MINOR

OPERATION AND MAINTENANCE

ACTIVITY PLAN

O&M 25-003 REV. 0

L-Area Chiller Replacement

(Site Index No. 479 "L-Area Reactor Area Cask Car Railroad Tracks as Abandoned")

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1. INTRODUCTION

This Operations and Maintenance (O&M) Plan addresses soil disturbing activities necessary to support the demolition of existing bollards, concrete and chiller and related equipment and construction of a new concrete pad, bollards, replacement chiller and related equipment adjacent to the existing chiller.

Excavation activities are within the 200' buffer area of RCRA/CERCLA Site Index No. 479 "L-Area Reactor Area Cask Car Railroad Tracks as Abandoned" of the *Federal Facility Agreement (FFA), Appendix C.2* (WSRC-OS-94-42). The potential area of disturbance is less than 10% of the waste unit area, characterizing it as "minor intrusive" activity. An O&M plan is required per WSRC-RP-96-45, *Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U),* December 15, 1996. An O&M plan provides added protection to human health and the environment and minimizes impact to long-term characterization and remediation efforts.

2. AREA DESCRIPTION AND CONDITIONS

The proposed activity is within 200' of RCRA/CERCLA Site Index No. 479 "L-Area Reactor Area Cask Car Railroad Tracks as Abandoned", which falls within the RCRA/CERCLA Site Index No. 584 "L-Area Operable Unit". The following site indices are included in this operable unit:

- SRS Index #1770 "Building 108-4L, Emergency Diesel Generator & Fuel Oil Storage"
- SRS Index #560 "L-Area Process Sewer Lines, as Abandoned"
- SRS Index #479 "L-Area Reactor Cask Car Railroad Tracks, as Abandoned"
- SRS Index #303 "Potential Release from L-Area Disassembly Basin"
- SRS Index #305 "Potential Release from L-Area Reactor Cooling Water System, 186/190-L"

The proposed activity is within 200' of the L-Reactor Complex, also identified as the L-Area Complex, includes a reactor vessel subunit; a disassembly basin subunit; and a building and attached structures subunit. It is included on the Federal Facility Agreement (FFA) Appendix K.1 (D&D Facilities to be Decommissioned). An Early Action Record of Decision (EAROD) documents the selected remedy for the C-, K-, L-, and R-Reactor Complexes (SRNS-RP-2009-00707).

The only index within 200' of the activity is #479 and L-Reactor Complex; the rest are not applicable to the proposed activity.

Unit 584 is in the FFA because of potential metals and radionuclide contamination from the various activities associated with the above indices.

3. O&M ACTIVITY

A. O&M ACTIVITY

The scope of the activity is to remove the existing concrete pad, bollards, asphalt, chiller and related infrastructure and install a new concrete pad, bollards and chiller with corresponding infrastructure. Both activities will involve excavation at the planned depths of approximately 3'-3'6" of soil in depth for bollards and ~4"-6" below grade for the slabs.
Note: the existing pad and bollards may be left in place, but the option to remove it is provided here. Also, the demolition of the existing structure may not require excavation to the depths listed here, but the depths provide conservatism and flexibility.

B. O&M ACTIVITY SAMPLING AND MONITORING FOR HEALTH AND SAFETY

Unit 584 is in the FFA because of **potential** metals and radiological contamination. The activity is not within the unit but is within the 200' buffer area of Index No. 479 and L-Reactor Complex

Radiological survey will be required at the excavation site. If radiological contamination is found, Radiological Protection will determine if protective equipment and personnel access restrictions are required.

Worker health and safety will be directed and controlled as required in the Assisted Hazard Analysis (AHA) with approvals from Radiological Protection, Industrial Hygiene, and the Environmental Compliance Authority (ECA).

C. HEALTH AND SAFETY PLAN

The health and safety concerns involve **potential** worker exposure to metals and radionuclide contamination.

Worker safety is covered in the Assisted Hazard Analysis and Work Packages and reviewed in the Pre-job briefing.

D. CHARACTERIZATION AND SAMPLING PLAN FOR THE AFFECTED AREA WITHIN THE UNIT

Unit 584 is in the FFA for potential metals and radiological contamination. Radiological Protection has prepared a sampling plan and will conduct surveys for work in this area.

Industrial Hygiene and Radiological Protection will review the work order and Assisted Hazard Analysis (AHA) to determine worker protection requirements.

If unexpected contamination is found, a Time-Out will be called. The ECA will be notified. The ECA will notify the SRNS On-Scene Coordinator (Bette Ross), who may request additional work scope and sampling from soil disturbed by the activity.

E. CONTAMINATED MATERIALS MANAGEMENT AND DISPOSAL
The excavated soil will be dispositioned per GCO instruction.

F. ENVIRONMENTAL PLANS AND PERMIT MODIFICATIONS
This activity requires an approved site clearance permit (ref. 5).

4. CONTINGENCY PLAN

During implementation of the activity, if conditions change at any time such that the activity is no longer considered "minor" (as defined in Reference 2) or any other unanticipated event occurs, the project manager, the planner, the Operations Manager or ECA shall:

- Stop work, secure the area, contain and stabilize the area if it is safe to do so.
- Immediately notify the SRNS-OSC and request a path forward. If necessary, the SRNS-OSC will notify the DOE-OSC and receive concurrence on the path forward
- Make any necessary changes to work authorization documents.

5. DOCUMENTATION AND REPORTING

The facility will transmit the following documentation to the SRNS-OSC within twenty (20) days of the completion of the activity:

- A statement that the activity is complete
- Sampling and characterization data (only if radiological soil sampling produces issues)

References

1. WSRC-OS-94-42, *Federal Facility Agreement for the Savannah River Site,* Administrative Document Number 89-05-FF, effective August 16, 1993. (Revision 0, Appendix C for Fiscal Year 2017)

2. WSRC-RP-96-45, *Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U),* December 15, 1996.

3. SRNS-RP-2009-00707, *Early Action Record of Decision Remedial Alternative Selection for the C-, K-, L-, and R-Reactor Complexes (U),* December 1, 2009.

4. EEC # OBU-L-2021-0254 Rev. 2, *Design and Install Replacement of 105-L Chiller Unit*

5. *Site Clearance Permit Number* SC-8624

6. *Soil Sampling Plan for 105-L + 15 Chiller Unit Replacement* (WO#2040508-04)