

Summary of the TNI Competency Task Force Meeting
Wednesday, February 24, 2021 1:00 pm Eastern

1. Welcome and Roll Call

The Interim Chair, Jerry Parr, welcomed everyone to the meeting. Attendance is recorded in Attachment 1. The minutes of the January 7, 2021, meeting were approved by acclamation.

2. Lessons Learned from Conference

A number of things occurred during and after conference to warrant reconsideration of the path laid out in the draft KSA document. These factors are identified below.

- Marlene Moore had sent Jerry many comments on the updated draft KSA document that was distributed with the January 7 minutes, and he did provide another update that addressed some of Marlene's comments; this later draft was distributed with the meeting reminder.
- A presentation by Marlene during conference, titled "Demonstration of Analyst Competency: How a Quality Management System Improves Laboratory Performance and Data Quality" caught Jerry's attention in its explanation of the relationship between competency and qualifications.
- Informal discussions among the NELAP Accreditation Council AB representatives during the networking sessions at conference made clear that the training paradigm outlined in the Draft Standard that was presented during the LAB session was going to receive an abundance of comments (primarily objections) from the NELAP ABs (requiring training that is not yet in existence). Those comments could mean that the training scheme the KSA document was framed around might not ever actually be utilized.
- The Drinking Water Certification Manual's "requirements" for assessors had not yet been addressed.

Jerry proposed that further work on the KSA document be tabled until the revision of V2M1 is final, and begin exploration of the Technical Director/Technical Manager role and its competency needs. The Assessor/KSA training course(s) may not need to address the language in the initial Draft Standard V2M1, and during this "holding" time, he can also further explore the relationship between competency and qualifications, as that may also impact establishment of competency requirements for assessors.

Jerry then asked for feedback and discussion on this proposed course of action. There was no sentiment to continue working on the KSA document at this time, given the stated uncertainties, and participants immediately launched into discussing the Technical Manager role.

3. Technical Manager Competency

The Quality Systems Expert Committee has been working with other expert committees and the NELAP AC to refine the Technical Manager (TM) or Technical Director (TD) requirements, but continues to struggle around what combination of education and experience should qualify an individual for that role, yet not require the accreditation body (or an assessor) to delve into details of course content and technical experience for each individual (or in some cases, each job applicant). Many worthwhile observations and insights were offered, as itemized below, and it became abundantly clear that the lab management and personnel supervision roles need to be separated from the role that a TM/TD is required to fill by the standard itself. Managerial personnel for lab operations do not necessarily need to be technically competent in running analyses and reviewing data for the lab's results.

- Identify the duties and responsibilities of the TM/TD position.
- Change the terminology completely – TM implies management responsibilities that can be fulfilled by a non-scientist, whereas the TM/TD role should be a subject matter expert (SME) for the analytical work being accomplished. The TM/TD may or not have managerial/supervisory duties but those should be clearly separate from the technical expertise required to fulfill the TM/TD role.
- Large labs never expect the TM person to run all sections of the lab.
- The TM (SME) should lead the junior analysts in properly calibrating equipment and performing analyses, while the QA Manager addresses and resolves the QC/QA issues.
- Small labs struggle and frequently cannot meet the current standard's requirements for the TM/TD position, and all of the "grandfathered" personnel are retiring. This endangers the industry.
- Define the roles to differentiate the SME from lab management (which can be non-technical personnel).

Jerry summarized the discussion by categorizing the knowledge needed by a TM/TD/SME as follows:

- Calibration,
- Evaluation of QA processes,
- Regulatory requirements for the various media programs, and
- Know what's allowable within the standard and the methods.

Defining the competency of this TM/TD/SME (however named, eventually) will include building the full list of SME skills and also reframing the role by assigning legal responsibilities for the actions of the laboratory to some other role identified as managerial. The SME qualifications could come from training, while the managerial responsibilities need not be assigned to a scientist. One suggestion was that a strawman product could be developed and circulated for comment among the ABs and the expert committees, as a starting place to introduce the SME concept.

Sections 5.2, 5.2.1 and 5.2.6 of V1M2 suggest that the TM is not lab management but are not explicit about it, while sections 4.1.5.a, 4.1.5.h and overall 4.1.5-4.1.7 define the role currently. The terminology Technical Manager replaced Technical Director when the NELAC Standard was replaced by an ISO based standard.

The discussion took a brief tangent into the "why" it is so difficult to hire TMs now. Apparently, one TM for an entire lab is unreasonable if the lab has multiple sections – a TM who understands chemistry may not qualify as TM for the micro section – and also, labs (especially smaller ones) in rural areas cannot meet the salary requirements of the qualified people, as they are in demand by larger labs that are typically located in more accessible places. Certified operators for wastewater labs are an exemption, but other fields of testing do not have such a credential, and a new graduate who might be willing to accept a lower salary does not have the experience to fulfill the TM/TD role.

To start off this next activity, Jerry committed to sifting through the current standard to identify technical versus managerial activities that are required, without paying attention to the nomenclature assigned to the individual performing those activities. Later, once the strawman is drafted, the Task Force should consult with Quality Systems committee and the Accreditation Council before going further.

4. Seeking a New Chair for the Task Force

Jerry stated that he plans to step down from the Interim Chair role and requested volunteers for an election of a permanent Chair for the Task Force, with the election to be held at the March meeting. To date, only one individual has volunteered; additional self-nominations are welcome!

Jerry intends to form a subcommittee to explore digital badging and also what would be involved with a full credentialing program. Elizabeth Turner, Amanda Dutko and Ken Brown responded to his request for volunteers, and he will also draw volunteers from the Training Committee. Digital badging is easy to do, and readily associated with training courses or a given series of courses, while credentialing would be both rigorous and continuous, with both initial training (and perhaps evaluation of experience) plus continuing education. Credentialing is a much stronger endorsement than is digital badging, and could be a way to upgrade the entire environmental laboratory community by setting the standard for certain classes of personnel.

5. Next Meeting

The next meeting of the Competency Task Force will be on **March 24, 2021, 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.	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	Yes	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	Yes	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	No	15
Mike	Michaud	Mike.michaud@abilenetx.gov	City of Abilene	No	16
Mitzi	Miller	Mitzi.Miller@nv5.com	NV5	Yes	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	Yes	20
Alfredo	Sotomayor	asotomayor@mmsd.com	MMSD	Yes	21
Elizabeth	Turner	Elizabeth.turner@pacelabs.com	Pace Labs, Inc.	Yes	22
Curtis	Wood	curtis_wood@waters.com	ERA, A Waters Company	No	23
Program Administrator:					
Lynn	Bradley	The NELAC Institute	Lynn.bradley@nelac-institute.org	Yes	