



Office of Federal and State Materials and Environmental Management Programs

*Safety and Security in the Beneficial Applications
of Nuclear Materials*

Options to Revise Radiation Protection Regulations

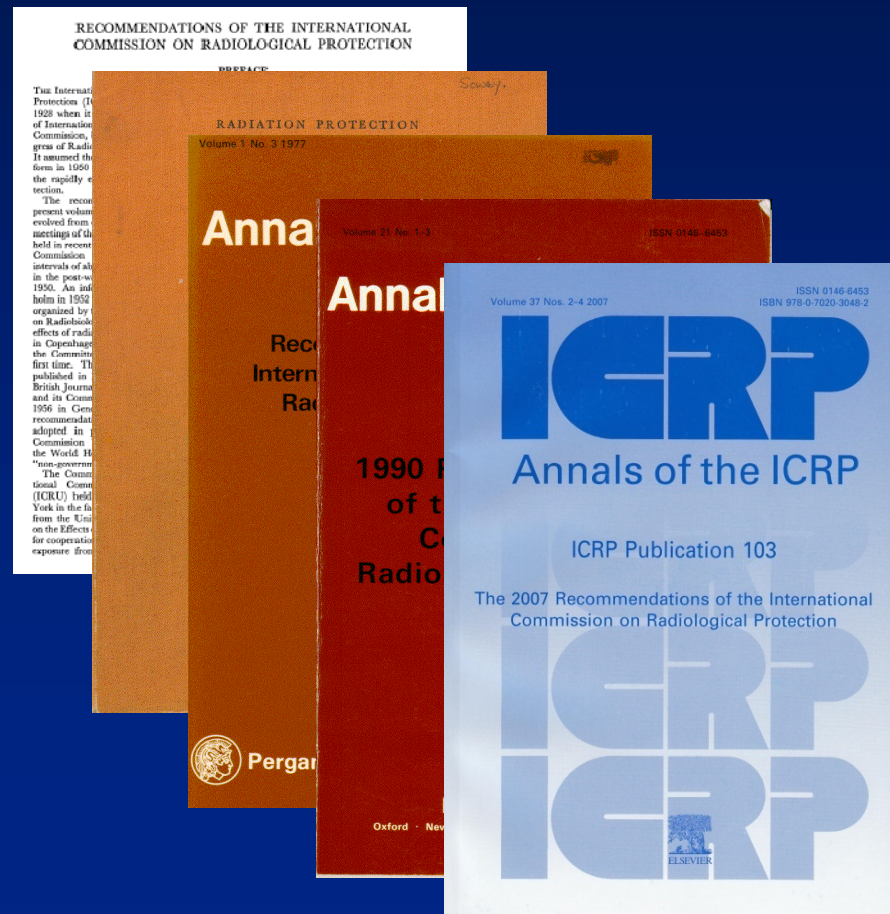
*NEI Health Physics Forum
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History

- International Commission on Radiological Protection (ICRP) Recommendations
 - Earlier recommendations: 1928, 1934, 1937, 1950, 1954
 - 1959 Publication 2
 - 1977 Publication 26
 - 1990 Publication 60
 - 2007 Publication 103



Background

- ICRP revised recommendations in late 2007
- NRC staff analysis indicated areas warranting consideration for revisions
- Commission approved staff recommendation to engage stakeholders and initiate development of technical basis materials on April 2, 2009



Outreach Activities

- Phase I of outreach included:
 - Presentations to numerous organizations and groups
 - FRN published inviting inputs (72 FR 32198)
 - Dedicated web address for comments Regs4RP@nrc.gov
- Phase II Workshops
 - FRN published with issues and questions (75 FR 59160)
 - Workshops in Washington, Los Angeles, and Houston
 - Comments accepted through January 31, 2011



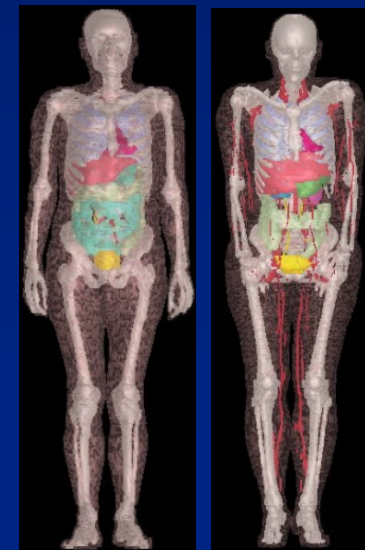
What Did We Hear?

- Participants from the wide diversity of NRC licensed activities
- Active participation
- Common themes in each workshop



TED and Numerical Values

- General support for updating numerical values and scientific base
- Mixed views on terminology
- Many suggested delaying rulemaking until ICRP completes work on dose coefficients
- Some discussion of moving from Regulation to Guidance



Occupational Dose Limits

- ICRP Recommendation is 10 rem over 5 years, with a maximum of 5 rem in any one year
- Part 20 limit is 5 rem per year
- Little support for change to regulation
 - Certain groups of licensees continue to have individuals above 20 mSv/yr (2 rem)
 - Standard of Care needs to remain as is
 - ALARA has resulted in achieving desired dose reductions
 - Many do not believe changes in risk justify change to limit



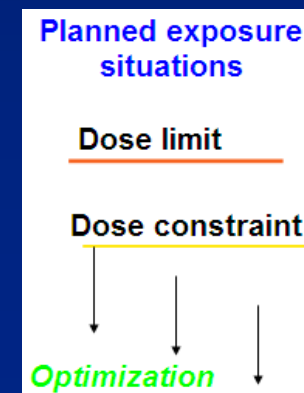
Special Populations

- **Dose Limits for Embryo/Fetus (Occupational)**
 - Mixed feedback
 - Current limit does not seem to pose issues for many licensees
 - Options don't seem to change level of protection
 - Change could challenge detection capabilities
- **Public Exposure**
 - Alternative dose provisions have not been used
 - Patient Release needs to remain unchanged



ALARA Planning

- Most licensees do planning to reduce exposures and use a variety of criteria to trigger actions
- Little support for using the term “constraint”
- Many concerned that any numerical values in regulations will be a *de facto* limit
- Some support for explicitly requiring planning, but with reservations of what inspectors would be expecting in licensing programs



Lens of the Eye

- Recent ICRP Statement entitled, “Statement on Tissue Reactions,” published April 2011
- ICRP recommendation is now 20 mSv (2 rem) over 5 years, with a maximum of 50 mSv (5 rem) in any one year
- Part 20 limit is 150 mSv (15 rem) per year
- IAEA moving to add new limit to BSS



Phase III Comment

- Federal Register Notice
- New Issue of limits for lens of the eye
- Additional opportunity for views on other topics



Path Forward

- Policy paper for Commission consideration in April 2011
- Development of Technical Basis to support Commission decisions
- It is still “too soon to tell” what the staff will ultimately recommend



Let Us Know

- Web pages

<http://www.nrc.gov/about-nrc/regulatory/rulemaking/opt-revise.html>

- Email Address: regs4rp@nrc.gov

