Minor
OPERATION AND MAINTENANCE
Activity Plan 25-002

Tornado Shelter Installation North of Trailer 704-746K in Site Evaluation Area 302

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1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is for the soil disturbance associated with the placement of a tornado shelter north of Trailer 704-746K in the K-Restricted Area (RA). This O & M Plan will provide a means by which soil/media disturbance can commence within Site Evaluation Areas (SEA) 302, while protecting human health and the environment, and minimizing impacts to long term characterization and remediation efforts. This O&M Plan is characterized as "minor intrusive" because less than 10 percent of the Site Evaluation Area will be excavated/disturbed.

2. AREA DESCRIPTION AND CONDITIONS

The Site Evaluation Area 302 is the K-Area Cooling Water Reservoir (186-K) identified as potential for having metals and radionuclides as being present (historically) in source water from the Savannah River.

This O & M Plan will direct sampling and O & M managed SEA disturbance activities within the K-Area Complex (KAC) Restricted Area immediately north of Trailer 704-746K, and east of the 186-K Cooling Water Reservoir. This soil disturbance is for the installation of a base foundation of crusher run material approximately 8" thick in a 45' X 15' area. It is anticipated that site prep will require a nominal 4" of topsoil removal prior to crusher run placement.

The topsoil removal location will be targeted for sampling by Radiological Protection (RP) in order to ensure that the potential contaminants of concern (primarily radionuclides) are assessed. Safety and health concerns are for personnel exposure to radionuclides. Previous work associated with Site Evaluation Area 302 and those similar within K-Area have not yielded any evidence of radionuclide presence in the environment. Radiological sampling reports will serve as the documents of record for allowance of subject soil disturbances to proceed. All results will be maintained by RP.

3. O&M ACTIVITY

A. O&M Activity Description

The planned soil disturbing activity in SEA 302 primarily involves minor excavation of topsoil (~4") to install a crusher run base foundation (~8") for the proposed tornado shelter. As expected, this work will essentially involve mechanical/heavy equipment use, vs physical hand digging.

This activity is expected to begin in the Fall/Winter of 2024 and complete by the end of the calendar year 2025. If this work scope requires significant change for any reason, the SRNS On-Scene Coordinator (OSC) will be contacted to determine if modifications to this O & M Plan are required.

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

Radiological Protection (RP) will perform sampling to support the subject soil disturbing activities that are described in this O & M Plan. There should be no waste associated with this activity in terms of soil, as it is anticipated (if clean) that it be spread at a nearby location. However, if soils contaminated by radionuclides are discovered, waste disposition will be performed typical for SRS waste protocol. Given that the soil from SEA 302 is found to be at or below background for radiological constituents, RP will allow for the excavation as described in Section D to proceed.

The work area will be barricaded to ensure that access is controlled.

Worker health and safety will be described and controlled, as required, in the Assisted Hazards Analysis.

C. Health and Safety Plan

The health and safety concern for this O & M Plan primarily involves worker exposure to potential radiological contamination. While there has been no detectible radiological contamination (above background) found in recent soil disturbances in K-Area SEA 302, RP shall be available for any questions or oversight requested during the process of

installation/construction, preparatory activities, and other associated excavations.

D. Characterization and Sampling Plan for the Affected Area within SEA 302

Soil sampling is required for any soil disturbance in this Site Evaluation Area. The soil sampling scope is defined in the "Soil Sampling Plan for Tornado Shelter North of 704-746K" (Ref. 2). It is currently available.

The characterization and sampling record for this minor intrusive O&M activity will be the RP sample data for the presence of radiological contamination in the soil/media.

If any radioactive contamination is found from sampling, the Environmental Compliance Authority (ECA), along with RP and K-Area Complex (KAC) Operations management will devise an alternative plan by which to carry out the excavation. As indicated above, evidence of soil contamination would likely require revision to this O & M Plan, or a possible addendum.

Additionally, the SRNS-OSC shall be notified by the Area ECA, and any additional work scope and sampling from the soil disturbance areas will be completed per SRNS-OSC guidance.

E. Contaminated Materials Management and/or Disposal

The disposition of any waste materials generated during this activity will be contingent upon sample results. If SEA 302 soil/media are determined to be "clean," normal waste disposal practices may be applied, as determined by the KAC Waste ECA. If contaminated, however, RP will advise soils/media/equipment disposition, in coordination with Waste Certification Engineering and the ECA. These options would be explored and fully described in a revised O & M Plan (or addendum).

Contaminated waste should be characterized and disposed of as "Radioactive Waste" under current SRNS/KAC Waste Management

procedures, or deconned, if deemed appropriate by RP and the SRNS-OSC.

F. Environmental Plans and Permit Modification Requests

The soil disturbing aspect of this task is not expected to involve environmental plans/permits or other required maintenance and inspections, except for potential erosion control practices.

The Site Use/Site Clearance Permit process will be addressed prior to soil disturbance initiation, as needed.

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" (is greater than 10% of the waste unit area impacted or disturbed) or any other unanticipated event occurs, the Facility Operations Manager 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 Facility Operations Manager or the ECA will transmit the following close-out documentation to the SRNS-OSC by the 20th day of the month following the month that the land disturbing 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.

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. *Soil Sampling Plan for Tornado Shelter North of 704-746K*