MINOR OPERATION AND MAINTENANCE ACTIVITY PLAN

Excavation Activities at Steel Creek Dam Service Bridge 686-G.

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1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is for the excavation activities at Steel Creek Dam Service Bridge 686-G. The work will protect human health and the environment and minimize the impact to long term characterization and remediation efforts. The primary purpose of L-Lake and the Steel Creek Dam was to provide a type of cooling reservoir for L-Reactor. Due to SRS changing the production missions, the dam has an enhanced requirement by ensuring the minimum stream bed flows are maintained and support downstream ecological resources.

Due to radioactive contamination present in the sediment, L-Lake is within the Steel Creek Integrator Operable Unit, which is an SRS Federal Facility Agreement Waste Unit. This activity is within Site Index (SI) 509 (Steel Creek Integrator Operable Unit (including L Lake (NBN) and L-Area Reactor Discharge Canal). 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 area in which the activity will be conducted is located within the southeastern quadrant of SRS at L-Lake and the Steel Creek Dam, 686-G. The excavation zone is approximately 10 feet x 10 feet and will be dug to approximately 2 feet. The location of the repair to be completed is shown on Attachment 1.

Contaminants of interest near the work area include:

Radionuclides: Cesium-137 and Cobalt-60

3. O & M ACTIVITY

A. O&M Activity Description

The O&M activity involves:

The O&M activity involves excavation activities at Steel Creek Dam Service Bridge 686-G. The work will be performed in accordance with the provisions of Asset Suite Work Order # 2084558 and AHA # 23238.

All excavated soils will be returned to the original location of soil disturbance. 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.

D. Characterization and Sampling Plan for the Affected Area within the Unit

A Soil Sampling plan has been generated. Reference Soil Sample Plan for L-Lake Steel Creek Bridge Anchor Installation for procedures. RP 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 will 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 Waste Management and ECA guidance and handled in accordance with existing SRNS waste guidance procedures. Clean soil can be put back in place once the leak repair is complete.

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 material generated, and
- The disposal location of any contaminated material, if generated.

Attachments

Attachment 1. Location of Repair at L-Lake Steel Creek Dam Service Bridge 686-G
Attachment 2. Aerial Image of L-Lake
Attachment 3. L-Lake Waste Unit Boundary

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 # 23238: “686-G Vendor to Excavate at Base of Steel Creek Bridge”.
4. WO# 2084558: “Excavation for Painting Steel Creek Service Bridge 686-G”.

Attachment 1. Approximate Location of Excavation for Repair at L-Lake Steel Creek Dam Service Bridge 686-G



= Location of repair

Attachment 2. Aerial Image of L-Lake



= Location of repair

Attachment 3. L-Lake Waste Unit Boundary

