OPERATION AND MAINTENANCE
ACTIVITY PLAN

Utility Pole Replacement Project

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1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is being written to support work activities planned for the treatment of utility poles as shown in Figure 1. The yellow highlighted poles are the ones slated to be treated this year.

Figure 1

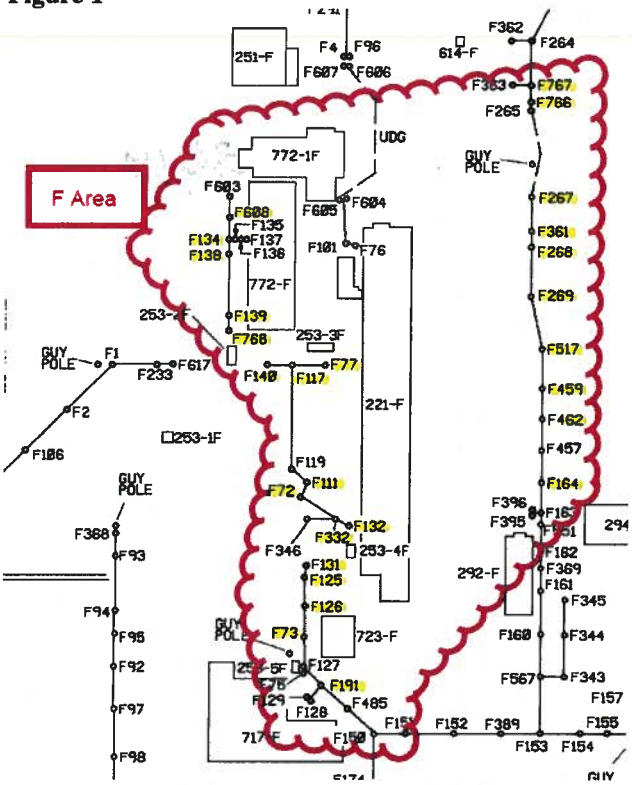
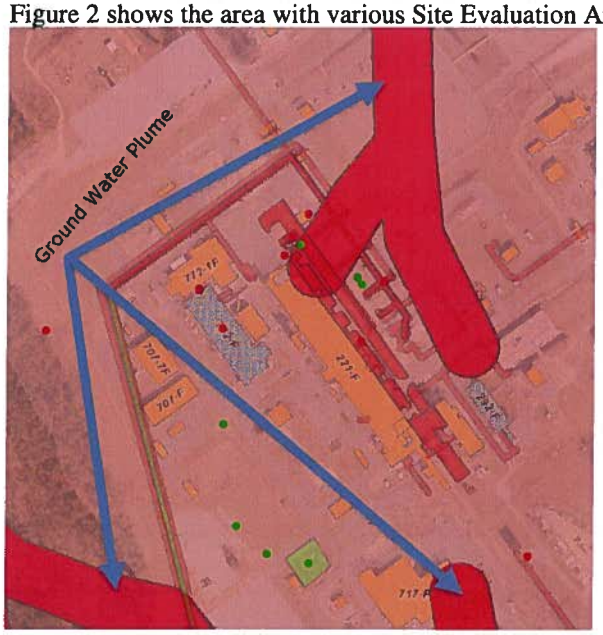


Figure 2 shows the area with various Site Evaluation Areas identified.



Note: The areas in Figure 2 above that are marked by the blue arrow are the groundwater plume identified for F-area and are not addressed in this document. Contamination in these areas is relatively deep and this activity involves only surface (about 1 foot) excavation only.

2. AREA DESCRIPTION AND CONDITIONS

Contaminants of interest near the work area include:

The following Site Evaluation Areas exist within 200 feet of this work location:

1) Waste unit 141, F-Area Inactive Process Sewer Line from Building to Security Fence
   Location: F-Area.
   Contaminants – Cs-137, Pu-238, Pu-239, Sr-90, Am-241, U-235, U-238, H-3.
   Note: Cs-137 and Sr-90 were reported as most prevalent. Tritium in this system would be in the form of tritiated water (TOT or TOH). It should not be present from this source at this time.

2) Waste Unit 563, F-Area Process Sewer Lines as Abandoned.
   Location: F-Area
   Contaminants: Unknown alpha, beta, gamma, and metals

3) SPF-002, 211-F Recycle Sump Overflow, 1/1/55
   Location: West of 211-F
   Constituents of Concern: Ru-106, Sr-90, Cs-137

   Note: Ru-106 is a fission product and has a half-life of 373 days. It is no longer present.

4) SPF-003, Jumper Work, 4/1/56
   Location: Area between the 221-F Railroad Tunnel Cut fence and the A-Line fence.
   Contaminants: Ru-106, Cs-137, Sr-90

   Note: Ru-106 is a fission product and has a 373-day half-life. That is roughly 60 half-lives from the date the spill occurred. The Ru-106 that was present at that time has decayed away.

5) SPF-005, 292-F Stack Releases, 5/57, 8/57, and 11/61
   Location F-Area Adjacent to and South of 292-F
   Constituents of concern: Fission Products

   Note: The Reference 1 only provides for Ru-106. Ru-106 is a fission product and has a 373-day half-life. The fact that there is one fission product present (Ru-106) says that others were present also. The most significant would be Cs-137 and Sr-90. Sr- 90 has a ~29 yr half-life and Cs-137 has a 30 yr half-life. Both radionuclides should still be present.

6) SPF-006, 292-1F Vessel Vent Fan Work, 11/1/57
   Location: F-Area, North and East of 221-F and North of 292-F (2 locations on map)
   Contaminants Unknown beta/gamma

7) SPF-007, Nash Exhauster Leak, 4/1/61
   Location: 500 Sq Ft of drainage ditch east of A-Line.
   Constituents Of Concern: Fission Products

   Note: The Reference 1 only provides for Ru-106. Ru-106 is a fission product and has a 373-day half-life. The fact that there is one fission product present (Ru-106) says that others were present also. The most significant would be Cs-137 and Sr-90. Sr- 90 has a ~29 yr half-life and Cs-137 has a 30-yr. half-life. Both radionuclides should still be present.

8) SPF-008, 772-F Stack (old stack) releases 4/56, 2/68, 5/68
   Location: F-Area
   Contaminants: Unknown alpha, beta and gamma

9) SPF-009, 221-F Segregated Solvent Sump

Location: 1200 Sq Ft near 900 apron (seg solvent) and north seepage basin
Constituents Of Concern: Sr-90, Cs-137, Ru-106

Note: Ru-106 is a fission product and has a half-life of 373 days. It is no longer present.

10) SPF-018, Spill on 6/1/59 of <1 Ci of segregated solvent from building 211-F
Location: 211-F
Constituents of Concern: Fission Products, TBP, n-paraffin

Note: If fission products were present, that can be assigned to Cs-137 and Sr-90.

A site evaluation has not been performed and impacts to the IOU have not been determined.

3. O & M ACTIVITY

A. O&M Activity Description

The O&M activity is treating power poles identified in Figure 1 (highlighted in yellow) utility poles in F-Area. Every attempt should be made to place any soil removed from the hole back into the hole.

If any soil cannot be placed back into its original hole it will be screened by RCO for free release to the 3 rivers landfill.

a. If the excess soil is below radiological limits and can be cleared for release to the 3 Rivers Landfill it shall be placed into an appropriate container and shipped accordingly.
b. If the soil cannot be cleared for release to the 3 Rivers Land Fill it will be placed into one or more containers to be specified by the facility GCO. It shall be sampled for constituents to be determined by the F-Area ECA/Waste CTF. The containers will be held pending analysis and waste characterization.

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 due to personnel safety around the work area.

Worker health and safety will be directed and controlled as required in the work package

C. Health and Safety Plan

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

The Work Order 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

No formal sampling plan will be utilized for work in this area. If soil is to be removed from this area, it will be sampled by RCO personnel. These samples will be analyzed to allow the soil to be cleared for release to the 3 Rivers landfill. If the excess soil is released for disposal at the 3 Rivers landfill, no further sampling currently planned. If the excess soil cannot be cleared for release it will be sampled for Waste Characterization and planning for that will occur when that determination is made. The F-Area Waste ECA/Waste CTF will provide specific analytical requirements for that material.

Additional work scope and sampling from the soil disturbance areas may be necessary and will be addressed per SRNS-OSC guidance, should radioactive contamination be found present.

E. Contaminated Materials Management and/or Disposal

The disposal of the waste materials generated during this activity will be contingent upon the survey results. Other clean waste originating from this job will be managed as appropriate and specified by RCO, or handled in accordance with existing F –Area procedures.

If radioactive contamination is found, the ECA will be contacted before any soil is placed into a container for disposal. Any other job control waste will be disposed of as "Low Level Radioactive Waste" under current F-Area Waste Management procedures if deemed appropriate by the SRNS-OSC.

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 the 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 Project Manager or Environmental Compliance Authority 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 by the 31st day of the month the activity was completed:

- the signed O&M plan
- Any sampling and characterization data collected,
- Quantity of contaminated materials generated, and
- 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