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NSA MID SOUTH
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STATEMENT OF BASIS SOLID WASTE MANAGEMENT UNIT 47 FORMER HAZARDOUS
WASTE ACCUMULATION POINT MILLINGTON SUPPACT TN

**Statement of Basis
Solid Waste Management Unit 47
Former Hazardous Waste Accumulation Point
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 Unit (SWMU) 47, Former Hazardous Waste Accumulation Point, Naval Support Activity Mid-South, Millington, Tennessee.

SPECIFIC SITE INFORMATION

Located on the south side of Building S-344, SWMU 47 (Figure 1) is a concrete pad area that joins a concrete wash rack and abuts Building S-344. The area south of the concrete is a grass field extending approximately 50 feet to the north bank of a tributary of Big Creek Drainage Canal. SWMU 47 reportedly stored mineral spirits, waste oil, and hydraulic fluid from 1983 to 1992. No visual evidence of a release was identified during a 1990 inspection.

Previous investigations at SWMU 47 include the *RCRA Facility Assessment* (RFA; ERC/EDGE, 1990) and a *Confirmatory Sampling Investigation* (CSI; EnSafe, 2000), from which the subsequent *Voluntary Corrective Action Report* (VCA; EnSafe, 2001) was produced and describes the removal of petroleum-contaminated soil at SWMU 47.

SUMMARY OF CONTAMINANT EVALUATION

Eight soil samples were collected from five hand-auger locations. Contaminant concentrations were compared to the U.S. Environmental Protection Agency's (USEPA) residential risk-based screening criterion (RBCs) and site background reference concentrations (RCs), where applicable. Because no RBC values exist for TPH, TDEC soil cleanup values were used for comparison.

Soils

Dieldrin was the only pesticide detected (in sample 047X000201 at a concentration of 420 parts per billion [ppb]) at a concentration that was above its residential RBC (40 ppb), industrial RBC (360 ppb), and RC of 262 ppb. Based on this exceedance, dieldrin was the only carcinogen identified as a contaminant of potential concern and was evaluated for risk during the CSI. Based on this evaluation, residential and industrial excess cancer risks for dieldrin were both below USEPA's upper bound acceptable risk range. The United States Environmental Protection Agency (EPA) and the Tennessee Department of Remediation (DR) (formally the Division of Superfund) approved the risk evaluation for dieldrin in soils at SWMU 47.

TPH was detected in all but one soil sample. Two surface soil samples contained TPH at concentrations exceeding the most conservative TDEC soil-cleanup value of 100 ppm. Those samples and their TPH concentration levels were sample 047X000201 at 320 parts per million (ppm) and sample 047000601 at 340 ppm. Based on the CSI recommendation, soil was excavated to dimensions of 5 feet squared and a depth of 2 feet below grade to remove petroleum-contaminated soil. Approximately two cubic yards of soil was removed from the excavation. The excavated soil was not visibly stained and had no petroleum odor. Following excavation, composite confirmation soil samples were collected from the excavation bottom and side walls. All confirmation TPH results were less than the most conservative TDEC cleanup standard of 100 ppm.

Groundwater

No contaminants were detected in the two direct push groundwater samples taken at SWMU 47.

SELECTED REMEDY

There are no site-related contaminants that would pose an excessive risk to an unrestricted reuse of the property. Therefore, no further action is the recommended remedy for SWMU 47, Former Hazardous Waste Accumulation Point.

REFERENCES

- EnSafe Inc. (2000, April 28). *Confirmatory Sampling Investigation Report, Assemblies G and H, Naval Support Activity Mid-South, SWMUs 23, 24, 41, 43, 47, 48, 49, and 61*. Revision 2. Memphis, Tennessee.
- EnSafe Inc. (2001, June 29). *Voluntary Corrective Action Report, RCRA Facility Investigation, Naval Support Activity Mid-South, Petroleum-Contaminated Soil Removal Buildings S-362/SWMU 65, S-235, S3-94, N-114/SWMU 24, N-1211, N-105, N-108, S-203, SWMU 41, SWMU 43, SWMU 47, SWMU 48, and SWMU 49*. Revision 1. Memphis, Tennessee.
- EnSafe Inc. (2001, November). *Assemblies G and H RCRA Facility Investigation Report, Naval Support Activity Mid-South*. Revision 1. Memphis, Tennessee.
- EnSafe Inc. (2005, November 4). *Supplementary Screening Level Ecological Risk Assessment SWMU 47 — Former Hazardous Waste Accumulation Point at Building S-344 NSA Mid-South*. Memphis, Tennessee.
- ERC/EDGE. (1990). *RCRA Facility Assessment, NAS Memphis*. Nashville, Tennessee.

FIGURES FOR SWMU 47

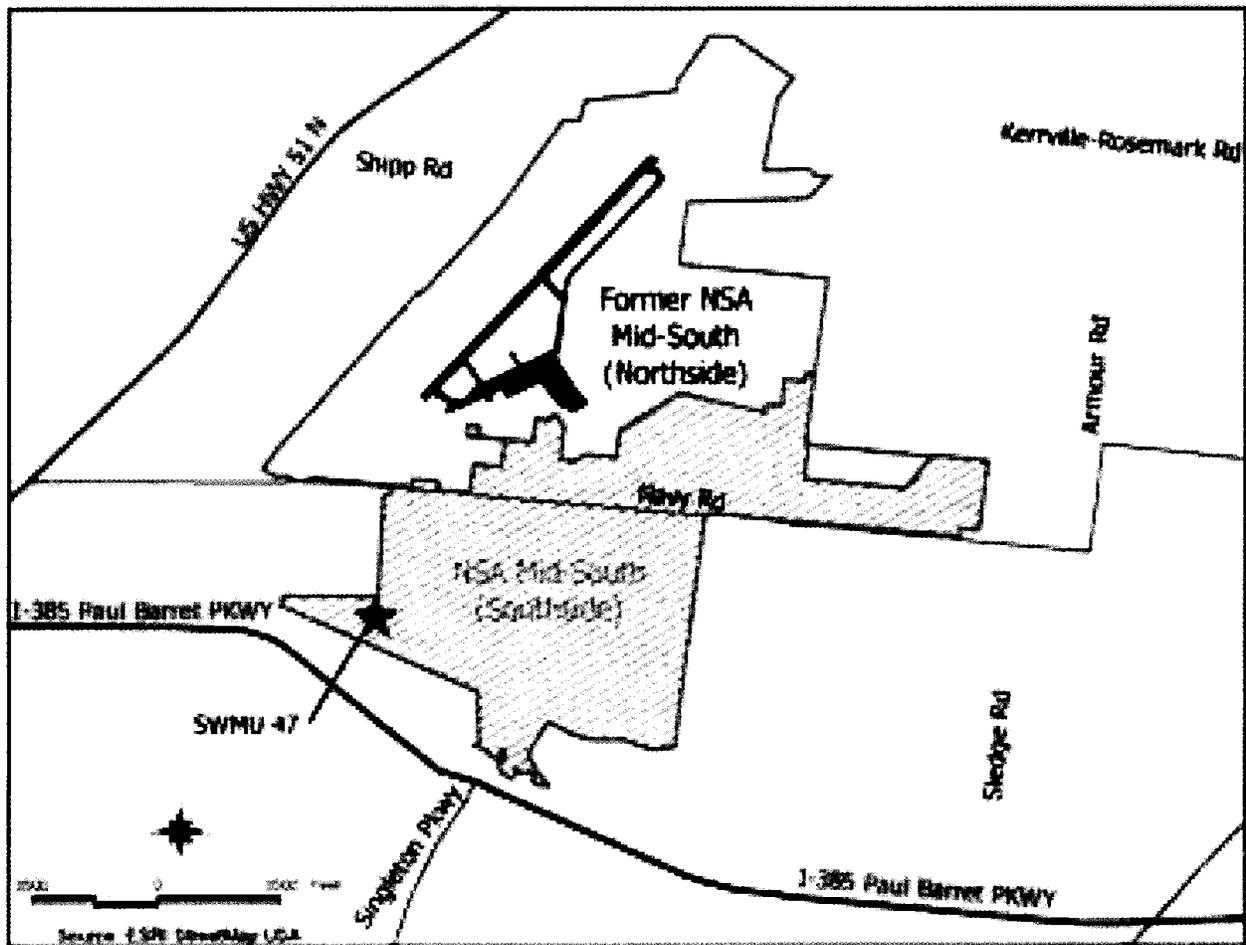
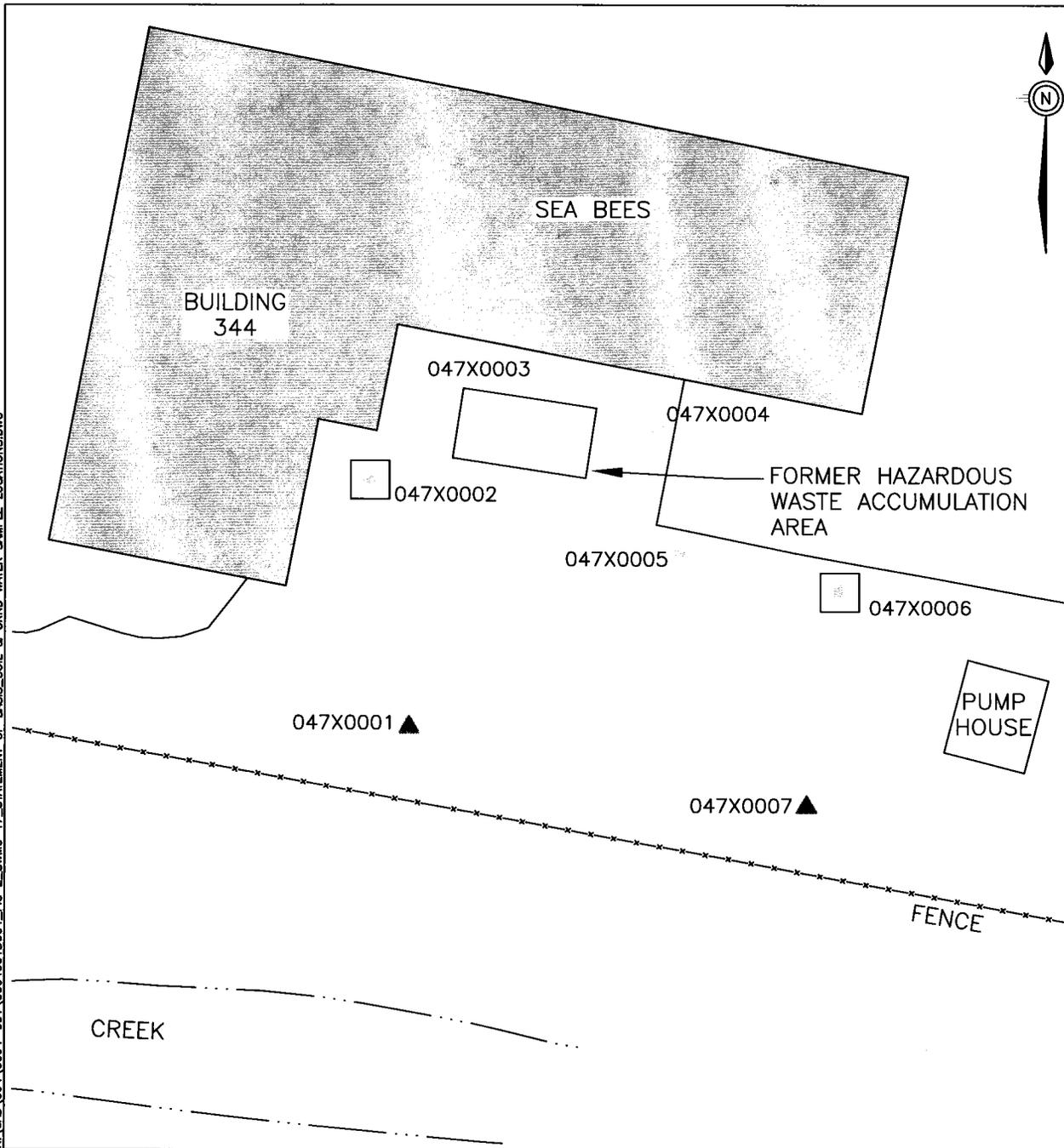


Figure 1: SWMU 47 Location at NSA Mid-South, Millington, Tennessee
Former Hazardous Waste Accumulation Point

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- LEGEND**
- ▲ - GROUNDWATER SAMPLE LOCATION
 - ✕ - HAND AUGER SOIL SAMPLE LOCATION
 - - EXCAVATION AREA
 - - AREA OF INVESTIGATION
 - - NSA MID-SOUTH BOUNDARY
 - ▭ - BUILDING

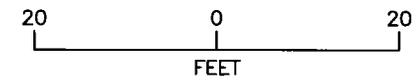


FIGURE 2
 SWMU 47 STATEMENT OF BASIS
 SOIL AND GROUNDWATER
 SAMPLE LOCATIONS