

## AGENDA

**Meeting of Program Area Committee 2  
Operational Radiation Safety  
Sunday March 15, 2015; 8:30 AM  
Congressional Room  
Hyatt Regency Bethesda  
Bethesda, Maryland**

8:30 AM	Welcome and opening remarks	Pryor
9:00	Remarks from the President, CC-1 involvement	Boice/Kase/Cool
9:45	Review of SC 2-6, Radiation Safety Aspects of Nanotechnology	Myers/Hoover
11:00	Discussion of Issues – SC 2-7, Radiation Safety Aspects of Sealed Radioactive Sources	All
	<b>NOTE:</b> we will start with Sections 9, 10 and the Appendices.	
Noon	Lunch	
1:00 PM	Continue discussion of issues – SC 2-7	All
2:15	Summary of assignments	Pryor
2:30	Adjourn and move to general PAC session	All

Attendees: Ed Bailey, Carol Berger, Chris Donahue, John Frazier, Eric Goldin, Dave Myers, John Poston, Kathy Pryor, Kathy Shingleton, Josh Walkowicz, Jim Yusko. Guests: John Boice, Don Cool, Mark Hoover, Ken Kase. Absent: Mike Littleton, Glenn Sturchio.

Kathy Pryor welcomed the group and introduced new member Chris Donahue.

John Boice addressed the committee, and discussed some new initiatives that NCRP was undertaking. He reminded the committee that we need to be identifying gaps or issues in the area of operational radiation safety where we can develop guidance in the future. He needs short summaries from each of the PACs regarding projects we are working on to share with potential funding agencies. John and Jerry Bushberg also have developed a set of draft operating guidelines for the PAC Chairs, and they are reinforcing the structure and importance

of the PACs to NCRP operations. John also asked that all of the PAC members submit short bio sketches to be posted on the website.

John Boice, Ken Kase and Don Cool discussed the charge for CC-1, "Radiation Protection Guidance for the United States." This committee is currently working on an outline for the planned update to NCRP Report 116 and wants to involve the PACs in developing guidance in their areas of expertise. The report will be consistent with ICRP 103 guidance, but will expand and improve upon it. The description of the CC-1 effort can be found here: [http://ncrponline.org/Current\\_Prog/CC\\_1.html](http://ncrponline.org/Current_Prog/CC_1.html) ICRP 103 will be 10 years old by the time that the NCRP report will likely be published. The CC-1 committee plans to actively solicit input from stakeholder organizations. PAC-2 should be considering providing input on issues such as how the principle of justification is applied (who does this include? Used for adding sources, but what about removal of sources such as in remediation?). Do we still need dose limits, considering the average occupational exposure in the US is well below the limits now? Perhaps a range of guidelines is sufficient. Do we need a public dose limit? The public tends to look at the dose limit as the dividing line between safe and dangerous. Other areas of interest are NORM/TENORM, special medical exposures and protection of the environment (non-human species). They also plan to fold in information on ethics in radiation protection.

The group plans to expand on their working outline in early April and then Ken will send it out for our review and thoughts. Each PAC will be asked to prepare a short paper on our input and suggestions.

The committee discussed the draft SC 2-6, Radiation Safety Aspects of Nanotechnology, and provided general comments and impressions. Most of the committee had not read the complete draft report in its entirety, but had concentrated on Section 5 on operational health physics in a nanotechnology environment. In general, the draft report contained a lot of interesting information on nanotechnology and nanomaterials. The executive summary was well done and fairly clear. The major comments revolved around the need to pare down the information on "standard radiation protection practices" and more clearly focus on the practices that require modification. Table 5.1 should be a concise summary of those areas where standard RP practices are sufficient and those areas where something different needs to be applied. The language and terminology also need to be revised to be more recognizable to operational health physicists in the United States. Where "standard RP practices" are listed as sufficient, the NCRP report number and title should be included in the table/text, rather than just the reference (NCRP, year of publication). In some cases, the descriptions of the "standard RP practices" do not reflect NCRP guidance or practices in US occupational settings. The committee recommended providing more concrete examples in areas that require modified in the radiation protection program.

The committee was reminded that individual comments are due to Laura Atwell by March 21<sup>st</sup>.

The committee reviewed the current draft of SC 2-7, Radiation Safety of Sealed Radioactive Sources. It was agreed that Section 10 should be retitled as a historical review of incidents, and

should focus on events in the US. The section should include a discussion of changes in regulations/control practices that resulted from an incident (or group of incidents). Examples included scrap metal recyclers adding radiation monitoring of incoming/outgoing materials to prevent inadvertent melting of sources; notices to GL gauge owners on fixed industrial gauge shutter testing and maintenance; etc. Section 2.2 was discussed at some length; it was decided that the existing table 2.2 needed to be revised to represent IAEA quantities for categories 1 – 5 (and exempt) for an expanded set of radionuclides (not just the ones subject to enhanced security controls). The committee will need to carefully review the revised list to make sure that any expanded regulatory control recommendation(s) is appropriate.

The list of actions is shown below.

Next Meeting: We will schedule teleconferences sometime during May/June after the revised sections have been submitted and Kathy P incorporates them into the draft report.

#### **Action Items:**

- **Everybody** – provide written comments on SC 2-6, Radiation Safety Aspects of Nanotechnology, to Laura Atwell (copy Kathy P). **[Due 3/21/15]**
- **Everybody** – submit a short bio sketch and photo (if you haven't already sent one) to Laura Atwell (copy Kathy P). **[Due 3/31/15]**
- **Kathy Pryor** – will identify our recommendations in the draft and pull them into the executive summary. **[Due 4/30/15]**
- **Carol Berger** – will work with Chris Donahue to modify Table 2.2. She will include IAEA quantities for categories 1 – 5 (and exempt) for an expanded set of isotopes. **[Due 4/30/15]**.
- **Chris Donahue** – will rework section 2.2 to provide our recommendation for the classification scheme to be used, and which activity levels should be subject to specific licensing (or equivalent). **[Due 4/30/15]**
- **Kathy Shingleton** – will develop some type of summary graphic or table to show the spectrum of sources (activities, types) and which aspects of the program applies to each (e.g. a “graded approach” graphic/table). **[Due 4/30/15]**
- **Kathy Shingleton** – will revise Section 9 on emergency preparedness **[Due 4/30/15]**
- **Josh Walkowicz** – will revise section 10 to: rename as a historical review of incidents;” focus on US incidents and consequences; provide a brief discussion of requirements that have changed as a result of these incidents. **[Due 4/30/15]**
- **Eric Goldin** – provide some text to lead into the information in Appendix C. **[Due 4/30/15]**