

Status Update – Interim Staff Guidance on Radon

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June 18, 2014

History/Context



- Factors Indicating Need for Guidance
 - 1991 Part 20 update: two values in App. B, Table 2
 - Potential lack of understanding by some licensees
 - Significant background concentrations
 - Measurement difficulties
- Now on path toward proper compliance demonstrations:
 - Awareness of the issue has been heightened.
 - Based on licensee submittals, RAIs, staff reviews, implementation details are now being worked out.

Status Update – Interim Staff Guidance on Radon



Topics today:

- Radon Interim Staff Guidance (ISG) – Overview/history
- Radon ISG April 2014 Workshop
- Staff Actions
- Overview of Comments Received on 2nd Draft of Radon ISG
- Path Forward

Radon ISG – Overview/History



- Staff presented to industry [National Mining Association and NRC workshops 12/2009, 1/2011, 4/2011, 5/2012]
- First draft of ISG (draft FSME-ISG-01) issued as draft for public comment September 2011.
- Comments from 10 people/groups.
- Revised draft FSME-ISG-01 issued March 2014, comment period through May 2014.
- Public Technical Workshop on Radon ISG - April 2014

Radon ISG – Technical Workshop



- April 2, 2014—Technical workshop held at NRC; industry, NRC, and public presenters; topics addressed:
 - Overview of ISG
 - Overview of environmental radon
 - Difficulties and improvements of measurements
 - Implementation suggestions, including potential increased use of modeling (MILDOS?) for compliance demonstrations.

Staff Actions

- Evaluating concerns/issues that NMA and public identified at Workshop in April 2014
- Evaluating public comments

Overview of Comments Received on 2nd Draft



- Number of Comments Received
- Overview of Comments
- New issues or concerns?

Path Forward

- NRC staff has implemented LCs for new licenses and license renewals, to address:
 - How a licensee addresses (measures or accounts for) radon progeny for public dose compliance
 - Determination of the members of the public likely to receive the highest dose
 - Determinations of quantities of principal radionuclides in effluents, per 10 CFR 40.65

Path Forward



- NRC staff is evaluating each licensee's methods for surveys and demonstrations of compliance including:
 - 40.65 semiannual environmental monitoring reports and other submittals (as appropriate).
 - submittals per license condition (LC) for new licensees.
 - Staff found Nichols Ranch LC submittal acceptable
- If licensee methods are insufficient or inadequately justified, NRC staff will send Requests for Additional Information (RAIs).
- Inspectors will inspect against the license. After headquarters staff agrees to the method and approach for each licensee (through LC review process or RAI review process), then inspections will inspect against it.

Path forward

- Modify ISG, as necessary and finalize ISG
 - Pursuing two paths
 - Site specific – Nichols Ranch example
 - Global Solution to provide flexibility to address difficulty with highly variable background and accuracy of the detectors available (i.e., use of measurement to support modeling)
 - Goal – complete ISG by the end of Fall 2014
 - Publish ISG in *Federal Register* Notice with disposition of comments
 - Public Meeting
 - Staff will implement after issuance

QUESTIONS ?

