NUCLEAR REGULATORY COMMISSION

10 CFR Part 20

[NRC-2011-0162]

Consideration of Rulemaking to Address Prompt Remediation of Residual Radioactivity During Operations

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of public Webinar and request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is seeking additional input from the public, licensees, Agreement States, non-Agreement States, and other stakeholders on a potential rulemaking to address prompt remediation of residual radioactivity during the operational phase of licensed material sites and nuclear reactors. The NRC has not initiated a rulemaking, but is gathering information and seeking stakeholder input on this subject for developing a technical basis document. To aid in this process, the NRC is requesting comments on the issues discussed in Section III, "Specific Questions," in the Supplementary Information section of this document, as well as comments on the draft Regulatory Basis (ML13109A281). Additionally, the NRC will hold a public Webinar to facilitate the public's and other stakeholders' understanding of these issues and the submission of comments.

DATES: The public Webinar will be held in Rockville, Maryland on June 4, 2013, from 12:00 p.m. to 3:00 p.m. (EDT). Submit comments on the issues discussed in this document by [**INSERT DATE 60 DAYS AFTER PUBLICATION**]. Comments received after this date will be considered if it is practical to do so.

ADDRESSES: You may submit comments by any one of the following methods (unless this document describes a different method for submitting comments on a specific subject):

• Federal Rulemaking Web site: Go to <u>http://www.regulations.gov</u> and search for documents filed under Docket ID NRC-2011-0162. Address questions about NRC dockets to Carol Gallagher, telephone: 301-492-3668, e-mail: <u>Carol.Gallagher@nrc.gov</u>. For technical questions, contact the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

• Mail comments to: Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

For additional direction on accessing information and submitting comments, see "Accessing Information and Submitting Comments" in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Mr. James Shepherd, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6712; email: *james.shepherd@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

The NRC published the Decommissioning Planning Rule (DPR) in 2011 (76 FR 33512; June 17, 2011) with an effective date of December 17, 2012. The DPR applies to the operational phase of a licensed facility, and requires licensees to operate in a way to minimize spills, leaks, and other unplanned releases of radioactive contaminants into the environment. It also requires licensees to check periodically for radiological contamination throughout the site, including subsurface soil and groundwater. The DPR does not have a mandatory requirement for licensees to conduct radiological remediation during operations. In the Staff Requirements Memorandum (SRM), SRM-SECY-07-0177 – Proposed Rule: Decommissioning Planning (10 CFR Parts 20, 30, 40, 50, 70, and 72; RIN: 3150-AH45) (ADAMS Accession No. ML073440549) that approved the proposed DPR, the Commission directed the staff to "make further improvements to the decommissioning planning process by addressing remediation of residual radioactivity during the operational phase with the objective of avoiding complex decommissioning challenges that can lead to legacy sites." To assist in this process, the NRC staff held a public Webinar on July 25, 2011, during which time input on a draft regulatory basis and a set of defined questions concerning a potential rulemaking was obtained from members of the public, licensees, Agreement States, non-Agreement States, and other interested persons. Additionally, interested persons were also afforded an opportunity to provide written comments on the same issues. (See 76 FR 42074; July 18, 2011). Based upon this input, the NRC staff revised its draft regulatory basis.

Subsequently, in SRM-SECY-12-0046 – Options for Revising the Regulatory Approach to Groundwater Protection (ADAMS Accession No. ML121450704), the Commission directed the staff to continue with its development of a regulatory basis for a rulemaking on remediation of residual radioactivity during the operational phase and to obtain public input on the draft regulatory basis. Therefore, the NRC staff is collecting supplementary input on a revised draft regulatory basis for a potential rulemaking requiring prompt remediation during operations.

II. Discussion

Currently, there are no NRC regulations that require licensees to promptly remediate radiological contamination. To enhance stakeholder engagement in finalizing a regulatory basis as a precursor to a proposed rule, the NRC staff developed a revised Draft Regulatory Basis (ML13109A281) to facilitate discussion with, and to solicit input from, interested stakeholders. The revised Draft Regulatory Basis describes the NRC's preferred approach to require licensees to promptly remediate radioactive spills, leaks and other areas of radioactive

concentrations when certain threshold limits are met. NRC's preferred approach contemplates using the NRC effluent discharge concentrations as the threshold for action. The preferred approach would also include a provision allowing licensees to delay remediation when certain conditions are met. To justify delaying remediation, licensees would be required to perform analyses such as dose assessment, risk-assessments and/or cost-benefit analyses for the NRC's review. In addition to the preferred approach, the NRC staff considered the following as alternative frameworks for requiring prompt remediation during operations:

- Issuing a regulation that would require licensees to conduct prompt remediation of a spill, leak, or other release when certain contaminant thresholds, such as the restricted release limits in Section 20.1403 of Title 10 of the *Code of Federal Regulations* (10 CFR), are exceeded. Unlike the preferred approach, this alternative would not provide the licensee with the opportunity to conduct an analysis to justify delayed remediation.
- 2. Issuing site-specific license conditions requiring timely remediation following identification of contamination above some specified volume or concentration.
- 3. Issuing new guidance in the form of a NUREG publication.
- No action (i.e., the NRC staff would rely on existing regulations and guidance documents to encourage licensees to consider prompt remediation after spills or leaks).

For more information on the preferred approach and alternatives, please refer to the revised Draft Regulatory Basis (ML13109A281).

III. Specific Questions

The NRC asked the following questions before, and received some public input. Several commenters stated that an additional rule is not necessary; and that issues can be addressed either by existing rule or by site-specific action. Others stated the proposed thresholds are not appropriate and that interim remediation is not cost effective. Those who supported the rule pointed to cases where there is significant contamination, and drew parallels to other regulations that require early cleanup, such as RCRA. As a result, the staff revised the previous draft document. The NRC is now seeking further stakeholder input on those questions and the staff's revisions to the document based on earlier comments:

- Should the NRC proceed with rulemaking to address remediation of residual radioactivity during the operational phase? Why or why not?
- 2. If the NRC does implement a rule that requires prompt remediation of radioactive spills and leaks, what concentration, dose limits, or other threshold limits should trigger prompt remediation? Should the thresholds differ for soil versus groundwater contamination?
- 3. Should the NRC allow licensees to justify delaying remediation under certain conditions when the contaminant level exceeds the threshold limit? If yes, then what conditions should be used to justify a delayed remediation?
- 4. Should factors such as safety, operational impact, and cost be a basis for delaying remediation?
- 5. If the NRC implements a rule that allows licensees to analyze residual radioactivity to justify delaying remediation, then what should the licensee's analysis cover? For example, what kind of dose assessment, risk-assessments and/or cost-benefit

analyses should be performed to justify delayed remediation? What other types of analyses are relevant?

- 6. If the NRC implements a rule that allows licensees to analyze residual radioactivity to justify delaying remediation, what role should the cost of prompt remediation versus remediation at the time of decommissioning play in the analysis?
- 7. If the NRC implements a rule that allows licensees to analyze residual radioactivity to justify delaying remediation, what standards or criteria should a licensee use to demonstrate to the NRC that a sufficient justification to delay remediation has been met?
- 8. Are there any other alternatives beyond those discussed in the Draft Regulatory Basis document that the NRC should have considered to address prompt remediation?
- 9. What other issues should the NRC staff consider in developing a technical basis for a rulemaking to address prompt remediation of residual radioactivity during site operations?

IV. Public Webinar

To facilitate the understanding of the public and other stakeholders of these issues and the submission of comments, the NRC staff has scheduled a public Webinar for June 4, 2013, from 12:00 p.m. to 3:00 p.m. (EDT). Webinar participants will be able to view the presentation slides prepared by the NRC and electronically submit comments over the Internet. Participants must register to participate in the Webinar. Registration information may be found in the meeting notice (ML13143A149). The meeting notice can also be accessed through the NRC's public Web site under the headings Public Meetings & Involvement > Public Meeting Schedule; see Web page http://www.nrc.gov/public-involve/public-meetings/index.cfm. Additionally, the

final agenda for the public Webinar and the revised Draft Regulatory Basis document will be posted no fewer than 10 days prior to the Webinar at this Web site. Those who are unable to participate via Webinar may also participate via teleconference. For details on how to participate via teleconference, please contact Sarah Achten; telephone: 301-415-6009; e-mail: sarah.achten@nrc.gov.

V. Accessing Information and Submitting Comments

A. Accessing Information

Please refer to Docket ID NRC-2011-0162 when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and is publicly available, by any of the following methods:

Federal Rulemaking Web site: Go to http://www.regulations.gov and search for Docket ID NRC-2011-0162.

• NRC's Agencywide Documents Access and Management System (ADAMS):

You may access publicly available documents online in the NRC Library at http://www.nrc.gov/reading-rm/adams.html. To begin the search, select "<u>ADAMS Public</u> <u>Documents</u>" and then select "<u>Begin Web-based ADAMS Search</u>." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to <u>pdr.resource@nrc.gov</u>. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

• NRC's PDR: You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID NRC-2011-0162 in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in you comment submission. The NRC will post all comment submissions at <u>http://www.regulations.gov</u> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

Dated at Rockville, Maryland, this 28 day of May 2013.

For the Nuclear Regulatory Commission.

/RA/

Andrew Persinko, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs.