

## Minutes of Conference Call of the Quality Systems for Radiochemistry Committee

**Date/time:** 8/24/2012 at 2:30 ET

**Participants:** Bob Shannon, Sreenivas Komanduri, Marty Johnson, Dave Fauth, Tom Semkow, Chandra Eschandrasedaran, Carolyn Wong, Keith McCroan, Joe Pardue, Nile Ludtke, Larry Penfold, Terry Romanko

The agenda was distributed by email on 8/21 along with several documents.

1. Draft Module 6 updated per our discussions
2. Radiochemistry Committee Charter
3. PowerPoint about TNI Consensus Standards Process
4. Collected Comments from several committee members for Friday's call.

### Agenda

1. Review and approve minutes
2. Review Charter and discuss the process moving forward as a TNI committee
3. Go through the Powerpoint (quickly)
4. Begin the review of module 6 based on comments received
5. Set up next meeting

Roll call

We talked about how the subcommittee has been elevated to a committee. Members will have to join TNI. We quickly reviewed the Committee Charter. We then went through a PowerPoint on the TNI Consensus Standards Process.

We began discussing Module 6 based on comments collected from the group and distributed in advance of the call.

- 1.1 Introduction Comments:
  - The term "Radiochemical" is favored over "radioanalytical".
  - Include reference that general quality systems requirements are specified in module 2 with additions as specified in this module (module 6)
  - Need clarifying statement that quality system includes both QA and QC
    - Tom will work on wording of last sentence.
- 1.2 Scope Comments:
  - We had a lengthy discussion on whether ICP-MS and/or KPA should be considered mass/metals measurements.
    - Carolyn asked whether we are copping out by excluding ICP-MS which is becoming more and more prevalent in radiochemistry labs.
    - Vas supports splitting these techniques off since they are not a radiometric techniques defined in the text. He emphasized that they use different detection statistics and that the rad module does not apply. He proposed that we consider ICP-MS and TIMS in a later revision.
    - Tom was against including other techniques for the time being, except referring to them.

- Bob pointed out that this is the scope statement of the module – and if we really need to get agreement on what should be in the module before we continue on with the module.
- Marty pointed out that rads and metals labs take very different approaches to determining decision limits. Metals chemists are not at all familiar with more rigorous estimations of uncertainty, and do not have experience reporting uncertainty. Even when a non-radiometric technique is used to determine radionuclides, for example to support compliance with NRC, DOE or other regulations, it is being run and interpreted together with radiometric techniques. It is therefore important that the approach to estimating uncertainty and reporting the data be consistent throughout the dataset.
- Bob pointed out that moving these techniques to the metals module may mean that rad labs have to apply for an additional field-of-testing, even though they do their analyses for "rad/nuclear" clients. There are not likely metals labs out there that run the KPA. On the other hand, rad labs that run ICP-MS. Metals chemicals and assessors may be unfamiliar with KPA and its respective analysis protocols, just as radiochemists may not have a good handle on the details of ICP-MS.
- Terry mentioned that the metals department at their lab runs the KPA.
- Bob responded that this is a bit different since Terry's lab maintains both metals and radiochemistry capabilities. He also pointed out that the requirements we are concerned with (calibration, cal-verification, and QA/QC) are defined in most methods. We could also reference module 4 requirements from Module 6. We would have to figure out how to discriminate between ICP-MS for metals and ICP-MS for rad.
- In the end, there was weak agreement, and some disagreement, that these techniques should be described in Module 6 and that we could point to requirements in Module 4. Nile made a suggestion of language that addresses that these techniques may be included in Module 6 when used for radiochemical testing, but that Module 4 sections can be included by reference.
- There was consensus, with Tom's proposal that "...some form of..." be removed from second sentence.
  - i.e., Procedures for radiochemical testing may involve chemical separation followed by ...

### 1.3 Terms and Definitions Comments

- There was consensus that it is much easier to word and make understood the whole module if this section includes and defines most concepts so readers can refer to this section to get the definition and then understand it consistent use in module 6.
- Group will send terms and definitions to the entire group ASAP to facilitate discussion before the next meeting.

**[After the meeting, Bob sent out an email suggesting that we look at Module 1 (which contains some definitions). If it is missing some, he suggested considering MARLAP as a starting place for definitions. If so, people can just send him the terms and he will compile a list of terms for the next meeting. If people think definitions need tweaking, send them to Bob and he will add them to the list.]**

We will meet next time on September 24, at the same time same time (2 PM Eastern Time)

The meeting adjourned at 3:30 PM ET.