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NSA MID SOUTH
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FACT SHEET FOR UPDATE ON THE NEX GAS STATION CLEANUP FOR MILLINGTON
SUPPACT TN
12/1/2001
NAVAL SUPPORT ACTIVITY

FACT SHEET

December 2001

This fact sheet was developed to inform interested citizens about the Naval Support Activity, Mid-South program. Facts sheets will be distributed periodically to keep the community informed. Additional copies of these fact sheets can be obtained by calling the Naval Support Activity Environmental Coordinator Office at (901)874-5902.



Naval Support Activity, Mid-South Millington, Tennessee Update on the NEX Gas Station Cleanup

Site Description

The NEX Gas Station is located on the north side of Navy Road. It includes two abandoned automotive service buildings, fuel pump islands, and three underground storage tanks (USTs) that contained unleaded regular gasoline. The service station is currently closed and out of service. Before the NEX Gas Station was closed, two 20,000-gallon and one 10,000-gallon underground storage tanks (USTs) supplied fuel to the seven pump island dispensers. Pipe and pipe joints have leaked gasoline into the surrounding area. The contaminants of the gasoline, benzene and total petroleum hydrocarbon - gasoline range organics (TPH-GRO) have been released to subsurface soils and shallow groundwater. The layout of the former NEX Gas Station is shown on Figure 1.

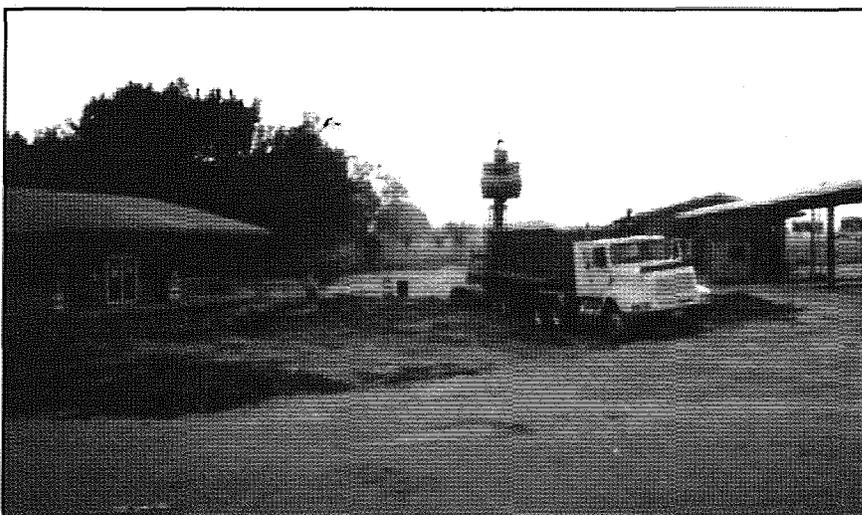
Previous Site Activities

Previous site investigations detected petroleum-related contamination in soil and shallow groundwater exceeding State of Tennessee standards. In 1993, a Corrective Action Plan (CAP) was developed that recommended nonenhanced bioremediation to address the site contaminants. However, groundwater contaminant concentrations did not appear to be decreasing significantly. Subsequently, ten Mobile Enhanced Multiphase Extraction (MEME)

events were implemented in 1998 and 1999. The MEME events were effective in removing some of the site contaminants, however, it became apparent that a more active remedial approach was appropriate. In December 2000, the CAP was amended to recommend source removal to address contaminated groundwater at the site. The amended CAP for the site consisted of two phases:

1) excavation and disposal of petroleum-contaminated soil that served as the source of the groundwater contamination, and 2) extraction and treatment of petroleum-contaminated groundwater.

A soil cleanup limit for TPH of 500 mg/kg was selected to remove the source of groundwater contamination. These soil cleanup limits are based upon the State



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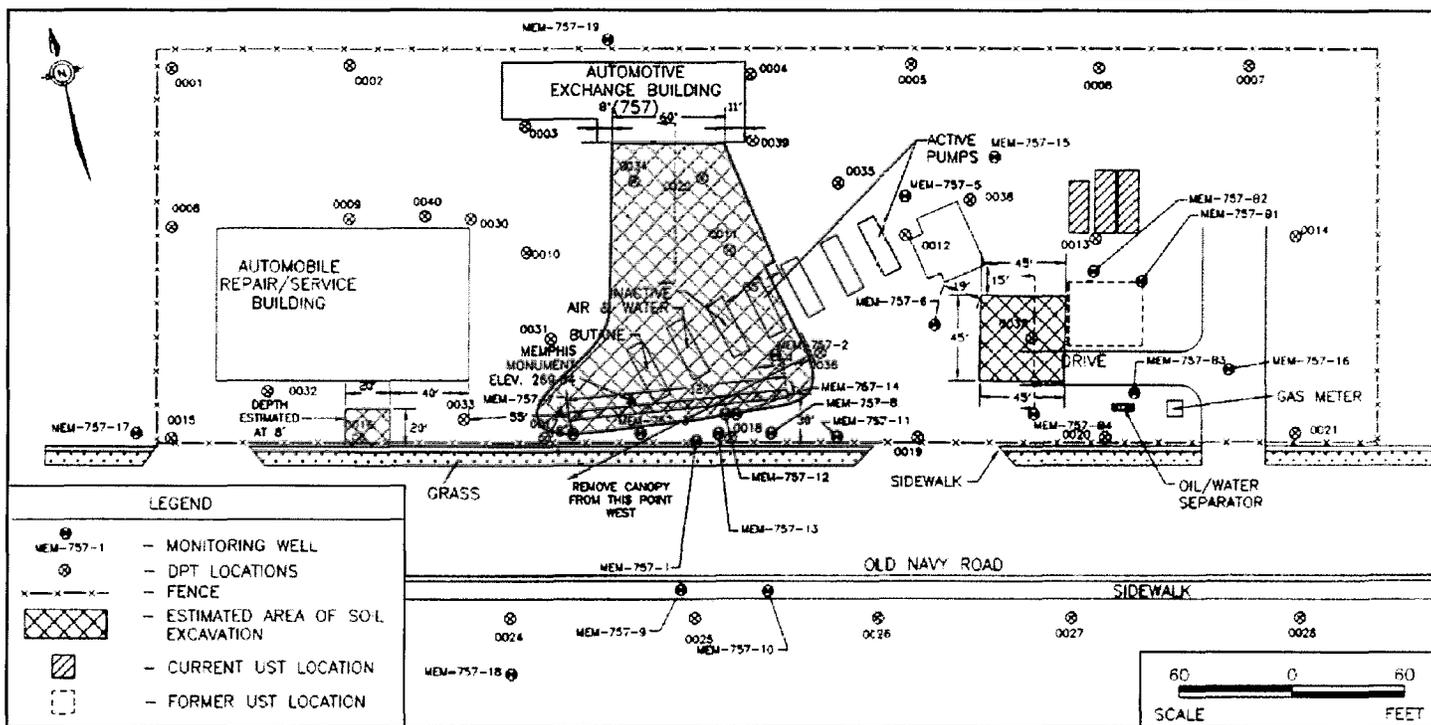


Figure 1 - Site Map

of Tennessee drinking water standards. The approximate limits of soil contamination exceeding these standards are shown on Figure 1.

The CAP also requires that after the contaminated soil has been removed, sump recovery wells will be installed in the excavations, and pumping of the groundwater will occur. Benzene, toluene, ethylbenzene, and total xylenes (BTEX) and TPH-contaminated water will be removed by pumping and then staged in temporary tanks for sampling and eventual discharge to an oil/water separator (OWS). The treated water from the OWS will then be discharged to the sanitary sewer connected to the City of Millington's publicly-owned treatment works (POTW). This procedure should reduce the presence of gasoline contaminants in the groundwater to acceptable standards.

Status of Cleanup Activities

Soil excavation at the site began in late August 2001. To date, approxi-

mately 13,000 tons of petroleum-contaminated soil have been excavated from the site for disposal. In addition, a portion of the canopy covering the former fuel islands was removed and disposed of to facilitate soil excavation in that area. An estimated 2,000 tons of contaminated soil remain for excavation and disposal.

Soil excavation activities were completed in late November 2001, and backfilling and site restoration (including installation of the groundwater recovery sumps) should be completed in early December 2001.

What's Next?

After completion of the soil removal activities, groundwater will be pumped from the recovery sumps for three one-week periods between December 2001 and March 2002. After completion of the pumping events, monitoring wells at the site will be sampled quarterly for a period of 1 year to verify that groundwater concentrations have met State of Tennessee standards.

Project Organization

The project organizations responsible for performing the onsite work include the following:

- Federal Regulatory Agency - EPA Region IV, Atlanta, GA
- State Regulatory Agency - TDEC, Memphis, TN
- Owner - US Navy
- Remedial Action Contractor - CH2M HILL Constructors, Inc., Atlanta, Georgia
- Comprehensive Long-Term Environmental Action Navy (CLEAN) Contractor - Ensafe, Inc, Memphis, TN

For More Information . . .

If you have questions about the Navy's actions, contact Randy Wilson at 901-874-5902.