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NSA MID SOUTH
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STATEMENT OF BASIS WASTE MANAGEMENT UNITS 19 AND 49 FORMER
UNDERGROUND WASTE TANK 1648 AND HAZARDOUS WASTE ACCUMULATION POINT
AT BUILDING N 757 MILLINGTON SUPPACT TN

**Statement of Basis
Solid Waste Management Units 19/49
Former Underground Waste Tank 1648 and
Hazardous Waste Accumulation Point at Building N-757
Naval Support Activity Mid-South
Millington, Tennessee**

INTRODUCTION

This Statement of Basis contains a summary of the location, operating history, contaminants detected, and remedy selected for Solid Waste Management Units (SWMUs) 19/49, Former Underground Waste Tank 1648 and Hazardous Waste Accumulation Point at Building N-757, respectively, Naval Support Activity Mid-South, Millington, Tennessee.

SPECIFIC SITE INFORMATION

Both SWMUs 19 and 49 are associated with the former Naval Exchange Service Station (Building N-757). SWMU 19 is the location of a former underground waste tank that received waste oil from 1983 to 1992. The tank was removed in 1996 at which time visual indications of a release were noted. SWMU 49, which is adjacent to SWMU 19, operated as a hazardous waste accumulation point for the Naval Exchange from 1969 through 1986. Both SWMUs are located approximately 150 feet north of Navy Road, on the base's Northside (Figure 1). As a result of their proximity to one another, the SWMUs have been investigated jointly.

A subsequent *Confirmatory Sampling Investigation* (CSI; EnSafe, 2000a) was completed for both SWMUs. As a result of contamination identified at SWMU 19, the CSI recommended a more comprehensive evaluation of SWMU 19, while no further action was recommended for SWMU 49. SWMU 19 underwent a *RCRA Facility Investigation* (RFI; EnSafe, 2000) and a subsequent *Voluntary Corrective Action* (VCA; EnSafe, 2003) to remove petroleum contaminated soil.

SUMMARY OF CONTAMINANT EVALUATION

The primary objective of the investigations was to identify whether soil and groundwater impacts were present and if so, determine the extent and potential risk to human health and the environment. Soil and groundwater sample locations for SWMUs 19/49 are provided in Figures 2 and 3, respectively.

The data set used to characterize SWMU 19 consisted of surface soil from two locations (019S0001 and 019S0002) and six subsurface samples from four locations (019S0003 through 019S0006), as shown on Figure 2. Groundwater samples were collected from the upper part of the sand and gravel fluvial deposits (a depth of approximately 50 feet) using a GeoProbe at three locations (019G0001, 019G0002, 019G0007), as shown on Figure 3.

The SWMU 49 data set consisted of one surface and one subsurface soil sample (from location 049S0001) and six groundwater samples (from locations 049G0002 through 049G0007). Groundwater samples were collected using a GeoProbe from comparable depths as SWMU 19.

Soil

The only contaminant detected above a screening standard was total petroleum hydrocarbons (TPH). Table 1 lists the detections above the TDEC’s most stringent 100 parts per million (ppm) cleanup standard.

**Table 1
Soil Contaminants Exceeding Cleanup Criteria (in ppm) ^a**

Sample Location (depth)	Analyte	Result	Cleanup Level (Navy) ^b	Cleanup Level (TDEC) ^c
049S0001 (0-1')	TPH	280	100	1,000
019S0004 (13-15')	TPH	4,600	1,000	1,000
019S0005 (13-15')	TPH	740	1,000	1,000
019S0006 (13-15')	TPH	120	1,000	1,000

Notes: ^a parts per million (ppm)

^b Navy self-imposed cleanup level for TPH in shallow soil (0-5')

^c TDEC action level for TPH in soil based on site-specific soil permeability data.

Based on recommendations from the CSI and RFI petroleum-contaminated soil was removed from the SWMUs 19/49 in June of 2003. Approximately 830 cubic yards were removed from the location of the former UWT (SWMU 19) and a 5-foot square area at SWMU 49. The presence of a sanitary sewer main resulted in some TPH contamination, with concentrations between 400 and 700 ppm being left in place. While these levels are above the Navy’s more stringent cleanup concentration, they are below the TDEC’s applicable 1,000 ppm cleanup level.

Groundwater

No contaminants were identified in groundwater above regulatory action levels.

SELECTED REMEDY

Investigations at SWMUs 19/49 indicate no release of contaminants above relevant action levels. Based on the available information, the proposed remedy for SWMUs 19/49 is no further action.

REFERENCES

EnSafe Inc. (2000a, April 28). Confirmatory Sampling Investigation Report; Assemblies G and H — SWMUs 23, 24, 41, 43, 48, 49, and 61; NSA Mid-South, Millington, TN. Revision 2. Memphis, Tennessee.

EnSafe Inc. (2000, September 15). RCRA Facility Investigation Report; Assembly F SWMUs — 17, 19, 20, 22, 39, and 63. NSA Mid-South, Millington, TN. Revision 1. Memphis, Tennessee.

EnSafe Inc. (2003, October 20). Technical Memorandum — SWMU 19 Soil Sampling and Removal Report (VCA); NSA Mid-South RCRA Facility Investigation. Memphis, Tennessee.

ERC/EDGE. (1990, September). RCRA Facility Assessment (RFA), NAS Memphis. Nashville, Tennessee.

FIGURES FOR SWMU 19/49

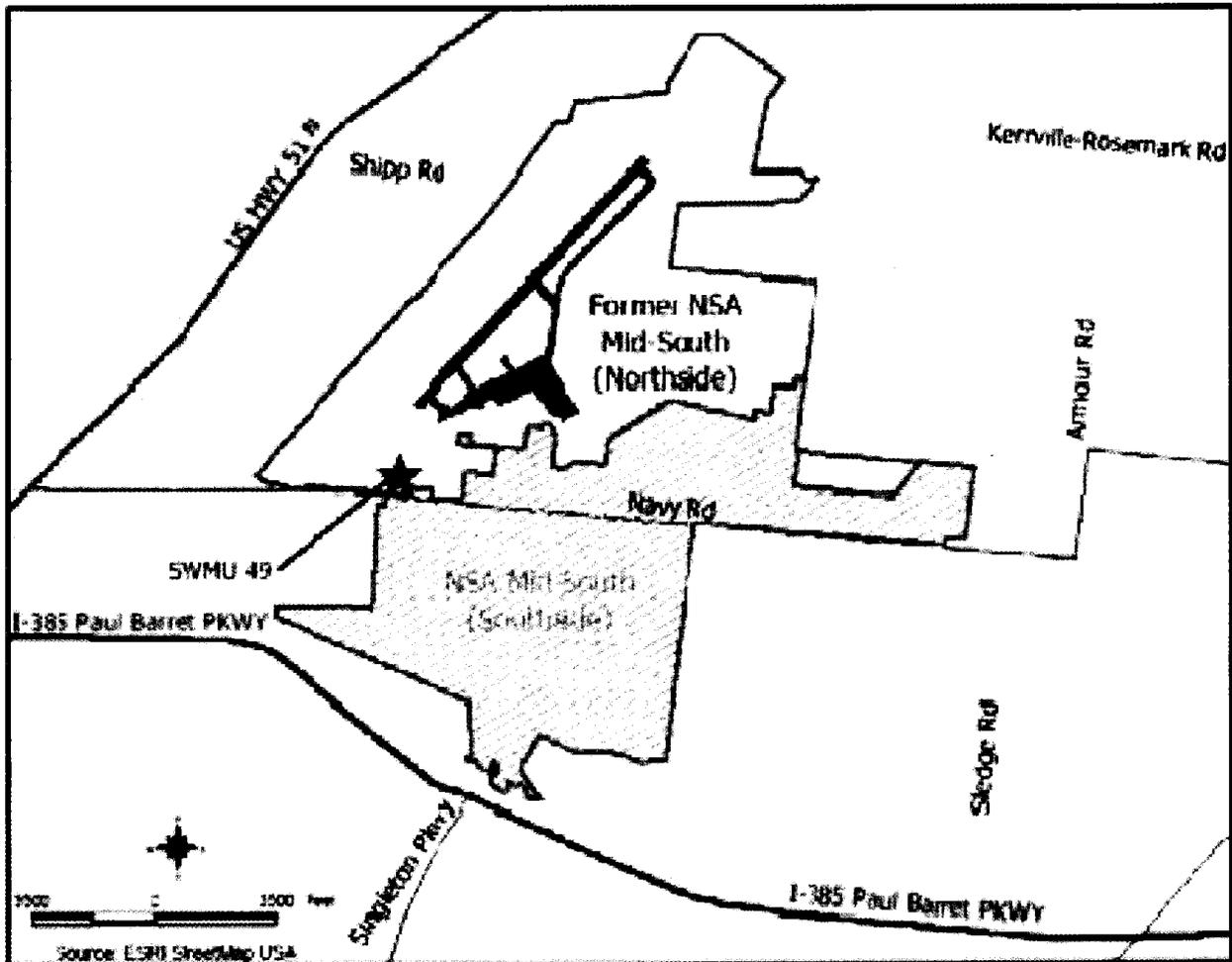
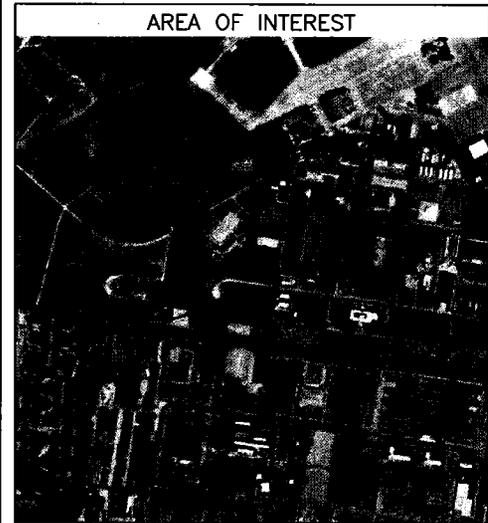
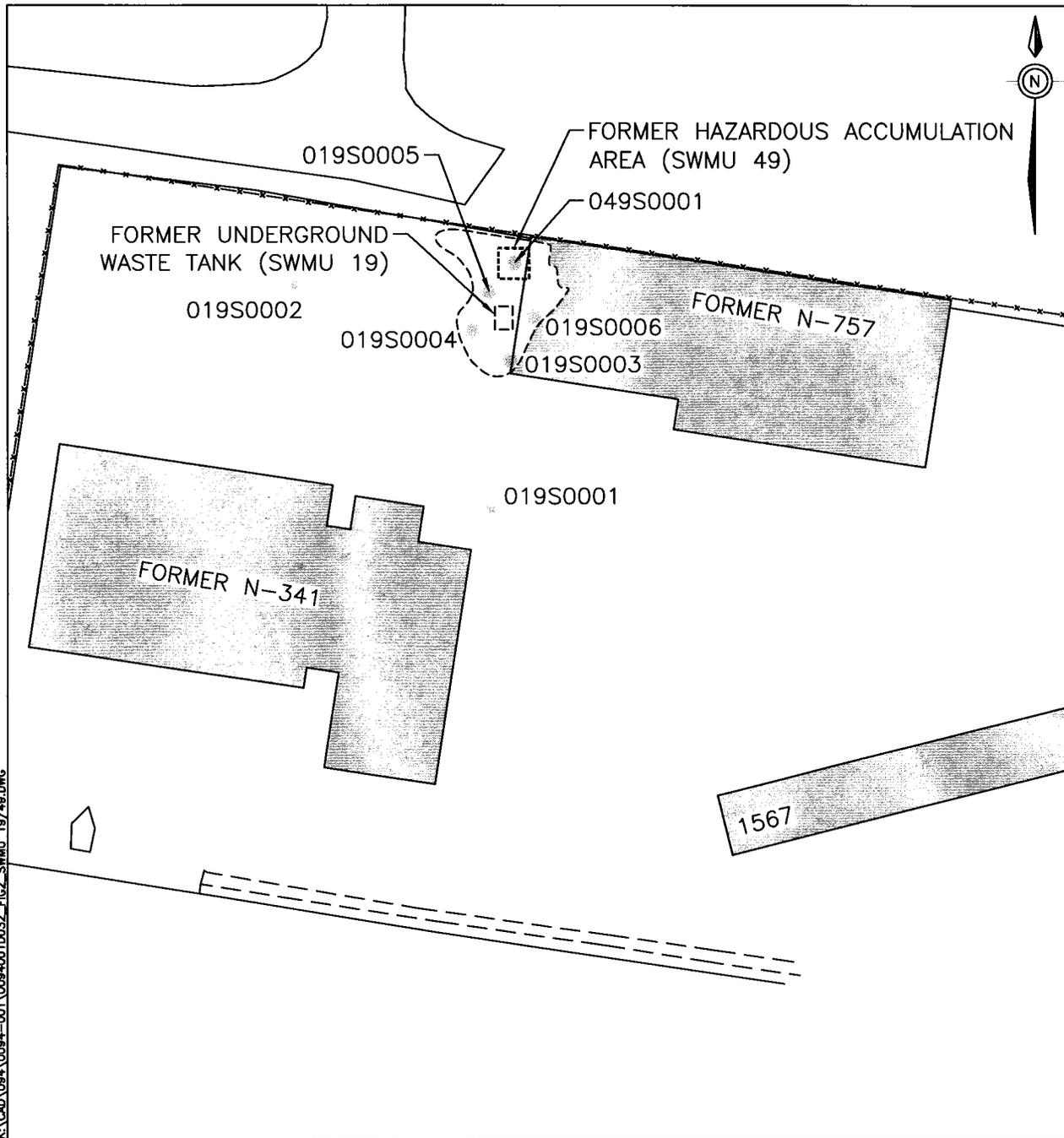


Figure 1: SWMU 19/49 Location at NSA Mid-South, Millington, Tennessee
Former Underground Waste Tank 1648 and
Hazardous Waste Accumulation Point at Building N-757

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- LEGEND
- ⊙ - SOIL SAMPLE LOCATION
 - - AREA REMOVED DURING VCA
 - ▨ - BUILDING
 - - NSA MID-SOUTH BOUNDARY
 - - AREA OF INVESTIGATION

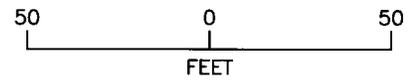
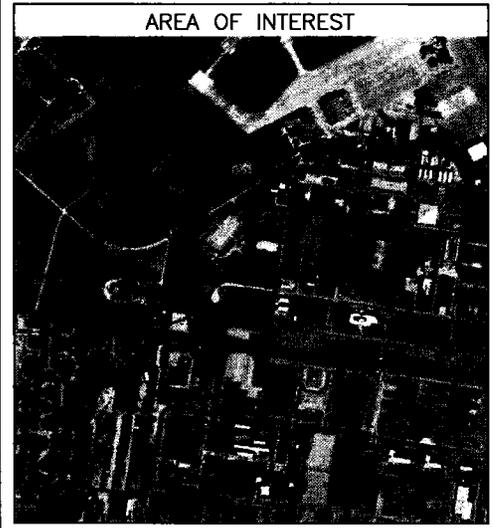
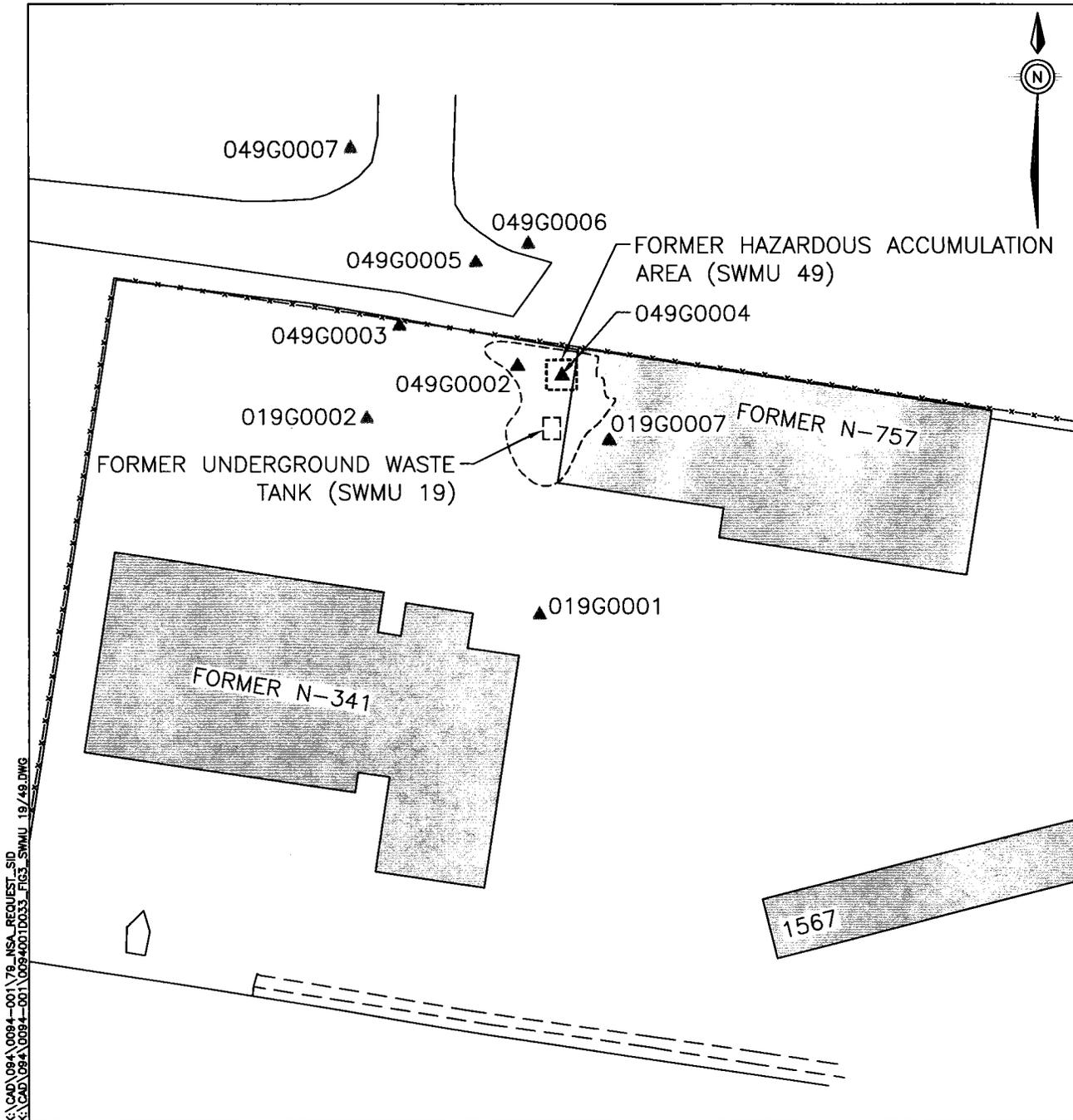


FIGURE 2
STATEMENT OF BASIS
SWMU 19/49
SOIL SAMPLE LOCATIONS



- LEGEND**
- ▲ - GROUNDWATER SAMPLE LOCATION
 - - AREA REMOVED DURING VCA
 - ▨ - BUILDING
 - - - NSA MID-SOUTH BOUNDARY
 - - AREA OF INVESTIGATION

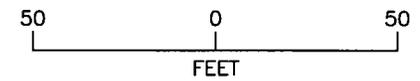


FIGURE 3
 STATEMENT OF BASIS
 SWMU 19/49
 GROUNDWATER SAMPLE LOCATIONS

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