

SECTION 4

Descriptions of ESI Sites

The following sections discuss the site history, summary of previous investigations, and future activities of the one IRP site and two MMRP sites that are in the ESI phase of the CERCLA process.

4.1 IRP ESI Sites

4.1.1 Site 37—Camp Geiger Area Surface Dump

Site 37, the Camp Geiger Area Surface Dump, encompasses approximately 4 acres in the Camp Geiger area of the Base (**Figure 4-1**). Between 1950 and 1951, Site 37 was used for the surface disposal of wastes including motor parts, garbage, and wood. During investigations at Site 37, buried debris was identified. US 17 Bypass runs through the northeastern portion of the site and the rest of the site is primarily wooded. In 2010, buried munitions were discovered in the vicinity and the area was identified as UXO-24 under the MMRP (**Section 4.2.2**).

FIGURE 4-1
IRP Site 37



Previous investigations are listed in **Table 4-1**.

TABLE 4-1
Previous Investigations Summary, IRP Site 37

Previous Investigation/Action	Date	Activities
Initial Assessment Study (WAR, 1983)	1983	The IAS was conducted to identify potential hazardous sites at MCIEAST-MCB CAMLEJ. No hazardous wastes were reportedly disposed of at Site 37, and no further assessment was recommended.
Confirmatory Site Assessment (Osage, 2011)	2009-2011	To verify the presence or absence of contamination due to the site's history as a dump, confirmatory sampling was conducted. Soil and groundwater samples were collected for VOCs, semivolatile organic compounds (SVOCs), pesticides/polychlorinated biphenyls [PCBs], herbicides, and metals. Potential unacceptable risks to the environment were identified due to exposure to pesticides and herbicides in soil and an additional investigation was recommended.
UXO-24 and Site 37 Preliminary Assessment/Site Investigation (CH2M HILL, 2014)	2013 - 2014	In 2013, a PA/SI was initiated to evaluate the nature and extent of potential MEC and MPPEH at UXO-24 (described in Section 4.2.2) and to evaluate the potential risk from pesticides and herbicides identified during the Site 37 Confirmatory Site Assessment. At Site 37, field activities included soil sampling for pesticide and herbicide analysis. Pesticides were detected at concentrations exceeding the screening criteria; however, no potential human health or environmental risks were identified due to exposure to soil. During the MEC investigation activities, buried debris was identified. The PA/SI recommended an ESI to delineate the nature and extent of the waste disposal area.

4.1.1.1 Future Activities

The ESI will be conducted in FY 2015/FY 2016 (**Schedule 4-1**). Based on the findings of the ESI, the path forward for the site will be determined.

Schedule 4-1
IRP Site 37
IRP & MMRP Site Management Plan FY 2016
MCIEAST-MCB CAMLEJ

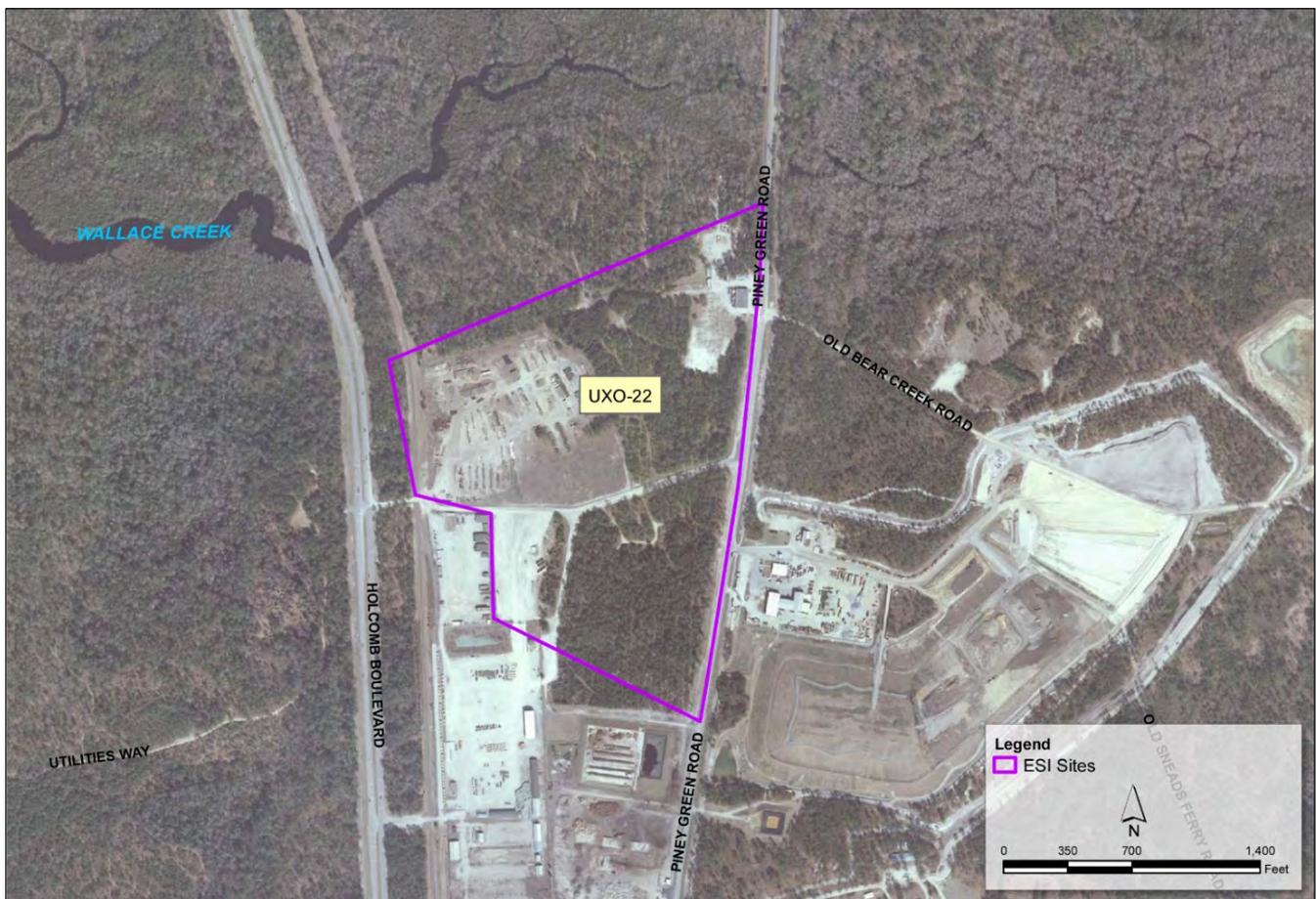
ID	Task Name	Duration	Start	Finish	2015												2016						
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
1	Expanded SI for UXO-24/Site 37	374 days	Fri 11/21/14	Wed 4/27/16																			
2	Draft UFP-SAP	69 days	Fri 11/21/14	Wed 2/25/15																			
3	Review Period (Navy/Base)	55 days	Thu 2/26/15	Wed 5/13/15																			
4	Review Period (USEPA/NCDENR)	30 days	Thu 5/14/15	Wed 6/24/15																			
5	Final UFP-SAP	10 days	Thu 6/25/15	Wed 7/8/15																			
6	Field Investigation/Data Evaluation	80 days	Thu 7/9/15	Wed 10/28/15																			
7	Draft Expanded SI Report	60 days	Thu 10/29/15	Wed 1/20/16																			
8	Review Period (Navy/Base)	30 days	Thu 1/21/16	Wed 3/2/16																			
9	Review Period (USEPA/NCDENR)	30 days	Thu 3/3/16	Wed 4/13/16																			
10	Final Expanded SI Report	10 days	Thu 4/14/16	Wed 4/27/16																			

4.2 MMRP ESI Sites

4.2.1 UXO-22—Sites 6 and 82 (OU 2)

Site UXO-22 covers approximately 75 acres between Holcomb Boulevard and Piney Green Road on the Mainside area of the Base (**Figure 4-2**). UXO-22 encompasses the location of the former Munitions Disposal Area and portions of IRP Sites 6 and 82 within OU 2. LUCs for intrusive activities are currently in place at Sites 6 and 82 that encompass UXO-22. Disposal trenches containing MPPEH (including expended 105-mm cartridges); communication wire; graphite battery packs; containers of petroleum, oil, and lubricant (POL); and metal 55-gallon drums were discovered and removed during the OU 2 RI (Baker, 1993), and additional MPPEH and munitions debris (MD) were identified during Supplemental Investigation activities conducted from 2009 to 2010. No former range activities are known to have occurred at the site. Current land uses at Site UXO-22 are industrial and commercial and consist of operation of the Base truck scales, equipment staging areas, parking lots, and a groundwater remediation system for Site 82.

FIGURE 4-2
MMRP Site UXO-22



Previous investigations are listed in **Table 4-2**.

TABLE 4-2
Previous Investigations Summary, MMRP Site UXO-22

Previous Investigation/Action	Date	Activities
Preliminary Assessment/Site Investigation (CH2M HILL, 2013)	2011-2013	<p>A field investigation was conducted to evaluate the presence and nature of MC contamination. Field activities included soil and groundwater sampling for explosives residues and metals. Explosives residues and metals were detected in exceedance of screening criteria in subsurface soil, sediment, and groundwater samples.</p> <p>Potential human health and ecological risks were identified from exposure to metals in soil, including surface soil in the ephemeral drainage. The metals exceedances are likely associated with the long-term use as a historical storage and waste disposal area rather than with the presence of MPPEH and MEC. Therefore, it was recommended that metals in soil be addressed as part of IRP Sites 6 and 82.</p> <p>Potential explosive hazards were identified based on the MEC and MPPEH found onsite during previous IRP investigations. An RI was recommended to further characterize the nature and extent of MEC. Additionally, a MEC surface clearance was recommended to minimize explosive risks from unintentional detonations, especially in the wooded areas and in the former Defense Reutilization and Marketing Office (DRMO) area.</p>
Draft Expanded Site Investigation	2013-2015	<p>An ESI was conducted to further investigate the presence and nature of MEC and MPPEH and to evaluate the extent of the battery disposal area identified during the PA/SI. Field activities included DGM, an intrusive investigation, test pitting and collection of soil samples from the battery disposal area, and surface clearing and soil sifting within a portion of the former DRMO. The data is being evaluated and the ESI Report will be submitted in 2015.</p>

4.2.1.1 Future Activities

The ESI Report will be completed in 2015. An Explanation of Significant Difference (ESD) for OU 2 is planned to incorporate an intrusive activity control for potential MEC into the LUCs for OU 2 (**Schedule 4-2**).

4.2.2 UXO-24—Camp Geiger Area

Site UXO-24 covers approximately 9 acres of mostly wooded land east of G Street in the Camp Geiger area of the Base (**Figure 4-3**). Prior to the 1950s, the site was completely wooded. Between 1950 and 1951, the site was used as a surface dump for items such as wood, tires, and scrap metal (Osage, 2011). During the late 1950s, the site was partially cleared for the construction of a carpenter shop, lumber rack, and paint shop in the northern portion of the site. Buried discarded military munitions (DMM) were discovered at UXO-24 in 2010. A limited visual site inspection conducted by Base Explosive Ordnance Disposal (EOD) personnel found additional DMM and MPPEH in the area surveyed. Because Site UXO-24 also encompasses the majority of Site 37 (**Section 4.1.1**), the two sites are being investigated simultaneously.

FIGURE 4-3
MMRP Site UXO-24



Previous investigations are listed in **Table 4-3**.

TABLE 4-3
Previous Investigations Summary, MMRP UXO-24

Previous Investigation/Action	Date	Activities
UXO-24 and Site 37 Preliminary Assessment/Site Investigation (CH2M HILL, 2014)	2013-2014	In 2013, a PA/SI was initiated to evaluate the nature and extent of potential MEC and MPPEH at UXO-24 and to evaluate the potential risk from pesticides and herbicides identified during the Site 37 Confirmatory Site Assessment (described in Section 4.1.1). At UXO-24, field activities included DGM and an intrusive investigation. Approximately 1,500 anomalies were identified during DGM, and intrusive investigation of 989 of the anomalies resulted in the discovery of 14 MEC items, consisting of 2 40-mm high explosive projectiles, 1 40-mm projectile, and 11 fuzes. During the MEC investigation activities, buried waste was identified. The PA/SI recommended an ESI to delineate the nature and extent of the waste disposal area.

4.2.2.1 Future Activities

The ESI will be conducted in FY 2015/FY 2016 (**Schedule 4-3**). Based on the findings of the ESI, the path forward for the site will be determined.

