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STATEMENT OF BASIS SOLID WASTE MANAGEMENT UNIT 15 FORMER N 94
UNDERGROUND TANK FARM MILLINGTON SUPPACT TN

**Statement of Basis
Solid Waste Management Unit 15
Former N-94 Underground Tank Farm
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) 15, Former N-94 Underground Tank Farm, Naval Support Activity Mid-South, Millington, Tennessee (Figure 1). A significant portion of NSA Mid-South's Northside was transferred to the City of Millington, including SWMU 15.

SPECIFIC SITE INFORMATION

SWMU 15 consisted of ten 10,000- to 25,000-gallon underground storage tanks (USTs) previously occupying a 40,000-square-foot grassy area south of Building N-94. The USTs were used to store aviation fuel and lubricating oil supplying the nearby flight line and a truck loading station east of the site. The USTs were removed in early 1992, but the excavation was backfilled with potentially contaminated excavated soil and clean soil to bring the site back to grade. During subsequent site investigations, petroleum-related contamination was documented in subsurface soil and groundwater at SWMU 15.

SUMMARY OF CONTAMINANT EVALUATION

Several investigations and sampling events have been conducted at the site. Extensive sampling was conducted in 1991 and 1992 during the UST removal and closure activities.

Soils

A Resource Conservation and Recovery Act Facility Investigation (RFI) was conducted in 1999. Thirty-five Direct Push Technology (DPT) samples were collected. TPH-GRO and TPH-DRO were detected in most soil samples, with the highest concentrations detected in subsurface soil at the former tank farm. The total TPH concentration in soil sample 015S0023 (TPH-GRO = 130 milligrams per kilogram (mg/kg), collected from 6 to 8 feet below land surface at the former tank farm, exceeded the most conservative TDEC TPH remediation goal of 100 mg/kg.

In 2003, 57,168 tons of petroleum-contaminated soil was removed from SWMU 15. On November 11, 2003, all excavation activities associated with the removal of the contaminated soil were suspended due to the greater than expected amount of soil contamination and concerns of the excavation being subjected to the winter rainy season. Petroleum concentrations in the final effectiveness soil samples collected from the excavation area were below the Division of Underground Storage Tank (DUST) site-specific cleanup level of 500 mg/kg. However, no

effectiveness samples were collected from southern, southeastern, and southwestern walls of the excavation. The excavation was filled with a layer of sand for future dewatering; followed by a layer of compacted fill dirt. Two recovery/monitoring wells were installed in the excavation pit fill. In July 2004 soil samples were collected at various depths along the southern edge of the excavation. Groundwater water samples were collected from the two recovery/monitoring wells mentioned above. Thirty-two Direct Push Samples (DPT) were collected at 2-foot intervals at a depth of 20 feet below ground surface, which coincided with the maximum depth of the excavation. One sample was found to have an EPH concentration of 1,500 mg/kg another sample contained GRO at 1,200 mg/kg which is above the 500 mg/kg clean-up level.

In 2004 approximately 2,480 tons of petroleum-contaminated soil were excavated from the site. Effectiveness samples of soils showed no concentrations of DRO-GRO above the established 500 mg/kg clean-up level.

Groundwater

Laboratory analysis of the loess groundwater samples revealed no detectable concentrations of DRO-GRO. Fluvial groundwater is being handled as part of Area of Concern A, Groundwater.

SELECTED REMEDY

Investigations at SWMU 15 indicate no site related contaminants above relevant action levels remaining at SWMU 15. Based on the available information, the proposed remedy for SWMU 15 is no further action (NFA).

REFERENCES

- EnSafe Inc. (2004, August 16). *Final Project Report for Soil Remediation at Solid Waste Management Unit 15, Naval Support Activity Mid-South. Memphis, Tennessee.*
- EnSafe Inc. (2004, August 31). *Technical Memorandum Recommendation for No Further Action, Former N-94 Underground Tank Farm SWMU 15 NSA Mid-South. Revision 0. Memphis, Tennessee.*
- EnSafe Inc. (2006, April 13). *Final Excavation Summary Report for Additional Soil Remediation at Solid Waste Management Unit 15, Naval Support Activity Mid-South. Memphis, Tennessee*
- ERC/EDGE. (1990, September). *RCRA Facility Assessment (RFA), NAS Memphis. Nashville, Tennessee.*

FIGURES FOR SWMU 15

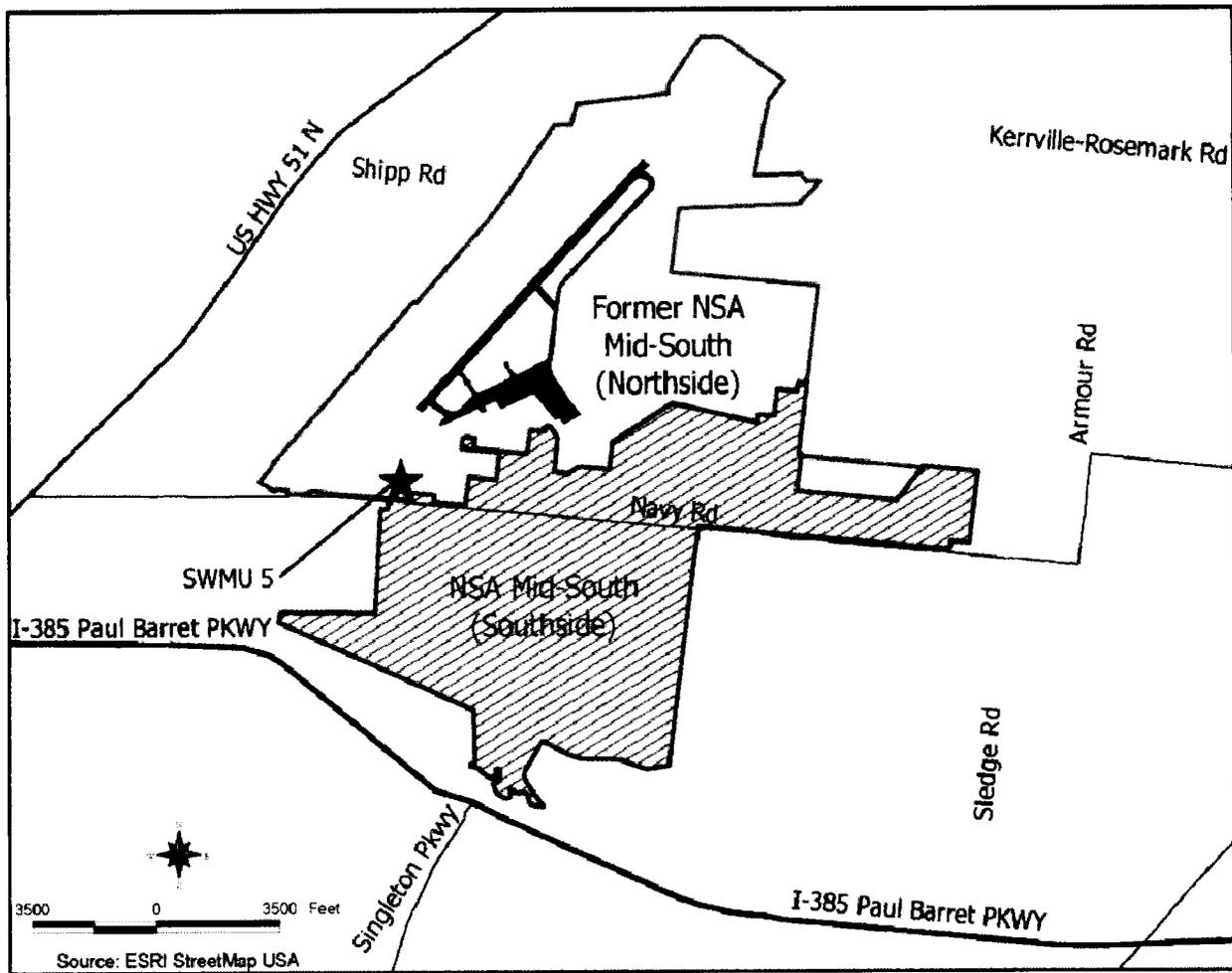
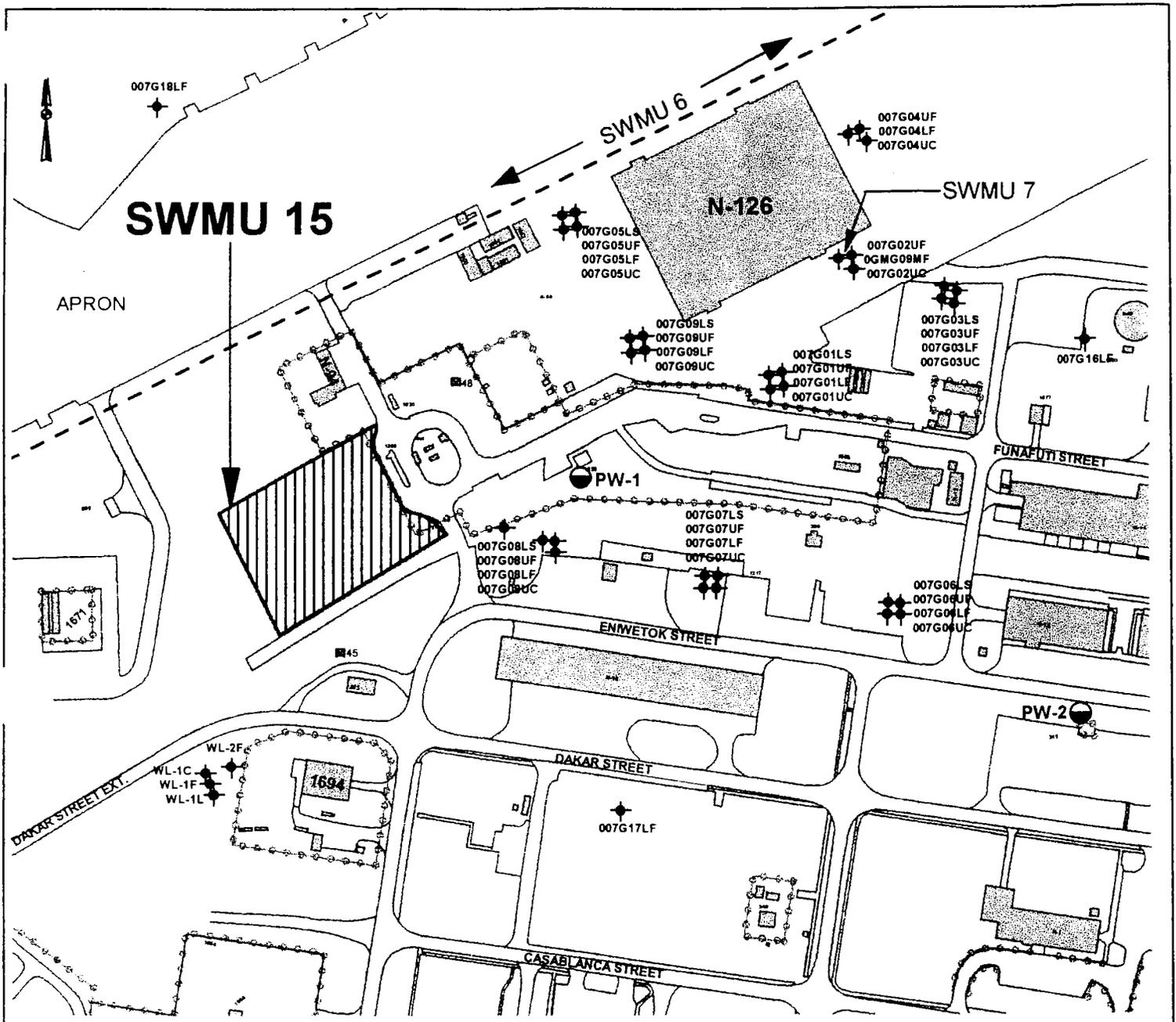
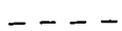


Figure 1: SWMU 15 Location at NSA Mid-South, Millington, Tennessee
Former N-94 Underground Tank Farm



LEGEND

-  PW-1 PRODUCTION WELL
-  007G18LF EXISTING MONITORING WELL AND WELL I.D.
-  UNDERGROUND STORM SEWER



RCRA FACILITY INVESTIGATION
 NAVAL SUPPORT ACTIVITY MEMPHIS
 MILLINGTON, TENNESSEE

FIGURE 1-1
 VICINITY MAP
 N-94 UNDERGROUND TANK FARM
 SWMU 15

