

N00639.AR.002011
NSA MID SOUTH
5090.3a

STATEMENT OF BASIS SOLID WASTE MANAGEMENT UNIT 30 PARK FIELD WASTE
TREATMENT TANK MILLINGTON SUPPACT TN
12/1/2005
STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION



STATEMENT OF BASIS



SWMU 30 — Park Field Waste Treatment Tank
Naval Support Activity Mid-South
Millington, Tennessee

Purpose of the Statement of Basis

This Statement of Basis (SB) has been prepared to inform the public and provide an opportunity to comment on a proposed remedy at solid waste management unit (SWMU) 30 — Park Field Waste Treatment Tank, at Naval Support Activity (NSA) Mid-South, Millington, Tennessee.

Before the remedy is finalized, TDEC would like to give the public an opportunity to comment on the proposed remedy. At any time during the public comment period, the public may comment as described in the following section "How Can You Participate?"

Site Description

SWMU 30 (Figure 1) is an inactive waste treatment septic tank remaining from Park Field, a U.S. Army training facility that preceded NSA Mid-South. Partly beneath Building S-420 on NSA Mid-South's Southside, the tank operated from 1917 to 1942, receiving waste from more than 60 buildings, including those where aircraft and ground vehicles were serviced. The tank was partially demolished and covered with soil, but specific documents detailing this work are unavailable.

Upon closure of the public comment period, TDEC will evaluate all comments and determine if there is a need to modify the proposed remedy.

How Can You Participate?

TDEC solicits public review and comment on this SB prior to implementation of the proposed

remedy as the final one. The final remedy for SWMU 30 will be incorporated into the Hazardous and Solid Waste Amendments Permit TNHW-094 for NSA Mid-South, scheduled to be updated in 2006.

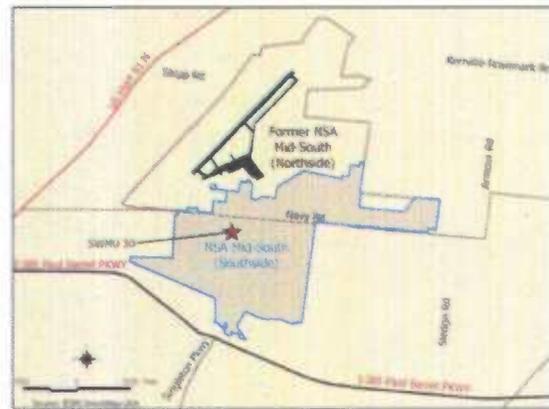


Figure 1 SWMU 30 at NSA Mid-South, Millington, Tennessee

Public comment on this SB and the proposed remedy will begin on the date that a notice of the SB's availability is published in The Millington Star and The Commercial Appeal, local daily newspapers. Since community input could affect selection of a final remedy for SWMU 30, a public comment period has been established for 45 days from (insert date). If requested during the comment period, TDEC will hold a public meeting to respond to any comments or questions regarding the proposed remedy. To request a hearing or to provide comments, contact the following person in writing or via email within the 45-day comment period:



SWMU 30
Statement of Basis

Mr. Roger Donovan
TDEC — Division of Solid Waste
Management
5th Floor, L&C Annex
401 Church Street
Nashville, TN 37243-1538
Telephone: (615) 532-0864
Email: roger.donovan@state.tn.us

Investigative reports and documents related to SWMU 30 are referenced at the end of this SB and are included in the Administrative Record, which can be reviewed in the Information Repository that was established to provide public access to documents pertaining to the Navy's environmental program. The Information Repository is maintained at:

Millington Civic Center
8077 Wilksville Road
Millington, Tennessee 38053
(901) 873-5770

Background Summary

Past operations at the former Naval Air Station (NAS) Memphis included metal plating, manufacturing, and other operations that involved the use of toxic and hazardous materials. Land use changed as a result of the 1990 Base Closure and Realignment (BRAC) Act, and the name of the facility was changed from NAS Memphis to Naval Support Activity (NSA) Mid-South.

A significant portion of NSA Mid-South's Northside was transferred to the city of Millington, and the remaining property was realigned (i.e., an operation was reassigned from NSA Mid-South to another facility, and/or an operation from another facility was reassigned to NSA Mid-South). Three facility operations changed: (1) Navy airfield operations ceased in October 1995, (2) training operations were realigned to NAS Pensacola in 1996, and (3) administrative operations for the

Navy Bureau of Personnel were realigned from Washington, D.C., to NSA Mid-South in 1997.

SWMU 30 is part of the remaining NSA Mid-South property and was initially evaluated during the 1990 *Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA; ERC/EDGE, 1990)*, which concluded that the site warranted further investigation. Even though the septic tank was abandoned in 1942, it was identified as a SWMU because of its potential receipt and release of regulated wastes such as waste oil, paint, paint-thinner waste, mineral spirits, and solvents (ERC/EDGE, 1990).

As required by the Navy's RCRA Permit, NSA Mid-South is required to evaluate and assess all SWMUs for potential environmental impacts. The septic tank at Building S-420 was designated as a site warranting further evaluation to determine the potential risks to human health and the environment.

A subsequent *Confirmatory Sampling Investigation (CSI; EnSafe, 1998)* was conducted to determine whether the septic tank had impacted soil or groundwater. Analytical results from this investigation resulted in a "No Further Action" remedy for SWMU 30. The basis for the remedy selection is provided under the "Summary of Contaminant Evaluation" and "Summary of Site Risk" sections of this SB.

Summary of Contaminant Evaluation

During the CSI, five surface and seven subsurface soil samples were collected to characterize possible impacts to soil. As part of the groundwater characterization, samples were collected from four locations in the fluvial sand and gravel deposits from depths between 40 and 50 feet below land surface. Soil and groundwater sample locations are shown on Figure 2 (Attachment 1).



SWMU 30 Statement of Basis

Soil

The only chemical detected above its U.S. Environmental Protection Agency (USEPA) risk-based screening concentration for soil was the semi-volatile organic compound benzo(a)pyrene. Benzo(a)pyrene exceeded USEPA's residential risk-based screening criterion (USEPA, 2000) of 88 parts per billion (ppb) at location 030SGB01 (300 ppb) and location 030SGB04 (90 ppb) (EnSafe, 1998). However, benzo(a)pyrene did not exceed the industrial risk-based screening concentration for soil (780 ppb) at locations 030SGB01 and 030SGB04.

Groundwater

No contaminants were detected in groundwater above a regulatory screening or health advisory level.

Summary of Site Risk

As part of the CSI, risks to human health and the environment from the contaminants identified at SWMU 30 were evaluated in accordance with existing USEPA and TDEC methods.

Human Health Risk

Risk assessments use estimated intake as part of the calculations. Intake is affected by the land-use scenarios, where one scenario may account for lifetime exposure to groundwater and soil, and another scenario may only include occasional exposure to soil with no groundwater exposure. To assess human health risk at SWMU 30, data from the CSI were used to evaluate risks using future residential and industrial land-use scenarios. Conclusions regarding potential site risk under the land-use scenarios are discussed below:

- ***Soil***

No chemicals of concern were identified in soil for a hypothetical residential or industrial reuse scenario.

- ***Groundwater***

No chemicals of concern were identified in groundwater for a hypothetical residential or industrial reuse scenario.

Ecological Risk

An ecological risk assessment was not completed as part of the CSI since the area has no viable ecological habitat (buildings, sidewalks, parking lots, and limited grassy areas between buildings) and there is a constant human presence (EnSafe, 1998).

Selected Remedy

The CSI recommended No Further Action for SWMU 30 and concluded the site is suitable for either residential or industrial reuse. The CSI report was approved by TDEC and USEPA in 1999.

Since TDEC's goals for human health and ecological risks have been met, no alternative remedies were evaluated. The Navy's proposed remedy of No Further Action is considered protective of human health and the environment. The remedy meets the four general standards of corrective measures, which are:

- Overall protection of human health and the environment
- Attainment of media cleanup standards
- Controlling the sources of release
- Compliance with standards for management



SWMU 30
Statement of Basis

There are no site-related contaminants that would pose an excessive risk to an unrestricted reuse of the property or warrant implementation of institutional controls.

References

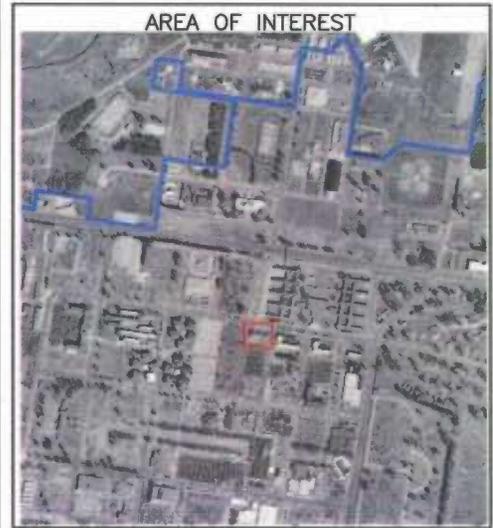
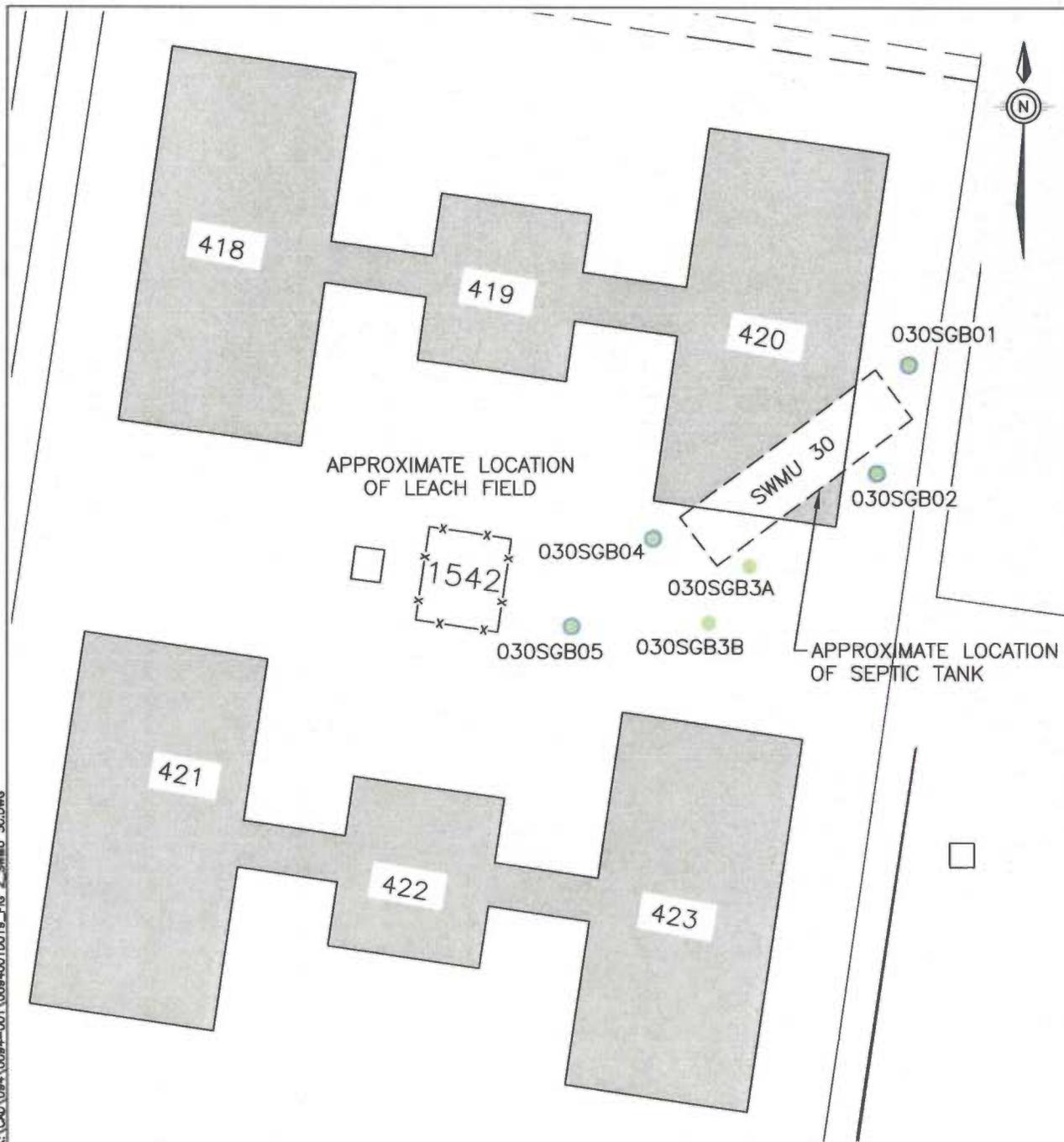
EnSafe Inc. (1998). *Confirmatory Sampling Investigation Report, Assemblies F – SWMUs 20, 22/63, 30, and 39, NSA Memphis, Millington, Tennessee. Revision: 2.* Memphis, Tennessee.

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

U.S. Environmental Protection Agency. (2000, April). *Risk-Based Concentration Table.* USEPA Region 3.

Attachment 1

K:\CAD\084\0084-001\78_NSA_REQUEST_SID
 K:\CAD\084\0084-001\0084001D019_FIG 2_SWMU 30.DWG



- LEGEND**
- SOIL SAMPLE LOCATION
 - SOIL AND GROUNDWATER SAMPLE LOCATION
 - 030SGB04 - BORING NUMBER
 - NSA MID-SOUTH BOUNDARY
 - AREA OF INVESTIGATION
 - BUILDING
 - FENCE LINE

NOTE:
 DURING SOIL SAMPLING,
 SURFACE SOIL WAS COLLECTED AT
 LOCATION 030SGB3A;
 SUBSURFACE SOIL WAS COLLECTED AT
 LOCATION 030SGB3B

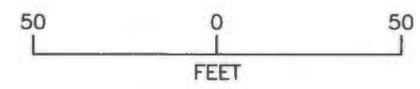


FIGURE 2
 SWMU 30 STATEMENT OF BASIS
 SOIL AND GROUNDWATER
 SAMPLE LOCATIONS