Summary of the TNI Competency Task Force Meeting Wednesday, July 28, 2021 1:00 pm Eastern

1. Welcome and Roll Call

Aaren welcomed everyone to the meeting. Attendance is recorded in Attachment 1. The minutes from June 23 were not approved due to lack of a quorum.

2. Follow-Up to Meeting with NELAP Accreditation Council

Aaren and Jerry met with the NELAP AC on July 6 to present the slightly revised Technical Director proposal. Aaren described the emergence of the proposal and its intent, verbally supplementing the written document that was shared with the Council in its meeting reminder.

Some ABs were in favor of the proposal as drafted, while others expressed a variety of unease over allowing labs free rein to establish staff qualifications. The two consistent themes of objection were, first, that some states believe they would need to review every TD's qualifications individually (including all secondary accredited labs) to ensure that state regulations were met and, second, that governments are known to be steadfastly risk-averse.

The constructive comments offered focused heavily on a preference for a "tiered approach", where educational levels trade off with years of relevant experience. For instance, a bachelor's degree plus one year of experience would qualify the same as an associate's degree plus three years of experience, and perhaps 5+ years of experience would qualify an individual who has no formal degree. There exists now, in the standard and in the Drinking Water Certification Manual, the option of a waiver of requirements but its use is apparently extremely uncommon.

3. Further Revisions to the TD Proposal for Presentation at Conference

After receiving feedback from the expert committees, the Consensus Standards Development Executive Committee and the NELAP AC, Aaren crafted three options in the language of the standard (based on current 2016 V1M2) for presentation at conference, replacing the previous single-option proposal. The full document is in Attachment 2. The first option is the original proposal. The second addresses the guidance in the Drinking Water Certification Manual that a lab "should" designate a person to oversee the functions that are typically associated with the technical director role. The third retains most of the current language but eliminates specific numbers of "credit hours".

One participant noted that the language "commensurate with the size and type of the lab" is a big step forward, while another noted that Option 3 is likely the greatest change that the NELAP AC will collectively accept, and that the SME would likely need to be better defined in terms of authority to stop work even though that individual need not have supervisory responsibilities over staff. Yet another participant noted that the third option is very little help for labs struggling to find qualified staff in the first place and that determining "qualifying experience" is likely to be problematic. There was general agreement with the concept that "environmental analysis" needed to be rephrased to address sample analysis, instrumental operations, sample preparation and quality control.

Several participants offered specific edits about removing supervisory authority and the reference to the extent of hours of absence that require a temporary substitute. All participants were invited to provide written comments by the end of the following day, to have them considered in the revision of options for actual presentation at conference.

Jerry noted that the conference portal is set up so that presenters can post documents separate from their PowerPoint presentations, and offered to work with Aaren to revise the full proposal as given to the NELAP AC to include the three options discussed here.

4. New Business

None.

5. Next Meeting

The next meeting of the Competency Task Force will be on <u>August 25, 2021, at 1 pm Eastern</u>. 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.	Yes	1
Paul	Banfer	paul.banfer@eisc.net	EISC	Yes	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	Yes	5
Yumi	Creason	ycreason@pa.gov	Pennsylvania DEP	Yes	6
Kirstin	Daigle	Kirstin.daigle@pacelabs.com	Pace Laboratories	No	7
Bob	Di Rienzo	Bob.DiRienzo@ALSGlobal.com	ALS Global	No	8
Steve	Drielak	drielak-associates@usa.net	Drielak & Associates	Yes	9
Amanda	Dutko	adutko@fairwaylaboratories.com	Fairway Laboratories	No	10
Stacey	Fry	sfry@babcocklabs.com	Babcock Laboratories	Yes	11
Kitty	Kong	Kitty.Kong@chevron.com	Chevron	No	12
Kimberly	Kostzer	kkostzer@coca-cola.com	Coca-Cola	No	13
Silky	Labie	elcatllc@centurylink.net	ELCAT	No	14
Harold	Longbaugh	Harold.Longbaugh@houstontx.gov	City of Houston	Yes	15
Mike	Michaud	Mike.michaud@abilenetx.gov	City of Abilene	No	16
Mitzi	Miller	Mitzi.Miller@nv5.com	NV5	No	17
Jerry	Parr	jerry.parr@nelac-institute.org	The NELAC Institute	Yes	18
Sharon	Robinson	Sharon.Robinson@doh.nj.gov	New Jersey DOH	No	19
Joann	Slavin	Joann.slavin@health.ny.gov	NY ELAP	No	20
Alfredo	Sotomayor	asotomayor@mmsd.com	MMSD	No	21
Elizabeth	Turner	Elizabeth.turner@pacelabs.com	Pace Labs, Inc.	No	22
Curtis	Wood	curtis_wood@waters.com	ERA, A Waters Company	No	23
Associate	Members (for	TM/TD activities):			
Debbie	Bond	DBOND@southernco.com	Alabama Power	Yes	24
Michelle	Wade	mwade@a2lawpt.org	A2LA Workplace Training	No	25
Program A	Administrator:				
Lynn	Bradley	The NELAC Institute	Lynn.bradley@nelac-institute.org	Yes	

Attachment 2 - Draft of Options for Technical Director

Proposal #1:

- 4.1.7.2 The laboratory shall designate at least one individual who shall be a qualified professional with the technical education and experience commensurate with the size and type of the laboratory. This individual is ultimately responsible for ensuring that all laboratory personnel have demonstrated competencies for their assigned functions and that all data reported by the laboratory meet the required quality control (QC) criteria and regulatory requirements. The laboratory's technical manager(s), however named, and/or his/her designee(s) shall:
 - a) be a member of the staff of an environmental laboratory who exercises actual day-to-day supervision of laboratory operations for the appropriate fields of accreditation and reporting of results.
 - b) be experienced in the fields of accreditation for which the laboratory is seeking accreditation.
 - c) have duties that include:
 - i. monitoring standards of performance in QC and QA, and
 - ii. monitoring the validity of the analyses performed and data generated in the laboratory to assure reliable data.
 - d) not be the technical manager(s) of more than one accredited environmental laboratory without authorization from the primary Accreditation Body. Circumstances to be considered in the decision to grant such authorization shall include:
 - i. the extent to which operating hours of the laboratories to be directed overlap,
 - ii adequacy of supervision in each laboratory, and
 - iii the availability of environmental laboratory services in the area served.
 - e) if absent for a period of time exceeding fifteen (15) consecutive calendar days shall designate another staff member meeting the qualifications of the technical manager(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
 - f) meet qualification requirements as specified in Section 5.2.6.1.

Proposal #2:

- 4.1.7.2 The laboratory's technical manager(s), however named, and/or his/her designee(s) shall:
 - a) be a member of the staff of an environmental laboratory who has exercises actual day-to-day supervision of laboratory operations for the appropriate fields of accreditation and reporting of results.
 - b) be a qualified professional with the technical education and experience commensurate with the size/type of the laboratory.-experienced in the fields of accreditation for which the laboratory is seeking accreditation.
 - c) have duties that include:
 - i. serving as the primary contact for laboratory personnel related to instrumental analysis, sample preparation, quality control, etc. so that all data reported by the laboratory meet the required quality assurance (QA) criteria and regulatory requirements monitoring standards of performance in QC and QA, and

- ii. having at least a working knowledge of quality assurance principles. monitoring the validity of the analyses performed and data generated in the laboratory to assure reliable data.
- d) not be the <u>subject matter expert(s)</u> technical manager(s) of more than one accredited environmental laboratory without authorization from the primary Accreditation Body. Circumstances to be considered in the decision to grant such authorization shall include:
 - i. the extent to which operating hours of the laboratories to be directed overlap,
 - ii adequacy of supervision in each laboratory, and
 - iii the availability of environmental laboratory services in the area served.
- e) if absent for a period of time exceeding fifteen (15) consecutive calendar days shall designate another staff member meeting the qualifications of the technical manager(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
- f) meet qualification requirements as specified in Section 5.2.6.1.

Proposal #3:

- 4.1.7.2 The laboratory's subject matter expert(s) technical manager(s), however named, and/or his/her designee(s) shall:
 - a) be a member of the staff of an environmental laboratory who has exercises actual day-to-day supervision of laboratory operations for the appropriate fields of accreditation and reporting of results.
 - b) be a qualified professional with the technical education and experience commensurate with the size/type of the laboratory that meets the qualification requirements as specified in Section 5.2.6.1. experienced in the fields of accreditation for which the laboratory is seeking accreditation.
 - c) have duties that include:
 - i. serving as the primary contact for laboratory personnel related to instrumental analysis, sample preparation, quality control, etc. so that all data reported by the laboratory meet the required quality assurance (QA) criteria and regulatory requirements monitoring standards of performance in QC and QA, and
 - ii. having at least a working knowledge of quality assurance principles. monitoring the validity of the analyses performed and data generated in the laboratory to assure reliable data.
 - d) not be the <u>subject matter expert(s)</u> technical manager(s) of more than one accredited environmental laboratory without authorization from the primary Accreditation Body. Circumstances to be considered in the decision to grant such authorization shall include:
 - i. the extent to which operating hours of the laboratories to be directed overlap,
 - ii adequacy of supervision in each laboratory, and
 - iii the availability of environmental laboratory services in the area served.
 - e) if absent for a period of time exceeding fifteen (15) consecutive calendar days shall designate another staff member meeting the qualifications of the technical manager(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

f) meet qualification requirements as specified in Section 5.2.6.1.

5.2.6.1 Subject Matter Expert Technical Manager Qualifications

The applicable requirements for subject matter experts technical managers are given below.

- a) Any <u>subject matter expert technical manager</u> of an accredited environmental laboratory engaged in chemical analysis shall be a person with a bachelor's degree <u>from an accredited institution</u> in the chemistry, environmental <u>sciences</u>, biological sciences, physical sciences or engineering, <u>or equivalent</u>, with at least twenty-four (24) college semester credit hours in chemistry, and at least two (2) years of experience in the <u>environmental</u> analysis of representative inorganic and organic <u>analytical technologies</u> analytes 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 <u>subject matter expert technical manager</u> 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 <u>from an accredited institution</u> in <u>chemistry</u>, <u>environmental</u>, <u>biological sciences</u>, <u>physical sciences or engineering</u>, <u>or equivalent chemical</u>, <u>physical or environmental sciences</u>, or two (2) years of equivalent and successful college education, <u>with a minimum of sixteen (16) college semester credit hours in chemistry and at least two (2) years of experience in the environmental analysis of representative inorganic and organic analytical technologies for which the laboratory seeks or maintains accreditation</u>. In addition, such a person shall have at least two (2) years of experience performing such analysis.
- c) Any <u>subject matter expert technical manager</u> of an accredited environmental laboratory engaged in microbiological or biological analysis shall be a person with a bachelor's degree <u>from an accredited institution</u> in microbiology, biology, chemistry, environmental sciences, physical sciences or engineering, <u>or equivalent</u> with <u>at least one college-level microbiology laboratory course and at least two (2) years of experience in the analysis of representative inorganic and organic analytical technologies for which the laboratory <u>seeks or maintains accreditation</u>. a <u>minimum of sixteen (16) college semester credit hours in general microbiology and biology and at least two (2) years of experience in the environmental analysis of representative analytes for which the laboratory seeks to obtain or maintains accreditation. A master's or doctoral degree in one of the above disciplines may be substituted for one (1) year of experience.</u></u>

A person with an associate's degree <u>from an accredited institution</u> in an appropriate field of the sciences or applied sciences, with a minimum of four (4) college semester credit hours in general microbiology <u>and at least one (1) year of experience in the analysis of representative analytical technologies for which the laboratory seeks or <u>maintains accreditation</u> may be the <u>subject matter expert technical manager</u> of a laboratory engaged in microbiological analysis limited to fecal coliform, total coliform, E. coli, and standard plate count. Two (2) years of equivalent and successful college education, including the microbiology requirement, may be substituted for the associate's degree. In addition, each person shall have one (1) year of experience in microbiological analyses.</u>

d) Any <u>subject matter expert technical manager</u> of an accredited environmental laboratory engaged in radiological analysis shall be a person with a bachelor's degree <u>from an accredited institution</u> 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. with twenty-four (24) college semester credit hours of chemistry with two (2) or more years of experience in the radiological analysis of environmental samples. A master's or doctoral degree in one of the above disciplines may be substituted for one (1) year experience.

5.2.6.2 Subject Matter Expert Technical Manager 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 subject matter expert meets the following experience criteria:
 - i. A SME 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 SME with no degree shall have at least five (5) 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 analytical experience, on a case-by-case basis, for subject matter expert(s) of a laboratory associated with a facility that only analyze samples from that facility.
- c) <u>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.</u>
- d) Notwithstanding the educational and experience requirements in 5.2.6.1, an individual who has been credentialed as a technical manager by an organization such as the American Water Works Association, the Water Environment Federation, or TNI shall be considered to possess the requisite management capability.