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STATEMENT OF BASIS SOLID WASTE MANAGEMENT UNIT 24 BUILDING N 114 AUTO
HOBBY SHOP MILLINGTON SUPPACT TN

Statement of Basis
Solid Waste Management Unit 24
Building N-114 (Auto Hobby Shop)
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) 24, Building N-114 (Auto Hobby Shop), Naval Support Activity Mid-South, Millington, Tennessee. It should be noted that all analytical data for soils was compared to Region III Risk Based-Screening Criteria (RBCs) except analysis for total petroleum hydrocarbons (TPH) which was compared to the state regulatory standard. Groundwater analytical data was compared to Maximum Contaminant Levels (MCLs). In the absence of an existing MCL, Region III RBC's were used for comparison. TPH in groundwater was compared to the state regulatory standard.

SPECIFIC SITE INFORMATION

SWMU 24 consisted of two aboveground storage (AST) waste oil tanks located between Buildings N-114 (Auto Hobby Shop) and N-349 (Figure 1). The AST located next to Building N-349 has been removed, leaving one 500-gallon AST. A catch basin, northwest of Building N-114 and southeast of N-397, was also investigated to determine if runoff and overflow had adversely affected soil. The catch basin was part of a caustic dip tank used for degreasing of engine blocks. During a 1990 inspection, the catch basin was observed to be full of water and overflowing onto surrounding soil. The SWMU is characterized by relatively level, low-relief topography, and the immediate area is covered with concrete, asphalt, or grass.

SUMMARY OF CONTAMINANT EVALUATION

In 1998, two soil investigations were conducted at SWMU 24, one for the ERNA GAI and the other for the Confirmatory Sampling Investigation (CSI). During the ERNA GAI, soil samples were collected at two areas of suspected releases at Facilities N-114 and N-397. Two soil samples, identified with the prefixes 114 and 397 (Figure 2), were collected from the surface (0-1 foot) and subsurface (12-15 feet) at each location. Environmental samples collected as part of the ERNA GAI were analyzed for volatile organic compounds (VOCs), metals, and total petroleum hydrocarbons (TPH).

During the CSI, 12 soil samples, identified with the prefixes of 024X, were collected from six locations around the existing AST (see Figure 2). Both surface (0-1 foot) and subsurface (3-4 foot) soil samples were collected to assess risk and inspect for potential releases. Environmental samples collected from soil as part of the CSI were analyzed for inorganic constituents (metals and cyanide), volatile organic compounds, semi-volatile organic compounds, pesticides/polychlorinated biphenyls, and TPH.

Soils

Only one surface soil sample, collected at location 114X0001 during the ERNA GAI at Building N-114, contained TPH at 1,900 parts per million (ppm) above the most conservative TDEC soil cleanup value of 100 ppm. TPH was detected in all CSI soil samples at concentrations ranging from 1.1 ppm to 2,900 ppm. Eleven of these samples were above the 100 ppm soil cleanup value. Based on these exceedances, the CSI recommended that the TPH-contaminated soil be removed.

Based on the CSI recommendation, two petroleum-contaminated areas were addressed during the SWMU 24 soil removal action: the area between Buildings N-114 and N-349 and the area adjacent to the northwest corner of Building N-114. In all, approximately 80 cubic yards of soil were removed (Figure 2). Following excavation, nine composite effectiveness soil samples were collected from both excavated areas. All TPH results were less than the most conservative TDEC cleanup standard of 100 ppm.

In 1999, during a natural gas line installation, petroleum-contaminated soil was discovered adjacent to the west sides of Building N-114 and N-349, which necessitated soil removal. Approximately 19 cubic yards of soil was excavated at the west side of Building N-349, and approximately 6 cubic yards were excavated at the west side of Building N-114. Excavation areas are shown on Figure 2. All petroleum-impacted soils exceeding the site-specific TDEC action level of 500 ppm TPH were removed. In all, about 25 cubic yards of soil were removed from the two areas.

Groundwater

Five locations were sampled to determine the potential for TPH and PCE contamination to groundwater. A saturated subsurface soil sample (12-15 feet) was collected from each location to assess whether loess groundwater contained TPH and PCEs. Groundwater was collected at each location (50-60 feet) to assess fluvial deposits. Neither PCE nor TPH were detected in the saturated soil or the groundwater samples.

Selected Remedy

Investigations at SWMU 24 indicate no site related contaminants above relevant action levels remaining at SWMU 24. Based on the available information, the proposed remedy for SWMU 24 is no further action (NFA).

REFERENCES

- EnSafe Inc. (1999, May 13). *ERNA Gray Areas Investigation Report, Naval Support Activity Mid-South, Millington, Tennessee*. Revision 1. Memphis, Tennessee.
- 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*.
- EnSafe Inc. (2001a, November). *Assemblies G and H RCRA Facility Investigation Report, Naval Support Activity Mid-South*. Revision 1.
- EnSafe Inc. (2001b, 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.
- ERC/EDGE. (1990, September). *RCRA Facility Assessment (RFA), NAS Memphis*. Nashville, Tennessee.

FIGURES FOR SWMU 24

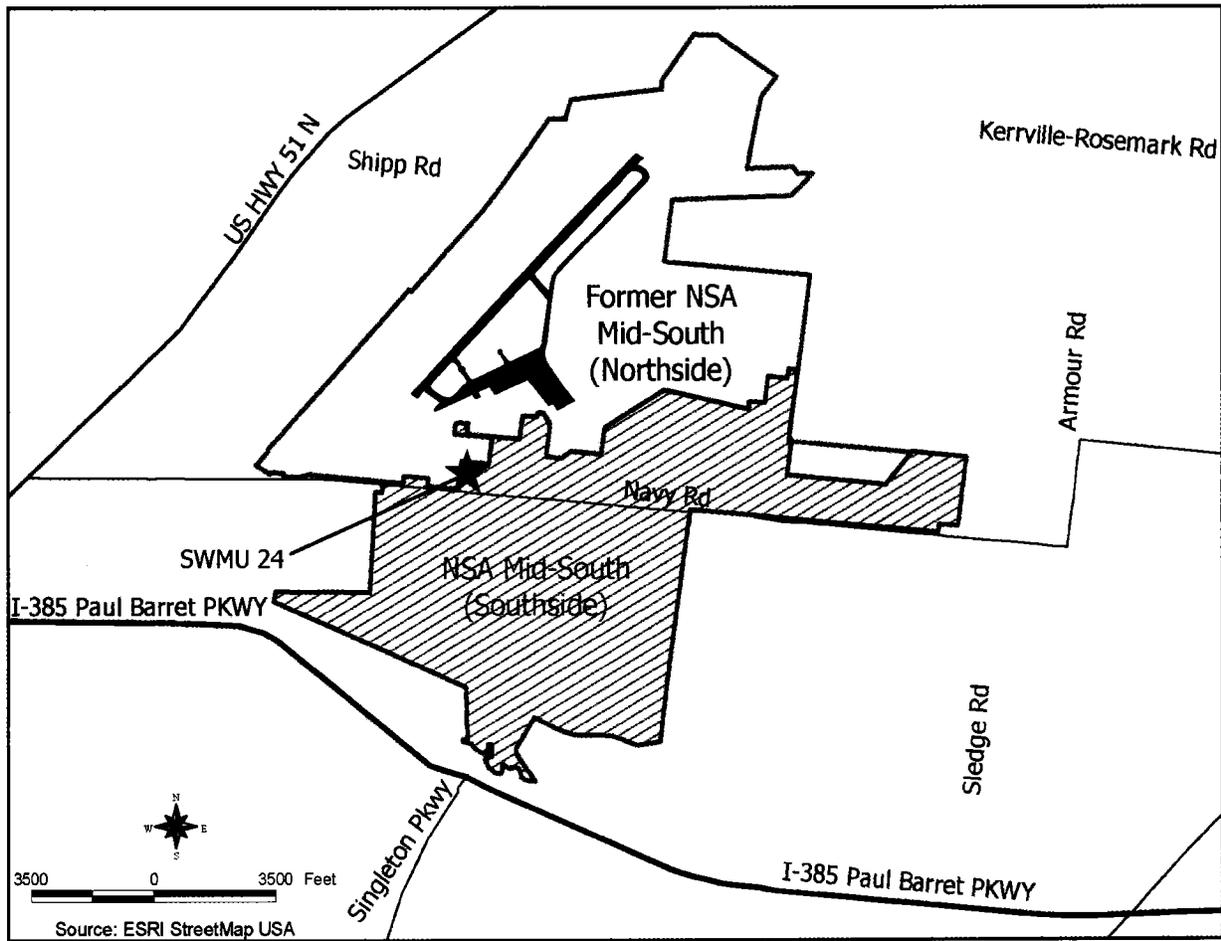


Figure 1: SWMU 24 Location at NSA Mid-South, Millington, Tennessee
Building N-114 (Auto Hobby Shop)

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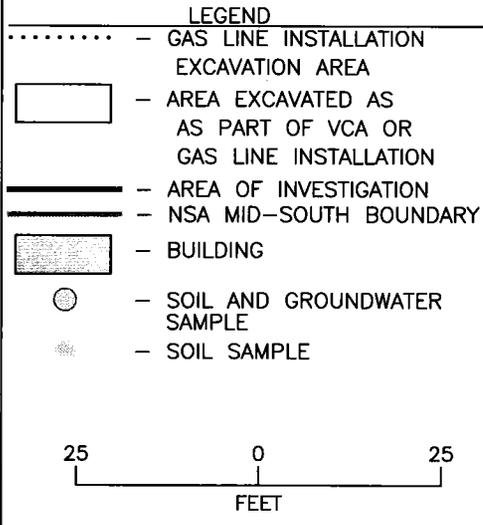
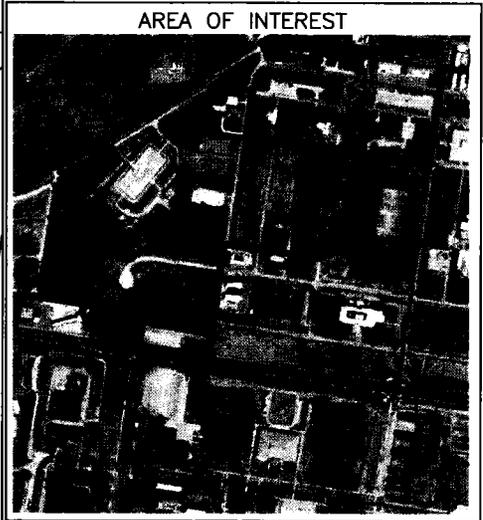


FIGURE 2
SWMU 24 STATEMENT OF BASIS
SAMPLE LOCATION MAP

397X0001