

NRC INSPECTION MANUAL

RDB

TEMPORARY INSTRUCTION 2600/017

REVIEW OF THE IMPLEMENTATION OF THE DECOMMISSIONING PLANNING RULE

The Decommissioning Planning Rule (DPR) requires licensees to minimize contamination released into the site, and to identify the location and amount of significant residual radioactivity throughout the facility and site, including in the subsurface. The results of the surveys should be recorded in records important to decommissioning if the identified contamination will require remediation to meet the unrestricted use criteria of 10 CFR 20.1402. Also, the next required update to the financial assurance report should include cost estimates for remediation to the 10 CFR 20.1402 "Radiological Criteria for Unrestricted Use."

2600/017-01 OBJECTIVES

The objectives of this Temporary Instruction (TI) are to determine whether the licensee or certificate holder has implemented the requirements of the DPR that was issued on June 17, 2011 (76 FR 35512) and became effective on December 17, 2012.

01.01 Verify that the licensee is maintaining adequate radiological control programs to minimize the introduction of radiological contamination into the site environment;

01.02 Verify that the licensee is implementing a program to ensure that releases of radioactivity to the environment are promptly identified and characterized;

01.03 Verify that the licensee is recording radiological survey data which identifies the location and concentrations or quantities of contamination that may require remediation at the time of license termination; and

01.04 Verify that the licensee is reporting updated financial assurance as required by the DPR.

2600/017-02 BACKGROUND

On June 17, 2011, the U.S. Nuclear Regulatory Commission issued the DPR (76 FR 35512) with an effective date of December 17, 2012. Draft guidance for implementing the rule, DG-4014, was issued on December 13, 2011. The final guidance, RG-4.22, was issued on December 27, 2012 (ML12158A361). This TI applies to all holders of operating licenses (Part 30, 35, 40, 50, 70, 72) that have not permanently ceased operations. For examples of operating licensees, see Attachment 1. Uranium recovery sites licensed under Appendix A of Part 40 are exempt only from the requirements of 10 CFR 30.1406(c). For nuclear power plants that have implemented NEI-07-07, and have been inspected under TI 2515/173 and TI 2515/185, no further review is required by this TI.

2600/017-03 INSPECTION REQUIREMENTS

Inspection staff should assess the licensee's response to the requirements of the DPR in 10 CFR Part 20 to minimize contamination released by reviewing potential sources of contamination leakage into the site, and by verifying monitoring and sampling plans are updated to identify potential radiological contamination throughout the facility and site, including the subsurface. Inspection staff should also identify if the licensee has submitted an updated financial assurance report, if required by 10 CFR 30.35, 40.36, 50.75, 70.25, 72.30). For licenses with inspection frequencies greater than one year, the master inspection plans should be annotated to ensure the DPR requirements are reviewed during the next scheduled inspection.

03.01 Program Controls.

- a) Determine whether the licensee has a program and/or procedures that fulfill the requirements of the DPR.
- b) Determine whether the licensee has procedures for review of environmental monitoring results and documentation of locations with significant residual radioactivity in decommissioning files in accordance with 10 CFR 20.1406(c) and 20.1501(a-b).

03.02 Program Implementation.

- a) **Minimization of Contamination.** Determine, by review of records and discussions with licensee or certificate holder personnel, whether the licensee or certificate holder has evaluated potential sources of residual radioactivity and taken actions to minimize leakage of contamination into the site in accordance with 10 CFR 20.1406(c).
- b) **Monitoring Stations and Sampling Locations.** Determine, by review of records and discussions with licensee or certificate holder personnel, whether a sufficient number and location of sampling points are adequate to detect significant residual radioactivity as required by 10 CFR 20.1501(a), "General." The DPR does not require licensees to monitor off-site contamination, nor to measure residual radioactivity at levels below those required to be remediated to criteria for unrestricted use (10 CFR 20.1402) at the time of decommissioning.
- c) **Records and Reports of Environmental Monitoring.** By record review and discussion, determine whether the licensee is documenting locations and amounts of residual radioactivity in decommissioning records as required by 10 CFR 20.1501(b), "General."
- d) **Calibration of Measurement Equipment:** By record review and discussions, determine whether the licensee or certificate holder is calibrating measurement equipment in accordance with the requirements of 10 CFR 20.1501(c), "General."

2600/017-04 INSPECTION GUIDANCE

04.01 Program.

- a) Review the facility programs and procedures, (together with discussions with licensee or certificate holder personnel) to meet the requirements of the DPR.
- b) Procedures should establish criteria for sampling, data recording, and storage of sample results.

04.02 Implementation.

- a) Minimization of Contamination Into the Site.

Determine whether the licensee has adequately evaluated plant systems and release paths and taken measures reasonable under the circumstances to meet the minimization requirements of 10 CFR 20.1406(c).

- b) Monitoring Stations and Sampling Locations.

Determine whether the procedures contain clearly written steps for monitoring contamination such as sampling and analysis. If it is known in advance when the licensee or certificate holder will be taking environmental samples, attempt to schedule the inspection in order to directly observe the sampling activities to determine if they are done per the applicable procedures. Such observations would assist the inspector in verifying that sampling is being done in accordance with procedures. Such sampling may include air, liquid, soil, surface or ground water.

- c) Records and Reports of Environmental and Radioactive Effluent Monitoring.

Examine the environmental and radiological effluent monitoring records generated since the effective date of the DPR (17 Dec 2012). Review licensee reports of abnormal releases into the site environment and environmental monitoring results since December 17, 2012.

- d) Calibration of Measurement Equipment.

By record review and discussions, determine whether the licensee or certificate holder is calibrating measurement equipment in accordance with the requirements of 10 CFR 20.1501(b), "General."

2600/017-05 REPORTING REQUIREMENTS

The results of the inspection should be reported in the routine inspection report. Telephone inquiries should be documented as a telephone record and placed into ADAMS. For materials licensees, the results of the on-site inspections should be documented in accordance with IMC 2800.

2600/017-06 COMPLETION SCHEDULE

This TI is to be initiated on the date of issue, and completed within one year.

2600/017--07 EXPIRATION

This TI will remain in effect for 12 months.

2600/017--08 CONTACTS

Any technical questions regarding this TI should be addressed to James Shepherd, Project Engineer, Reactor Decommissioning Branch, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs (FSME), at 301-415-6712 or james.shepherd@nrc.gov.

2600/017--09 STATISTICAL DATA REPORTING

Direct inspection effort related to this TI should be charged to the routine inspection code for each site.

2600/017—10 RESOURCE ESTIMATION

This TI should be implemented in conjunction with routine inspections of licensee radiation protection and health and safety plans. No additional resources are required.

2600/017—11 TRAINING

Inspectors performing this inspection must meet the basic training for inspectors specified in IMC 1245, 1246, or 1247, as appropriate. In addition, inspectors should attend the FSME training on the Decommissioning Planning Rule and RG 4.22.

2600/017—12 REFERENCES

1. U.S. Nuclear Regulatory Commission, "Decommissioning Planning Rule," *Federal Register*, Volume 76, Number 117, June 17, 2011, pp. 35512–35575.
2. --- "Decommissioning Planning During Operations," Regulatory Guide 4.22, December 2012, ADAMS Accession No. ML12158A361.
3. --- "Consolidated Decommissioning Guidance - Financial Assurance, Recordkeeping, and Timeliness," NUREG-1757, Volume 3, Revision 1, November 2011, ADAMS Accession No. ML12048A683.
4. --- "Radiological Criteria for License Termination," *Federal Register*, Volume 62, Number 139, July 21, 1997 pp. 39057–39095.

END

Attachment 1

1. For licensees that do not have significant residual radioactivity because they possess only small amounts of short-lived radioactive material or sealed sources, the staff does not expect significant changes to the existing monitoring and health and safety programs because the material will not result in contamination of the facility affecting decommissioning.
2. Licensees, such as Independent Spent Fuel Storage Installations, do not need to perform a detailed evaluation, since there are no liquids to contaminate the environment and routine surveillances are conducted to ensure container integrity.

Attachment 2
Revision History Page

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number
N/A	ML13043A278 02/25/13 CN 13-006	This TI was created to provide inspection guidance related to inspection of licensees' implementation processes and procedures for the Decommissioning Planning Rule that added 10 CFR 20.1406(c) and revised 10 CFR 20.1501(a) and 20.1501(b).	No formal training, however, DWMEP will conduct a familiarization briefing for inspectors on February 26, 2013.	ML13043A287