

**Radiochemistry Expert Committee (REC)
Meeting Summary**

January 22, 2020

1. Roll Call and Minutes:

Terry Romanko, Chair, called the meeting to order at 1pm Eastern on January 22, 2020 by teleconference. Attendance is recorded in Attachment A – there were 7 members present. Associate members in attendance: Jim Chambers, Bob Shannon (until 1:25pm Eastern), Mark Johnson, Carl Kircher, Keith McCroan (Guest), Stan Stevens, Amanda Fehr and Craig Huff.

Meeting minutes are distributed by email for comment/revision for a week and then posted on the TNI website.

Ilona noted that we may need to rethink how we do minutes review. She will provide additional information after the Staff meeting in Newport Beach.

2. Training Material for Newport, CA Meeting

Terry is finalizing the training material on Monday to get to Ilona. She will forward it to the meeting attendees. Terry asked if anyone on the call can review it. Sherry, Greg and Velinda volunteered. He will send it out to the group by the end of the week. They may need an extra day, so Ilona said she would delay her review to Tuesday.

3. Public Meeting

Ilona will send a format for collecting the information for the public webinar. Terry noted he doesn't need it until after 2/17/20.

4. Technical Director

Terry is suggesting new wording for iii) that can be seen in Attachment D.

Carl noted that the NELAP AC talked about Technical Manager. He was concerned that Radiochemistry and Microbiology were much tougher. He questioned whether there are courses in radiochemistry that people can take. Terry noted that what is stated here helps with this concern. There is an option in Section 6 to substitute some experience towards college credits. There is a requirement that 24 hours have to be college courses, but this could be chemistry and physics classes.

Jim asked about use of CEUs at manufacturer classes. How do they fit in with this? What about short courses offered at universities? Will be taken into consideration.

Terry will send out the Technical Manager language as he currently has it on the screen. Ilona suggested that Jim provide some suggested changes he would like considered during the Technical Manager meeting in Newport Beach. Ilona noted again that there will be discussion about whether a Technical Manager class would be useful.

Amanda agreed with Ilona's comment that the changes in iii) that Terry is suggesting will be well received.

Ilona commented that the issue was raised because labs are struggling to fill vacant Technical Manager roles. The new language will help with this. Now people need to go back to school, the new language allows for experience to be considered.

5. PT Samples

He got an email from Keith McCroan and Bob Shannon regarding some PT issues. Keith provided review of the bullets. This was an issue in one of his labs.

Keith asked what it is we are trying to measure when we analyze a PT sample. They failed high for Uranium-238 in soil. They investigated by looking at their current procedure and an older procedure they used to use. They got higher results with the fusion compared to the older acid digestion. They believe they got the correct result with fusion and the acid digestion just doesn't get it all. They believe the PT limit was set by a method with incomplete recovery. They are the only participant that uses fusion on these samples. The PT provider noted they don't have enough data to provide a different assigned value for the lab's digestion method. Keith thought the issue should be raised with the Radiochemistry Expert Committee.

Radiochemistry PT Samples—Some ideas

- The measurand must be defined clearly for the participating laboratory.
 - Activity, massic activity, volumic activity, or areic activity
 - Specified reference date and time
 - As received or after specified preparation steps (e.g., dry or wet)
 - Specified unit of measurement
- Unless otherwise stated, the assigned value represents the PT provider's best estimate of the *true value* of the measurand as defined.
 - Presumes the definitional uncertainty is small enough that a "true value" makes sense.
- Unless otherwise stated, the assigned value does not depend on the method of analysis used by a participating laboratory.
 - Because the true value is the true value.

- Exceptions are possible but must be plainly stated.
- Unless otherwise stated, acceptance criteria cannot favor biased methods.

Carl Kircher noted that he just submitted an Analyte Request Application for NPW Radiochemistry PTs. He asked if there is one needed for Soil PTs in TNI too? Bob thinks they need PTs if labs are being accredited for Soil.

Craig Huff added late. The issue Keith raised needs to be fixed quickly. There is a vast difference between prep method and results.

Carl noted that if you segregate this by prep method, you may have an issue with sufficient numbers of studies. Keith noted the approach is now based on requirements and not past studies. Carl asked if there are DQOs for soil now. Bob said they could be as flexible as a lab stating what MQO's they need. They can use those MQOs.

Keith is proposing that the true value is the true value.

Jim noted a lab may feel that the PT is not fit for use for their lab.

Craig doesn't think it is a problem for a PT Provider to set an assigned value in a soil matrix based on a fusion preparation technique. He believes the result would be higher. What do you do about the people doing acid digestion because they would be in a different data group? The way things are now, one of these groups would be "punished".

Ilona asked if this is similar to what the PTPEC just did in Microbiology with MPN. Carl agreed this may work here, but the ARA would have to be carefully prepared.

What if you are a lab that can do fusion and classic acid digestion? The lab may perform the PT using fusion. The lab does regular acid digestion unless a client specifically requests fusion. Would this solve the PT issue?

Terry asked for more comment. Ron noted that if TNI goes to PTs by Prep that is a huge change.

This will be further discussed at the next meeting. Mainly affects Uranium.

6. Membership

Yoon and Candy will be rotating off the committee so there will be one less Lab and one less Other.

The guests and associates signed off the meeting at 2:25.

Terry reviewed all the applications submitted to the Committee:
Jim Chambers (Other)
Amanda Fehr (Lab)
Stan Stevens (Other)
Mark Johnson (AB)
Amy Pollard (LAB)

A motion was made by Greg to add Jim Chambers, Amanda Fehr, Stan Stevens and Mark Johnson as voting members to the Committee. The motion was seconded by Velinda and approved by all on the call (7 members – enough to finalize. Will send to other members as a courtesy.).

The candidates will be forward to the Chair of the CSDP EC for approval. The balance will be 4/4/4.

7. New Business

None.

8. Action Items

A summary of action items can be found in Attachment B.

9. Next Meeting and Close

The next meeting will be February 26, 2020 at 1pm Eastern.

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

The meeting was adjourned at 2:57 pm Eastern. (Motion: Greg Second: Velinda Unanimously approved.)

**Attachment A
Participants
Radiochemistry Expert Committee**

Members	Affiliation		Contact Information
Terry Romanko Chair (2021*) Present	TestAmerica Laboratories, Inc.	Lab	Terry.romanko@testamericainc.com
Sherry Faye (2022*) Present	Wadsworth Center, NY State DOH Albany, NY	AB	sherry.faye@health.ny.gov
Velinda Herbert (2021*) Absent	National Analytical Environmental Laboratory	Lab	Herbert.velinda@epa.gov
Brian Miller (2021*) Present	ERA	Other	bmiller@eraqc.com
Ron Houck (2021) Present	PA DEP/Bureau of Laboratories	AB	rhouck@pa.gov
Yoon Cha (2020) Present	Eurofins Eaton Analytical	Lab	YoonCha@eurofinsUS.com
Candy Friday (2020) Absent	CdFriday Environmental, Inc.	Lab	candy@fridayllc.com
Greg Raspanti (2022*) Present	New Jersey Department of Environmental Protection	AB	Greg.Raspanti@dep.nj.gov
Pepa Sassin (2022*) Absent	EPA - Region 3	Other	Sassin.Pepa@epa.gov
Robert Aullman (2022*) Present	Utah Department of Health	AB	aullman77@gmail.com
Ilona Taunton (Program Administrator)	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	
93	Discuss new PT criteria at next FoPT Chemistry subcommittee meeting	Bob and Keith	3/21/19	
94	Harmonize Excel Checklist with Word Checklist	Terry and Candy	3/27/2019	In progress.
95	Provide information for training data package to Terry.	Yoon	TBD	
96	Let Ilona know if training material needs to be pre-recorded for Jacksonville.	Terry	7/15/19	
97	Submit new membership to Chair of CSDP EC for approval.	Terry	2-22-20	

Attachment C – Back Burner / Reminders

	Item	Meeting Reference	Comments
5	Form 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	
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.

Attachment D – Technical Manager Update

- a) Any technical manager of an accredited environmental laboratory engaged in radiological analysis shall be a person:
- i. with a bachelor's degree; and
 - ii. with thirty-two (32) college semester credit hours of chemistry and physics; and
 - iii. with sixteen (16) college semester credit hours of radiochemistry; and
 - iv. with two (2) or more years of experience in the radiological analysis of environmental samples.
 - v. A master's or doctoral degree in one of the above disciplines may be substituted for one (1) year experience.
 - vi. 1 year experience working in an environmental radioanalytical laboratory may be substituted for 4 credit hours. Multiple years of substitution may be utilized, but each year substituted must be related to the learning of and proficiency in a different analytical method/technique or instrumentation type. This will help ensure an increasing level of knowledge in radiochemistry analyses (preparation and/or instrumentation) during that time period. No more than 24 hours total may be substituted – at least 24 hours must be from actual college courses.
 - vii. In lieu of any of the above, the laboratory may petition each body for which accreditation is sought, presenting the candidate's qualifications in a consistent format to each.

Replace iii. above with:

with four (4) college semester credit hours of radiochemistry for each instrument type used in the laboratory, with a maximum of sixteen (16) hours required. For example, the technical manager of a laboratory performing only gas-flow proportional counting (GFPC) would need only 4 hours of credit, whereas one at a laboratory performing GFPC, alpha spectrometry, gamma spectrometry, liquid scintillation, alpha scintillation, and ICP-MS would require 16 hours; and