

Program Area Committee 2 Meeting Agenda

Minneapolis, Minnesota

July 11, 2009

The PAC 2 Meeting scheduled for July 11 in Minneapolis will be held in the Marquette VII room in the Minneapolis Hilton. The meeting will begin at 8:30 and go no later than 5:00 PM, but I don't think it will go that long. Coffee will be provided, but we are on our own for meals.

Agenda

1. Introduction of new (and not so new) members.
2. Final review of Self-Assessment of Radiation Safety Programs sent out on June 17th. Each member to take the lead in discussing the section(s) of assigned responsibility
3. John Poston summary of "Preparedness For Responding to the Aftermath of Radiological and Nuclear Terrorism: A Guide For Decision Makers."
4. Discussion regarding which project (report or commentary) to undertake next. Discuss your initial feedback on the two primary topics under consideration "Balancing Security and Radiation Protection Requirements" and "Response to and Investigation of Radiological Incidents."

Also, consider topics that we have we have discussed in the past as potential report of commentary topics:

- a. Response to, investigation of and documentation for radiation accidents and incidents (NCRP Funding Proposal and original Scope Statement)
- b. Balancing Security and Radiation Protection Requirements (Preliminary Discussions PAC 2-2009)
- c. Radiation Protection in Biological and Biomedical Research (Scope Statement)
- d. Radiation Safety in the Steel Industry (Scope Statement)
- e. Radiation Protection of Industrial Accelerators (Scope Statement)
- f. Air Flight (Scope Statement)

- g. Radiation to Inhibit Restenosis (Scope Statement)
- h. Radiation Protection in Diagnostic Nuclear Medicine (Scope Statement)
- i. Air Monitoring (Scope Statement)
- j. Radiation safety at PET and combined PET/CT medical imaging facilities
- k. Shielding design for small cyclotrons and delivery systems for short-lived radioisotopes used in PET imaging procedures
- l. Radiation protection for radiographers

NCRP Program Area Committee 2
Minneapolis, Minnesota
Meeting Minutes
July 11, 2009

Present: Ed Bailey, Mary Birch, Eric Golden, David Myers, John Poston, Kathy Pryor, Josh Walkowicz, and Jim Yusko

Absent, Ken Miller, John Frazier, Carol Berger (Although Ken Miller and John Frazier were unable to attend the meeting due to travel issues, I was able to meet with them separately during the Health Physics Meeting.)

Agenda

The PAC 2 meeting was convened by Dave Myers at 8:30 AM.

1. Introduction of new members.

Jim Yusko and Josh Walkowicz were introduced as new members of PAC 2. Carol Berger was unable to attend the meeting.

2. Final review of Self-Assessment of Radiation Safety Programs

The final draft of the Report on the Self-Assessment of Radiation Safety Programs that was sent out on June 17 was reviewed in detail. Committee members present led the discussion of their section(s) of assigned responsibility.

The review focused primarily on the proposed responses to the editorial comments that were received from Council review. The majority of the responses to the contingent comments had been previously discussed with the committee member who had responsibility for the section to which the comment was related. A number of typographical errors were also identified and corrected.

Some of the editorial comments that were not incorporated into the document were discussed (e.g., providing specific checklists for the self-assessment of a variety of radiation safety programs at different institutions). The committee agreed that this comment would be difficult to incorporate given the wide variety of radiation safety programs that exist. The consensus was that it is much better to provide a checklist of the items that need to be considered (as we have done in the Report) when planning the assessment any particular radiation safety program.

Section 6 (Qualification and Selection of Assessors) was discussed with John Frazier and Section 7 (Self-Assessment Methods and Techniques) with Ken Miller individually during the Health Physics Meeting.

3. John Poston summary of "Preparedness For Responding to the Aftermath of Radiological and Nuclear Terrorism: A Guide For Decision Makers."

John provided a viewgraph presentation of draft report SC 2-2 that is undergoing peer review. It was particularly relevant to the discussion that followed (under item 4) regarding which project PAC 2 should propose to undertake next.

4. Discussion regarding which project (report or commentary) to undertake next.

The primary considerations for evaluating the potential topics were:

1. The need for operational radiation safety guidance on the topic.
2. The ability of the committee to write the report with the expertise that exists on the committee. This was felt to be important because none of the topics have been funded separately and are currently supported by the funds received from the Health Physics Society.
3. Also, it was felt that since most of the topics had been proposed at some time in the past that it would be necessary to do a literature search for existing guidance documents in the topic area.

The following is a brief summary of the discussion regarding proposed topics that either have approved scope statements or have been discussed as possible topics in the past.

- a. Response to, investigation of, and documentation for radiation accidents and incidents (NCRP Funding Proposal and original Scope Statement)

Both the NCRP funding proposal and the original scope statement were discussed. Regarding the NCRP funding proposal, it was felt that given the number of documents that NCRP has issued or has in preparation on emergency response (i.e., Report 138, NCRP Commentary 19, Report 161, SC2-4, SC 4-2) relating to terrorist events, that another report in this area would be somewhat redundant. Another issue raised that the FBI has the responsibility for investigating terrorist incidents.

On the other hand, the committee felt that a report based on the original scope statement dealing with the investigation of radiological incidents would be more appropriate for the committee to undertake. It would also be a follow on to the Report on Self-Assessments which refers to “incident or accident investigations, which are retrospective in nature and have their own formal methodology.”

- b. Balancing Security and Radiation Protection Requirements (Preliminary Discussions PAC 2-2009)

Concerns were raised about this topic because of the need to discuss the security vulnerabilities associated with radiation sources. For example, for worker and first responder protection, the locations of radiation sources need to be clearly identified. This information could be of use to those individuals who wanted gain access to the sources for malevolent intent. The concerns expressed by Cindy Jones of the NRC regarding the sensitivity of this

potential topic area were also discussed.

Also, the order issued by the NRC (EA—05-090) regarding the enhanced security requirements and the NRC's proposed regulations (a new Part 37) for large radioactive sources are quite specific. Similar security requirements apply to the large sources at Nuclear Power Plants and at DOE facilities. It was felt that given the enhanced security requirements in place, that there was little room for balancing radiation safety and security requirements. Radiation safety programs were simply going to have to adapt to security programs that have been put in place.

c. Radiation Protection in Biological and Biomedical Research (Scope Statement)

It was felt by Ken Miller that the topics relating to the use of radiation sources in medical/biomedical applications could potentially be combined into one report. These include proposed topics:

- Radiation Protection in Biological and Biomedical Research
- Radiation to Inhibit Restenosis (item g on this list)
- Radiation safety at PET and combined PET/CT medical imaging facilities (item j on this list)
- Radiation Protection in Diagnostic Nuclear Medicine (item h on this list)
- Shielding design for small cyclotrons and delivery systems for short-lived radioisotopes used in PET imaging procedures (item k on this list)

One concern about taking on this general topic is that Ken Miller is the only member of the committee whose primary expertise is in medical health physics.

d. Radiation Safety in the Steel Industry (Scope Statement)

It was felt that the topics relating to the use of radiation sources in industry could potentially be combined into one report. These include proposed topics:

- Radiation Safety in the Steel Industry (item d on this list)
- Radiation Protection of Industrial Accelerators (item e on this list)
- Radiation protection for radiographers (item j on this list)
- Radiation safety in well logging

- Use of radiation sources in industrial process applications

The primary concern regarding this topic is that Josh Walkowicz is the only member of the committee who deals with this topic on a regular basis.

- e. Radiation Protection of Industrial Accelerators (Scope Statement)

See item d

- f. Air Flight (Scope Statement)

It was felt that this topic was adequately addressed in recently issued Report 160.

- g. Radiation to Inhibit Restenosis (Scope Statement)

Chemicals are replacing in radioactive materials for inhibiting restenosis (See item c)

- h. Radiation Protection in Diagnostic Nuclear Medicine (Scope Statement)

See item c on this list.

- i. Air Monitoring (Scope Statement)

This was felt to be a reasonable potential topic although since the scope statement was prepared in 1994, a thorough literature search would have to be performed.

- j. Radiation safety at PET and combined PET/CT medical imaging facilities

See item c on this list.

- k. Shielding design for small cyclotrons and delivery systems for short-lived radioisotopes used in PET imaging procedures

See item c on this list.

- l. Radiation protection for radiographers

See item d on this list

The general consensus of the committee was that the best topic for us to pursue next is the investigation of Radiological Incidents and Accidents as proposed in the original scope statement. It was agreed that I would bring this proposal to the next NCRP board meeting at the beginning of August.

5. Discussion of possible Peer reviewers for SC 2-3, “Radiation Safety Guidance for Image Guided Interventional Medical Procedures.” The following names were suggested by Ken Miller as potential peer reviewers for the draft Report:
 - Ben Archer, Baylor University
 - Rich Vetter, Mayo Clinic
 - Stephanie Carlson, Mayo Clinic
 - Larry Rothenburg, Sloan Kettering
 - Susan Langhorst , Washington University
6. The next meeting of the PAC 2 Committee was tentatively scheduled for the annual NCRP meeting in March 2010.
7. The meeting was adjourned at 3:00PM