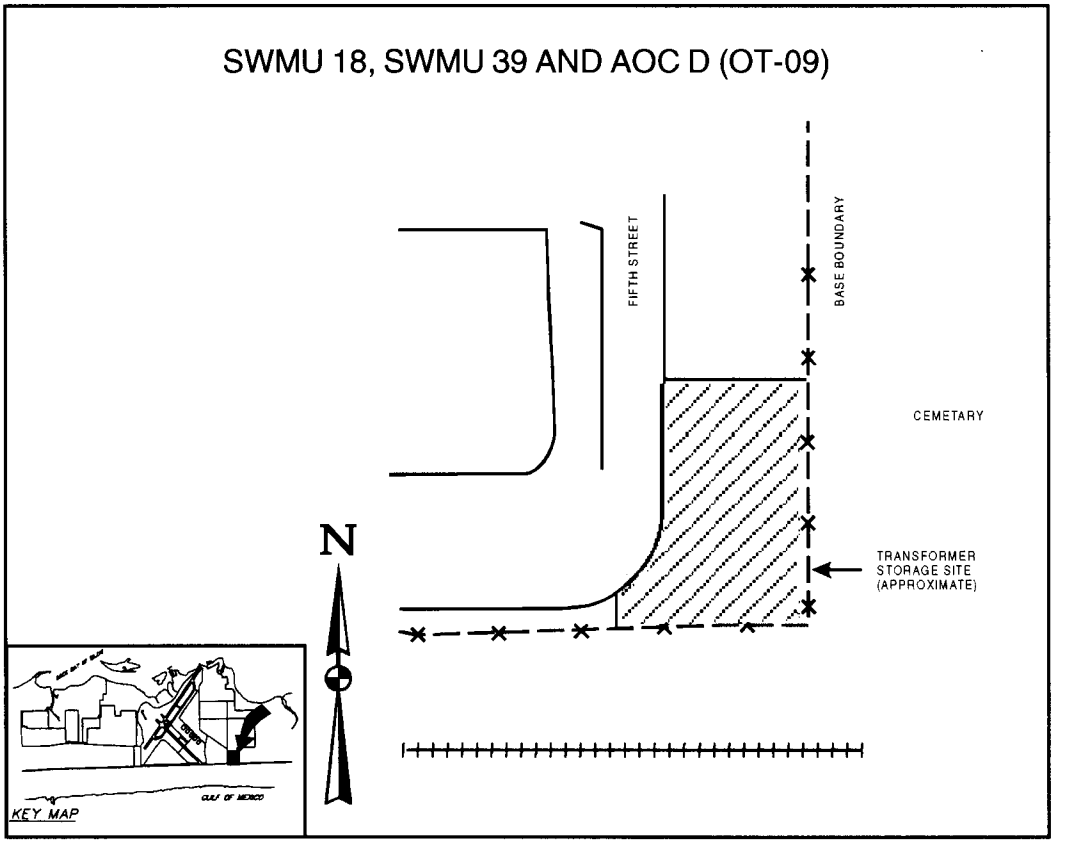
KEESLER AIR FORCE BASE
INSTALLATION RESTORATION PROGRAM
KEESLER AFB, MISSISSIPPI
Statement of Basis - Solid Waste Management Units (SWMUs) 18 and 39, Area of Concern (AOC) D

IRP SITE DESIGNATION

Old Civil Engineering (CE) Storage Area: RCRA Site Code SWMU 18, IRP Site Code OT-09.

Transformer Storage Area: RCRA Site Code SWMU 39, IRP Site Code OT-09.

CE Storage Yard (AOC D): RCRA Site Code AOC D, IRP Site Code OT-09.



INTRODUCTION

Keesler Air Force Base (AFB) is located within the city limits of Biloxi, Mississippi, on the peninsula bordered by the Back Bay of Biloxi and the Mississippi Sound. The Old CE Storage Yard (SWMU 18; OT-09), Transformer Storage Area (SWMU 39; OT-09), and CE Storage Yard (AOC D; OT-09) have been grouped together for investigation purposes due to their proximity to one another and the similar wastes at each unit. SWMUs 18/39 and AOC D (OT-09) were used between 1955 and 1983 for the storage of old electrical transformers containing polychlorinated biphenyls (PCBs). An unknown number of small spills of transformer fluid have been noted in the past history of this site. The area is now paved and is used as a parking lot for the current Base business/administration area.

This paper, called a Statement of Basis, is part of the cleanup planning process and is a requirement of the RCRA permit issued by the United States Environmental Protection Agency (USEPA). The proposed remedy (cleanup method) is explained along with other possible remedies that have been evaluated. The proposed remedy for SWMUs 18/39 and AOC D (OT-09) includes excavating, disposing of PCB contaminated soil off-site, backfilling with clean soil, and repaving the area. Public comment and participation in the remedy selection process is requested.

The information presented in this Statement of Basis summarizes the information obtained from previous investigations conducted at SWMUs 18/39 and AOC D (OT-09). Detailed information concerning this site can be found in the RCRA Facility Investigation (RFI)/Group 1 Sites Report (RFI, April 1999). This document is available in the Administrative Record. The Administrative Record is located at the information repository identified later in this Statement of Basis.

The public is encouraged to comment and participate in the remedy selection. The public is also encouraged to review the Administrative Record. The USEPA will select a final remedy for SWMUs 18/39 and AOC D (OT-09) only after the public comment period has ended, and the comments are reviewed and considered.

PUBLIC COMMENT PERIOD AND PUBLIC MEETING

The public is encouraged to provide comments regarding the corrective action alternatives provided in the Corrective Measures Study (CMS) Report (January 2000). In addition, the public may comment on any other corrective action alternatives, including those not previously evaluated. The public is also invited to provide comments on corrective action alternatives not presented in the above mentioned documents.

Important dates to remember

Public comment period begins:
April 17, 2000

Public comment period ends:
May 31, 2000

Please note, written comments must be postmarked no later than midnight, **May 31, 2000.** A public meeting will be held, if requested. During the public meeting, USEPA, the Mississippi Department of Environmental Quality (MDEQ), and the U.S. Air Force will be available to respond to oral comments and questions.

The Administrative Record for SWMUs 18/39 and AOC D (OT-09) is available at:

Biloxi Public Library
Reference Section
139 Lameuse Street
Biloxi, Mississippi
Mon., Tue., Wed., 9 A.M. to 8 P.M.
Thu., Fri., Sat., 9 A.M. to 5 P.M.

Comments will be summarized and responses will be provided in the Responses to Comments document. The Responses to Comments document will be prepared following the close of the public comment period. The comments and corresponding responses, and the Responses to Comments will be included with the final permit modification in the Administrative Record.

To request further information please contact:

Ms. Lisa Noble
Keesler AFB, Mississippi
(228) 377-8255
lisa.noble@keesler.af.mil

or

Mr. Robert Pope
U.S. Environmental Protection Agency, Region IV
(404) 562-8506
pope.robert@epamail.epa.gov
or

Mr. Bob Merrill
Mississippi Department of Environmental Quality
(601) 961-5049
bob_merrill@deq.state.ms.us

Submit written comments to:

U.S. Environmental Protection Agency
Attention: Mr. Robert Pope
U.S. Environmental Protection Agency, Region 4
Federal Facilities Branch
61 Forsyth Street
Atlanta, GA 30303

Comments must be postmarked no later than midnight, **May 31, 2000.**

PROPOSED REMEDY

USEPA is proposing excavation, off-site disposal of contaminated soil, and repaving as the remedy for SWMUs 18/39 and AOC D (OT-09). The cost associated with this remedy is estimated to be a one-time cost ranging from $123,463 to $182,263.

SWMUS 18/39 AND AOC D (OT-09) DESCRIPTION

The Old CE Storage Area (SWMU 18; OT-09), Transformer Storage Area (SWMU 39; OT-09), and CE Storage Yard (AOC D; OT-09) have been grouped together for investigation purposes due to their proximity to one another and the similar wastes at each unit. The site is approximately 380 by 260 feet in size and is located west of a cemetery, and adjacent to the former Civil Engineering Building (now demolished) in the southeastern corner of the Base, east of Building 4606. This site was used between 1955 and 1983 for the storage of old electrical transformers containing PCBs. An unknown number of small spills of transformer fluid have been noted in the past history of this site in the RCRA Facility Assessment (RFA) Report. The area, which is now paved with asphalt, is a parking lot located in the current Base business/administration area. Future residential land use of this site is considered less likely than commercial or industrial development due to the presence of the existing Base infrastructure. This area is served by the Base water distribution system and would likely continue to be in the future.

SWMUs 18/39 and AOC D (OT-09) Investigations and History

Previous work was performed at this site in 1987. The work included the installation of 20 shallow soil borings to a depth of one foot. Aroclor-1254 (a PCB) was identified in 9 of 22 samples, ranging in concentration from non-detect to 17.2 mg/kg. Based on these findings, soil samples were collected from a single soil boring placed in the area of highest contamination at one foot intervals to a total depth of five feet. Analytical results indicated decreasing concentrations of PCBs with depth in the soils and levels ranging from 0.02 to 21.6 mg/kg. The results of this past site investigation are summarized in the Final RFI Report (RFI, April 1999).

An RFI was conducted in 1992 to evaluate the presence of PCBs in groundwater. To accomplish this, a shallow temporary well was installed and sampled. One groundwater sample was collected and analyzed for PCBs and pesticides.

SWMUs 18/39 AND AOC D (OT-09) Investigation Results

The extent of contamination at this site was limited to low concentrations of PCBs in the shallow soils in an area measuring approximately 50′ by 80′; the PCB concentrations decreased with increasing depth. While no PCBs were detected in the groundwater, low levels of two pesticides were. Using data collected during the RFI, a Human Health Risk Assessment (HHRA) was performed. The Final RFI report was submitted to the USEPA in April 1999. Based on the results of the RFI and the HHRA, a CMS was prepared and submitted to the USEPA in January 2000.

SUMMARY OF SWMUS 18/39 AND AOC D (OT-09) RISKS

Soil analytical results from the previous investigation and groundwater analytical results from the RFI were used to evaluate human health risks associated with exposure to contaminants in the affected media (RFI, April 1999).

For human health, USEPA Region IV has established a target level below which derived cancer risks and non-cancer hazards are considered to be acceptable. Risks were evaluated for hypothetical future industrial workers, hypothetical future construction workers, and hypothetical future on-site residents (both adults and children) and compared to the USEPA Region IV target levels.

All receptors at SWMUs 18/39 and AOC D (OT-09) were assumed to be exposed to soils located at the surface (surface soil). In addition, hypothetical future industrial workers and hypothetical future residents were expected to be exposed to groundwater.

Using USEPA Region IV methodology, one Chemical of Concern (COC) was identified for hypothetical future construction workers and hypothetical future residents. Although the COC was identified for the hypothetical future resident, it should be noted that, given the current industrial use of the site and anticipated future use as an industrial area, it is highly unlikely that residential development will ever occur at SWMUs 18/39 and AOC D. Although the hypothetical future resident is not expected to live at

the site, this group was included in the risk assessment to allow a health-protective evaluation of the soil and groundwater. The total risks and hazards derived for all other receptors were below the USEPA target levels for cancer and non-cancer effects.

Aroclor 1254 was identified as a human health COC in surface soil (0-1′) for hypothetical future construction workers and residents at SWMUs 18/39 and AOC D per USEPA Region IV guidance. Recommendations of the RFI were that Aroclor 1254 in surface soils be considered a final COC due to the fact that it exceeds USEPA Region IV guidance for non-carcinogens. A recommended cleanup level for subsurface soil is also included in the event that excavation is necessary below a depth of one foot. The maximum detected concentration (MDC) of Aroclor 1254 and the recommended cleanup level are presented below for surface and subsurface soil:

COC	Medium	MDC (mg/kg)	Recommended Cleanup Level (mg/kg)
Aroclor 1254	Surface Soil	21.6	1.65
Aroclor 1254	Sub-surface Soil	0.408	4.95

An ecological characterization was performed to evaluate pathways for exposure of wildlife and vegetation to site contaminants (RFI Report, April 1999). The conceptual model indicated that there are no complete exposure pathways at this site. The site and surrounding area are developed; therefore, a baseline ecological risk assessment of the site was not conducted.

CORRECTIVE ACTION SCOPE

The Corrective Action proposed in this Statement of Basis is intended to be the only corrective action taken at SWMUs 18/39 and AOC D (OT-09). The scope of the corrective action includes excavation and off-site disposal of PCB contaminated soil above the recommended cleanup level in an area measuring approximately 50′ by 80′, collection and analysis of confirmatory soil samples, backfilling the area with clean soil, and covering the site with pavement. This action poses no threat to human health or the environment based on current site conditions at SWMUs 18/39 and AOC D (OT-09).

CURRENT ACTIVITIES AT SWMUS 18/39 AND AOC D (OT-09)

A Corrective Measures Study Report was submitted to the USEPA in January 2000. The recommendations of this document were excavation, off-site disposal of contaminated soil, and repaving of the site. This document will be provided in the Administrative Record.

CORRECTIVE ACTION ALTERNATIVES SUMMARY

There is no substantial threat or potential for release at SWMUs 18/39 and AOC D (OT-09) which could adversely impact human health or the environment. However, the HHRA indicated that the total hazards derived for hypothetical future construction workers and residents were above the USEPA target levels for non-cancer effects. The majority of the hazard derived for the hypothetical future construction workers and residents was associated with contact with surface soil. Therefore, the alternative control measure identified for evaluation was excavation, off-site disposal of contaminated surface soil, and repaving. This action will remove the source thus eliminating the risks associated with the surface soils to hypothetical construction workers and residents.