

NEW SITE IDENTIFICATION (NSI)

Part A – NEW SITE IDENTIFICATION INFORMATION (To be completed by the Task Lead for New Site)	
1. Site Title: Soil Beneath TAN-607 Decontamination Shop Sump	Site Code: TSF-54 NSI Evaluation Initiation Date: March 24, 2005
2. Task Lead For New Site: Wendell Jolley	Phone: 526-5990
3. NSI Coordinator: Nielsen Burch	Phone: 526-5676
4. Initiator or Initial Observer: Nathan Wheldon (Portage Environmental, Inc.)	Phone: 528-6608
5. Description of Suspected New Site and Location: <p>The suspected new site is located beneath the former TAN-607 Decontamination Shop Sump in the southwest corner of the TAN-607 building. The TAN-607 Decontamination Shop Sump (01TAN00001) is a 600-gal sump that received low-level radioactive waste discharges from the decontamination room. The sump measures 1.2 m (4 ft) by 1.2 m (4 ft) by 1.6 m (5.0 ft) in depth. The sump was lined with epoxy-coated stainless steel in the late 1980's. The decontamination room was active from 1957 to approximately 1975. From 1975 until the mid-1980s, the decontamination room was maintained in standby status and operated periodically. From the mid-1980s to February 1990, the facility was maintained in reserve status but was not used. From February 1990 to the time the liner was removed in 2004 the facility was in cold standby. The steel-lined concrete sump was removed as part of HWMA/RCRA closure activities for the Intermediate Level Radioactive Waste Management System: Treatment Subsystem (TAN-616). In February of 2005 the original concrete floor and non-load bearing walls of the sump (north and east) were removed as part of the closure activities. Additionally, the TAN-607 load bearing walls of the sump (west and south) were scabbled to remove staining and remains of radiological contamination as outlined in the HWMA/RCRA closure plan.</p> <p>During removal of the grout between the sump liner and the original sump concrete floor, laborers noticed droplets of elemental mercury. Work was halted as the mercury was cleaned up, then as work continued additional droplets would form. This iteration continued several times until there was no more visible mercury. To remove the concrete floor the sump was cut into pieces that could be lifted out and put into a RCRA-compliant box. As several of the cuts were made, monitored levels of airborne mercury exceeded the OSHA Threshold Limit Value (TLV) (up to 100 ug/m³), indicating the presence of mercury. As the floor was lifted a small amount of elemental mercury was visible along the south and west walls of the sump. This mercury was removed prior to soil sampling activities. Radiological surveys taken just above the soil showed a general field of 5 mr/hr.</p> <p>Because observed conditions indicated a release of hazardous and/or radioactive material to the underlying soils, soil samples were collected and analyzed in accordance with provisions of the approved HWMA/RCRA closure plan. The analytical data indicate elevated levels of mercury (highest observed total concentration of 226 mg/kg), the presence of TCE and PCE, and elevated radionuclide concentrations (Cs-137 concentrations ranging from 55 to 12,100 pCi/g). Aroclor-1260 is also present in the soils. A comparison of the 95% upper confidence limit (UCL) to the preliminary remediation goals (PRGs) (OSWER No. 9355.01-83A) revealed that the concentrations of Co-60, Cs-137, U-235, and Sr-90 were greater than the PRGs for the occupational scenario. The risk for nonradionuclide constituents is approximately 2E-06, of which the Aroclor-1260 provides most of the risk. Without the Aroclor-1260, the risk from the remaining RCRA constituents is considerably less than 1E-06. A soil sample collected from the area with the highest mercury concentration was re-analyzed for TCLP metals. Results show that the soil is not characteristically hazardous.</p> <p>Prior to backfilling the excavation, a cover was placed over the soils for future identification. A locator ribbon was also placed approximately 1 ft above the cover such that the contaminated soils can be easily identified if future excavation activities are determined necessary. The depth of the contamination is unknown since only surficial soil samples were taken. A drawing displaying the location of this area within building TAN-607 is shown in Attachment A.</p>	
6. Is the site SWMU as defined in OSWER DIRECTIVE 9502.00-6? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
7. Recommendation <input type="checkbox"/> Recommend not including as a new FFA/CO site. This site DOES NOT warrant further investigation, does not meet the criteria for acceptance, and should not be included under FFA/CO Action Plan. <input checked="" type="checkbox"/> Recommend including as new FFA/CO site. This site DOES meet the criteria for acceptance, may warrant further investigation, and should be included under FFA/CO Action Plan.	

NEW SITE IDENTIFICATION (NSI)

Recommended WAG and Operable Unit to which site should be assigned:

WAG: 10

Operable Unit: 10-08

Recommended action for this site:

No Action No Further Action Remedial Action under Existing ROD Track 2 RI/FS

8. Responsible Manager Signature:

Name: Michael Hodel

Signature: *Michael P Hodel*

Date: 5-4-05

NEW SITE IDENTIFICATION (NSI)

PART B - INEEL FFA/CO RESPONSIBLE PROGRAM MANAGERS (RPM'S) CONCURRENCE

Site Title:
Soil Beneath TAN-607 Decontamination Shop Sump

Site Code:
TSF-54

DOE-ID FFA/CO RPM Concurrence: Concur with recommendation. Do not concur with the recommendation.

Signature: Kathleen E. Hair Date: 5/09/05

Explanation: This site was identified during closure of a Voluntary Consent Order tank system. It should be placed in OU 10-08. The site may be addressed using the standards applied to other OU 1-10 soil sites. DOE's current goal is to complete remedial action in the TAN facility area in FY 05, if possible.

EPA FFA/CO RPM Concurrence: Concur with recommendation. Do not concur with the recommendation.

Signature: [Signature] Date: 5-19-05

Explanation: Agree the site should be placed in OU 10-08.

State of Idaho FFA/CO RPM Concurrence: Concur with recommendation. Do not concur with the recommendation.

Signature: Gayle E. Park Date: 7-25-05

Explanation: DEQ agrees that TSF-54, identified during partial closure of the intermediate-level radioactive waste management tank system, is a release site to soils that should be addressed under the FFA/CO. This site should be placed in Operable Unit 10-08 for further risk evaluation prior to developing a remedial action decision.

NEW SITE IDENTIFICATION (NSI)

Attachment A

