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FINAL AFTER ACTION REPORT FOR SITE 11 CAFFEE ROAD LANDFILL NSWC INDIAN  
HEAD MD  
08/01/2014  
CH2M HILL

Final

# After Action Report for Site 11 – Caffee Road Landfill

## Naval Support Facility Indian Head Indian Head, Maryland

Contract Task Order JU35

August 2014

Prepared for

**Department of the Navy  
Naval Facilities Engineering Command  
Washington**

Under the

**NAVFAC CLEAN 1000 Program  
Contract N62470-08-D-1000**

Prepared by



**Chantilly, Virginia**

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# Acronyms and Abbreviations

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AGVIQ-CH2M HILL JV III	AGVIQ and CH2M HILL Joint Venture III
DFOW	definable feature of work
ESS	Explosives Safety Submission
EZ	exclusion zone
LTMP	long-term monitoring plan
LUC	land use control
MDAS	material documented as safe
MEC	munitions and explosives of concern
MPPEH	material potentially presenting an explosive hazard
NSF-IH	Naval Support Facility Indian Head
QC	quality control

## 1 Munitions Response Site Description

### 1.1 Description of the Munitions Response Site

Site 11 is located in the southeast portion of the Main Installation of Naval Support Facility Indian Head (NSF-IH) in Maryland. The site is situated at the southern end of Caffee Road, extending about 200 feet on either side of the road (Figure 1). The site is bordered by an unnamed creek and wetland to the west and by Mattawoman Creek to the south and east.

### 1.2 Construction Support

This After Action Report (AAR) addresses the munitions response presented in the *Explosives Safety Submission for Site 11 – Caffee Road Landfill, Naval Support Facility Indian Head, Indian Head, Maryland* (CH2M HILL, 2011; hereinafter referred to as the ESS). The munitions response action addressed in the ESS was associated with the following intrusive activities: installation of site boundary stakes at Areas A and B; installation of erosion and sediment controls (i.e., a super silt fence) at Area A; and construction of permanent monitoring wells at Area A. These activities were performed using anomaly avoidance techniques.

### 1.3 Site History

The shoreline along Site 11 and five material potentially presenting an explosive hazard (MPPEH) items located within the site were addressed under *Explosives Safety Submission for Site 17 Construction Support and Interim Removal Action (Amendment 01), Naval Support Facility Indian Head, Indian Head, Maryland* (CH2M HILL, 2012). Response actions taken under this ESS are documented in *After Action Report for Site 17 Construction Support and Interim Removal Action, Naval Support Facility Indian Head, Indian Head, Maryland* (CH2M HILL, 2013). As noted in the referenced AAR, between May 9 and May 18, 2011, an estimated 2,400 pounds of material documented as safe (MDAS) were recovered along the shoreline of Site 11 and disposed of in accordance with the ESS. In addition, five MPPEH items, determined to be MDAS, were removed from the land portion of Site 11. These items were originally observed on November 10, 2010 during a visual surface survey of the land portion of Site 11. The MDAS was transported to Montgomery Scrap in Rockville, Maryland, where it was shredded on May 20, 2011. In summary, no munitions and explosives of concern (MEC) were discovered.

## 2 Request to Cancel Exclusion Zones

Since no exclusion zones (EZs) were established in the ESS, there are no EZs to be removed.

### 3 Summary of Munitions and Explosives of Concern and/or Material Potentially Presenting an Explosive Hazard

No MEC and/or MPPEH were encountered during activities documented in the ESS.

### 4 Relative Effectiveness and Residual Risk

The objective of the ESS was to provide anomaly avoidance support during implementation of the selected remedy. Because all surface MEC and MPPEH were removed during previous munitions responses and the surface of the landfill has been covered with at least 2 feet of a soil cover to prevent erosion and possible exposure of subsurface items, the residual risk from MEC/MPPEH at the site is considered to be low. Because this is a landfill, unauthorized digging is prohibited by workers in accordance with the land use control (LUC) plan (AGVIQ-CH2M HILL JV III, 2011a).

### 5 Summary of Quality Control and Quality Assurance Reports

Quality control (QC) was monitored through the definable features of work (DFOWs) using a three-phase control process. The QC manager was responsible for ensuring that the three-phase control process, including the Preparatory Phase, Initial Phase, and Follow-up Phase, was implemented for each DFOW listed in the Quality Control Plan (AGVIQ-CH2M HILL JV III, 2011b).

Contractor QC reports and contractor production reports were prepared and submitted to the project team by the QC manager every day of fieldwork, which included the days when the work under this ESS (installation of site boundary stakes at Areas A and B; installation of erosion and sediment controls (i.e., a super silt fence) at Area A; and construction of permanent monitoring wells at Area A) were performed (AGVIQ-CH2M HILL JV III, 2012a).

### 6 Maps

Figure 1 shows the location of Site 11 at NSF-IH. Figure 2 shows the boundaries for the construction support activities and landfill boundary (soil cover area).

### 7 Land Use Controls

The landfill cover at Site 11 only addresses a portion of the site. However, there is an LUC in place for the site. Comprehensive Environmental Response, Compensation, and Liability Act LUCs for Site 11 are documented in the *Final Land Use Control Remedial Design Plan for Site 11, Coffee Road Landfill, Naval Support Facility Indian Head, Indian Head, MD* (AGVIQ-CH2M HILL JV III, 2011a). The LUCs are land- and groundwater-use restrictions within the Site 11 area. The objectives of the LUCs for soil, solid waste, and near-shore sediment in Area A are to: (1) prohibit digging into or disturbing the existing cover or contents of the landfill, (2) prohibit residential development on the site, and (3) prohibit the use of the shallow groundwater beneath the site. There are no LUCs for Area B, but there are for the adjacent near-shore sediment. The objective of the LUCs for the near-shore sediment adjacent to Area B is waterway use restrictions, such as prohibiting swimming and anchoring of vessels.

### 8 Provisions for Long-term Management

The Navy will retain ownership of this property and the site is within the restricted area of the Base. Long-term management provisions for the site are documented in the *Final Long-term Management Plan, Site 11 - Coffee Road Landfill, Naval Support Facility Indian Head, Indian Head, MD* (AGVIQ-CH2M HILL JV III, 2012b). The objective of the long-term monitoring plan (LTMP) is to establish an environmental sampling plan that will provide sufficient data to allow periodic evaluation of the remedial action performed. The evaluation process consists of periodic sampling of the groundwater, semi-annual inspection of the monitoring wells, and semi-annual inspection of the landfill cover system to ensure the integrity of the cover is maintained and that all components of the remedy are in place and functioning as designed. MEC risk for surface areas is considered a negligible risk at this time.

However, the potential for subsurface explosives safety residual risks remain at both sites. Long-term management and periodic Five-Year Reviews will be performed to ensure surface erosion or storm surge do not expose new subsurface hazards.

## 9 References

CH2M HILL. 2011. *Explosives Safety Submission for Site 11 – Caffee Road Landfill, Naval Support Facility Indian Head, Indian Head, Maryland.*

CH2M HILL. 2012. *Explosives Safety Submission for Site 17 Construction Support and Interim Removal Action (Amendment 01), Naval Support Facility Indian Head, Indian Head, Maryland.*

CH2M HILL. 2013. *After Action Report for Site 17 Construction Support and Interim Removal Action, Naval Support Facility Indian Head, Indian Head, Maryland.*

AGVIQ and CH2M HILL Joint Venture III (AGVIQ-CH2M HILL JV III). 2011a. *Final Land Use Control Remedial Design Plan for Site 11, Caffee Road Landfill, Naval Support Facility Indian Head, Indian Head, Maryland.*

AGVIQ-CH2M HILL JV III. 2011b. *Final Remedial Action Work Plan Site 11 – Caffee Road Landfill, Naval Support Facility Indian Head, Indian Head, Maryland*

AGVIQ-CH2M HILL JV III. 2012a. *Final Construction Completion Report Site 11 – Caffee Road Landfill, Naval Support Facility Indian Head, Indian Head, Maryland.*

AGVIQ-CH2M HILL JV III. 2012b. *Final Long-term Monitoring Plan, Site 11 - Caffee Road Landfill, Naval Support Facility Indian Head, Indian Head, Maryland.*

## Figures

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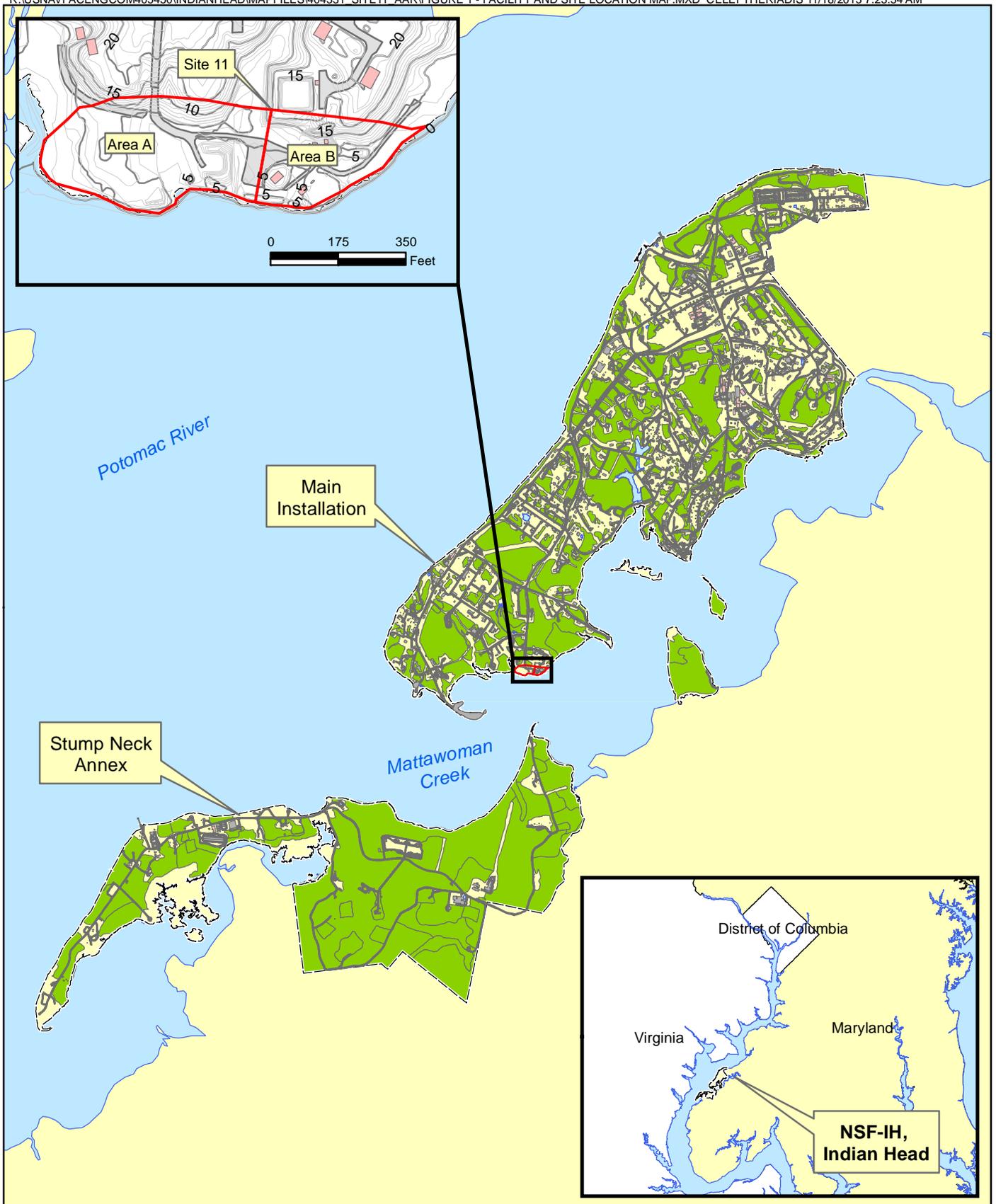
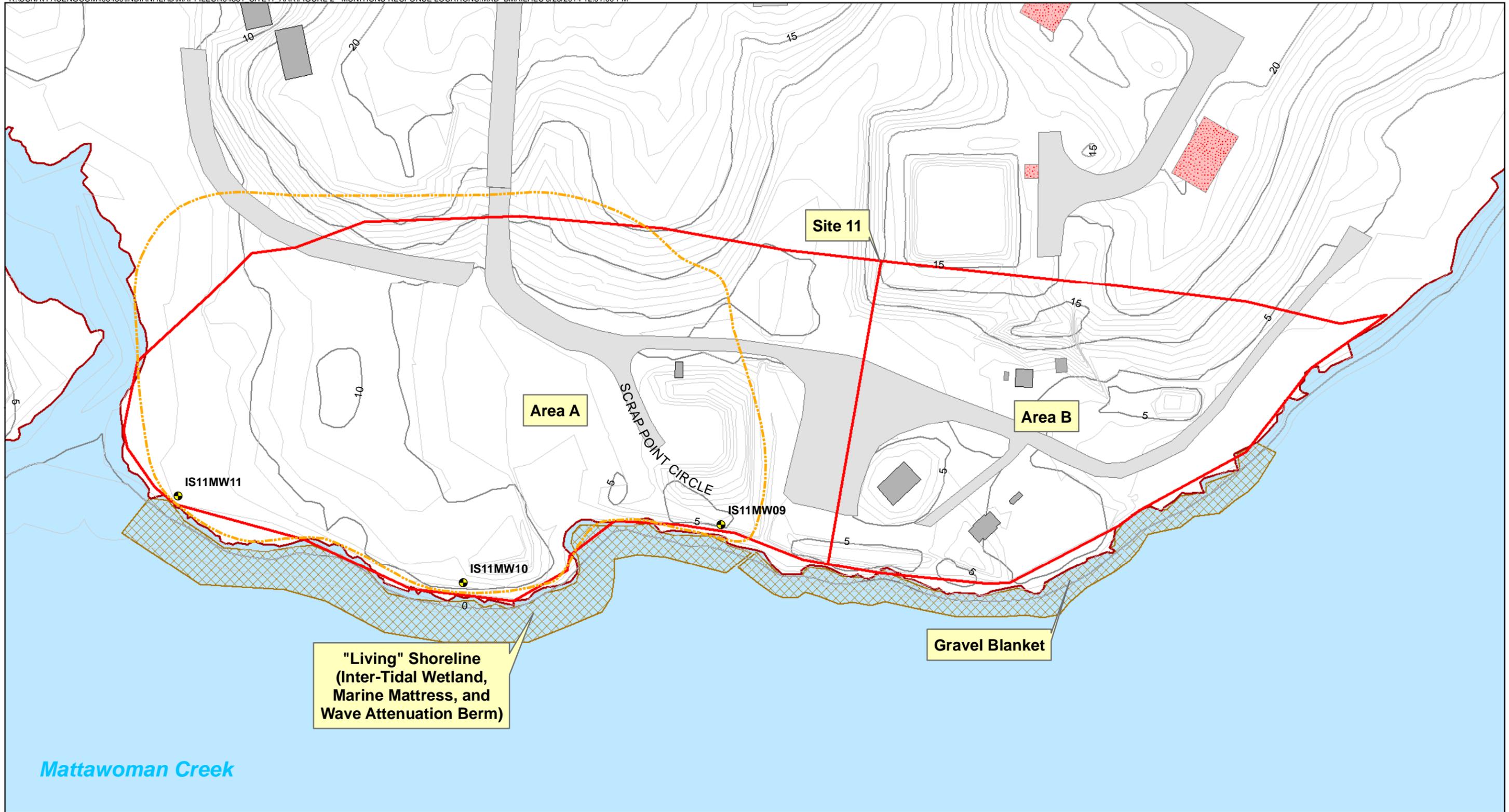


Figure 1  
 Facility and Site Location Map  
 After Action Report for Site 11 – Caffee Road Landfill  
 NSF-IH, Indian Head, MD



- Legend**
- Monitoring Well Location
  - Topographic Index Contours (1-Foot Interval)
  - Topographic Index Contours (5-Foot Interval)
  - ▨ Demolished Building
  - Building
  - ▨ Soil Cover Area
  - ▭ Site Boundary
  - ▭ NSF-IH Base Boundary

- Note:**
1. Known end use for Area A is a landfill.
  2. Known end use for Area B; a portion will be used for the thermal treatment pad and other portion is not designated.
  3. Known end use for Site 11 shoreline is a constructed "living shoreline" for habitat creation and erosion protection.

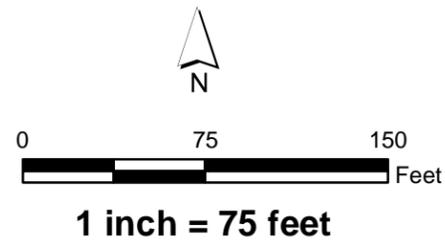


Figure 2  
Munitions Response Locations  
After Action Report for Site 11 – Caffee Road Landfill  
NSF-IH, Indian Head, Maryland