

Summary of the TNI Competency Task Force Meeting  
Wednesday, January 26, 2022 1:00 pm Eastern

1. Welcome and Roll Call

As Aaren had indicated her desire to step down from the Task Force Chair role at the December meeting, and was unavailable for this meeting, Jerry temporarily resumed the role of Interim Chair and welcomed everyone to the meeting. Attendance is recorded in Attachment 1. The minutes from December 1 were approved by unanimous vote.

A summary of the Special Session at conference (1/20/22, 8 am Central) was distributed to Task Force members but not approved as minutes. NOTE: Lynn neglected to distribute Aaren's edits to the October 28 minutes, so those remain to be approved at the February meeting.

2. Election of New Chair

Jerry announced that Ken Brown had agreed to become Chair of the Task Force, and asked if there were any other nominations for the Chair role. Hearing none, Joann moved and Harold seconded that Ken be elected to become the next Chair, and approval was unanimous with Ken abstaining.

3. Discussion of Special Session at Conference in San Antonio

As Ken was not present for this session at conference, Jerry continued to moderate the discussion. Others in attendance there were Debbie, Mike, Alfredo and Aaren.

At that session, Jerry presented a brief description of how TNI might proceed with a credentialing program, and Aaren discussed how this Task Force arrived at "Option 3" to describe the Technical Expert concept. Then an open discussion of the Technical Expert concept showed a consensus that there are no outstanding objections to transitioning to that concept from the current Technical Manager role as described in the 2016 EL Standard.

Jerry did note that a participant requested that an additional exception be added in §5.2.6.2.d, so that credentials from a state regulatory authority be included in the list of exemptions (e.g., a wastewater operator permit).

Ken noted that in Option 3, the section 4.1.7.2 is primarily about knowledge and experience requirements while subsection d is about the Technical Expert's absence, and suggested that subsection d should be renumbered to be 4.1.7.3 instead. Also, in 5.2.6.1.b, tests are discussed, so that for subsection c, it might make better sense to describe technologies rather than analytes.

Then, considerable discussion took place over the length of time needed to qualify as "experience" for the traditional "wet chemistry" testing – one year may be too long in the current environment where it is reportedly very difficult to retain new staff. Several participants argued that 6 months would be adequate, others thought that the times could be longer if the new hire lacked technical background or it was a particularly difficult technology. The Drinking Water Certification Manual does not specify years of experience, although it is reported that an update is in preparation (but has been for a very long time, now).

There was also a brief discussion of whether the Technical Expert competency requirements should be in the individual technical modules or all in the Quality Systems module, and there was a rapid consensus to leave all of the competency requirements in V1M2 as they are, now.

Jerry asked Debbie whether she would prefer to delay the handoff until more issues are resolved, but she indicated that she would like to proceed as planned. Debbie did state that she will want

additional input from Microbiology and Chemistry committees as well as coordination with the other technical module committees (asbestos, radiological chemistry, and WET). With many issues identified but not fully resolved, the Task Force will formally hand off refinement of the Technical Expert concept to the Quality Systems Expert Committee. Lynn will send an email to Debbie Bond, Chair of QS, formalizing that transfer (done 2/2/22). A copy of the version of Option 3 sent to Quality Systems can be found in Attachment 2, below.

A brief conversation about credentialing followed, suggesting that the test questions should be a random sampling from a quite large pool of relevant questions, and that we should definitely look into ways that technology can facilitate administering tests, similar to changes to the SAT tests that have recently been in the news. Jerry did note two corrections to the presentation he had made in San Antonio, that for course attendance, one hour of course should equal one hour of professional development time, and that for teaching a course, one hour of teaching would equal one and one-half hours of professional development.

At that point, time was expired. The next meeting will begin to deal with credentialing, and the KSAs for training leading to credentials.

4. Next Meeting

The next meeting of the Competency Task Force will be on **Wednesday, February 23, 2022, at 1 pm Eastern**. An agenda and any necessary documents will be sent in advance of the meeting.

Attachment 1

Competency Task Force Roster

NAME		EMAIL	AFFILIATION	Present?	
Aaren	Alger	aaren@alger-consulting.com	Alger Consulting & Tech.	No	1
Paul	Banfer	paul.banfer@eisc.net	EISC	No	2
Kenneth	Brown	kbrown@escondido.org	City of Escondido	Yes	3
Julia	Caprio	JKlensCaprio@Geosyntec.com	Geosyntec	No	4
Patricia	Carvajal	pmcarvajal@sara-tx.org	San Antonio River Authority	No	5
Yumi	Creason	ycreason@pa.gov	Pennsylvania DEP	Yes	6
Kirstin	Daigle	<a href="mailto:Kirstin.daigle@pacelabs.com">Kirstin.daigle@pacelabs.com</a>	Pace Laboratories	No	7
Steve	Drielak	drielak-associates@usa.net	Drielak & Associates	Yes	8
Amanda	Dutko	adutko@fairwaylaboratories.com	Fairway Laboratories	Yes	9
Stacey	Fry	sfry@babcocklabs.com	Babcock Laboratories	Yes	10
Kimberly	Kostzer	kkostzer@coca-cola.com	Coca-Cola	No	11
Silky	Labie	elcatllc@centurylink.net	ELCAT	No	12
Harold	Longbaugh	Harold.Longbaugh@houstontx.gov	City of Houston	Yes	13
Mike	Michaud	Mike.michaud@abilenetx.gov	City of Abilene	Yes	14
Mitzi	Miller	Mitzi.Miller@nv5.com	NV5	Yes	15
Jerry	Parr	jerry.parr@nelac-institute.org	The NELAC Institute	Yes	16
Sharon	Robinson	Sharon.Robinson@doh.nj.gov	New Jersey DOH	No	17
Joann	Slavin	Joann.slavin@health.ny.gov	NY ELAP	Yes	18
Alfredo	Sotomayor	asotomayor@mmsd.com	MMSD	Yes	19
Elizabeth	Turner	Elizabeth.turner@pacelabs.com	Pace Labs, Inc.	No	20
<b>Associate Members</b> (for TM/TD activities):					
Debbie	Bond	DBOND@southernco.com	Alabama Power	Yes	22
Michelle	Wade	mwade@a2lawpt.org	A2LA Workplace Training	Yes	23
<b>Program Administrator:</b>					
Lynn	Bradley	The NELAC Institute	Lynn.bradley@nelac-institute.org	Yes	

## Attachment 2

### Language in Option 3 for Technical Expert

4.1.7.2 The laboratory's technical expert(s), however named (e.g., Technical Manager, Technical Director, Technical Specialist, Group Leader, Supervisor, Lead Analyst, Department Head) shall:

- a) be an individual with education and experience as specified in Section 5.2.6.1 This individual must have detailed knowledge and experience in the fundamentals of each test he/she is responsible for and at least a working knowledge of relevant quality system requirements in the TNI Standard. This individual may have supervisory responsibilities, but this is not required. This individual may also act as a resource to assure that data generated are fit for the purpose required by the client.
- b) serve as the key authority regarding all processes involved in generating data from a specific area (e.g., microbiology, inorganic non-metals) including sample preparation, instrument calibration, sample analysis, quality control, identification and quantitation, and reporting to ensure that all data reported from this specific area meet quality assurance (QA) criteria and regulatory requirements.
- c) not be the technical expert(s) of more than one accredited environmental laboratory without authorization from the primary Accreditation Body
- d) meet qualification requirements as specified in Section 5.2.6.1.

4.1.7.3 If the technical expert is unable to fulfill their responsibilities for a period of time exceeding fifteen (15) consecutive calendar days, shall designate another staff member meeting the qualifications of the technical expert(s) to temporarily perform this function. If this absence exceeds thirty-five (35) consecutive calendar days, the primary accreditation body shall be notified in writing; and

#### 5.2.6.1 Technical Expert Qualifications

The applicable requirements for technical experts are given below. **Where a degree is required, the Technical Expert must be able to provide a copy of the diploma which was awarded and the AB should verify that the diploma was issued from an institution accredited by an organization recognized by the US Department of Education or equivalent international organization, at the time the diploma was issued.**

- a) Any technical expert of an accredited environmental laboratory engaged in chemical analysis shall be a person with an earned bachelor's degree in the chemistry, environmental sciences, biological sciences, physical sciences or engineering, or equivalent, and at least two (2) years of experience in the analysis of representative inorganic and organic analytical technologies for which the laboratory seeks or maintains accreditation. A master's or doctoral degree in one of the above disciplines may be substituted for one (1) year of experience.
- b) Any technical expert of an accredited environmental laboratory limited to inorganic chemical analysis, other than metals analysis, shall be a person with at least an earned associate's degree in chemistry, environmental, biological sciences, physical sciences or engineering, or equivalent, or two (2) years of equivalent and successful college education, and at least two (2) years of experience in the environmental analysis of representative analytical technologies for which the laboratory seeks or maintains accreditation.

A person with an associate's degree in an appropriate field of the sciences or applied sciences, with a minimum of one (1) college course in general chemistry and at least one (1) year of experience in the analysis of representative analytical technologies for which the laboratory seeks or maintains accreditation may be the technical expert of a

laboratory engaged in tests using calorimetric, conductivity, gravimetric, titrimetric, or turbidimetric techniques. Two (2) years of equivalent and successful college education may be substituted for the associate's degree.

- c) Any technical expert of an accredited environmental laboratory engaged in microbiological or biological analysis shall be a person with a bachelor's degree in microbiology, biology, chemistry, environmental sciences, physical sciences or engineering, or equivalent with at least one (1) college-level microbiology course and at least two (2) years of experience in the analysis of representative technologies for which the laboratory seeks or maintains accreditation. A master's or doctoral degree in one of the above disciplines may be substituted for one (1) year of experience.

A person with an associate's degree in an appropriate field of the sciences or applied sciences with at least one (1) college-level microbiology course and at least one (1) year of experience in the analysis of representative analytical technologies for which the laboratory seeks or maintains accreditation may be the technical expert of a laboratory engaged in microbiological analysis using methods that employ presence/absence tests; membrane filtration; multi-tube fermentation; multi-well culturing devices; or heterotrophic plate count techniques. Two (2) years of equivalent and successful college education, including the microbiology requirement, may be substituted for the associate's degree.

- d) Any technical expert of an accredited environmental laboratory engaged in radiological analysis shall be a person with a bachelor's degree from an accredited institution in chemistry, environmental, biological sciences, or physical sciences or engineering, or equivalent and at least two (2) years of experience in the analysis of representative radiological analytical technologies for which the laboratory seeks or maintains accreditation. A master's or doctoral degree in one of the above disciplines may be substituted for one (1) year experience.
- e) [Similar language for asbestos]
- f) [Similar language for aquatic toxicity/WET]

#### 5.2.6.2 Technical Expert Qualification Exceptions

- a) The Accreditation Body may waive the need for the above specified academic credentials, on a case-by-case basis, for highly experienced analysts. The laboratory may seek an educational waiver if the proposed technical expert meets the following experience criteria:
  - i. A technical expert with an earned associate's degree instead of the requisite bachelor's degree shall have at least four (4) years of experience in the analysis of representative analytical technologies for which the laboratory seeks or maintains accreditation.
  - ii. A technical expert with no degree shall have at least five (5) years of experience in the analysis of representative analytical technologies for which the laboratory seeks or maintains accreditation.
- b) The Accreditation Body may also waive the need for the above specified academic credentials, on a case-by-case basis, for technical expert(s) of who hold a valid plant operator's certificate appropriate to the nature and size of such facility issued by a State Regulatory Agency. Such accreditation shall be limited to the scope of that facility's regulated permit.
- c) If such a waiver is granted based on paragraphs a) or b), the Accreditation Body will prepare a written and signed justification for such a waiver.

- d) Notwithstanding the educational and experience requirements in 5.2.6.1, an individual who has been credentialed by an organization such as the American Water Works Association (AWWA), the Water Environment Federation (WEF) or The NELAC Institute (TNI) shall be considered to possess the requisite qualifications.