Minor
OPERATION AND MAINTENANCE
Activity Plan

Water Removal Activities to Investigate, Identify and Repair Water Intrusion into HAD Cells C&D, 772-F Courtyard Site Evaluation Area-SRS Index Number 308

Prepared by: _____ 8/25/2020
C. B. Stevens — Date
Environmental Compliance Authority F/H Labs ECA

Approved by: _____ 08/25/2020
R. M. Simmons — Date
RPD FLM

Approved by: _____ 8/25/2020
D. K. Parkman — Date
F-Area Complex Operations Support Manager

Approved by: _____ 8/25/20
C. J. Ward — Date
Environmental Compliance Authority Manager EC&ACP

1. INTRODUCTION

This Operation and Maintenance (O&M) Plan details water removal activities to investigate, identify and repair water intrusion source(s) into HAD Cells C&D, which are located in the 772-F courtyard. This O&M Plan is characterized as "minor intrusive" because there is no planned excavation activities of the RCRA/CERCLA area (Reference 1). In addition, the water being removed will be transferred to and treated at a CERCLA Offsite Rule unit (Reference 2).

This activity is within a CERCLA Unit, SRS Index Number 308, Low Level Radioactive Drain Lines from F-Area Laboratory, 772-F, F-Area Laboratory (772-F & -1F) High Activity Tanks C and D of the Federal Facility Agreement (FFA, Reference 3). It is also within 200 feet of other CERCLA Units as outlined in #2 (AREA DESCRIPTION AND CONDITIONS) below.

2. AREA DESCRIPTION AND CONDITIONS

The work area is located in the 772-F courtyard.

Areas and contaminants of interest near the work area include the following:

- Site Evaluation Area, SRS Index Number is SPF-008, 772-F Stack release 4/56, 2/68 and 5/68. Contamination released from the 772-F Stack to the surrounding grounds. The area surrounding the 772-F Stack is approximately 200 feet radius. The constituents of concern are unknown alpha, beta and gamma.
- CERCLA Unit, SRS Index Number 308, Low Level Radioactive Drain Lines from F-Area Laboratory, 772-F, F-Area Laboratory (772-F & -1F) High Activity Tanks C and D.
- CERCLA Unit, SRS Index Number 429, Spill on 05/26/88 of 10 Gallons of Ethylene Glycol-Rad from F-Area Laboratory, No Building Number (NBN).
- CERCLA Unit, SRS Index Number 563 F-Area Process Sewer Lines, As Abandoned, NBN. The F-Area Process Sewer Lines conveyed wastewater potentially contaminated with metals, organics, and radionuclides from separations process facilities.

Cell C&D sump water intrusion analysis was conducted for chemical constituents and reported in the Special Waste Compliance Plan (SWCP) for Contaminated Water Transfers to ETP from Cells C&D F/H Area Laboratories (Reference 4). Ongoing sampling/analysis and ETP WAC compliance are also outlined in this SWCP.

3. O&M ACTIVITY

A. O&M Activity Description

This O&M activity involves water removal efforts to investigate, identify and repair water intrusion source(s) into HAD Cells C&D, which is located in the 772-F courtyard. The water removal activities involve the utilization of procedure L4.02-30132, SAMPLE AND TRANSFER HAD CELL C AND/OR D. Work is expected to take 3 to 6 months.

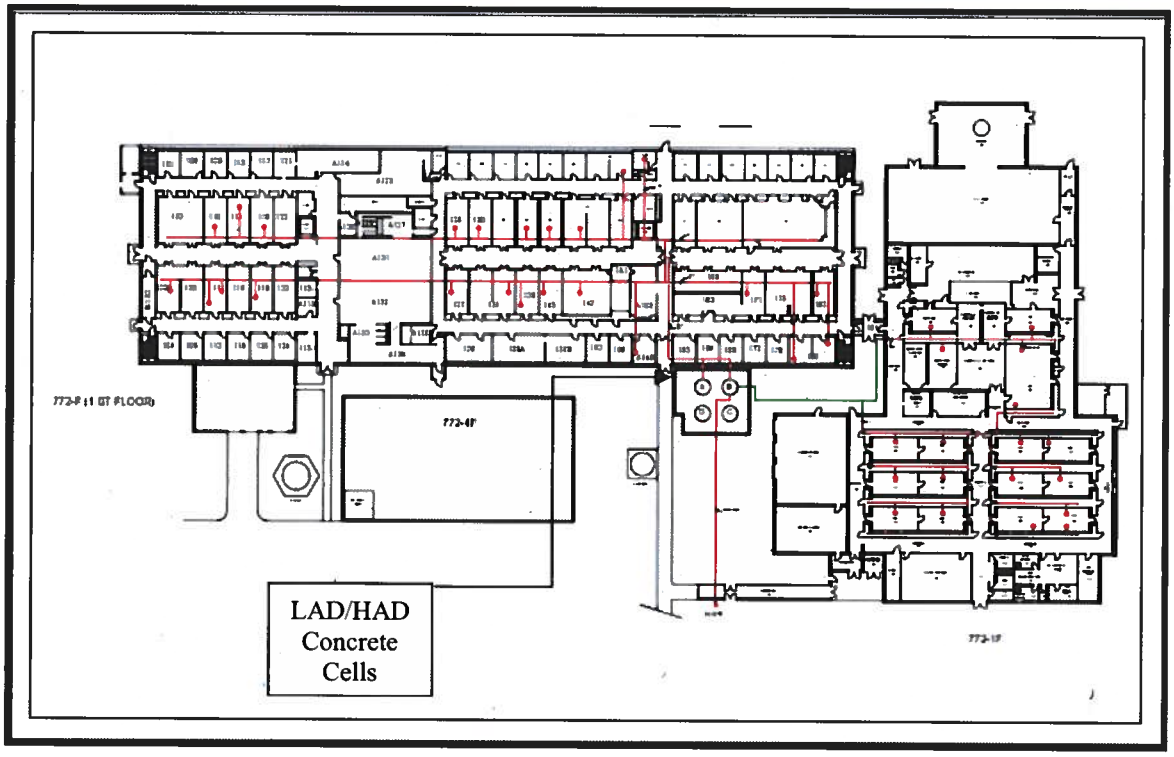


Figure shows location of the LAD/HAD cells.

NO SOILS WILL BE EXCAVATED AND WATER REMOVAL ACTIVITIES WILL BE MANAGED BY PROCEDURE L4.02-30132 AND THE SWCP.

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. This is to ensure personnel safety around the work area.

Worker health and safety will be directed and controlled as required in the Technical Work Documents (TWD) (i.e., procedure) and the Assisted Hazard Analysis (AHA(Reference 5)).

RPD will monitor the water removal activities for radioactive contamination per their standard procedures and the work permit. If radiological contamination is encountered, RPD will determine if protective equipment and personnel access restrictions are required.

C. Health and Safety Plan

The health and safety concerns involve worker exposure to contaminants of interest listed in Section 2 above.

The TWD and/or AHA for these activities will contain instructions to comply with this plan.

The safety requirements and personal protective equipment described in these documents is appropriate for the potential hazards of the waste units.

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

The SWCP outlines the ongoing sampling/analysis and ETP WAC compliance for disposition of the water removal.

Additional work scope and sampling involving the water removal activities will be addressed per guidance from the Facility Manager (FM) or designee, RPD and the SRS On-Scene Coordinator (OSC) should radioactive contamination outside the identified area be found present.

E. Contaminated Materials Management and/or Disposal

The job control waste will be disposed as "Low Level Radioactive Waste" under current F/H Lab Waste Management procedures as deemed appropriate by the FM and SRS-OSC. Water removal from Cells C&D is managed by the SWCP.

F. Environmental Plans and Permit Modification Requests

No permit modifications are required as a result of this activity.

4. CONTINGENCY PLAN

If at any time during the implementation of this activity, the conditions change such that the activity is no longer considered "minor" (as defined in Reference,1) or any other unanticipated event occurs, the FM or Environmental Compliance Authority shall:

- Immediately notify the SRS-OSC. The SRS-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 SRS-OSC as to the findings and the requested path forward. The SRS-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 SRS-OSC by the 20th day of the month the activity is completed:

- The signed O&M plan
- Any sampling and characterization data collected
- Quantity (if any) of any contaminated materials generated
- Treatment, storage, and disposal location of contaminated material

6. REFERENCES

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

2. ARF#14719, "Notice of Acceptability Pursuant to the CERCLA Off-Site Rule Savanah River Site, Aiken, SC", J.I. Palmer to J. Allison, May 23, 2007.

3. SRNS-OS-94-42, Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 0 of Appendix C and Revision 0 of Appendix E for Fiscal Year 2019.

4. Q-WCP-F-00002, Special Waste Compliance Plan (SWCP) for Contaminated Water Transfers to ETP from Cells C&D F/H Area Laboratories, June 22, 2020.

5. Assisted Hazard Analysis (AHA) #CLB-9811, June 6, 2020.