NRC INSPECTION MANUAL

INSPECTION PROCEDURE 87654

URANIUM MILL, IN-SITU RECOVERY, AND 11e.(2) BYPRODUCT MATERIAL DISPOSAL SITE DECOMMISSIONING INSPECTION

Effective Date: 12/30/2022

PROGRAM APPLICABILITY: IMCs 2801 and 2602

87654-01 INSPECTION OBJECTIVES

- 01.01 To determine if licensed decommissioning programs for in-situ uranium recovery sites, uranium mills and other sites in possession of 11e.(2) byproduct material are being conducted in accordance with the U.S. Nuclear Regulatory Commission (NRC) requirements as specified in individual licenses and the regulations.
- 01.02 To determine if the licensee's uranium recovery decommissioning program is implemented in a manner to ensure the safety and health of workers, public and protection of the environment during decommissioning.

87654-02 INSPECTION REQUIREMENTS

Conduct performance-based inspections with an emphasis on risk-significant activities that have an impact on safety and the environment. As described in IMC 2602, risk modules (RMs) are program areas that have been determined to be important to reducing risks at decommissioning facilities. RMs were identified to focus inspection efforts on those site activities that are the most likely to impact the safety and health of workers, the public and/or the environment. Inspection time and effort should be concentrated on the RMs described in the following paragraphs.

02.01 Observation of Decommissioning Activities (RM-01)

Observe one or more physical activities that require written procedures, work plans, hazard assessments or radiation work permits (RWPs) approved by the Radiation Safety Officer (RSO), such as cell construction, soil and groundwater sampling or remediation, building survey, decontamination, or demolition.

02.02 Occupational Radiation Protection (RM-02)

Assess trends in radiation protection program performance, such as increases in occupational exposures.

02.03 Security and Control of Radioactive Material (RM-03)

Observe the licensee's security and control of radioactive material, with particular emphasis on storage of decommissioning wastes.

02.04 Waste Generation, Storage and Transportation (RM-04)

Verify the licensee has transferred or disposed of licensed materials in accordance with NRC regulations. Observe one or more waste packaging and loading of waste for placement in a disposal cell or transport offsite. If the inspector is not able to observe waste operations, then review a selection of waste packaging and transportation records generated since the last inspection.

02.05 Public Dose, Effluent Releases and Environmental Monitoring (RM-05)

Verify that the licensee is implementing a radiation protection program that ensures radiation dose level and effluent releases in unrestricted areas did not exceed the limits. Observe the condition of at least one environmental monitoring location and one effluent location unless decommissioning has progressed to the point where environmental and effluent monitoring are no longer required by the license. Observe the collection of samples from these locations. Assess trends in effluent and environmental monitoring, including groundwater monitoring. Review the licensee's estimate of annual public dose and the annual land use report.

02.06 Management Organization and Control (RM-06)

Review facility changes, tests and experiments authorized by the Safety and Environmental Review Panel (SERP). Verify that the licensee has implemented the appropriate programs for management oversight and control of decommissioning activities.

02.07 Final Status Surveys (FSS) (RM-07)

If FSSs are being conducted and completed by the licensee, refer to Inspection Procedure (IP) 83890, "Closeout Inspection and Survey," for additional information regarding review of the FSS.

87654-03 INSPECTION GUIDANCE

03.01 Observation of Decommissioning Activities (RM-01)

Identify one or more physical decommissioning activities that are ongoing at the site. When selecting from multiple activities, the inspector should prioritize activities involving higher radiological risk. This includes area with higher inventories of radioactive materials; areas with loose or soluble chemical forms of radioactive material; areas with hard to detect radionuclides (e.g., alpha-emitting radionuclides or low energy beta emitting radionuclides) and decommissioning activities using novel or unconventional technologies. Prioritize activities which involve the application or physical or chemical forces or energy, such as demolition, dismantling, decontamination, and remediation.

03.02 Occupational Radiation Protection (RM-02)

Observe ongoing activities under RWPs or standard operating procedures to ensure that all necessary controls to limit occupational exposure are in place and work is conducted in accordance with the associated documents. Records to be reviewed include occupational exposure records, RWPs, radiological survey and release records. Quality control of records and data should be evaluated. For example, if RWPs require respirators or breathing zone (BZ) air samplers, ensure that individuals who are signed into the RWP are respirator qualified or were issued BZ monitors and the results were converted into dose for each employee signed into the RWP. Inspections should review spreadsheet calculations to ensure the algorithms are correct.

Ensure the licensee reported any radiological events to the NRC as required by the license and regulations. If the licensee has agreed to provide courtesy notifications to the NRC for issues that are not NRC reportable but are required to be reported to the State, verify that those notifications were also made to the NRC. The inspector should make sure they understand what notifications are required by license condition and which are courtesy notifications.

The routine audit program review requirements for the radiation protection program vary by site. At a minimum, Title 10 of the *Code of Federal Regulations* (10 CFR) 20.1101(c), "Radiation Protection Programs," requires licensees to conduct annual program reviews. Guidance for annual as low as reasonably achievable (ALARA) audits is provided in Regulatory Guide (RG) 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Recovery Facilities will be As Low As Reasonably Achievable", Section 2.3.3. The license application and specific license conditions may provide additional audit and program review requirements.

Activities to be evaluated:

- a. Observe routine contamination surveys in restricted or unrestricted areas, such as process areas, maintenance areas and rest areas (e.g., break rooms).
- b. Observe the use of ventilation controls for occupied structures to reduce radon levels.
- c. Observe workers' use of radiological measuring and sampling equipment. Ensure that the licensee's staff demonstrates knowledge and understanding of measuring equipment, lapel air samplers and self-frisking stations. Perform independent radiation surveys to assess the performance of the licensee's radiation protection program.
- d. Observe postings of notices to workers. According to 10 CFR 19.11(f), "Posting of Notices to Workers," notices to workers shall appear in a sufficient number of places to permit individuals engaging in NRC-licensed or regulated activities to observe them on the way to or from any licensed or regulated locations to which the document applies, shall be conspicuous and shall be replaced if defaced or altered. Verify the licensee's posting of notices to workers meets the regulatory requirements.
- e. Observe radioactive materials postings. Note: Many licensees have conditions that exempt the licensee from the posting requirements of 10 CFR 20.1902(e), "Posting of Areas or Rooms in which Licensed Material is Used or Stored," for areas within the mill or in-situ recovery site provided that all entrances to the mill or in-situ site are conspicuously posted in accordance with 10 CFR 20.1902(e) with the statement that "any area within the facility may contain radioactive material."
- f. Review records that document occupational exposures including bioassay and dose assessment performed as result of incidents or accidents.
- g. Review records such as equipment release records and routine contamination surveys.

- h. Review RWPs as need to supplement the inspection effort. The goal of this review is to ensure that radiological controls have been established and implemented for non-routine work activities. Cross reference RWPs against bioassay and air monitoring records.
- i. Review radiological instrumentation program and associated records. This includes but is not limited to: portable survey instruments, fixed monitoring equipment, constant air monitors, portable air samplers, BZ air samplers, and alarming dosimeters. If the licensee calibrates and maintains any of these components, observe the calibration and maintenance activities or have personnel demonstrate the processes used. Records for review include calibration and functional test records.
- j. Assess training and qualification of the licensee's employees through interviews and observation to determine how well employees understand their work activities and to ascertain whether licensee staff are qualified to implement the NRC-approved Decommissioning Plan (DP).

03.03 Security and Control of Radioactive Materials (RM-03)

Verify both passive and active measures are in place to secure radioactive materials from unauthorized removal or access. Verify both passive and active measures are in accordance with the procedures and process detailed in the DP. Passive measures include but are not limited to: ropes, to control access, labeling of containers, and posting of storage areas. Active measures include but are not limited to: locked storage locations with key control when materials are not in use and maintaining constant surveillance when not stored in a locked location. If the licensee possessing quantities of materials that meet the 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material," requirements, refer to IP 87137, "10 CFR Part 37 Materials Security Program," for additional information.

03.04 Waste Generation, Storage and Transportation (RM-04)

Verify the presence of passive and active measures are in place to control access to radioactive materials and waste. See Section 03.07 for security and control of radioactive wastes. Appendix B of IMC 2602 includes a list of discretionary procedures, including IP 86740, "Inspection of Transportation."

If the licensee has a tailings impoundment or evaporation pond, verify by walking down the impoundment or pond, that there are not failures or breaks in the impoundment embankments and no tears in the impoundment liner. Look for signs of drilling or washout. Verify the leak detection and impoundment water levels monitoring systems are in place and operational. Ensure that visual inspections are performed by the licensee staff at the required frequency. If the impoundment fluids are identified in the groundwater leak detection system, verify that appropriate actions to cleanup, and correct the issue are timely and the required notifications completed.

03.05 Public Dose, Effluent Releases and Environmental Monitoring (RM-05)

a. Verify the licensee is implementing a radiation control program that ensures radiation dose levels and effluent releases in unrestricted areas did not exceed the public dose limits set forth in 10 CFR 20.1301, "Dose Limits for Individual Members of the Public," and §20.1302, "Compliance with Dose Limits for Individual Members of the Public," during decommissioning. Verify the annual radiation protection program audit report is included with the annual or semiannual effluent report submittals, if required by license condition.

- b. If the facility has a tailings pile for onsite disposal of radioactive wastes, verify that the licensee conducts annual radon flux measurements to demonstrate compliance with Appendix A of 10 CFR Part 40, "Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily for Their Source Material Content," Criterion 6 requirements. Verify the method used to conduct the radon flux measurements is the U.S. Environmental Protection Agency Method 115 or an NRC approved equivalent.
- c. Observe the condition of environmental monitoring stations and effluent locations unless decommissioning has progressed to such an extent that environmental and effluent monitoring is no longer required. Observe the collection of samples from these locations or if that is not possible, have personnel demonstrate the sample collection processes. Assess trends in effluent and environmental monitoring.
- d. Verify that groundwater quality data were collected at the correct locations and frequency as required by the license (NRC-approved radiological environmental monitoring program), were analyzed for the right constituents, and were verified against established detection or compliance standards, as appropriate. If groundwater quality data indicated detection or compliance standards (including compliance standards set by alternate concentration limits) were exceeded, confirm that the licensee appropriately notified the NRC and took appropriate corrective actions. Verify that compliance wells were correctly located with respect to the most recent NRC-approved locations. If applicable verify the groundwater corrective action programs were conducted in a timely manner. Verify that wells and boreholes that must be sealed under the approved DP or reclamation plan, were correctly sealed and abandoned.
- e. If the licensee agreed to provide courtesy notifications to the NRC for issues, such as spills and excursions that are not reportable to the NRC but were required to be reported to the State, verify that these events were also reported to the NRC. Note: for some licensees this is not a courtesy agreement but a license condition.

03.06 Management Organization and Control (RM-06)

Review licensee implementation of approved plans, programs, regulatory requirements and license conditions for the management and control of decommissioning of the facility. This review should include the following: (1) the license organizational structure in place for the decommissioning project; (2) designation and qualification of the RSO; (3) Quality Assurance program and annual review; (4) records control and storage; (5) safety committee; and (6) decommissioning and cleanup procedures in place or to be implemented. See IP 87305, "Management Organization and Control," for additional information.

Observe facility changes, tests or experiments authorized by the licensee's SERP when reviewing the licensee's documentation of changes, tests and/or experiments assess whether the change, test or experiment would:

a. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the license application (as updated).

- b. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a facility structure, equipment, or monitoring system (SEMS) important to safety previously evaluated in the license application (as updated).
- c. Create a possibility for an accident of a different type than any previously evaluated in the license application (as updated).
- d. Create the possibility for a malfunction of a SEMS important to safety with a different results than previously evaluated in the license application (as updated); or
- e. Result in a departure from the method of evaluation described in the license application (as updated) used by the NRC in establishing the final safety evaluation report, environmental impact statement, environmental assessment, technical evaluation report or other analysis and evaluations for license amendments.

If the inspector determines that one or more of the criteria listed above is met, they should consult in the NRC project manager.

03.07 FSS (RM-07)

If FSSs are being conducted and completed by the licensee, refer to IP 83890 for additional information on the review of FSS.

87654-04 RESOURCE ESTIMATE

The time onsite inspection hours required to complete this IP are dependent upon: (1) the licensee's decommissioning activities being inspected; (2) the standard uranium recovery health and safety inspection areas covered in the inspection; (3) the overall complexity of decommissioning at the facility, and; (4) the duration of the licensee's decommissioning program. For facilities needing a significant decommissioning effort, it is estimated that approximately 10 to 40 inspection hours will be needed to complete each inspection of a key decommissioning activity or standard health and safety area.

87654-05 PROCEDURE COMPLETION

This IP is considered complete when the inspector has sufficiently reviewed the licensee's performance under each RM and the objectives of this procedure have been met.

87654-06 REFERENCES

The following NRC IMCs and related IPs should be used for guidance, in part, for the decommissioning inspection:

IMC 1230, "Quality Assurance Program for Radiological Confirmatory Measurements," 10/1/83.

IMC 2602, "Decommissioning Inspection Program for Fuel Cycle Facilities and Materials Licensees," December 2022

IMC 2605, "Decommissioning Procedures for Fuel Cycle and Materials Licensees," 11/12/96.

- IMC 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program,"
- IP 83890, "Closeout Inspection and Survey"
- IP 86740, "Inspection of Transportation"
- IP 87137, "10 CFR Part 37 Materials Security Programs"
- IP 87305, "Management Organization and Controls"
- IP 88104, "Decommissioning Inspection Procedure for Fuel Cycle Facilities"
- IP 89020, "Groundwater and Water Management Activities"
- IP 89030, "Radiation Protection"
- IP 89035, "Uranium Recovery Radioactive Wastes and Transportation"
- IP 89045, "Uranium Recovery Effluent Control and Environmental Protection"

IP89010, "Onsite Construction"

Applicable portions of the following NRC documents should be used for guidance:

- NUREG-1507, Revision 1, "Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions." August 2020.
- NUREG-1569 Revision 1, "Standard Review Plan for In-Situ Leach Uranium Extraction License Applications." Draft Report for Comment, January 2003.
- NUREG-1575, Revision 1, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)", August 2000.
- NUREG-1620, Revision 1, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act." June 2003.
- NUREG-1727, "NMSS Decommissioning Standard Review Plan." September 2000 (Appendix D, ALARA).
- RG 8.31, "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Recovery Facilities will be As Low As Reasonably Achievable"

EPA Method 115, "Monitoring for Radon-222 Emissions."

END

APPENDICES

Appendix A: Uranium Recovery Decommissioning Inspection Field Notes

Appendix A: Uranium Recovery Decommissioning Inspection Field Notes

This appendix provides field notes which can be used by the inspector to assist with the performance of the inspection. Note that all areas indicated in the field notes are not required to be addressed during <u>each</u> inspection. However, for those areas <u>not covered</u> during the inspection, a notation ("Not Reviewed") should be made in each section where applicable. Additionally, all areas covered during the inspection should be documented in sufficient detail to describe what activities and/or records the inspector observed. The fieldnotes to the "Decommissioning Inspection Procedure for Uranium Recovery Licensees" should be supplemented with: (1) the applicable discretionary inspection procedures (IPs) for operating facilities provided in the IP 89000 series; and (2) other written documentation of the inspection, as necessary.]

1.01. SUMMARY OF DECOMMISSIONING STATUS

The checklist below is intended to provide, in a written outline format, summary documentation of the status of the licensee's facility in the decommissioning process. This documentation will be filed as part of the inspection report. Use this information to develop each inspection plan(s) for the various stages of decommissioning, namely, before dismantlement, during dismantlement and site remediation, and after site remediation.

a.	Licensee ceased operational program() Y () N
b.	Required decommissioning financial assurance mechanisms in place () Y () N $$
C.	Decommissioning Plan (DP) required() Y () N
d.	Licensee final survey required() Y () N
e.	U.S. Nuclear Regulatory Commission (NRC) confirmatory survey required() Y () N $$
f.	NRC closeout inspection required () Y () N
g.	Licensee doing decommissioning planning and preparation before dismantlement() Y () N
h.	Licensee actively remediating site () Y () N
i.	Licensee completed site remediation() Y () N

Description of Facility Status:

1.02. INSPECTION OF KEY DECOMMISSIONING ACTIVITIES

The following is a generic checklist of major licensee activities occurring at various stages of decommissioning. From this generic checklist and from facility-specific activities you identify, develop the set of licensee activities to be inspected for each individual inspection throughout the decommissioning process. Plan to focus inspection resources on risk modules (RMs) that present potential high-risk conditions.

To complete the licensee activities checklist, the inspector will need to obtain information from the Licensing Project Manager, review the DP, make observations at the licensee's facility, review licensee records, take measurements and samples of contaminants, and undertake other investigative measures, to determine whether the licensee is meeting all regulatory and DP commitments for each decommissioning activity the licensee is performing.

1.03 LICENSEE ACTIVITIES INSPECTED BEFORE DISMANTLEMENT

RM 1: Observation of Decommissioning Activities

٠	Work planned and implemented to reduce plant/wellfield footprints() Y ()N
•	Support systems and services (e.g., water, lighting) in place()Y ()N
•	Facility licensing conditions are in place and met by licensee()Y()N
•	Workers conducting work as required by standard operating procedures (SOPs), RWPs and ALARA principles()Y ()N
•	Hazard identification conducted and communicated to employees()Y ()N
٠	Controls in place to mitigate hazards are appropriate for work planned()Y()N
٠	Management support for safety and ALARA observed()Y ()N
RM 2:	Occupational Radiation Protection
•	Work is performed in accordance with radiation protection program requirements, ALARA principals and good health physics practices()Y ()N
•	All contaminated areas, waste processing areas and waste handling areas are posted in conformance with the regulations()Y ()N
•	Routine contamination surveys are conducted in restricted and unrestricted areas at the required frequencies()Y ()N
•	Employees performing surveys or sampling demonstrate proficiency and an understanding of the use and limitations of the equipment()Y()N
•	Notices to employees and other NRC inspection information appropriately posted. Employees understand ALARA()Y()N
•	Dose assessment performed for incidents/accidents or as the result of abnormal monitoring results()Y()N
•	Routine air sampling and radon monitoring conducted, converted to dose, and documented as appropriate()Y ()N
•	Contamination and equipment release records are appropriate (correct information, appropriate calibrated instrument used, etc.)()Y()N

•	Cross check of RWPs with bioassay and air monitoring records indicate that employees are appropriately qualified and results converted to dose()Y (
•	Calibration and functional testing for instrumentation conducted and documented as appropriate()Y()N		
•	Training and qualification for employees is appropriate for their job() Y ()N $$		
RM 3:	Security and Control of Radioactive Material		
•	Radioactive material locked in storage when not in use()Y ()N		
•	Licensee maintained constant surveillance of material when in use or not in locked storage()Y()N		
•	Radioactive waste stored or staged appropriately in both restricted and unrestricted areas()Y()N		
•	Controls and security in place are commensurate with the risk from the radioactive material()Y()N		
RM 4:	Waste Generation, Storage and Transportation		
•	Onsite waste storage complies with applicable regulations()Y ()N		
•	Staging for waste prior to onsite disposal or packing for offsite disposal appropriate to limit/mitigate access or migration of the waste()Y()N		
•	Shipment of offsite waste meets applicable requirements()Y ()N		
RM 5:	Public Dose, Effluent Releases and Environmental Monitoring		
•	Monitoring and public dose compliance continued from operations()Y ()N		
•	ALARA practices in place to limit effluents and dose to public()Y ()N		
•	Licensee providing environmental data to NRC as required()Y ()N		
•	Reporting requirements (and courtesy reporting) completed as required()Y ()N		
•	Effluent monitoring records and reporting appropriate()Y ()N		
•	Total public dose within limits()Y ()N		
•	Dose assessment for spaces adjacent to radioactive material storage locations and dose are appropriate for the public		
RM 6:	Management Organization and Control		
•	Management supports annual audits including ALARA audit of the program()Y()N		

•	Radiation Safety Officer (RSO) has the authorities and responses
	needed for the radiation safety program. RSO promotes ALARA()Y ()N

•	Licensee recordkeeping complies with Title 10 of the <i>Code of Federal</i> <i>Regulations</i> (10 CFR) 30.36, "Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas," 40.42, "Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas," and 70.38, "Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas."
•	DP and schedule are in development or has been submitted and is under review by the NRC()Y ()N
•	Land use evaluations performed annually()Y ()N
•	Additional protocol paperwork submitted as applicable()Y ()N

RM 7: Final Status Surveys (FSS)

• Not applicable

Basis for Findings:

1.04 <u>LICENSEE ACTIVITIES INSPECTED DURING DECONTAMINATION,</u> <u>DISMANTLEMENT, AND SITE REMEDIATION</u>

RM 1: Observation of Decommissioning Activities

- Decontamination and remediation of the following are being performed consistent with DP and sound industry practice:
 - Soil.()Y()N
 - Sediment.....()Y()N
 - Surface waters.....()Y()N
 - Groundwater.....()Y()N
- Decontamination and dismantlement of structures (buildings, utilities, treatment lagoons, etc.) are being performed consistent with DP, Radiation safety plan, and sound industry practices. (ALARA, OSHA, etc.)......()Y()N
- Support systems and services (e.g., lighting, water) in place.....()Y ()N
- License has adequate records for decommissioning activities performed (e.g., decontamination and dismantlement of structures; decontamination and remediation of soils, sediment, surface waters, groundwater, surveys)...()Y()N
- Facility licensing conditions are in place and met by licensee.....()Y()N

•	Workers conducting work as required by SOPs or RWPs. Workers demonstrate ALARA principles()Y ()N
•	Hazard identification conducted and communicated to employees()Y ()N
•	Controls in place to mitigate hazards are appropriate for work planned()Y ()N
RM 2:	Occupational Radiation Protection
•	Licensee has developed and implemented a training program for new decommissioning activities (e.g., demolition of structures, excavation of soils, etc.). Inspection has determined that this program is adequate()Y()N
•	Work is performed in accordance with radiation protection program requirements, good health physics practices and ALARA principles()Y()N
•	All contaminated areas, waste processing areas and waste handling areas are posted in conformance with the regulations()Y ()N
•	Routine contamination surveys are conducted in restricted and unrestricted areas at the required frequencies()Y ()N
•	Employees performing surveys or sampling demonstrate proficiency and an understanding of the use and limitations of the equipment()Y()N
•	Notices to employees and other NRC inspection information appropriately posted()Y ()N
•	Dose assessment performed for incidents/accidents or as the result of abnormal monitoring results()Y()N
•	Routine air sampling and radon monitoring conducted, converted to dose, and documented as appropriate()Y ()N
•	Contamination and equipment release records are appropriate (correct information, appropriate calibrated instrument used, etc.)()Y ()N
•	Cross check of RWPs with bioassay and air monitoring records indicate that employees are appropriately qualified and results converted to dose()Y()N
•	Calibration and functional testing for instrumentation conducted and documented as appropriate()Y()N
•	Training and qualification for employees is appropriate for their job()Y ()N
RM 3:	Security and Control of Radioactive Materials
•	Radioactive material locked in storage when not in use()Y ()N
•	Licensee maintained constant surveillance of material when in use or not in locked storage()Y()N

•	Radioactive waste stored or staged appropriately in both restricted and unrestricted areas()Y()N
•	Controls and security in place are commensurate with the risk from the radioactive material()Y()N
RM 4:	Waste Generation, Storage and Transportation
•	Waste characterization and packaging in accordance with 49 CFR, "Transportation."()Y ()N
•	Temporary storage/staging areas for radioactive wastes from building demolition, equipment dismantlement, soil excavation, etc., are posted and protected()Y()N
•	Waste transportation complies with applicable requirements for marking, labeling, placarding and shipping papers()Y ()N
•	Onsite waste storage complies with applicable regulations()Y ()N
•	Staging for waste prior to onsite disposal or packing for offsite disposal appropriate to limit/mitigate access or migration of the waste()Y()N
•	Shipment of offsite waste meets applicable requirements()Y ()N
RM 5:	Public Dose, Effluent Releases and Environmental Monitoring
•	Where active remediation is being performed (decontamination or demolition of structures, excavation of soil, etc.) radiation levels in unrestricted areas do not exceed 2 mrem in any one hour()Y ()N
•	Licensee providing environmental data to NRC as required()Y ()N
•	Reporting requirements (and courtesy reporting) completed as required()Y ()N
•	Effluent monitoring records and reporting appropriate()Y ()N
•	Total public dose within limits()Y ()N
•	Dose assessment for spaces adjacent to radioactive material storage locations and dose are appropriate for the public()Y()N
RM 6:	Management Organization and Controls
•	Licensee has implemented procedures for the decommissioning activities identified in the DP()Y ()N
•	License recordkeeping complies with 10 CFR 30.36, 40.42 and 70.38()Y ()N
•	Management supports annual audits of the program including ALARA()Y()N

•	RSO has the authorities and responses needed for the radiation safety program. RSO practices ALARA principles()Y ()N				
•	DP and schedule are in place and approved by NRC()Y ()N				
•	Land use evaluations performed annually()Y ()N				
•	Additional protocol paperwork submitted as applicable()Y ()N				
RM 7: <u>FSSs</u>					
•	Survey instruments used are appropriate to the contaminants of interest()Y ()N $% \left({{\left({{\left({{\left({1 \right)} \right)}} \right)}} \right)$				
•	Use of survey instruments is appropriately demonstrated by workers()Y ()N $% \left({\left {{\left({{\left({{\left({\left({\left({\left({\left({\left({\left($				
Basis f	for Findings:				
1.05	LICENSEE ACTIVITIES INSPECTED AFTER COMPLETION OF SITE REMEDIATION				
RM 1:	Observation of Decommissioning Activities				
•	Licensee recordkeeping complies with 10 CFR 30.36, 40,42 and 70.38()Y ()N $$				
RM 2: Occupational Radiation Protection					
•	FSS in accordance with radiation protection program()Y ()N				
RM 3:	Management Organization and Control				
•	Licensee has implemented procedures for the decommissioning activities identified in the DP()Y ()N				
RM 4:	Waste Generation, Storage and Transportation				
•	Transportation of waste complies with applicable requirements()Y()N				
RM 5:	<u>FSSs</u>				
•	Surveys performed in accordance with the DP()Y ()N				
RM 6:	Public Dose, Effluent Releases and Environmental Monitoring				
•	Unrestricted release of materials and equipment is appropriate()Y()				
RM 7:	Security and Control of Radioactive Material				
•	Site security and control in accordance with 10 CFR 20.1801, "Security of stored material," and 1802, "Control of material not in storage."()Y()N				

Basis for Findings:

Attachment 1: Revision History for IP 87654

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional Non- Public Information)
	ML22010A144 12/15/22 CN 22-026	Revised to reflect performance-based, risk-informed inspection philosophy. Reissued in its entirety due to substantial changes		ML22327A273