



Office of Federal and State Materials and Environmental Management Programs

Safety and Security in the Beneficial Applications of Nuclear Materials

Advance Notice of Proposed Rulemaking 10 CFR Part 20

NRC Public Meeting - October 2, 2014

**Issue 2- Occupational Dose Limit for the
Lens of the Eye**

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Lens of the Eye

- **NRC Current Limit:**
 - Dose limit for the lens of the eye is 150 mSv (15 rem)
 - 10 CFR 20.1201(a)(2)(i)
- **ICRP Recommendation:**
 - ICRP Statement issued April, 2011; published in ICRP Publication 118
 - Reduced limit based on evidence that radiation induces cataracts at lower cumulative levels than previously estimated (≈ 0.5 Gy (50 rad))
 - 20 mSv (2 rem) per year, averaged over 5 consecutive years (i.e., 100 mSv (10 rem) in 5 years), with no single year exceeding 50 mSv (5 rem)

Lens of the Eye

- **Commission Direction:**
 - Continue discussions with stakeholders regarding possible revisions to the dose limit (150 mSv (15 rem)) for the lens of the eye
- **Proposal:**
 - Reduction to 50 mSv (5 rem) LDE

Lens of the Eye Questions

- **Q2-1 Is closer alignment or adoption of the ICRP Publication 118 recommendations regarding the dose limits to the lens of the eye appropriate given the scientific information now available?**
- **Q2-2 How should the impact of a radiation induced cataract be viewed in comparison with other potential radiation effects?**
- **Q2-3 What mechanisms could be applied to keep the cumulative exposure to the lens of the eye below the threshold of 0.50 Gy (50 rad)?**

Lens of the Eye Questions

- **Q2-4** What methods should be allowed for measurement or assessment of the dose to the lens of the eye?
- **Q2-5** What methods should be allowed for recording dose when the eyes are protected?
- **Q2-6** What are the potential operational impacts?
- **Q2-7** What are the potential impacts on State regulatory programs?

Summary

- **Comments will be accepted until November 24, 2014**
 - Federal e-Rulemaking portal at <http://www.regulations.gov> under Docket ID NRC-2009-0279
 - email to Rulemaking.Comments@nrc.gov
 - fax to Secretary, U.S. Nuclear Regulatory Commission, 301-415-1101
 - mail to Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff
- **Public Meetings / Webinars scheduled for:**
 - October 9, 2014
 - October 16, 2014
 - October 23, 2014

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