



# NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS

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## AGENDA

### Meeting of Program Area Committee 2 Operational Radiation Safety Sunday, April 15, 2019; 8:30 AM Congressional Room Hyatt Regency Bethesda Bethesda, Maryland

8:30 AM	Welcome	Pryor
8:40	Introductory remarks/status of SC 2-7, Radiation Safety Aspects of Sealed Radioactive Sources	Pryor
8:50	Discussion of SC 2-8 draft	All
10:30	Remarks from the President	Held
11:00	Continue discussion of SC 2-8 draft	All
Noon	Lunch	All
1:00 PM	Continue discussion of SC 2-8 draft	All
2:15	Summary of assignments	Pryor
2:30	Adjourn and move to general PAC session	All

**Attendees:** Ed Bailey, Chris Donahue, Eric Goldin, Barbara Hamrick, Willie Harris, Mike Littleton (phone), Dave Myers, Kathy Pryor, Kathy Shingleton, Debra Scroggs, Glenn Sturchio, Jim Yusko, Jim Willison. **Absent:** John Poston, Josh Walkowicz. **Guests:** Kathy Held, Laura Atwell.

The meeting was called to order at 8:30 am. Kathy Pryor welcomed the group and thanked Committee members for attending. Willie Harris was introduced as the newest member of PAC 2.

#### **Update on Status of Report No. 182 (Radiation Safety of Sealed Radioactive Sources):**

Kathy Pryor discussed the current status of Report No. 182. Director of Science John Boice was not able to perform his review until mid-March 2019. His comments were minor and have been incorporated into the final version. Once the cover graphics are finalized and the Library of Congress number is issued, the report will go to the printers and will be published soon

thereafter. Good news: The Library of Congress has issued our number, so there are no other obstacles to publication.

### **Visit from the President and Director of Operations:**

President Kathy Held and Director of Operations Laura Atwell visited the PAC 2 meeting.

Dr. Held congratulated the members on the upcoming publication of Report No. 182, *Radiation Safety of Sealed Radioactive Sources*. We are awaiting the issuance of the Library of Congress number for the report and it will be sent to the printer immediately after. [Note: the Library of Congress number was issued on April 2<sup>nd</sup>.]

Dr. Held discussed the recent update to the NCRP Council Members Handbook, which explains the roles of the PACs, Council members and Board and explains the process to propose, write, review and approve NCRP documents. This Handbook was only sent to current Council members and is open to their review and comments. We requested that the Handbook be distributed to all of the PAC members. [Note: Kathy Pryor forwarded the Handbook to PAC 2 members after the meeting.]

Dr. Held also discussed the move to Office 365 and the availability of Microsoft Teams for collaboration and meetings. She reminded the Committee that NCRP draft materials must not be referenced or disseminated before publication.

Dr. Held commended PAC 2 for working efficiently and being cost-conscious in our production of our reports. Writing committees will not be authorized to start work on new projects until funding is in hand. PAC 2 is primarily supported by contributions from the Health Physics Society and the American Academy of Health Physics. The finances of the NCRP continue to be an issue and leadership continues to seek grants and funding opportunities. We also continue to seek financial support for the annual meetings.

### **Review of SC 2-8 Draft Report, *Operational Radiation Safety Program***

The proposal for revising Report No. 127, *Operational Radiation Safety Program*, was approved by the NCRP Board of Directors on April 4, 2018. Report No. 127 is 20 years old and many of the references are outdated. Report No. 180 (CC 1) on *Radiation Protection Guidance for the United States* has been issued and it would be helpful to provide guidance on how to incorporate the new report's recommendations into radiation safety programs. Report No. 127 has been useful as a road map to setting up a new radiation safety program, and has been one of the more popular reports that has been available at a minimal cost. The approved proposal includes plans to expand the existing report to include other types of radiation safety programs, such as medical health physics and radiation-generating devices.

The current draft was distributed to Committee members on March 11, 2019. It includes input gathered at the SC 2-8 meeting on February 19, 2019 at the Health Physics Society meeting in San Diego, California. A few of the sections are missing input and/or updates. Specific comments collected in the meeting were forwarded to Kathy Shingleton to capture in the next draft.

The Committee discussed the target audience for the report and agreed that defining this would help to focus the content. It was suggested that we look at the target audience that was defined for Report No. 176, *Radiation Safety Aspects of Nanotechnology*, and create a similar statement. Report No. 176 states the following:

*This Report is intended primarily for operational health physicists, radiation safety officers, and internal dosimetrists who are responsible for establishing and implementing radiation safety programs involving radioactive nanomaterials. It should also provide useful information for workers, managers and regulators who are either working directly with or have other responsibilities related to work with radioactive nanomaterials.*

This concept could be adapted to define the target audience for SC 2-8 (excluding the specific reference to internal dosimetrists, which was applicable to Report No. 176.). The report could also be useful as a resource for training radiation safety officers.

The Committee agreed that the review of the draft should be limited to “big picture” items, such as whether or not the right sections have been included, the order of the sections and general terminology and approach. Each of the section authors was asked to capture comments on their sections for the next draft revision. The review concentrated on Sections 2 through 6, with a brief discussion of portions of Section 7.

The Committee discussed the use of direct quotes from referenced documents such as Report No. 180. We agreed that many of the longer direct quotes were helpful in that the reader would not need to have the referenced report in hand.

The Committee discussed terminology used in the draft and the need to be consistent between sections. These terms included the radiation safety officer (instead of radiation safety manager, radiation protection manager, etc.), radiation safety committee (instead of ALARA committee or similar), users (instead of licensees) and radiation safety program (instead of radiation protection program). The terms can be more specific in the individual appendices on specific occupational settings. The Committee also agreed that we should add terms to the glossary, including users (which could be people or organizations), radiation safety program and ALARA (as part of optimization).

The Committee discussed the introduction to the draft report. Frequently the Executive Summary and the Introduction end up being somewhat repetitive; it was agreed that instead of an Introduction, Section 2 would consist of a discussion of the purpose and scope of the radiation safety program and would consolidate the information on ALARA considerations from a number of subsequent sections into a sub-section of Section 2. The subsequent sections would then refer back to this new sub-section on ALARA. The discussion on exposure to members of the public in Section 5.10.3 should also be moved up to Section 2. The type of operation will influence the scope of the radiation safety program and should be discussed here. Section 2 can also include a description of administrative dose guidelines (ADGs). In addition, the Committee discussed removing the word “operational” from the sub-title of [current] section 2.1.

The Committee discussed adding a few other appendices on specific operational settings. We need to consider adding an appendix on portable and fixed gauges. [At the all-PAC meeting, it was suggested that we consider one on the oil and gas industry.] Qualifications of the radiation safety officer/radiation safety manager need to be discussed in the appendices as there are specific requirements in certain settings.

The current Section 4 covers organization and administration of the Radiation Safety program. The description of the radiation safety committee and its roles and responsibilities need to be strengthened. The section on radiation safety culture can be renamed as safety culture and moved to an earlier spot in Section 4. Some discussion should be included on escalation of user compliance issues. The integrated safety management system discussion needs to be reviewed and a specific reference provided for the diagram.

The current Section 5 needs to include updated key references and some discussion of the use of shielding codes. References to any existing NCRP reports on shielding should also be added. Section 5.9 could include the use of wireless communications for access control systems, but will also need to mention issues related to cybersecurity for those systems.

The Committee discussed the definition of a “member of the public” and the issue of co-located workers. There was some difference of opinion regarding when workers were receiving occupational exposure at a facility, and there appears to be a different definition/interpretation provided by NRC and DOE. At DOE facilities, if a person is exposed in an occupational setting, they are not “members of the public,” but are considered ‘general employees.’ We need to be consistent with the recommendations of Report No. 180, and also need to add the definition to the Glossary.

The sections on personal protective equipment (PPE)/protective clothing (PCs) should be combined into a single section. The difference between PPE and PCs also needs to be described.

The current Section 6.6.3.5 on females of reproductive age needs to be removed. Worker training needs to include information on the institution’s declared pregnant worker program.

### **Path Forward**

Kathy Shingleton will update the draft report to incorporate the consolidation of content and changes in the order of the sections in the next two weeks. Kathy Pryor will review the revised draft and distribute it to the Committee.

The authors will address the comments in their respective sections. The revisions are due back to Kathy Shingleton and Kathy Pryor by **June 10<sup>th</sup>**.

Kathy Pryor will schedule a meeting of PAC 2/SC 2-8 at the Health Physics Society Annual meeting in Orlando in July 2019. Discussion at that meeting will concentrate on the current Sections 7 through 12.

### **Adjournment**

The meeting was adjourned at 2:15 pm.