Proficiency Testing Expert Committee

Meeting Summary
April 3, 2020

The Committee met via teleconference on April 3, 2020 at 11:00 AM ET. Chair Kirstin Daigle led the meeting. The agenda for the meeting is provided as Attachment 1. Added the agenda item of "PT Studies and the impact of the COVID-19" at the request of Chandra.

Roll call

Nicole Cairns, NYSDOH (Laboratory)	Present
Thekkekalathil Chandrasekhar (Chandra), FLDEP (Laboratory)	Present
Patrick Garrity, KYDOW (AB)	Present
Craig Huff, ERA (Vice-Chair; PT Provider)	Present
Susan Jackson, SC DHEC (Laboratory)	Present
Tim Miller, Phenova (PT Provider)	Present
Reggie Morgan, Hampton Roads San. Distr. (Laboratory)	Present
Rachel Bailey, Advanced Analytical Solutions (PT Provider)	Present
Matt Sica, ANAB (AB)	Absent
Amy Pollard, Occidental Chemical(Laboratory)	Present
Kirstin Daigle, Pace Analytical (Chair; Laboratory)	Present
Sennett Kim, A2LA (AB)	Present
Rachel Ellis, NJ DEP (AB)	Present
Robert Wyeth, Program Administrator	Present

Associate Committee Members Fred Anderson and Audrey Cornell were also present. With a quorum present the meeting proceeded.

Review and approve March 6, 2020 minutes

March 6, 2020 minutes were reviewed and with one editorial change in the spelling of Fred Anderson's name, a motion was made by Craig and seconded by Chandra to accept the minutes. The motion was unanimously approved and will be posted on the TNI website.

Charter Review

Although not required at this time, Kirstin suggested a review of the PTEC Charter. The committee reviewed each section of the 2017 Charter (Attachment 2) and after discussing other possible need to modify the section on "Decision Making" to clarify voting on developing standards for ANS approval, it was decided no changes were needed. The 2017 Charter was accepted by the committee as it is currently written.

2020 Work Plan

Kirstin provided copies of the committee specific SIR summary and a document listing potential topics of concern from previous discussions (Attachment 3). From these documents and other suggestions of the committee, the committee's work plan for 2020 will be derived.

Other topics for future discussion suggested by committee members include the "greater than values" seen primarily in microbiology reporting as well as other methods/procedures. The issue of Aroclor scoring was also suggested as a topic to be addressed by the committee.

After continuing general conversations regarding a work plan, Kirstin asked the committee members to review these documents with the intent to develop a prioritization of topics and development of a detailed work plan during forthcoming meetings.

The SIR previously referred to in the March meeting has not yet been received. Bob will communicate with Lynn regarding the status of this SIR.

Impact of Corona virus on PT Studies

The corona virus pandemic has impacted public and private businesses across the country. Numerous state agencies have been essentially closed as have some laboratories. There are open and on-going PT studies underway and more are scheduled to begin prior to any anticipated resolution to the pandemic. Considering the potential impacts of problems with PT reporting and the subsequent potential for revocation of accreditation of laboratories, the committee is requesting the immediate attention of the AC to this issue. The AC is schedule to meet on Monday April 6, 2020. Bob, on behalf of the committee, will send an email to Lynn requesting that the AC address this urgent concern and bring the issue to some resolution during that Monday call. An ad-hoc group of all potentially impacted parties/committees was also suggested to assist in resolution and/or implementation of a solution. Kirstin was going to contact the chair of the PTPEC and the AC chair to coordinate a conference call as early as next Tuesday (following the AC call) to further address the issue.

The meeting adjourned at 11:45 AM ET on a motion by Tim, seconded by Craig and passed unanimously by committee members present. The next meeting of the PT Expert committee is scheduled for May 1, 2020 at 11:00 AM ET.

Attachment 1

TNI Proficiency Testing Expert Committee Agenda
04/03/20
11:00 AM – 12:30 PM EST

Dial-in using your phone:
United States: **+1 712-832-8330**
Access code: **822 174**

1. Review and approve minutes from previous meetings
   - TNI_PTEC_3-6-2020_draft.2.docx

2. Review Charter
   - 3_PTEC Charter 03-03-17 Final

3. 2020 Work Plan -
   - 5_Comments-Review of PT Standards 11.01.19
   - 14_SIR PT Summary 01.04.19 PTEC Review

4. Impact of Corona virus on PT Studies (added at request of Chandra)

Attachment 2

3_PTEC Charter
03-03-17 Final[7075].

Attachment 3

5_Comments -
Review of PT Standar

Copy of 14_SIR PT
Summary 01.04.19 P

Laboratory Proficiency Testing Expert Committee (PTEC)

Charter (Revised: 03-03-2017)

Mission

Develop and maintain consensus standards for proficiency testing (PT) that support TNI programs and that address the following elements of a proficiency testing program:

- Roles and responsibilities of program participants.
- Manufacturing, validation and verification of PT samples.
- Accreditation and oversight of PT Providers.
- Management and evaluation of PT sample data by PT Providers (PTP), PT Provider Accreditors (PTPAs) and the Proficiency Testing Program Executive Committee (PTPEC).
- Use of PT samples by laboratories, accreditation bodies, and regulatory programs supported by TNI programs.

Composition of the Committee

TNI members representing applicable stakeholder groups; each serving 3-year terms with a maximum of 2 consecutive terms.

- Stakeholder groups include:
  - Laboratory/Field Sampling Measurement Organization (FSMO)
  - PT Provider
  - Accreditation Body (AB) – (includes ABs of Labs/FSMOs/PTPs)
  - Other (i.e. consultants, 3rd party assessors, etc…)
- A Chair and Vice-Chair are elected from among the committee membership; each serving 1-year terms with a maximum of 3 consecutive terms.
- Membership must maintain balance so that no stakeholder group has a majority.
- Associate members are allowed.

Objectives

1. Develop and maintain consensus standards for proficiency testing (PT) that are practical, implementable, and meet the needs of the environmental community.
   - **Success Measure:**
     - Adoption of PT standards by TNI and/or other applicable programs.

2. Develop and maintain consensus standards for the manufacture of PT samples that ensures PT samples provide equal challenge to participants regardless of manufacturer.
   - **Success Measure:**
     - Failure rates as summarized by the PTPAs and evaluated by the PTPEC show consistency across PT Providers.

3. Develop and maintain consensus standards that support PT sample design and scoring criteria (analyte, matrix, concentration and acceptance criteria) appropriate to evaluate a participant's competency in the field(s) of accreditation for which the PT sample was manufactured.
   - **Success Measure:**
     - Successful accreditation of PT Providers showing compliance with design and scoring criteria specified in the standards and on the Fields of Proficiency Testing (FoPT) tables approved by the PTPEC and applicable TNI programs.

4. Support the PTPEC in the successful and consistent implementation of PT standards.
    - **Success Measure:**
        - Successful evaluations of accreditation bodies (including ABs of Labs/FSMOs/PTPs) showing appropriate use and implementation of the PT standard.

5. Serve as a technical resource to TNI membership.
    - **Success Measure:**
        - Prompt response to Standard Interpretation Requests (SIRs).
        - Adoption of guidance documents by TNI that support the PT standards (*i.e.* Small Lab Handbook)

Decision Making

Decisions of the PTEC are generally made by a majority vote in the presence of a quorum during teleconferences, face-to-face meetings, or by electronic voting, unless an alternate voting procedure is determined to be necessary by the committee.

Available Resources

- Volunteer committee members
- Existing national and international consensus-based standards
- TNI website and other TNI support services (administrative, technical editing, etc.)
- Teleconference and web-based services
- Industry experts

Anticipated Meeting Schedule

- Monthly teleconferences (open to all full and associate members and the general public)
- Additional teleconferences as needed
- Face-to-face meetings during the semiannual TNI Forums (open to all full and associate members and the general public)

ATTACHMENT 3

#	Date Submitted	2003	2009	2016	Actual Request	Final Response	Jerry's Comment	Applicable to 2003	Applicable to 2009	Applicable to 2016	Addressed/Clarified in 2016 Standard
32	10/15/08	Ch 2: E.3.2.1	V3: 10.2	V3: 5.9	A similar but more difficult situation occurs with the evaluation of microbiological data sets. In the case of quantitative microbiology, the NELAC 2003 Standard Chapter 2 Appendix E Section 3.2.1 appears to authorize the PT provider to use alternative evaluation criteria where 20 valid data points are not available. The Appendix appears to be in direct conflict with Chapter 2 Section 2.6 noted above which clearly states that there are no exceptions. The APG procedure in this case was to supplement available interlaboratory data with internal testing data run by the same method as the laboratories. The A2LA auditor found this to be inappropriate. We do not disagree with the auditors in this instance; however, Chapter 2 Appendix E Section 3.2.1 requires any alternate procedure to be approved by the PTOB. Clearly, the responsibility to providing acceptable evaluation criteria lies with the NELAC PT Board as noted in Chapter 2 Section 2.6 and not with either the PT provider or A2LA. In an effort to get appropriate guidance from A2LA as to available acceptable alternate procedures, we requested guidance from the A2LA microbiological auditor. She provided no recommendation on alternative acceptable procedures. Similarly, we requested guidance from the statistical auditor whose comment was that other providers have procedures but that he was not allowed to provide consultation. It appears to APG that if an alternative quantitative microbiological evaluation procedure must be approved by the PTOB that they then have an obligation to provide guidance on an acceptable proceed. However, it seems inappropriate for A2LA to accept responsibility for setting NELAC acceptance criteria when that function is vested in the NELAC PT Board by the 2003 NELAC Standard. Therefore, in order to meet the requirement of Chapter 2 Appendix E 3.2.1 alternative guidance must be provided since it is also not the responsibility of the PT provider to establish NELAC evaluation criteria.	The information in specific appendices, i.e. Appendix E for Microbiology, takes precedence over the information in the general standard, where conflicts exist. Therefore, Appendix E 3.2.1 must be followed and states, in the second sentence, "Sample sets of less than 20 data points may be used only with the approval of the PTOB/PTPA." The commentor needs to develop and present an option to A2LA and then work through any feedback until they have an acceptable procedure.	Although these sections have been extensively revised in the 2009 and 2016 standards, the basic response is still valid.	Yes.	Yes.	Yes.	Yes. Small data sets were adequately addressed in Section 10.2 of 2009 V3 and Section 5.9.2 of 2016 V3, but SIR still applies to the fact that it is the PT Providers responsibility to develop their own statisitical procedures for approval by their PTPA.
95	10/13/09	Ch 2: F.2.1, F.2.2 & F.3	V1M1: 4.2.1 e)	V1M1: 5.1.2 & 5.2.2	I am confused about the PT requirements for labs doing WET analysis. The only 'true' PT is the DMRQA - but it runs longer than 45 days - which doesn't meet F.2.2 requirements. I need to know will the DMRQA be allowed and counted as a PT until such a time as the PT providers have other PTs available?	While the DMRQA study containing the WET PT is open for a period longer than 45 days, the laboratory must complete the analysis of the WET PT sample within 45 days of sample receipt in order for the WET PT result to be used to meet 2003 NELAC standard requirements. ***The laboratory would have up to 45 days from sample receipt to analyze the WET sample and then the remainder of the DMRQA study period to report the WET PT analytical results to the PT provider.***	The 2009 standard extended the time period to 90 days. E 2016 standard removes all references to study dates for WET testing. The SIR no longer applies to the 2009 ro 2016 standards.	Yes, however, the response is misleading, if not inaccurate. F.2.2.a) Analyze within 45 calendar days of sample receipt: report results within 45 calendar days of completion. **"within 45 calendar days of completion" ≠ "remainder of the DMRQA study"**	No.	No.	Yes. Section 5.2.2 of 2016 V1M1 for WET testing: To maintain accreditation the laboratory shall participate in one (1) WET PT study per calendar year for each accreditation FoPT that correspond to the fields of accreditation for which the laboratory is accredited. a) This requirement can be met by annual participation in the EPA DMRQA studies for WET, or b) If the laboratory is not participating in an EPA DMRQA study for WET, the closing dates of subsequent PT study samples for WET testing PT studies must be no more than fourteen (14) months apart.
184	9/9/11	Ch 2: 2.7.2	V1M1: 4.2.1	V1M1: 5.2.3	NELAC 2003 2.7.2 says, "For continuing accreditation, completion dates of successive proficiency rounds for a given field of proficiency testing shall be approximately six months apart. Failure to meet the semiannual schedule is regarded as a failed study." TNI V1M1 4.2.1 says, "The analysis dates of successive PT samples for the same accreditation FOPT shall be at least five months apart and no longer than seven months apart unless the PT sample is being used for corrective action to establish successful history …" There is no language to describe what happens after 7 months have passed. The sentence is missing from TNI that was in NELAC that directed or allowed the addition of a "failed study" when the semiannual requirement was not met. Is it the intent of the standard for ABs to continue treating a failure to meet the semiannual schedule as a failed study? This is a significant enforcement issue since a potential alternative seems to be in V2M2, 10.3: "The Primary AB shall revoke the accreditation of a laboratory for a FoPT when:(a) the laboratory does not participate in the PT program as required by this Standard." This penalty is too severe and problematic for what could be just a missed deadline.	If a laboratory fails to report a single proficiency testing result it is evaluated as "not acceptable" per V2M2 7.3 part b. If the laboratory fails to report results for 2 out of 3 proficiency testing study time frames, then the laboratory's accreditation shall be suspended per V2M2 10.1 for failing to participate in the timeframes specified in the standard.	The language has been clarified in the 2016 standard and the SIR is likely obsolete.	No.	Yes.	No.	Yes. Section 5.2.3 of V1M1 states a laboratory that fails to analyze and report PT studies for a particular field of accreditation with the frequency specified in Sections 5.2.1 or 5.2.2 for which it seeks to maintain accreditation is charged with a failed PT study.

ATTACHMENT 3

#	Date Submitted	2003	2009	2016	Actual Request	Final Response	Jerry's Comment	Applicable to 2003	Applicable to 2009	Applicable to 2016	Addressed/Clarified in 2016 Standard
266	7/14/2014	Ch 2: 2.1.3	V1M1: 4.0 & 5.1.1	V1M1: 4.1.2 & 4.3.4	I am having difficult interpreting the requirements outlined in 4.0. The main concern is with our metals department where we run methods 200.7, 6010B, 200.8, 6020. If we are analyzing a PT by all four methods and reporting all methods individually, are 200.7/6010B and 200.8/6020 being treated the same? For example, is a failure for Cobalt by 200.8 equivalent to a failure for Cobalt by 6020, even if our PT demonstrates that we passed Co by 6020? These methods have different digestions and different method requirement at the instrument level. For the 200 series we utilize a hot block digestion and the 6000 series utilizes a microwave digestion. At the instrument level, the control limits for MS/MSDs and blank spikes are different. The requirements for same-source and second-source checks are different. These are different methods. Is each metals failure for ICP a failure for all ICP methods and each ICP-MS failure a failure for all ICP-MS methods? If this is the case, are we able to only run by one method and hold the accreditation for both. The standard references FoPT, with is defined by matrix, technology/METHOD, analyte. Not just based on matrix, technology, analyte.	The use of the term "method" within the definition of Field of Proficiency Testing (FoPT) (2009 V1M1, 3.6) is only included to accommodate EPA's drinking water program where PTs are required per method for the drinking water analytes referenced in the Code of Federal Regulations (CFR), specifically 40 CFR 141. The use of the term "technology" within the definition of FoPT (2009 V1M1, 3.6) only refers to the determinative analytical technology; preparative techniques/methods are not part of this definition. In addition, the Note in Section 5.1.1 of V1M1, states the following: "…If the laboratory is accredited for multiple test methods that use the same technology within a field of accreditation, the laboratory is not required to analyze a PT sample for each test method, except for fields of accreditation for the drinking water accreditation matrix for which a PT sample per test method is required…" Therefore, using the example provided, for each analyte in the same matrix, the TNI standard only requires PTs for one ICP method (200.7 or 6010B) to maintain accreditation for both ICP methods and one ICP-MS method (200.8 or 6020) to maintain accreditation for both ICP-MS methods If the laboratory chooses to analyze and report PT results for both methods within a technology (i.e. 200.7 and 6010B for ICP), then an unacceptable score for either of those methods will result in an unacceptable score for both methods due to their shared technology. See the Note in V1M1, Section 5.1.1, which states the following "….When the laboratory reports an analytical result for an accreditation FoPT within the same field of accreditation and accreditation matrix by more than one test method using the	V1M1 of the 2016 standard was revised to include this statement "An unacceptable score for the reported test method will result in an unacceptable score for all test methods for that accreditation FoPT."	Yes.	Yes.	Yes.	No. While Section 4.3.4 of 2016 V1M1 has clarified the scoring of multiple methods within one FoPT, the definition for FoPT has not been clearly defined for the applicability of "method" to the Drinking Water program Only.
181	9/6/11	n/a	V1M1: 4.2.1 a)	n/a	Please clarify the use of "analysis date" in V1M1, section 4.2.1 a) for successive PT samples. The standard states that the analysis date is to be at least 5 months apart and no longer than 7 months apart. TNI defines "analysis date" as the "calendar date of analysis" in the "Terms and Definitions" section. So, if a PT sample is analyzed on March 15, 2011, is the period anytime between August 2011 and October 2011 (5 - 7 months) acceptable, or, must one use the period August 15, 2011 to October 15, 2011 for the next PT sample?	The term "analysis date" is as defined in the Terms and Definitions. The 5 to 7 month window would be as is described above; PTs must be analyzed between August 15, 2011 to October 15, 2011 for evaluation purposes.	Analysis date was removed from the 2016 standard.	No.	Yes.	No.	n/a - Analysis date removed from standard.
	9/12/11	n/a	V1M1: 6.1 b) vs. V2M2: 8.2 c)	n/a	There is a discrepancy between these two sections. V1M1 6.1 b) says 15 days between analysis dates for successive PTs for corrective action. V2M2 8.2 c) still uses the closing date of the previous study	There was an oversight in the V2M2 section 8.2(c) requirements. Section V2M2 5.1.4 refers to time between analysis dates for Initial Accreditation and Section V2M2 5.2.1 refers to time between analysis dates for Continuing Accreditation. PTs used for corrective action are viewed the same as those for continuing accreditation. For consistency within the PT program, the language that is in V1M1 6.1b is the TNI 2009 requirement and should be utilized by the ABs as the requirement for V2M2 section 8.2(c).	The 2016 standard does not discuss PTs for corrective action, but instead refers to corrective action in a general sense and references Module 2.	No.	Yes.	No.	n/a - Corrective Action PT requirements removed.
	12/8/10	Ch 2: D.1.5.b	V1M4: 1.5.4	V1M4: 1.5.4	Since PTs are supposed to be treated like "real environmental samples", must laboratories perform second column confirmation for "hits" in PT samples analyzed by GC methods? Or, would a PT sample be considered "a positive result detected on a sample from a location that has been prevously tested by the laboratory" and therefore 2nd column confirmation is not required?	The 2003 NELAC Standard (Chapter 5, Appendix D.1.5) and the 2009 TNI Standard (V1M4 1.5.4) require the laboratory to perform confirmations according to the method. The approved methods in Standard Methods for the Examination of Water and Wastewater and the applicable U.S. EPA methods require confirmation on "unfamiliar samples." A PT sample (by design, a sample with unknown composition) is a sample that is "unfamiliar" to the laboratory and therefore requires confirmation per method requirements.	The 2009 and 2016 standards are identical.	Yes.	Yes.	Yes.	No. V1M1 of the 2016 Standard does not have language that explicitly requires second column confirmations in the analysis of PT samples. Therefore, SIR still needed for clarification/interpretation.
275	9/25/2014	n/a	V2M2: 4.1.1 f)	V2M2: 4.1.5 g)	V2M2, section 4.1.1 f) states: "notify all Secondary ABs of revocation of accreditation of any laboratory in the program." Does this standard language require not only for a Primary AB to notify all Secondary ABs of a total revocation of a laboratory's accreditation, but to also require notification for a partial revocation? We are requesting this SIR since we are debating the interpretation of this requirement within our own program and because we have only been notified by one other AB in regards to total revocation of a laboratory accreditation. We feel there is a need for clarification on how to interpret/implement this requirement and are uncertain if it is being understood and implemented consistently by other ABs.	This standard clause does not delineate between the types of laboratory accreditation revocations, total or partial. The standard should be implemented such that Secondary ABs are notified of any revocation, total or partial, of a laboratory's accreditation.		No.	Yes.	Yes.	No. Language was not changed between 2009 and 2016 Standard.
	6/27/11	Ch 2: 2.1.3.a, 2.3.3, B.1.3 & B.1.4	V2M2: 5.2.2, V3: 6.2.1 & 6.2.2	V1M1: 4.1.2, V3: 5.5.2	A laboratory in our program has requested accreditation to measure analytes in biological tissue. The question is "If biological tissues are not listed as a matrix for the current NELAC Fields of Proficiency Testing, are proficiency tests of solid and chemical materials acceptable to demonstrate proficiency for testing biological testing?"	Biological tissues are not a matrix in the TNI FoPT tables, as such there would be no proficiency testing requirements for this matrix.	The 2016 standard clearly indicates only analytes in FoPT tables are required.	Yes.	Yes.	Yes.	No. Even though V3 sect 5.2.2 of the 2016 Standard states " The matrix for soil PT samples shall be well-characterized natural soil and shall not contain greater than 90% sand by mass", the standard does not exclude this matrix or FoPT table as a substitute for biological tissue matrices.
	4/1/11	Ch 2: 2.1.3	V2M2: 6.3	V1M1: 4.3.4	Section 6.3 says: The Primary AB shall allow the laboratory to analyze the same PT sample using different technologies and/or multiple test methods for any FoPT. If a laboratory reports more than one test method per technology per FoPT, an unacceptable score for either test method shall result in an unacceptable score for both test methods for that FoPT. If a lab uses 2 different extraction procedures for the same analytical method (e.g. Semi-Volatile GCMS in NPW matrix using Liquid/liquid Extraction sometimes and Solid Phase extraction at other times with any of the same analytes). Would it be acceptable to run a PT sample for each technology/extraction combination as long as they stick with the "fail one/fail both" concept that is in the referenced section? It get a little muddy since the TNI standard does not really recognize preparation methods and only looks at the technology but in reality it is like 2 different test methods.	The interpretation of the standard is that if PTs are analyzed using multiple preparation methods while being analyzed by a single analytical technology per an FoPT, then if one PT fails, all of the groups under that technology fail, regardless of the preparation method. The PT assessment is made by analytical technology per FoPT.	V1M1 of the 2016 standard was revised to include this statement "An unacceptable score for the reported test method will result in an unacceptable score for all test methods for that accreditation FoPT."	Yes.	Yes.	Yes.	No, but this topic cannot be addressed in the standard; TNI does not speak to preparation methods.