

Radiochemistry Expert Committee (REC) Meeting Summary

August 28, 2024

1. Roll Call and Minutes:

Amanda Fehr, Chair, called the meeting to order at 1pm Eastern on August 28, 2024 by teleconference. Attendance is recorded in Attachment A – there were 9 voting members present. Associate members in attendance: Joe Pardue, Keith McCroan, Rhonda Ridenhower, Velinda Herbert, and Larry Jassin.

There were no changes to the agenda and it was approved by unanimous consent.

The April minutes were missed for approval and were reviewed by the Committee today. A motion was made by Mary Beth to approve the April 24, 2024 minutes as written. The motion was seconded by Jim Chambers and unanimously approved.

2. Technical Specialist Discussion

Ilona shared the conversation that occurred on the QMS Workgroup call last Monday. They are considering Bachelor's degree with only 1 year of experience.

Amanda shared what Radiochemistry initially sent to the QMS Expert Committee:

a) *Radiochemical Testing (Module 6)*

- i. *Any technical specialist responsible for radiochemical testing shall be a person with*
 - 1) *successful completion of eight (8) college, or equivalent technical courses, in any combination of chemistry, physics, or equivalent scientific discipline;*
 - 2) *an additional college, or equivalent technical course, in radiochemistry for each technology for which the technical specialist will be responsible with no more than four (4) technology specific courses required (e.g., the technical specialist responsible for only gas-flow proportional counting (GFPC) would need only one (1) course, whereas a technical specialist responsible for GFPC, alpha spectrometry, gamma spectrometry, liquid scintillation, alpha scintillation, and ICP-MS would require four (4) courses);*
and
 - 3) *two (2) years of experience in the radiochemical testing of environmental samples. An earned master's or doctoral degree in chemistry, physics, or equivalent scientific discipline may be substituted for one (1) year experience.*
 - 4) *Required courses in 1) and 2) may be substituted with additional years of experience working in an environmental radiochemical testing laboratory beyond the two (2) years required in 3). Multiple years of experience may*

be substituted for courses, but at least six (6) courses must be from actual college or equivalent technical training sources. Each year substituted must be related to the learning of and proficiency in a different technology. One (1) year of experience shall substitute for one (1) course.

The QMS Expert Committee decided to remove part of this information and only include the minimum requirements in Module 2. Each of the Expert Committees have been asked to evaluate the DRAFT new Module 2 language and decide if more Technical Specialist requirements should go in their modules. The DRAFT language is included in Attachment D.

Amanda asked for input:

- Amanda pointed out the deputy requirements in the DRAFT language. Deputy could be in place for 100 days, but then new Technical Specialist needs to be in place.
- Laura noted it may take time to get the experience in something like gamma spectrometry. 1 year is not enough experience to be a Radiochemistry Technical Specialist.
- Larry asked if there could be a test? Ilona and Amanda pointed out Credentialing will have a test.
- Ilona looked back at the 2003, 2009 and 2016 TNI Standard and 2 years experience was required with a bachelor's degree in all three standards.
- Ilona reminded the group that Amanda had shared the feedback that the NELAP AC had on the Radiochemistry submission for Technical Specialist. Amanda will be sending this back out for further review and discussion next month.

3. Orange County, CA Summer Conference

Amanda noted it was a very good meeting and that she requested a ¼ of a day meeting for Radiochemistry in Jacksonville, FL in February 2025. The Committee may be working on the Standard if additional information on Technical Specialist information needs to be added and it would be helpful to get direct input.

4. New Business

None.

5. Action Items

A summary of action items and backburner/reminder items can be found in Attachment B and C.

6. Next Meeting and Close

The next meeting will be September 25, 2024 at 1pm Eastern.

Amanda adjourned the meeting at 1:48 pm Eastern.

**Attachment A
Participants
Radiochemistry Expert Committee**

Members	Affiliation		Contact InAffirmativemation
Amanda Fehr – Chair (2026) Present	GEL	Lab	amanda.fehr@gel.com
Sherry Faye (2025) Present	Wadsworth Center, NY State DOH Albany, NY	Lab	sherry.faye@health.ny.gov
Abigail Africa (2027*) Present	Oklahoma Department of Environmental Quality	Lab	Abigail.africa@deq.ok.gov
Laura Freeman (2027*) Present	New Jersey Department of Environmental Protection	AB	Laura.freeman@dep.nj.gov
Stan Stevens (2026) Present	Perma-Fix Environmental Services	Other	stanws@aol.com
Mark McNeal (2027*) Present	ACZ Laboratories, Inc.	Lab	markm@acz.com
Jim Chambers (2026) Present	Fluor-BWXT Portsmouth LLC	Other	jim.chambers@ports.pppo.gov
Chrystal Sheaff (2027) Present	Energy Laboratories, Inc.	Lab	csheaff@energylab.com
Mary Beth Gustafson (2027) Present	Virginia	AB	mary.gustafson@dgs.virginia.gov
Ilona Taunton (Program Administrator) Present	The NELAC Institute	n/a	Ilona.taunton@nelac-institute.org

Attachment B

Action Items – REC

	Action Item	Who	Target Completion	Completed
90	Send note about method codes and concerns to the PT Expert Committee. Is there a way to limit the codes a lab can use to report PT data?	Bob	TBD	12/27/23: On hold until notified.
120	Terry Contact Lem Walker clean water MQOs. Joe Pardue will provide Terry with DoD limits.	Terry Joe Pardue	TBD	Needed for Non-DW FoPT limits. 4/24: Bob Shannon is now working on this.
121	Discuss whether to look at the QSM and comments submitted to determine whether some additional changes should be made to the TNI final Standard.	All	TBD	
124	Determine whether in meeting trainings should be offered as Webcasts.	All	TBD	12/27/23: Discuss at next meeting.
125	Breakout Group to work on PT criteria (FoPT) for non-potable water and to potentially address other matrices.	Robert/Bob/ Keith		
126	Discuss Bob Shannon’s proposal for participants in the PT Program to establish the requirements they want to be evaluated against. Discuss with PTPEC and PT Providers.	Amanda Bob	TBD	
127	Review NEFAP EC Comments and the new QSM Expert Committee Module 2 DRAFT Technical Specialist language and determine whether Radiochemistry needs to add language to Module 6.	All		8/28/24: Action Item added.

Attachment C – Back Burner / Reminders

	Item	Meeting Reference	Comments
5	Affirmativem subcommittee of experts in MS and other atom counting techniques to see that these techniques are adequately addressed in the radiochemistry module.	9/24/14	12/27/23: Technology is acknowledged in new Standard. It has been addressed.
6	From Action Item # 75: Prepare copy of Standard annotated with summary document language.		This is a project Carolyn was working on, but the committee decided it may duplicate the Small Lab Handbook. This project has been put on Hold. 12/27/23: No need. Small Lab Handbook is sufficient.

The language in yellow is language the QMS Expert Committee may need to change depending on outcome of future discussion.

Technical Specialist Sections

5.6.3 The laboratory shall have a technical specialist responsible for each analytical discipline that corresponds with its accreditations. The technical specialist may be responsible for one or more analytical disciplines. The technical specialist may have supervisory responsibilities, but this is not required. Technical specialists are key personnel. Technical specialists, however named, must:

- a) have a working knowledge of relevant TNI Standard requirements,
- b) have responsibility and authority for the management of nonconforming work, including actions in 7.10.1 b),
- c) serve as the responsible individual regarding all processes involved in generating data from an analytical discipline (e.g., microbiology, inorganic non-metals) including sample preparation, instrument calibration, sample analysis, quality control, identification and quantitation, and reporting to ensure that data reported from this analytical discipline meet quality assurance (QA) criteria and regulatory requirements.

5.6.4 The technical specialist may be responsible for analytical disciplines at more than one location provided the laboratory submits a plan to the primary accrediting body detailing availability at each location. The plan must include how the technical specialist will fulfill requirements in 5.6.3 a) and b) at more than one location including the adequacy, frequency, and the type (remote or physical) of oversight in each laboratory. The laboratory must retain a record of the approval of the plan from the accrediting body.

5.6.5 For each analytical discipline for which the laboratory holds accreditation, a deputy must be assigned in the event that a technical specialist is unable to fulfill responsibilities in 5.6.3 a) and b).

- a) The deputy is not required to meet technical specialist qualification requirements.
- b) If this period of time exceeds thirty-five (35) consecutive calendar days, the laboratory must notify the primary accreditation body in writing.
- c) The laboratory must have a technical specialist(s) who meet(s) the qualification requirements in place within one hundred (100) calendar days from when the technical specialist is unable to fulfill responsibilities.

6.2.2.1 Technical Specialist Qualifications

Technical Specialist qualifications are based on the following options: education and experience, TNI Credentialing, recognition by previous revisions of this Standard, and analytical discipline scope

expansion. [Section 4] of Modules 3 through 7 may include additional requirements for technical specialist qualifications.

The laboratory must maintain records that demonstrate the technical specialist(s) meet(s) the qualifications or exceptions defined below. Where coursework is required, the laboratory must retain supporting records that show courses were successfully completed (e.g., certificate, letter, transcript).

6.2.2.2 A technical specialist must meet one set of the following minimum qualifications for which they are responsible, where the required experience is in each corresponding analytical discipline(s) and can occur simultaneously:

- a) a bachelor's, master's or doctoral degree and one (1) year of experience,
- b) four (4) college level STEM (science, technology, engineering, math) courses and three (3) years of experience,
- c) be a full-time employee of a drinking water or sewage treatment facility who holds a valid treatment plant operator's certificate appropriate to the nature and size of such facility and have two (2) years of experience, or
- d) TNI technical specialist credential for each analytical discipline and one (1) year of experience.

6.2.2.3 Technical Specialist Qualification Exceptions

- a) Any person who was formally recognized as a technical specialist (however named) based on requirements or exceptions in previous revisions of this standard will continue to be eligible as technical specialist for the same analytical disciplines at any accredited laboratory.
- b) If a laboratory seeks accreditation for a method in an analytical discipline that is not currently on the laboratory scope of accreditation, a technical specialist may be assigned responsibility for the method based on demonstrating performance of the new method (installation documentation, method validation or verification, DOC, PT performance, etc.).