MINOR OPERATION AND MAINTENANCE ACTIVITY PLAN

Installation of 12 Lysimeters in E-Area – Site Index 592

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1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is for the installation of 12 Lysimeters in E-Area. The work will protect human health and the environment and minimize the impact to long term characterization and remediation efforts. E-Area Low-Level Waste Facility (ELLWF) is an active operating facility with the purpose of disposing of low-level waste in the E-Area LLW Disposal Units. The disposal units include Engineered Trenches (ET), Slit Trenches (ST), Components-In-Ground (GIC) trench, Low-Activity Waste Vault (LAWV), Intermediate Level Vault (ILV), and the Naval Reactor Disposal Area (NRCDA).

Operation of the ELLWF began with placement of the first low-level waste box within the Low-Activity Waste (LAW) Vault on September 28, 1994. Disposal operations are anticipated to continue until year 2065, and a 100-year institutional control period will follow cessation of disposal operations.

This activity is within Site Index (SI) 592 (E-Area Low Level Waste Facility) of the Federal Facility Agreement (FFA, Reference 1). SIs are also called RCRA/CERCLA Units.

This plan is characterized as "minor intrusive activity" based on the soil excavation meeting the definition of both "minor" and "intrusive" as defined in Reference 2.

2. AREA DESCRIPTION AND CONDITIONS

The lysimeters will be installed adjacent to a RCRA/CERCLA unit as identified as:

> Waste Unit: 592, E-Area Low-Level Waste Facility, 643-26E [including Low Level Radioactive Waste Disposal Facility (non-hazardous waste disposal portion of 643-7E) and Combined Spills from 643-G as reported in WSRC-RP-97-419] Location: E-Area, 643-26E, The LLWDF is located north of 643-E. Contaminants of Concern are Radionuclides.

To date, there has been no remediation of waste unit 592; the status of this unit is active. Per Appendix E of Reference 2, Remedial Actions are scheduled to begin in March 2063 for waste unit 592. A site evaluation has not been performed and impacts to the Operable Unit (OU) have not been determined.

3. O & M ACTIVITY

A. O&M Activity Description

The O&M activity involves:

The O&M activity is the installation of 12 Lysimeters in E-Area. If soil is generated, then the soil should be placed as close to the original location as reasonably possible. The disposal of any soil will be per the environmental compliance authority (ECA), generator certification official (GCO), and radiological protection (RP) direction.

B. O&M Activity Sampling and Monitoring for Health and Safety

The work area will be barricaded with rope or rigid handrail to ensure that access is controlled for personnel safety around the work area. Worker health and safety will be directed and controlled as required in the Assisted Hazard Analysis.

C. Health and Safety Plan

The health and safety concerns involve worker exposure to contaminants of interest listed in section 2 above. The work will be completed in accordance with the requirements stated in the AHA. The safety requirements and personal protective equipment described in the AHA are appropriate for the potential hazards related to the RCRA/CERCLA units.

This activity is not expected to involve other environmental plans / permits, required maintenance and inspections, or erosion control practices.

RP may prepare a sampling plan for work in this area and will conduct sampling of the soil excavated during this activity. If unexpected contamination is found, the SRNS On-Scene Coordinator (OSC) may request additional work scope and sampling from soil disturbed by the activity. Material removed as part of the excavation may be returned as backfill when the activity is completed.

E. Contaminated Materials Management and/or Disposal

Any waste materials generated during this activity will be disposed of as appropriate. This waste will be managed as appropriate per facility GCO and ECA guidance and handled in accordance with existing SRNS waste guidance procedures.

F. Environmental Plans and Permit Modification Requests:

This activity is not expected to involve other environmental plans / permits, required maintenance and inspections, or erosion control practices.

4. CONTINGENCY PLAN

If at any time during the implementation of the activity, the conditions change, such that the activity is no longer considered "minor" (greater than 10% of a waste unit area impacted or disturbed), the Shift Operations Manager (SOM) shall be notified and the Facility Manager (or designee) or the ECA shall:

• Immediately notify the SRNS-OSC. The SRNS-OSC will notify the DOE-OSC.

• Contain and stabilize the area, investigate as necessary to determine the necessary change in the activity plan, secure the area, and stop work.

• Update the SRNS-OSC as to the findings and the requested path forward. The SRNS-OSC will communicate the information to the DOE-OSC and obtain concurrence on the path forward.

5. DOCUMENTATION & REPORTING

The Project Manager will transmit the following documentation to the SRNS-OSC within twenty days of the completion of the activity:

- The signed O&M plan
- Any sampling and characterization data collected

The following information is not expected to be generated by this activity, but, if generated, will be forwarded to the SRNS-OSC:

- The quantity (if any) of any contaminated materials generated, and
- The disposal location of any contaminated material, if generated.

References

1. SRNS-OS-94-42, Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 1 of Appendix C and Revision 0 of Appendix E for Fiscal Year 2018.
2. SRNS-RP-96-45, Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U), December 15, 1996.
3. AHA # BG-6218 R0: E-Area Lysimeter Installation.
4. WO # 02121434: "E-Area Lysimeter Well Installation"