

**From:** Stephen McGuire  
**To:** WND1.WNP9(SNS)  
**Date:** 10/24/96 1:24pm  
**Subject:** Compatibility CO Regs - Licensing and Radiation Safety Requirements for Irradiators -Reply

Responses to your e-mail follow your questions:

>>> Stephen Salomon 10/22/96 02:10pm >>>  
Stephen,

I am reviewing the subject for compatibility in Colorado. In conversations with Chuck Mattson in Colorado, he asked that we explain the following:

10 CFR 36.2 Definitions:

For seismic area, why is "in 250 years" used? Is there a Reg Guide for Part 36 that could be helpful?

Response: There is a little more discussion of seismic areas on the bottom of page 17 and the top of page 18 of Reg Guide DG-0003. 250 years is one of the time periods for which the USGS gives probabilities of acceleration. The selection of 250 years was a judgement. Since the lifetime of an irradiator is considerably less than 250 years, the value is unlikely to be exceeded during the life of the irradiator and even if exceeded it is unlikely to be exceeded by much.

10 CFR 36.39(j) Seismic. Colorado wants to eliminate "such as American Concrete Institute Standard ACI 318-89" because by Colorado statute the agency must supply a certified copy and have it readily available. He was unable to find such ACI 318-89. He wants to change the later part of the discussion to "...appropriate current sources such as national standards or local building codes." Do you have any problem with this approach?

Response: No problem with that. The reference was intended to be informational.

10 CFR 36.23(c) The last sentence in this provision. "The monitor may be located in the entrance (normally referred to as the maze) but not in the direct radiation beam." He does not understand why? Is this covered in a Reg Guide or some other document that I could send him?

Response: If the monitor is in the direct beam, it will soon burn out and give a false indication that there is no radiation. There is no need for the monitor to be in the direct beam because there is plenty of scattered radiation in the maze that is easily detected.

Cheryl Trottier responded to this e-mail except the last point. It does not seem to be covered in the Reg Guide D003. Can you explain or point to another reference?

Thanks for your prompt response.

Steve Salomon, OSP