

Summary of the TNI Competency Task Force Meeting  
Wednesday, January 25, 2023 1:00 pm Eastern

1. Welcome and Roll Call

Ken welcomed everyone to the meeting, which by prior agreement was scheduled for two hours. Attendance is recorded in Attachment 1. By the end of the meeting, a quorum was present, and so the minutes from December 7, 2022, and the special session at conference (January 11, 2023) were unanimously approved following a motion by Patty, seconded by Scott.

2. Addressing Comments from the Special Session at Conference (January 11 Minutes)

The comments as itemized in the summary of the Special Session are repeated below, with the action agreed upon noted in italics at the end of each comment.

Proposed combinations of education and experience:

- The “one year in position” requirement needs clarification to state “one year working as a Quality Manager”; later in conversation, this was refined to be “one year working in a position in Quality Management, however named” or “one year as a QM, however named” – *change to one year in “quality” with a footnote to clarify that this means employed in some capacity in the area of QA*
- The time “working in a laboratory” should be clarified to be “working in a laboratory performing analytical tasks”, but further discussion suggested that prior analytical experience ought not to be a requirement for a Quality Manager -- *no action*
- Concerns about any person with only a high school education being eligible were met with explanations that people follow different life paths into the positions and that to eliminate everyone who never completed a college degree could be perceived as racially unjust – *no action*
- Should education “in a related field” be specified, or left un-defined? Suggestion was to use the language from the Standard, and also that education in a quality-related field might not be adequate – *clarify what constitutes a related field by using same terminology as V1M2 uses for technical specialist*
- The level of experience required for a QM position will depend on the size and scope of the laboratory – a complex lab (full-service, offering many methods/technologies) will likely require a QM with more experience than a small lab with limited scope of accreditation – *unable to clarify any further*
- Should the credential be “certified environmental laboratory QM professional” as title? – *change to “Certified Environmental Laboratory Quality Management Professional”*
- One year in the position of QM might be too short also, time “in position” could (and should) include roles other than the “top” person with the QM title, if working in the quality department of a large lab – *addressed by change in first item (above)*
- California’s new program will create many new QA/QM positions – for a person with associate degree and less than four years’ experience, how would that work? – *no change*

Examination for QM credential – definitely not closed book

- A former high school teacher opposed closed book tests, stating that the ability to look up information is crucial, as is knowing where to look. This individual also opposes true/false questions, preferring multiple choice or possibly “fill-in-the-blank” (with grading based on a thorough list of synonyms) – *fill in the blank is unlikely to be used due to difficulty in automated grading of single word answers*
- Another commenter prefers open book, especially for individuals who might be taking a remotely proctored examination at home -- *no action*

- A passing score of 70% would be acceptable, although 75% should be considered. TNI training courses require a two-thirds (67%) passing score – *investigate what statistics are used in other related exams such as Certification Officer course*
- Yet another commenter prefers open book exams, but believes that the passing score should be raised for an open book exam, stating that quality experts are expected to answer questions that are rarely simply yes/no, but typically involve a discussion of approach and details – *no action*
- Passing score should depend on the difficulty of the test, which in turn should be determined by the risk of failure in the actual position (by the credentialed employee) – *no action*
- Consider asking what factors go into answering a question or what is not relevant to the answer, rather than a specific answer – *no action*
- Test new questions by including them in a certain number of exams but not actually scoring them for grading purposes – yes, good idea
- Consider adding a short interview (~20 minutes) to the exam and also consider including 2-3 questions requiring a description of how to approach the answer – these to be evaluated by QA experts – *unlikely due to difficulty of having a single interviewer and difficulty in grading*
- How and by whom should references be provided for the exam? – *all references are already in the KSA document*
- Another commenter favors open book, as that is a better way to assess whether a person has the baseline knowledge to perform in the position; favors the approach of the assessor training course – *no action*
- Yet another favors open book, but requests that consideration be given for adults with either disabilities or test anxiety in providing examinations (and for badge tests, as well) – *ensure physical access and address other disabilities on a case-by-case basis*
- A person familiar with the Association of Boards of Certification notes that their tests specify the references used to develop the questions; for this credential, the references are noted in the KSA document – *as noted, references are in KSA document*
- The number of questions proposed (150) for a three hour exam seems like more than a person could reasonably locate answers to, using an “open book” process, but this commenter favors open book – *beta testing of exam questions will resolve this issue*
- Scoring of the exam should be by topical categories, with a passing score on each of the categories (this is already in the plan, using the 12 specialist exams as categories) – *yes, if fail all questions of one category, would fail test, but test would not be graded on the basis of a passing score on questions from all 12 digital badge exams; plan to provide feedback to individuals who fail the full exam about which areas are weak. Further research may refine this plan.*
- Recommend avoiding questions where there is more than one correct answer among the multiple choice (this is how Virginia’s waste water operator certification test is organized) -- *yes*
- A brief discussion of the proposed fee for the certification exam (\$325) suggested that it might be higher than the industry will bear, and noted that TX’s fee is \$145 for testing and listing in database (type of credential not specified) – *fees at this point are estimates, as staff time needed for processing all parts of the application and exam are uncertain*

#### Digital badges:

- This route to the QM credential would bypass the education and experience requirements -- *yes*
- For the PT Specialist (and also the QC Specialist), the badge award should specify the field of testing; laboratory skills should also have field of testing specification (especially with

relation to support equipment) – *the PT badge could be like the QC badge, but more likely the QM PT badge would be generic – ordering PTs and contents of PT module. Module specialization for PTs (along the lines of FoPT tables, perhaps?) may become part of the Technical Specialist credentialing, when the program progresses to that point. Jerry will reassess the KSAs and eliminate the module-specific ones for PT and QC, for now.*

- Additional badge combinations could include data integrity with internal audits, measurement traceability with support specialist -- *reassessing*
- Corrective actions should be separated from internal audits, as they apply to many other activities also -- *reassessing*
- Information technology would fall within the data handling badge -- *reassessing*
- Additional aspects for specialist badges should include cause analysis (perhaps with corrective action?), measurement uncertainty, vendor supplied goods, and sampling -- *reassessing*
- The customer service badge could be discarded -- *reassessing*
- Every requirement in Module 2 is assigned to one of the badges now – *no action*
- Courses offered right now do not necessarily match the badges or badge requirements, but additional courses will be planned to train for areas not already offered. 190 hours of training are presently available, with only 46 hours envisioned to be required (total) for all 12 badges (plus there is some overlap, that courses apply to multiple badges) -- *yes*
- Will there be provision for legacy individuals? No, this should not be needed, as badges will not be required by either TNI or the Standard. It is conceivable that employers might at some point require them, however – *no action*
- The badge titles should match the KSA names – *yes, these will be cleaned up*
- Ethics and data integrity training should be pre-requisites for everything – *worth considering, but all labs are required to provide mandatory training in these topics per V1M2*
- The cost of courses needed as well as the cost of badges (and the full credential) are “non-trivial” – are certificates and credentials useful outside of the laboratory community, and is the cost of these badges/credential comparable to their intrinsic value? – *suggestion that, for each badge, the exam fee should be 1/12 of the full credential cost, but this will depend on software design and other factors*
- TNI has no plans and no desire to mandate recertification for badges – *unchanged*

#### Recertification:

- Fees are estimates for now; final fees will be determined by IT costs. TNI’s IT Administrator has agreed to design and build the database architecture for a full credentialing program – *development underway*
- Current fee estimates are for TNI members; non-member fees have not been considered yet
- If an individual holds more than one certificate (as the program grows), can PDH count for all certificates? And would there then be one single fee for the multiple recertifications? – *the PDH hours could count for all recertifications but there would remain separate fees for each recertification type*
- While only TNI training will be applicable to badges, any provider’s training (for professionally relevant courses) will be applicable for PDH -- *yes*

Jerry will revise both the KSA document and the PowerPoint, and is contemplating a webinar in March for the roll-out of the digital badge program.

### 3. New Business

One Task Force member mentioned that training on internal investigations would be beneficial to lab staff, as this is much different than internal audits. Jerry will refer that idea to the Training Committee.

### 4. Next Meeting

The next scheduled meeting of the Competency Task Force will be Wednesday, February 22, 2023, at 1 pm Eastern. The agenda, a Teams meeting link, and any necessary documents will be sent in advance.

**Attachment 1**

**Competency Task Force Roster**

| <b>NAME</b>   |           | <b>EMAIL</b>                     | <b>AFFILIATION</b>          | <b>Present?</b> |    |
|---------------|-----------|----------------------------------|-----------------------------|-----------------|----|
| Paul          | Banfer    | paul.banfer@eisc.net             | EISC                        | Yes             | 1  |
| Kenneth       | Brown     | kbrown@escondido.org             | City of Escondido           | Yes             | 2  |
| Patricia      | Carvajal  | pmcarvajal@sara-tx.org           | San Antonio River Authority | Yes             | 3  |
| Steve         | Drielak   | drielak-associates@usa.net       | Drielak & Associates        | No              | 4  |
| Amanda        | Dutko     | adutko@fairwaylaboratories.com   | Fairway Laboratories        | Yes             | 5  |
| Stacey        | Fry       | sfry@babcocklabs.com             | Babcock Laboratories        | No              | 6  |
| Harold        | Longbaugh | Harold.Longbaugh@houstontx.gov   | City of Houston             | Yes             | 7  |
| Joann         | Slavin    | joann.slavin@health.ny.gov       | NY DOH                      | No              | 8  |
| Scott         | Siders    | siders6six@yahoo.com             | Retired                     | Yes             | 9  |
| Alfredo       | Sotomayor | asotomayor@mmsd.com              | MMSD                        | No              | 10 |
| Elizabeth     | Turner    | Elizabeth.turner@pacelabs.com    | Pace Labs, Inc.             | No              | 11 |
| <b>Staff:</b> |           |                                  |                             |                 |    |
| Jerry         | Parr      | Jerry.parr@nelac-institute.org   | TNI Executive Director      | Yes             |    |
| Lynn          | Bradley   | Lynn.bradley@nelac-institute.org | TNI Program Administrator   | Yes             |    |