# Radiochemistry Expert Committee (REC) Meeting Summary

## January 10, 2017

#### 1. Roll Call and Minutes:

Bob Shannon, Chair, called the meeting to order at 1:06 pm Eastern on January 10, 2018 by teleconference. Attendance is recorded in Attachment A – there were 6 members present. Associates: Jim Chambers, Keith McCroan, Joe Pardue, Larry Penfold, Pepa Sassin, and Stan Stevens.

Meeting minutes are distributed by email for comment/revision for a week and then posted on the TNI website. The committee did not meet in December.

#### 2. Action Items

Ilona updated the committee with information about the use of the TNI Standard. The 2016 Module 6 of the Standard can be distributed to committee members on request, but it can only be used for committee business and not shared beyond the committee member.

#### 3. 2016 Standard Checklist

The committee originally completed the Checklist in Word after discussing this with the CSDP Executive Committee. TNI would now like a copy in Excel.

Ilona took the checklist and put it into an Excel format that Bob reviewed. The committee would still like to make the Word version available on request, so the Word version needs to be updated with the changes and corrections made while preparing the Excel version.

Larry will review the new Excel format and let Bob know if he needs help. He will let Bob and Ilona know if any corrections are needed.

Ilona noted that multiple questions in the Word version were separated into individual lines in the Excel part and also asked if Larry can confirm the N/A items.

#### 4. New Orleans Meeting

Bob asked if others would like to be involved in training during the New Orleans meeting. Vas thinks Carolyn should be involved. Terry noted that if the topic is Liquid Scintillation, the tritium method should be discussed. Carolyn suggested doing gross alpha beta by LSC. This method might be good because many people don't have it online

and it would be of interest. On the other hand there are few labs doing it. Bob and Carolyn talked about the training and she may not lead the charge but can play a significant role especially given her experience with the new gross alpha and beta by LSC method.

Terry may be interested in helping, but August is a busy time and he would need to assess his involvement when it gets closer.

#### 5. Training Albuquerque

Bob sent DRAFT slides to the committee for review. He would like to look at the slides and get input for additions and ways to scale back the number of slides to allow for a presentation and workgroups in Albuquerque.

Bob asked that people send comments by the end of the week so it can be finalized by next Wednesday for distribution to the class attendees.

Bob suggested looking for material that can be left out. There are some places where best practices are included instead of Standard requirements. Should this be left in? Bob thinks teaching people the technique is critical.

Vas asked what type of comments Bob is looking for? Accuracy, what content should and should not be included, flow of the slides, etc. There is not a lot of time to make major changes.

Marty noted the basic 101 radiation information is at the beginning. When the training is recorded, people can be notified this information could be skipped if they are proficient in the method already. He is suggesting to modulize the presentation so people can jump to information. This can be considered when more trainings are available.

# 6. Status on TNI PT Acceptance Criteria SOP

Bob and Keith are continuing to work on this. He will spend more time on it after Albuquerque.

#### 7. Standard Revision

Bob reminded everyone to keep sending items for consideration for the revision of the Standard. The committee has not started this effort yet, but Bob has been keeping track of suggestions being made for the next update (Attachment D).

#### 8. New Business

- Vas asked about the status of the Standard implementation. Has anyone started using it? California is still moving forward on implementation of the 2016 Standard and this will be a topic of discussion in New Mexico. There are a number of tools that are essentially finished to help with implementation: 2016 Standard Checklist, 2016 Small Laboratory Handbook, 2016 Quality Manual Template, etc ... The NELAP AC has not approved it yet, so it has not been implemented by NELAP.

#### 9. Action Items

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

### 10. Next Meeting and Close

The next meeting is scheduled in Albuquerque on January 23, 2018 at 1pm Mountain time.

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

The meeting was adjourned at 1:48pm Eastern.

# Attachment A Participants Radiochemistry Expert Committee

| Members   | Affiliation  |       | Contact Information                 |
|---|--|-------|-------------------------------------|
| Bob Shannon<br>(Chair) (2019)<br><b>Present</b>               | QRS, LLC Grand Marais, MN  | Other | BobShannon@boreal.org               |
| Tom Semkow<br>(Vice Chair)<br>(2019)<br>Absent                | Wadsworth Center, NY State<br>DOH<br>Albany, NY                                  | AB    | thomas.semkow@health.ny.gov         |
| Sreenivas (Vas)<br>Komanduri<br>(2019)<br>Present             | State of NJ Department of Environmental Protection  Trenton, NJ                  | АВ    | Sreenivas.Komanduri@dep.state.nj.us |
| Marty Johnson<br>(2019)<br>Present                            | US Army Aviation and Missile<br>Command Nuclear Counting<br>Redstone Arsenal, AL | Lab   | Mjohnson@tSC-tn.com                 |
| Velinda Herbert<br>(2021*)<br>Present                         | National Analytical<br>Environmental Laboratory                                  | Lab   | Herbert.velinda@epa.gov             |
| Brian Miller<br>(2021*)<br>Absent                             | ERA  | Other | bmiller@eraqc.com                   |
| Terry Romanko<br>(2021*)<br><b>Present</b>                    | TestAmerica Laboratories, Inc.   | Lab   | Terry.romanko@testamericainc.com    |
| Ron Houck<br>(2018*)<br>Absent                                | PA DEP/Bureau of Laboratories  | AB    | rhouck@pa.gov                       |
| Yoon Cha<br>(2020)<br><b>Present</b>                          | Eurofins Eaton Analytical  | Lab   | YoonCha@eurofinsUS.com              |
| Candy Friday<br>(2020)<br>Absent                              | CdFriday Environmental, Inc.   | Lab   | candy@fridayllc.com                 |
| llona Taunton<br>(Program<br>Administrator)<br><b>Present</b> | The NELAC Institute  | n/a   | Ilona.taunton@nelac-institute.org   |

# **Attachment B**

# **Action Items - REC**

|    | Action Item   | Who           | Target<br>Completion | Completed |
|----|---|---------------|----------------------|-----------|
| 84 | Forward new member information to CSDP for approval.                          | Ilona         | 11/30/17             | Complete  |
| 85 | Check on TNI's policy to share copies of the Standard with committee members. | Ilona         | 12/26/17             | Complete  |
| 86 | Review Excel 2016 Standard Checklist for finalization.                        | Larry Penfold | 2/15/18              |           |
| 87 | Review DRAFT PPT for the New Mexico training.                                 | All           | 1/15/18              |           |
|    |   |               |                      |           |
|    |   |               |                      |           |

# Attachment C – Back Burner / Reminders

|   | ltem  | Meeting   | Comments  |
|---|---|-----------|---|
|   |   | Reference |   |
| 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. Summary of Recommended Changes to the 2016 Standard

#### 1. Tom

- a. Section 1.7.1.5.c.ii)
  - i. Physical impossibility of measurement of Lucas Cell background per day of use after it has been filled with radon.
- b. Sections 1.6.2.2.b) and 1.7.2.3.e.iii)
  - i. Three gamma energy ranges for DOC and two ranges for LCS are specified. Since LCSs are often used for DOC, it is inconsistent.
- c. Section 1.7.1.4.a.iii)
  - i. No guidance is provided what to do if the instrument performance check source is compromised.
- d. Sections 1.7.3.5.b) and 1.7.3.5.f)
  - i. Contradiction and a lack of logic in saying that "shall be reported directly as obtained" and then that specific requirements can take precedence over "shall". Then it should not be "shall".
- 2. Vas
  - a. Consider whether existing issues would benefit from being addressed as SIRs
- 3. Keith
  - a. 1.7.2.3(d)
    - i. It makes a lot more sense to talk about activities x times the MDC than x times the critical level. The critical level isn't really a well-defined measurable quantity. As we ordinarily define and use it, it's just a statistic that can vary with each measurement. The MDC is the a priori concept, whose value we can estimate.
    - When we calculate the a priori MDC, we actually do calculate an a priori critical value, too, but that value is never recorded or used for anything else.