 2<br>through 12. Does that mean we need to flag any values<br>outside this calibration range? Is "J" appropriate? or a flag<br>identified as "out side calibration range"?<br>FYI - our analyst found a reference that states that negative<br>values for pH are possibleand she actually got a sample like<br>that last week from mine waste. |
| Comments                 | NELAC 5.5.10.3  |
| Response                 | The use of flags to report data is dependent on the client<br>requirements and the state regulatory requirements. The<br>committee cannot comment on appropriate use, as the use of<br>qualifiers varies from state to state. In all cases, the value<br>must be identified with either a flag to indicate the value as   |

|  | being outside the calibration range or a narrative describing the condition. |
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## Appendix E

Summary of Changes June 14, 2010

Definitions:

Analyte Parameter Reference Method

Proposed permanent change to the Radiochemistry Module (TIA)

Substitute "Analyte" for Parameter (where applicable) or "compound of interest", etc.

Need to discuss adding "full-time" to laboratory technical director. (4.1.7.2)

5.4.4 Added ISO Clause 5.4.4

5.4.5 Added ISO Clause 5.4.5

5.4.5.4 Added reference to each of the technical modules for specifics.

In each of the technical modules:

1.4 – Method Selection: Points to Sections 5.4.2, 5.4.3, 5.4.4 and deletes redundant language.

1.5 – Method Validation: Points to 5.4.5 and deletes redundant language