

2004 IAP

# Fort Rucker

Installation Action Plan



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2004 IAP

# Fort Rucker

Alabama

# Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Installation Restoration Program (IRP) for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

The IRP is specifically focused on contamination resulting from past activities, and is funded by the centrally-managed Environmental Restoration, Army (ER,A) budget account. Cleanup activities directed at contamination primarily resulting from current operations are separately funded and managed, and, although mentioned where relevant, will not generally be discussed in detail in an IAP.

In an effort to coordinate planning information between the IRP manager, the U.S. Army Environmental Center (USAEC), installations, executing agencies, regulatory agencies, and the public, an IAP has been completed for Fort Rucker. The IAP is used to track requirements, schedules and tentative budgets for all major Army installation restoration programs.

All site specific funding and schedule information has been prepared according to projected overall Army funding levels and is therefore subject to change. Under current project funding, all remedies will be in place at Fort Rucker by the end of 2005.

The following agencies contributed to the formulation and completion of this 2004 Installation Action Plan for Fort Rucker during a planning workshop held on 26 June 2003:

**Engineering and Environment, Inc.**

**Fort Rucker IRP**

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# Acronyms & Abbreviations

ACSIM	Assistant Chief of Staff for Installation Management	GW	Groundwater
ADEM	Alabama Department of Environmental Management	HAZ	Hazardous
AEDBR	Army Environmental Database Restoration	IAP	Installation Action Plan
AHP	Army Helipoint	ICM	Interim Corrective Measure
ALNG	Alabama National Guard	INSP	Inspection
AMMO	Ammunition	IRA	Interim Remedial Action
AST	Aboveground Storage Tank	IRP	Installation Restoration Program
b/t	between	JP-4	Jet Propellant Number Four
BNDRY	Boundary	LF	Landfill
BR	Branch	LTM	Long Term Maintenance
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene	MCL	Maximum Contaminant Level
CAMP	Corrective Action Management Plan	MNA	Monitored Natural Attenuation
CAMU	Corrective Action Management Unit	MOA	Memorandum of Agreement
CAP	Corrective Action Plan	MOGAS	Motor Gasoline
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980	MOU	Memorandum of Understanding
CESAS	U.S. Army Corps of Engineers, Savannah District	MTR	Motor
CM(C)	Corrective Measures Implementation (Construction)	NE	Not Evaluated
CM(O)	Corrective Measures Implementation (Operation)	NFA	No Further Action
CM(WP)	Corrective Measures Implementation (Workplan)	NPDES	National Pollution Discharge Elimination System
CMS	Corrective Measures Study	NPL	National Priorities List
COE	U.S. Army Corps of Engineers	OWS	Oil and Water Separator
CS	Confirmation Sampling	PA	Preliminary Assessment
CY	Cubic Yards	PCB	Polychlorinated Biphenyls
DA	Department of Army	PCP	Pentachlorophenol
DD	Decision Document	POL	Petroleum, Oil and Lubricants
DEH	Director of Engineering and Housing	POM	Program, Operation, Management
DERA	Defense Environmental Restoration Account (currently called ER,A)	PT	Point
DERP	Defense Environmental Restoration Program	PVC	Polyvinyl chloride
DoD	Department of Defense	PY	Prior Year
DPG	Defense Planning Guidance	RA	Remedial Action
DPW	Directorate of Public Works	RA(C)	Remedial Action - Construction
DR	Deed Restriction	RA(O)	Remedial Action - Operation
DRMO	Defense Reutilization and Marketing Office	RAB	Restoration Advisory Board
DRN	Drain	RC	Response Complete
EPA	United States Environmental Protection Agency	RCRA	Resource Conservation and Recovery Act
EPR	Environmental Program Requirements	RD	Remedial Design
ER,A	Environmental Restoration, Army (formerly called DERA)	REM	Removal
FFA	Federal Facility Agreement	RESV	Reservation
FMR	Former	RFA	RCRA Facility Assessment
FS	Feasibility Study	RFI	RCRA Facility Investigation
FTR	Fort Rucker	RI	Remedial Investigation
FTRU	Fort Rucker	RIP	Remedy in Place
FY	Fiscal Year	ROD	Record of Decision
		RR	Railroad
		RRSE	Relative Risk Site Evaluation
		S&A	Supervision and Administration
		S&R	Supervision and Remediation
		SI	Site Inspection
		SR	Simple Removal
		STD	Stand
		STE	Site

*Acronyms continued on next page*

# Acronyms & Abbreviations

STOR	Storage
STR	Storage
STRG	Storage
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TNG	Training
TPH	Total Petroleum Hydrocarbons
USAARL	U.S. Army Aviation Research Lab
USAAVNC	U.S. Army Aviation Center
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Center
USAEHA	United States Army Environmental Hygiene Agency (currently called USACHPPM)
USATHAMA	United States Army Toxic and Hazardous Material Agency (currently called USAEC)
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
WAST	Waste
WST	Waste

## *CERCLA and RCRA Acronym Conversions*

### **CERCLA**

### **RCRA**

Preliminary Assessment (PA)	=	RCRA Facility Assessment (RFA)
Site Inspection (SI)	=	Confirmation Sampling (CS)
Remedial Investigation/ Feasibility Study (RI/FS)	=	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)
Remedial Design (RD)	=	Corrective Measures Implementation (Workplan) (CMI(WP))
Remedial Action (Construction) (RA(C))	=	Corrective Measures Implementation (Construction) (CMI(C))
Remedial Action (Operation) (RA(O))	=	Corrective Measures Implementation (Operation) (CMI(O))
Long Term Monitoring (LTM)	=	Long Term Maintenance (LTM)
Interim Remedial Action (IRA)	=	Interim Corrective Measure (ICM)

<b>Status:</b>	Non NPL, with Corrective Measures Permit (1989, updated 2003)	
<b>Number of AEDBR Sites:</b>	107 AEDBR sites 9 Active ER,A sites 98 Response Complete sites (36 RC under ER,A program / 62 RC by Corrective Measures Permit)	
<b>Different Site Types:</b>	2 Burn Areas 1 Contaminated Soil Pile 1 Dip Tank 15 Landfills 24 Storage Areas 1 Sewage Treatment Plant 20 Underground Storage Tanks 3 Waste Treatment Plants	1 Fire/Crash Training Area 2 Disposal Pit/Dry Wells 2 Incinerators 23 Oil Water Separators 3 Surface Impoundment/Lagoons 7 Above Ground Storage Tanks 1 Radioactive Waste Area 1 Other
<b>Contaminants of Concern:</b>	Petroleum, Oil, Lubricants, Metals	
<b>Media of Concern:</b>	Groundwater, Soil, Surface Water	
<b>Completed REM/IRA/RA:</b>	<ul style="list-style-type: none"> <li>• FTRU-010, -040, -041, -042, -045, -051, -052, -071, -080, -082, -101, -109, -115, -157, -158, -161, -162, -165, -179</li> <li>• UST Removals in 1992, 1993, 1994, 1995</li> </ul>	
<b>RA Five-Year Review:</b>	The first 5-Year Review is planned for Landfills on 28 February 2006.	
<b>Current IRP Phases:</b>	CMI(WP) at 1 site	CMI(C) at 2 sites      LTM at 6 sites
<b>Projected IRP Phases:</b>	CMI(C) at 1 site	LTM at 9 sites
<b>Identified Possible REM/IRA/RA:</b>	FTRU-070, -073	
<b>Duration:</b>	Year of IRP Inception: 1988 Year of RA Completion: 2005 Year of IRP Completion: 2015	

# Installation Information

***SITE DESCRIPTION:***

- Daleville, Dale and Coffee Counties, Alabama.
- Fort Rucker is located in southeast Alabama approximately 20 miles north west of the city of Dothan.
- 62,430 acres in size (57,885 acres at the main installation and 4,545 acres of satellite airfields and leases and easements).

***COMMAND ORGANIZATION:***

ACSIM (Assistant Chief of Staff for Installation Management)

**Installation:** Headquarters U.S. Army Aviation Center and Fort Rucker.

***IRP EXECUTING AGENCIES:***

- Installation Restoration Program Executing Agency - U.S. Army Corps of Engineers, Mobile District.
- Investigation Phase Executing Agency: U.S. Army Environmental Center, Environmental Restoration Division, from 1990 to 1997. U. S. Army Corps of Engineers, Mobile District, from 1997 to present.
- Remedial Action Phase Executing Agency: U.S. Army Corps of Engineers, Mobile District South Atlantic Division.

***REGULATORY PARTICIPATION:***

**Federal:** U.S. Environmental Protection Agency, Region IV, RCRA and Federal Facilities Branch, Waste Management Division.

**State:** Alabama Department of Environmental Management.

***REGULATORY STATUS:***

- Non-NPL with RCRA Corrective Action.

***MAJOR CHANGES TO IAP FROM PREVIOUS YEAR (FY03):***

- 107 sites potentially eligible for NFA.

# Installation Information

**LOCATION,  
HISTORY &  
MISSION:**

Fort Rucker was activated on May 1, 1942, as the Ozark Triangular Division Camp, in response to U.S. Military escalation following Pearl Harbor. In June of 1943, the facility was renamed to Camp Rucker, in honor of General Edmund Winchester Rucker.

Until 1946, Camp Rucker served as an infantry training ground and housed artillery, tank, anti-aircraft, medical, and quartermaster troops. Following VE Day in May 1945, the camp became an Infantry replacement Training Center and later an Infantry Advanced Replaced Training Center.

The successful utilization of helicopters in Korea had caused a pressing need for testing and training in the maintenance and operation of rotary-wing aircraft. The Army established an aviation center and school to meet the need. The existing Army Aviation School of Ft. Sill, Oklahoma, was relocated to Camp Rucker. In March of 1955, Camp Rucker was officially designated as the U.S. Army Aviation Center (USAAVNC). In October of the same year, it became a permanent U.S. military fort, and, consequently, was renamed Fort Rucker.

In 1973, Fort Rucker became the center for all U.S. Army aviation flight training. Since then, its mission has been to maintain and operate facilities and provide services and material to support the helicopter pilot training for the Army.

In addition to Fort Rucker's role as the Army's Aviation Center, it houses several tenant activities and directorates. Fort Rucker is the home for the Army Safety Center, the U.S. Army Aviation Development Test Activity, the Aeromedical Center and Aeromedical Research Laboratory, and a Human Engineering Laboratory.

Three notices were placed in local newspapers to solicit interest in establishing a Restoration Advisory Board (RAB). The notices informed the public of the role of the RABs and gave a window of opportunity to reply of 30 days. At the end of the 30 day comment period, no replies were received from the Public.

# Contamination Assessment

## OVERVIEW

The Fort Rucker Installation Restoration Program identified 111 sites in 1988. Forty-four of these sites required further investigation, which was initiated in 1990. As a result of site investigations, recommendations and studies of these sites, the following is a summary of the IRP initiatives for: no further action, removals and corrective measures study.

1. All the sites at Fort Rucker scored low because the primary contaminant was petroleum hydrocarbons.
2. None of the sites contamination has migrated off-post.
3. None of the sites has extensive groundwater contamination.
4. Currently 87 sites are being evaluated by the state regulators for NFA status.
5. An additional 19 sites remaining should be granted NFA status in the near future with four sites requiring LTM and one site requiring a cap.

The IR Program at Fort Rucker has a reasonable expectation of declaring a large percentage of its sites RC in the near future.

# Contamination Assessment

## PREVIOUS STUDIES

### 1960

- U.S. Department of Agricultural, Soil Conservation Service, **1960**, Soil Survey for Dale County, Alabama, U.S. Government Printing Office, Washington, D.C.

### 1979

- U.S. Department of Agricultural, Soil Conservation Service, **1979**, Soil Survey for Coffee County, Alabama, U.S. Government Printing Office, Washington, D.C.

### 1982

- Environmental Science and Engineering, Inc., 1982, Installation Assessment of Fort Rucker, Alabama, Report No. 305.

### 1984

- U.S. Army Environmental Hygiene Agency, 1984, Draft Final Report: Evaluation of SWMUs at Fort Rucker, Report No. 37-26-1648-89, Aberdeen Proving Ground, Maryland.
- U.S. Army Environmental Hygiene Agency, 1984, Evaluation of Washrack Leachate, Fort Rucker, Alabama, Hazardous Waste Study No. 37-26-0458-85, Aberdeen Proving Ground, Maryland.
- U.S. Geological Survey (Scott, John C.; Law, Linda R.; and Cobb, Riley H.), 1984, Hydrology of the Tertiary-Cretaceous Aquifer System in the Vicinity of Fort Rucker Aviation Center, Alabama, U.S. Geological Survey Water Resources Report 84-4118.

### 1987

- U.S. Army Environmental Hygiene Agency, **1987**, Geohydrogeologic Study at Fort Rucker, TAC-Runkle Landfill and Dilly Branch Landfills, Aberdeen Proving Ground, Maryland.

### 1988

- U.S. Geological Survey (Scott, John C. and Cobb, Riley H.), **1988**, Geohydrology Susceptibility of Major Aquifers to Surface Contamination in Alabama, Area 12, U. S. Geological Survey Water Resources Investigations Report 88-4078.
- U.S. Army Toxic & Hazardous Materials Agency (Dames and Moore), **1988**, Draft Technical Plan for the Installation Restoration Program at Fort Rucker, Aberdeen Proving Ground, Maryland.
- U.S. Army Toxic & Hazardous Materials Agency, **1988**, Installation Restoration Program Plan for Fort Rucker, Aberdeen Proving Ground, Maryland.
- U.S. Environmental Protection Agency, Region IV (A. T. Kearney), **1988**, RCRA Facility Assessment Report for Fort Rucker, Atlanta, GA.

### 1990

- U.S. Army Toxic & Hazardous Materials Agency (Metcalf & Eddy, Inc.), **September 1990**, Draft Work Plan, Volume 1, Data Management Plan, Aberdeen Proving Ground, Maryland.

### 1991

- U.S. Army Toxic & Hazardous Materials Agency (Metcalf & Eddy, Inc.), **March 1991**, Final work plan, Volume 1, Project Management Plan, Aberdeen Proving Ground, Maryland.

*Previous Studies continued on next page*

# Contamination Assessment

## PREVIOUS STUDIES, continued

### 1992

- U.S. Army Corps of Engineers, Toxic and Hazardous Materials Agency, **January 1992**, Preliminary Site Inspection for Fort Rucker Military Reservation, Site Inspection Report No. 91030, U.S. Army Corps of Engineers Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, MD.
- U.S. Army Toxic & Hazardous Materials Agency (Metcalf & Eddy, Inc.), **June 1992**, RCRA Facility Investigation Draft (Feb 1992) Report, Fort Rucker, Aberdeen Proving Ground, Maryland.

### 1993

- Metcalf & Eddy, Inc., **1993**, Volume 1, Final Project Management Plan, Fort Rucker Corrective Measures Study.
- Metcalf & Eddy, Inc., **1993**, Volume 2, Final Sampling and Analysis Plan, Fort Rucker Corrective Measures Study.

### 1994

- U.S. Army Environmental Center, September **1994**, Final RCRA Facility Report, Aberdeen Proving Ground, Maryland.
- U.S. Army Corps of Engineers (Metcalf & Eddy, Inc.), **December 1994**, Final Corrective Measures Remedial Design Workplan for the Removal of Contaminated Soils at SWMUs 2c, 27, 28, 31, 41a, 41b, 48, 63, 64, 70, 71, D, J and K. U.S. Army Corps of Engineers Savannah, Georgia.

### 1995

- U.S. Army Corps of Engineers (Metcalf & Eddy, Inc.), **Feb 1995**, 65% Review, The Removal of Contaminated Soils at SWMUs 2c, 27, 28, 31, 41a, 41b, 48, 63, 64, 70, 71, 73, D, J and K. U.S. Army Corps of Engineers Savannah.
- U.S. Army Environmental Center (Metcalf & Eddy, Inc.), **Nov 1995**, Phase II RCRA Facility Investigation Final Report, Fort Rucker Alabama, Aberdeen Proving Ground MD.

### 1996

- U.S. Army Environmental Center, **June 1996**, Draft Corrective Measures Study Report, Aberdeen Proving Ground, Maryland.
- U.S. Army Environmental Center (Metcalf & Eddy, Inc.), **Nov 1996**, Statement of Basis, No Further Action Sites, Fort Rucker Alabama, Aberdeen Proving Ground MD.

### 1997

- U.S. Army Environmental Center, **July 1997**, State of Basis Simple Removal Sites and Corrective Measures Study Sites, Aberdeen Proving Ground, Maryland.
- U.S. Army Environmental Center (Metcalf & Eddy, Inc.), **July 1997**, Final Corrective Measures Study, Fort Rucker, Alabama.

### 1998

- Environmental Chemical Corporation—Contract No. DACW01-95-D-0033, DO 014, **August 1998**, Final Report—Interim Soil Removal at SWMU 15, Fire Fighting Training Area and Removal of Contaminated Soils at CAMU 2-7, Fort Rucker, AL, Mobile District Corps of Engineers, 109 St. Joseph St. Mobile, AL 36602.

2004 IAP

Fort Rucker  
Active ER,A  
Site Descriptions

### **SITE DESCRIPTION**

The site was a landfill approximately 1.5 acres in size and located on the southwest corner of Red Cloud Road and Copter Road in the middle of the developed portion of Fort Rucker, near a housing complex. It operated from an unknown date until 1953 and is now covered with soil and grass. The site was used to dispose of construction debris. Results from the RCRA investigation revealed elevated metals contamination in the upgradient well for this site. The Phase II RFI results indicated contamination was present and a Corrective Measures Study (CMS) was recommended.

The CMS results indicated limited contamination and recommended that deed restrictions be implemented to prohibit residential development. Based on this, No Further Action (NFA) is recommended at this site.

### **PROPOSED PLAN**

A Risk Based Evaluation will be accomplished. Based on the Phase II RFI and CMS results, no further remedial action is planned at this site. Fort Rucker will continue coordination with ADEM to achieve NFA status.

Due to highly erodible soils at this site, LTM is recommended for cap maintenance.

### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** Metals

**MEDIA OF CONCERN:**  
Groundwater, Soil

**COMPLETED IRP PHASE:**  
RFA, RFI, CMS

**CURRENT IRP PHASE:**  
LTM

**FUTURE IRP PHASE:** LTM

## SITE DESCRIPTION

The site was a landfill about 1-acre in size located at the southern edge of Fort Rucker near the DPW compound. The site was used to dispose of ash from nearby incinerators. The landfill operated from the 1940s until 1952. Initial investigation results concluded that metals contamination was present in the groundwater at this site. Phase II RFI investigation results confirm the Phase I data, and a Corrective Measures Study (CMS) was conducted.

The CMS results indicated limited contamination and recommended that deed restrictions be implemented to prohibit residential development. Based on this, No Further Action (NFA) is recommended at this site.

## PROPOSED PLAN

A Risk Based Evaluation will be accomplished. Based on the Phase II RFI and CMS results, no further action is planned at this site. Fort Rucker will continue coordination with ADEM to achieve NFA status.

Due to highly erodible soils at this site, LTM is recommended for cap maintenance.

## STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** Metals

**MEDIA OF CONCERN:**

Groundwater, Soil

**COMPLETED IRP PHASE:**

RFA, RFI, CMS

**CURRENT IRP PHASE:**

LTM

**FUTURE IRP PHASE:** LTM

## SITE DESCRIPTION

The site was a 10-acre landfill located in the southeast portion of Fort Rucker on North Dilly Branch Road and east of the Engine Test Stand. It operated as a trench and fill landfill from an unknown date until closure in 1970. Household refuse and debris from demolished barracks were placed here.

An investigation was conducted by the U.S. Army Environmental Hygiene Agency (USAEHA) in 1987. The results indicated groundwater contamination with VOCs at the site. The 1997 RFI confirmed the USAEHA results and also found metals in the groundwater. Further investigation was required to determine the impact to this site from three adjacent SWMUs, as well as the impact to down-gradient areas. Phase II RFI results confirmed the Phase I data and a Corrective Measures Study (CMS) was recommended. A CMS was conducted and recommended Natural Attenuation with enhanced monitoring. ADEM concurred with the recommendations of the CMS. Natural Attenuation monitoring will continue on a semi-annual basis for TPH and metals. Analytical data indicates a continued downward trend of contamination at the site.

## PROPOSED PLAN

Under agreement (MOA) between ADEM, EPA and the installation, semi-annual monitoring will continue until 2015. The installation will approach the State with analytical data in 2005 to determine if further Natural Attenuation monitoring is required.

## STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** Metals

**MEDIA OF CONCERN:**  
Groundwater

**COMPLETED IRP PHASE:**  
RFA, RFI, CMS

**CURRENT IRP PHASE:**  
LTM

**FUTURE IRP PHASE:** LTM

## SITE DESCRIPTION

This site was a trench and fill landfill about 10-acres in size and located on Campground Road at the northern edge of Fort Rucker. Woods surround the landfill on three sides and a road and residential houses are located on the fourth side. The landfill was a municipal waste landfill operated from 1977 to 1982. In addition to the installation, the landfill was used by the City of Ozark and Dale County to dispose of household waste.

Investigation results from the Phase I RFI indicated groundwater contamination (VOCs and metals) at this site and further investigation was required to determine the full extent and impact of this contamination. The Phase II RFI, conducted in 1997, confirmed the Phase I results and this site was recommended for Corrective Measures. A Corrective Measures Study (CMS) was conducted, and the recommendations in the CMS were for Natural Attenuation with enhanced monitoring. EPA approval of the CMS was received on January 5, 1998.

ADEM concurred with the recommendations of the CMS. Natural Attenuation with enhanced monitoring will continue on a semi-annual basis for TPH and metals. Analytical data indicates a continued downward trend of contamination at the site.

## PROPOSED PLAN

Under agreement (MOA) between ADEM, EPA and the installation, semi-annual monitoring will continue until 2015. The installation will approach the State with analytical data in 2005 to determine if further Natural Attenuation monitoring is required. Long Term Maintenance will include erosion control.

## STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** Organics, Metals

**MEDIA OF CONCERN:** Groundwater

**COMPLETED IRP PHASE:** RFA, RFI, CMS

**CURRENT IRP PHASE:** LTM

**FUTURE IRP PHASE:** LTM

## SITE DESCRIPTION

The site was an unlined pit approximately 80 feet in diameter and 7 feet deep. The pit was located on Faulkner Gate Road and was used to dispose of waste POL products such as contaminated helicopter fuel, tanker truck washouts, and possibly motor oil. Operations at this site ceased prior to 1980 and the pit was capped with clay. Samples taken from the pit in 1980 showed traces of trichloroethylene. Both the State of Alabama and Region IV EPA were notified of the site and immediate closure was recommended. The top of the pit was mounded to promote runoff and trees were planted to prevent erosion. A RFI conducted in the 1980s revealed BTEX (benzene, toluene, ethylbenzene and xylene) constituents in the groundwater. Further investigation was required at this site to determine the full nature and extent of contamination. The Phase II RFI conducted in 1997 confirmed the initial investigation results, and a Corrective Measures Study (CMS) was recommended. The CMS recommended Bio-venting to digest the POL contamination. A Bio-venting Project was initiated in 1997 and is still in operation. The level of contamination has been dramatically reduced (97%). Based on these findings, a report was submitted to ADEM in 1999 describing the bio-venting results and requesting concurrence to continue bio-venting and groundwater monitoring.

As a result of significant rain events, unauthorized vehicular traffic, and differential settling of the cap, the structural integrity of the cap was compromised. A contract was awarded in FY99 to stabilize the landfill cap and to limit vehicular access to the site. This stabilization project continued into FY00. The result was a 90% stabilization of the embankment. A portion of the stabilization project will require re-engineering to prevent further erosion.

## PROPOSED PLAN

Continue bio-venting and semi-annual long term groundwater monitoring through FY15. Potential engineering remedy for prevention of future erosion could include geo-textile fabric and/or rip-rap. The installation will approach the State with analytical data in 2005 to determine if further Natural Attenuation monitoring is required. Long Term Maintenance will include erosion control.

## STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** TPH, VOCs, Metals

**MEDIA OF CONCERN:** Groundwater

**COMPLETED IRP PHASE:** RFA, RFI, CMS

**CURRENT IRP PHASE:** LTM

**FUTURE IRP PHASE:** LTM

## SITE DESCRIPTION

The site is located on Dilly Branch Road on the southeast portion of the installation. An old unlined fire-training pit was operated from the 1950s until 1986. It was approximately 60 feet in diameter and 3 feet deep, clay lined. Waste POL (crankcase oil, MOGAS, JP-4 and other fuels) were poured onto a water buffer inside the pit, ignited, and extinguished. In 1986 a new brick lined fire fighting training pit was constructed overlapping the original site. As a result of the new construction a portion of the original site was excavated and buried nearby. The construction was a change in operation to meet NPDES discharge requirements.

The new fire fighting training pit was an open circular pit lined with firebrick and concrete. An overflow drain inside the pit carried excess liquid to an oil/water separator. Waste POL was collected in an underground tank and the wastewater was carried through a 6-inch PVC pipe to an unlined ditch.

The installation began RFI in 1994. Soil samples were collected from both pits. Sediments were sampled in the drainage ditch leading from the fire pit, and wells were installed to determine any impact to groundwater. Further investigation at this site was required since contaminants were found in groundwater downgradient of the site and in the water discharging from the oil/water separator. The Phase II RFI data confirmed the Phase I data and a Corrective Measures Study was recommended. The CMS recommended a removal action for both pits, the drainage ditch, and the old soil disposal area. The Mobile District Corps of Engineers designed a soil removal and thermal desorption project for the site in 1997. Work began in 1998 and was completed in 1999. This resulted in the installation successfully remediating its most heavily contaminated site. Erosion of the site was occurring, so a contract was awarded in FY99 to stabilize the site. Stabilization work was completed in FY00.

## PROPOSED PLAN

LTM is being conducted in accordance with the MOU with EPA Region IV and ADEM. LTM will continue on a semi-annual basis (12 wells) until FY2015. Erosion control will occur on an as needed basis. The installation will approach the State with analytical data in 2005 to determine if further Natural Attenuation monitoring is required. Long Term Maintenance will include erosion control.

## STATUS

**RRSE RATING:** High

**CONTAMINANTS:** TPH, Organics

**MEDIA OF CONCERN:** Groundwater, Soil

**COMPLETED IRP PHASE:** RFA, RFI, CMS, CMI(WP), CMI(C)

**CURRENT IRP PHASE:** LTM

**FUTURE IRP PHASE:** LTM

**SITE DESCRIPTION**

The site was a corrugated metal building located at the end of Engineer Road on the southern boundary of the installation. The structure was used to store pesticides from the 1940s until the early 1980s. The building was approximately 15 feet by 15 feet with a concrete floor. The Phase I RFI conducted in 1986 revealed that the soils surrounding the building were found to contain elevated levels of lead, arsenic, and pesticides. Based on this data, further investigation was recommended to delineate soil contamination. A Phase II RFI conducted in 1990 indicated that soils were contaminated at the site and a removal was recommended. The building was demolished and debris removed in 1998.

The installation has excavated, disposed, and backfilled with clean fill.

**STATUS**

**RRSE RATING:** Low

**CONTAMINANTS:** Metals,  
Pesticides

**MEDIA OF CONCERN:** Soil

**COMPLETED IRP PHASE:**  
RFA, RFI, CMS, ICM

**CURRENT IRP PHASE:**  
LTM

**FUTURE IRP PHASE:** LTM

**PROPOSED PLAN**

A Risk Based Evaluation will be accomplished. Upon completion of RA, NFA will be requested through ADEM.

Surface water control measures require continued maintenance.

# HERBICIDE STORAGE (BLDG 1448) SWMU 50 FTRU-073

## SITE DESCRIPTION

The site was a corrugated metal building located at the end of Engineer Road on the southern boundary of the installation. The structure was used to store pesticides from the 1940s until the early 1980s. The building was approximately 15 feet by 15 feet with a wooden floor. The Phase I RFI conducted in 1986 revealed that the soils surrounding the building were found to contain elevated levels of lead, arsenic, and herbicides. Based on this data, further investigation was recommended to delineate soil contamination. A Phase II RFI conducted in 1990 indicated that soils were contaminated at the site and a removal was recommended. The building was demolished and debris removed in 1998.

The installation has excavated, disposed, and backfilled with clean fill.

## STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** Metals,  
Herbicides

**MEDIA OF CONCERN:** Soil

**COMPLETED IRP PHASE:**  
RFA, RFI, CMS, ICM

**CURRENT IRP PHASE:**  
LTM

**FUTURE IRP PHASE:** LTM

## PROPOSED PLAN

A Risk Based Evaluation will be accomplished. Upon completion of RA, NFA will be requested through ADEM.

Surface water control measures require continued maintenance.

## SITE DESCRIPTION

The site was a landfill located at the southeast corner of Hatch and Engineer Road in the southeastern area of the installation. This trench and fill landfill was approximately 40+ acres in size and was operated from approximately 1950 to the early 1980s. The landfill was used for the disposal of a wide variety of materials. The west half of the site was backfilled with clean fill and pine trees were planted. The east half was closed and backfilled with clean fill.

Groundwater monitoring wells were installed at various times throughout the life of the landfill. It was during this monitoring that contamination above MCLs was detected in several wells. In June 1999, ADEM required the installation to prepare a Groundwater Corrective Action Plan (CAP). As a result of the CAP, 16 groundwater monitoring wells were installed to delineate the extent of contamination. Preliminary analytical data collected indicated the presence of chlorinated solvents, VOCs, and metals. At this time it appears that the contamination could be migrating from the site. Preliminary data suggested the need for additional groundwater monitoring wells to further delineate the plume. Additional monitoring wells were installed in January 2001.

## STATUS

**RRSE RATING:** High

**CONTAMINANTS:** VOC,  
Chlorinated Solvents, Metals

**MEDIA OF CONCERN:**  
Groundwater, Soil

**COMPLETED IRP PHASE:**  
RFA, RFI

**CURRENT IRP PHASE:**  
CMI(WP)

**FUTURE IRP PHASE:**  
CMI(C), LTM

## PROPOSED PLAN

Through a limited risk assessment in the RI phase, the installation is hoping to show that the migration of the plume will be limited and that contamination levels will be within acceptable limits once the cap is constructed. However, if the risk assessment indicates that a more aggressive approach is necessary, the plume will have to be addressed using other remediation techniques. The proposed cap will be a RCRA constructed cap and will cover the entire site. Long term maintenance will include erosion control as well as state required monitoring.

2004 IAP

Fort Rucker  
ER,A Response Complete  
Site Descriptions

## SITE DESCRIPTION

The site was a landfill approximately 10 acres in size located on Ferrel Road adjacent to the U.S. Army Aviation Research Lab (USAARL). The site was operated from an unknown date until 1986. The landfill is a terraced landfill consisting of three separate terraces with berms. Construction debris, paper, cardboard, and household refuse was reportedly disposed of here. The initial assessment conducted by ADEM and EPA indicated that no further investigation of this site was warranted based on the Phase II RFI results.

Two 100-year floods, within a five year period, caused severe erosion of the existing cap and slopes of the landfill. This erosion exposed landfill material and scattered debris downstream of the site. ADEM instructed the installation to correct the erosion problems immediately. The installation formulated a plan to conduct interim remedial corrective action based on state requirements. The IRA included repairing the eroded areas by backfilling and diversion of storm water off the site. The severe slope of the berms resulted in erosion of the berm structure, thereby requiring immediate repair to avoid future problems of the same nature. The repair of the erosion was completed in September of 2001. Additional work is needed on the terraced areas.

The IRA is expected to be completed in late 2003. Based on the completion of the IRA, the installation will recommend to the state that this site becomes Response Complete NFA. Long Term Maintenance to prevent erosion will continue after RC.

## STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** Solid Waste

**MEDIA OF CONCERN:** Ground-water, Soil

**COMPLETED PHASE:** RFA, CS, RFI, ICM

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 200109

# LF PROPERTY DISPOSAL YARD, SWMU 7

## FTRU-004

### SITE DESCRIPTION

This site is a closed construction landfill, which was operated from an unknown date until 1958. The landfill is located in the southeast corner of Fort Rucker near the Defense Reutilization and Marketing Office (DRMO). The landfill is approximately 9 acres in size and is currently covered with soil and densely wooded. Household refuse was reportedly placed in trenches and covered with soil. Oil and grease were also reportedly placed in open pits. Furrows formed by subsidence of landfill material are visible at the surface. No seepage, stressed vegetation, exposed landfill material or surface erosion have been observed.

Inorganic analytes in surface soil were consistent with background soils for Fort Rucker. No regulatory or action levels were exceeded. Compounds of concern in groundwater were primarily solvents and petroleum products. NFA was recommended based on overall low contaminant concentrations and low migration potential. One constituent, tetrachloroethylene, was detected slightly above the maximum contaminant level (MCL) established for drinking water in one location during Phase I. However, concentrations were below the MCL during Phase II. During Phase II, chromium was above the MCL in an unfiltered sample, but was below the regulatory standard in the filtered sample, thereby attributing the elevated concentration to suspended sediment. Based on the Phase II RFI results, No Further Action is recommended at this site.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** Solid Waste  
**MEDIA OF CONCERN:**  
Groundwater  
**COMPLETED PHASE:** RFA, CS, RFI  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199410

# LF S OF CASTLE RD & N OF BNDRY, SWMU 9

## FTRU-006

### SITE DESCRIPTION

This 3-acre landfill was operated from an unknown date until 1963. It is currently covered with trees. The wastes disposed of here are unknown. Small quantities of metals and organics were detected in monitoring wells located at the site. The Phase II RFI results indicate that No Further Action is required at this site. Based on the Phase II RFI results, No Further Action is recommended at this site.

Based on the Phase II RFI and CMS results, no further action is planned at this site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site.

### STATUS

**RRSE RATING:** Medium  
**CONTAMINANTS:** Organics, Metals  
**MEDIA OF CONCERN:**  
Groundwater  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199602

# LF S OF DILLY BR/N OR CASTLE RD, SWMU 11

## FTRU-007

### SITE DESCRIPTION

The site was a 52-acre landfill that was operated from an unknown date until 1970. Household refuse and demolition debris were placed here in a trench-and-fill operation. In 1999 the site was completely wooded, except for the area at the Fire Training Pit. A previous investigation conducted in 1987 revealed organics in the groundwater near the site. Metals and semi-volatile organics were detected in the RFI sampling effort and additional investigation was required to delineate the full nature and extent of contamination. The Phase II RFI data indicated that the groundwater contamination was not attributable to this site, but to SWMUs 10 and 15. Based on the Phase II RFI results, No Further Action is recommended at this site.

Based on the Phase II RFI and CMS results, no further action is planned at this site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site.

### STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** Solid Waste

**MEDIA OF CONCERN:**  
Groundwater

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199602

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# SI HATCH ROAD NEAR LAKE, SWMU 2C

## FTRU-010

### SITE DESCRIPTION

The site was an open, unlined pit about 30 feet by 60 feet in size which was used from 1970 to 1987 to dispose of kitchen grease at the installation. Waste motor oil may also have been disposed of at this site. The pit has not been used since 1987 and all kitchen grease is now collected and disposed of by a contractor. In addition to the grease pit, another open, unlined pit of approximately the same size contained waste asphalt (tar). Removals were planned at both of these pits. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil,  
Surface Water

**COMPLETED PHASE:** RFA, CS,  
CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199812

# PRESENT AMMO INSP PT BURN TRENCH, SWMU 66

## FTRU-022

### SITE DESCRIPTION

This unit was located in the southern portion of Fort Rucker off Hatch Road about a mile south of the Golf Course. It was located approximately 200 ft north of the storage yard behind the Ammunition Inspection Point on Hatch Road. The trench was open and unlined, approximately 180 by 15 ft by 10 ft deep. The land sloped to the southeast about 2000 ft to a tributary that flows into Buckhorn Lake.

This unit was used between 1984 and 1990 to dispose of packaging from ammunition such as paper boxes, cardboard, and tubes. Items were placed in the trench until it was full, and then the trash was burned, reportedly every one to three months. In June 1990, the trench was 80% full of cardboard, rocket tubes, and wooden pallets.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** NE  
**CONTAMINANTS:** None  
**MEDIA OF CONCERN:** None  
**COMPLETED PHASE:** RFA  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 198611

# FMR AMMO INSP PT BURN TRENCH, SWMU 67

## FTRU-023

### SITE DESCRIPTION

This unit was located in the southern portion of Fort Rucker, near the riding stables. It was approximately 1500 ft east of the intersection of Combat and Hatch roads. Surrounding the site are horse stables and woods. The site was an open and unlined trench, approximately 70 by 200 by 20 ft deep. Land slopes gently to the northeast. The nearest surface water is a tributary stream 1500 ft to the northeast that eventually flows into the Choctawhatchee River.

The trench was used to dispose of packaging from ammunition such as wooden crates, fiber canisters, and plastic tips. When the trench became full the materials in the trench would be periodically burned. The trench was operated from an unknown date until 1984 when the site was closed by covering it with soil.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** NE  
**CONTAMINANTS:** None  
**MEDIA OF CONCERN:** None  
**COMPLETED PHASE:** RFA  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 198611

# WASTEWATER TREATMENT PLANT, SWMU 20

## FTRU-030

### SITE DESCRIPTION

The site was a septic tank and drain field located near the western boundary of Fort Rucker. It began operation at an unknown date and was taken out of service in 1998 when the wastewater lines were connected to the main wastewater treatment plant. The area received sanitary waste from three hangers, a briefing building, and three other buildings at Lowe Army Heliport. Flow was carried in an 8-inch concrete pipe to a septic tank which discharged into the drain field. This area is approximately 100 by 250 feet. The site is presently covered with grass and contains a row of vertical clay vent pipes.

NFA was recommended at this site following the Phase I investigation since no hazardous constituents were identified above regulatory levels in subsurface soils. Surface soil results from the Phase II RFI were consistent with site background.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** Wastewater

**MEDIA OF CONCERN:** Soil,  
Groundwater

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199208

# STORAGE WASTE POL - 10K GAL RR TANK, SWMU 27

## FTRU-041

### SITE DESCRIPTION

The site was a 10,000-gallon railroad tank car set on blocks and surrounded by an earth dike 2 feet high. It was used to store waste POL, primarily waste crank case oil, contaminated diesel fuel, leaded and unleaded MOGAS, JP-4, and other fuels. The tank car was removed. Investigation results concluded elevated levels of petroleum hydrocarbons were present in the soils surrounding the tank and should be removed. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS,  
CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

# STRG WAST POL (10K GAL RR TANK), SWMU 28

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## FTRU-042

### SITE DESCRIPTION

This site was a 10,000-gallon railroad tank car located next to SWMU-27. It was used to store waste POL, primarily waste crank case oil, contaminated diesel fuel, leaded and unleaded MOGAS, JP-4, and other fuels. The tank was removed. Investigation results concluded that elevated levels of petroleum hydrocarbons were present in the surrounding soils and should be removed. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

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# STORAGE WASTE POL (30K GAL AST), SWMU 31

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## FTRU-045

### SITE DESCRIPTION

The site was a 30,000-gallon storage tank made of steel and surrounded by an earthen dike. The floor inside the berm was concrete, but in deteriorated condition. A fill pipe lead from the edge of the dike to the top of the tank. Two smaller pipes lead from the bottom of the tank to two additional tanks on the downhill slope. This system separated water from waste oil. The tank and oil/water separator were removed. Soils near the storage tank were found to be contaminated with petroleum hydrocarbons. All contaminated material was removed from the site in 1998. Groundwater was contaminated with elevated levels of metals and needed further characterization prior to implementing any remedial action. Based on the Phase II RFI results, No Further Action is required for the groundwater.

This site had two actions planned: the soils at this site were removed; and all contaminated material has been removed from the site. The groundwater at this site required additional characterization, and further investigation was required. Based on the Phase II RFI results, no further action is required for the groundwater and soil. Coordination with Region IV EPA and the State is ongoing concerning closure of this site.

### STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil, Groundwater

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

# WST FUEL STR SW DILLY BR RD & AVE F SWMU 63

## FTRU-052

### SITE DESCRIPTION

The site was a product storage area about 30 feet by 20 feet with an asphalt floor and a metal roof. It was used beginning in 1984 to store POL products such as motor oil, hydraulic fluid, antifreeze, and brake fluid. Sampling results indicated that elevated levels of petroleum hydrocarbons were present in the soils and the soils were recommended for removal. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

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# PESTICIDE STORE/HANDLE (BLDG 1424) SWMU 48

## FTRU-071

### SITE DESCRIPTION

The site was a building where pesticides were stored and mixed on a concrete pad at the southwest corner of the building. Runoff from the concrete pad would flow into a concrete-lined ditch, then into an unlined drainage ditch. The soils adjacent to the mixing pad and in the drainage pathway were sampled and analyzed for pesticides, volatiles, semivolatiles, TPH, and metals. Results of this sampling effort indicated that the soils were contaminated with pesticides, TPH, and lead. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH, Metals, Pesticides

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199712

# PESTICIDE/HERBICIDE STE (BLDG 20023) SWMU 51

## FTRU-075

### SITE DESCRIPTION

The site is located in the central portion of FTR near the golf course. It consisted of a building (20023) and an adjacent concrete pad, which had been used to store herbicides and pesticides as well as to rinse off equipment after use. Building 20023 is a wooden structure about 20 by 30 feet in size and has a concrete floor. The concrete pad is about 15 by 30 feet and is located on the north side of the building. Water from washing equipment flowed off the pad onto the ground. In June 1990, white granules were observed in an area on the south side of the building.

During Phase I, total petroleum hydrocarbons (TPH) was detected in soil above regulatory levels, but TPH was not directly related to the pesticide activities and was most likely due to runoff from an adjacent parking area. No pesticides or herbicides were detected above regulatory levels. Consequently, NFA was recommended. No additional samples were collected during the Phase II RFI.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** Pesticides, Herbicides

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199602

# WASHRACK W/OW SEP (BLDG 1436), SWMU 80

## FTRU-079

### SITE DESCRIPTION

The vehicle wash rack was located near the southern boundary of Fort Rucker in the DEH (DPW) area. The wash rack consisted of a set of 50 foot steel ramps underlain by a concrete pad. The wash rack was closed in 1993. Past operations included the use of solvents. Wash water flowed to an oil/water separator through a drain, then to a concrete lined ditch, and was eventually discharged to a wooded area under a National Pollutant Discharge Elimination System (NPDES) permit.

Soil sampling was conducted during Phase I. No hazardous constituents were detected above regulatory levels, and consequently NFA was recommended.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** Solvents

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199602

## WASHRACK W/OW SEP (LOWE AHP), SWMU 71 FTRU-080

### SITE DESCRIPTION

The site was a concrete pad approximately 100 feet by 50 feet covered by a metal roof. It was used beginning in 1954 to wash helicopters. In 1987, parts of the helicopters were washed with trichlorotrifluoroethane. All wash water flowed into an oil/water separator. Waste POL was accumulated in an underground tank. Monitoring wells were installed at the site in 1984 and groundwater was found to contain trace solvents and organics. RFI investigation results revealed elevated levels of chromium in the groundwater at this site, as well as elevated petroleum hydrocarbons in the outfall of the oil/water separator. Further investigation was required at this site to adequately define the groundwater contamination. The Phase II RFI report recommended No Further Action for the groundwater at this site. All contaminated material was removed from the site in 1998. Based on the findings of the Phase II RFI, No Further Action is recommended for the groundwater portion of this site.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH, Organics, Metals

**MEDIA OF CONCERN:** Soil, Groundwater

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

## WASHRACK W/OW SEP (BLDG 6035), SWMU 72 FTRU-081

### SITE DESCRIPTION

This facility was located near the southern boundary of Fort Rucker at Guthrie Field. The concrete pad at this site was a simple concrete apron that sloped to a drain that lead to an oil/water separator with a diversion valve to discharge to the sanitary sewer or a storm drain. Five to six helicopters were washed at this facility daily until the practice was discontinued in 1986. The solvent trichlorotrifluoroethane (MIL-C87-936 Type 1) was used for engine degreasing and exterior cleaning. Storm runoff would flow about 300 ft over the paved apron and landing strip areas to a drain, eventually discharging about 1200 ft south of the site into a wooded area.

An investigation was done to determine if a release of petroleum products, solvents, or pesticides/herbicides occurred at this site. The RFI dated Oct 1994 recommended No Further Action at this site.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** POL, Solvents

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199410

# WASHRACK W/OW SEP (BLDG 1412), SWMU 73

## FTRU-082

### SITE DESCRIPTION

The site was a concrete wash pad 41 feet by 49 feet that drained into an oil/water separator. Drainage flowed from the separator into a concrete-lined ditch that joined another concrete-lined ditch and then discharged into the woods approximately 70 feet from the site. The wash rack was used to wash a variety of vehicles and equipment, including equipment from pesticide and herbicide operations. The baffle was missing from the oil/water separator. The sediments from the bottom of the separator were sampled, as was the standing water in the separator. Samples from the drainage pathway were also taken. Results indicated elevated levels of petroleum hydrocarbons in the drainage-way soils and the sediments. All contaminated material was removed from the site in 1998.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** TPH  
**MEDIA OF CONCERN:** Soil, Surface Water  
**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199803

# WASHRACK W/OW SEP (ALNG AREA), SWMU 74

## FTRU-083

### SITE DESCRIPTION

This unit was located north of the intersection of Faulkner and Lowe Field roads in the southern portion of Fort Rucker at the Alabama National Guard area. It consisted of an outdoor concrete pad and trench. The concrete wash pad was 200 ft long with a 90 by 12 ft trough with baffles, an oil skimmer, and a drain. A paved storage yard surrounded the site where vehicles and equipment are parked. The specific wastes of concern at this unit are POLs and solvents. Discharge from this unit was controlled by the discharge limits set by Fort Rucker NPDES permit number AL000 2178-005. The RFI dated 1994 recommended No Further Action at this site.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** POL, Solvents  
**MEDIA OF CONCERN:** Soil, Wastewater  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199410

# SUMP DRAINAGE SYSTEM - POL SHOP SWMU 70

## FTRU-101

### SITE DESCRIPTION

The site was a sump connected to an oil/water separator located in a roadside ditch. The sump was a concrete trench covered with a metal grid. It was in operation beginning in the 1940s and received POL wastes, cleaning solvents, antifreeze, gasoline, and other wastes from a nearby vehicle maintenance shop. The separator discharged into an unlined drainage ditch next to the road. Investigation results concluded that the soils surrounding the sump as well as the soils in the drainage pathway were contaminated with petroleum hydrocarbons and lead. Recommendations were to remove the soils and sample to ensure they were not hazardous. All contaminated material was removed from the site in 1998.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil,  
Surface water

**COMPLETED PHASE:** RFA, CS,  
CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

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## MATERIAL STORAGE (BLDG 6015), SWMU K

### FTRU-109

### SITE DESCRIPTION

The site was in a fenced storage yard between two buildings. The yard was unpaved and was used for storage of new product. SWMU's 41a, 41b, 68 and L are also located in this storage yard. The site consisted of an area in the center of the yard where about a dozen drums were stored, some on a rack and some on pallets. The products included solvents, motor oil, hydraulic oil and ethylene glycol. Investigation results concluded that the surrounding soils were contaminated with petroleum products and removal was recommended. All contaminated material was removed from the site in 1998.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS,  
CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

# FORMER HAZ WASTE STORAGE AREA, SWMU 61 FTRU-110

## SITE DESCRIPTION

The site is located near the southern boundary of Fort Rucker inside the DPW vehicle storage yard. It was an open, unpaved area approximately 35 by 25 feet in size. The area was used to store drums containing hazardous waste from 1981 to 1984, and it was partially covered with gravel in 1990. Drums are no longer located at this site.

Soil sampling was undertaken to identify the possible presence of hazardous constituents, but none were identified above regulatory levels. Only TPH was detected in one surface sample above the regulatory level, but TPH was not directly related to the hazardous waste storage activities. Consequently, NFA was recommended in the Phase I RFI.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

## STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** Hazardous Waste Constituents

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199410

# PHOTOGRAPHIC LAB (BLDG 1109), SWMU 57 FTRU-114

## SITE DESCRIPTION

This unit was located at the southern edge of Fort Rucker approximately 900 ft southeast of the intersection of 18<sup>th</sup> Street and Dilly Branch Road. A building, paved streets, and parking lots were to the north, west, and east of the site. Woods were located to the south, and the land at the site was level.

The specific wastes generated at this unit are silver and photographic fixer and developer. The filtered residual solutions were discharged to the sanitary sewer. A monitoring program was in place at this location.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

## STATUS

**RRSE RATING:** NE

**CONTAMINANTS:** Silver, Photo fixer and developer

**MEDIA OF CONCERN:** Wastewater

**COMPLETED PHASE:** RFA

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 198611

# NEW PCB MTR STORE (ENGR & DILLY BR) SWMU J

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## FTRU-115

### SITE DESCRIPTION

The site was a rectangular shaped storage yard, 140 feet by 40 feet, paved with concrete and surrounded by a fence. It was used beginning in 1986 to store drums of new product such as motor oil and lubricants. The drums were stored vertically on pallets and horizontally on the ground. Some 5-gallon drums of new product were also stored on the ground. Investigation results concluded that elevated levels of petroleum hydrocarbons were present in the soils surrounding the site. All contaminated material was removed from the site in 1998.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** TPH  
**MEDIA OF CONCERN:** Soil  
**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199803

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# FMR WASTE PCB STRG (DRMO 113), SWMU 55

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## FTRU-116

### SITE DESCRIPTION

The site was a paved area approximately 10-feet by 10-feet where transformers and capacitors containing PCBs were stored. A section of the pavement was removed and the underlying soils sampled. Semi-volatile organics and petroleum products were detected above action levels. Further investigation was required at this site to determine the full nature and extent of contamination. The Phase II RFI data do not confirm the Phase I data, and recommended No Further Action at this site. Based on findings of the Phase II RFI investigation, No Further Action is recommended at this site.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** Organics, TPH  
**MEDIA OF CONCERN:** Soil  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199602

# FMR WASTE PCB STRG (LUMBER YARD), SWMU 54

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## FTRU-117

### SITE DESCRIPTION

The site was a paved area approximately 20-feet by 20-feet where drums of transformer fluid were stored. Semi-volatile organics and petroleum products were detected in soils surrounding the site. Further investigation was required to determine the full extent of contamination. Phase II RFI results do not confirm the Phase I data. Based on findings of the Phase II RFI investigation, No Further Action is recommended at this site.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** Organics, TPH  
**MEDIA OF CONCERN:** Soil  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199602

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# ACID PIT B/T BLDG 6015 & 6016, SWMU 68

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## FTRU-119

### SITE DESCRIPTION

The site was a concrete box, 4 feet by 5 feet by 4 feet deep. It was used from the late 1950s until 1981 to dispose of spent battery (sulfuric) acid, which was reportedly neutralized prior to disposal. The top of the concrete box was visible at the land surface, the concrete was highly deteriorated, and the inside of the pit was backfilled with soil. A boring was drilled through the pit and soil samples were taken from depths of 6, 8, and 14 feet. Initial sampling showed the soils to be contaminated with lead, with the highest concentration of lead found at 14 feet. Further investigation was required at this site to determine the extent of soil and potential groundwater contamination. Data from the Phase II RFI indicated that contamination is not as pervasive as originally thought. Based on findings of the Phase II RFI investigation, No Further Action is recommended at this site.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Medium  
**CONTAMINANTS:** Metals  
**MEDIA OF CONCERN:**  
Groundwater, Soil  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199410

# STORM DRN OUTLETS, WASTE STRG AREA, SWMU 60

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## FTRU-120

### SITE DESCRIPTION

The site is located at Lowe Army Heliport near the western boundary of Fort Rucker. The site was an open area which was partially underlain by concrete for drum storage. Drums containing paint stripping wastes were reportedly placed on wooden pallets over soil and/or concrete. No stressed vegetation has been observed.

NFA was recommended by Phase I RFI because hazardous constituents were not detected in soil above regulatory levels. Groundwater was not encountered to a depth of 20 feet.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** NE  
**CONTAMINANTS:** Solvents  
**MEDIA OF CONCERN:** Soil  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199410

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# AREA OF OIL SPILL, SWMU L

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## FTRU-157

### SITE DESCRIPTION

This site was located near the southern boundary of Fort Rucker within a fenced storage yard between Buildings 6015 and 6016. This was the site of a spill which occurred in 1987 when a truck leaked approximately 50 gal of diesel fuel onto the ground.

This site was investigated and found to be free of contamination, or with contamination below any action levels of concern and no further investigation is required. Relative Risk Site Evaluations (RRSE) was not performed for this site, as it was determined through field investigation that this site did not require remedial action. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low  
**CONTAMINANTS:** POL  
**MEDIA OF CONCERN:** Soil  
**COMPLETED PHASE:** RFA, CS  
**CURRENT PHASE:** RC  
**FUTURE PHASE:** RC  
**RC DATE:** 199410

# WASTE OIL (55 GAL DRUMS) (BLD 4004) SWMU 64 FTRU-158

## SITE DESCRIPTION

The site was a drum storage area about 10 feet by 20 feet, uncovered and unpaved. It was used beginning in 1984 to store motor oil, lube oil, antifreeze and solvent. Some drums were stored on a drum rack, others on wooden pallets on the ground. Sampling results indicated elevated levels of petroleum hydrocarbons and removal of the soils was recommended. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

## STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

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# DEMOLISHED VEHICLE STORAGE YARD, SWMU 62 FTRU-161

## SITE DESCRIPTION

The site was an open, unpaved area, about 300-feet by 500-feet in size. It was used beginning in 1984 to store demolished vehicles. The vehicles were broken down for parts and abandoned on site. Results of the Phase II RFI sampling effort indicated localized petroleum contamination of the soils, and removal and disposal of these soils was recommended. All contamination was removed in 1998. Based on findings of the Phase II RFI investigation, No Further Action is recommended at this site.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

## STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199410

# SPENT BATTERY STRG, BLDG 6015, SWMU 41B

## FTRU-162

### SITE DESCRIPTION

The site consisted of several areas about 5 feet by 5 feet where batteries were stored on pallets awaiting transport to other locations. No containment, liner, or pavement was underneath the pallets. This site was used beginning in the early 1980s. Investigation results concluded that the soils adjacent to and below the pallets were contaminated with petroleum hydrocarbons, chromium, and lead. The soils in this area were recommended for removal. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Medium

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

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# WASTE OIL (AST) (BLDG 6015) SWMU 41A

## FTRU-165

### SITE DESCRIPTION

The site was a 300-gallon aboveground tank used to store waste motor oil from the DOL vehicle maintenance shop. The tank was horizontally welded to a steel rack approximately 2 feet above the ground. Investigation results concluded that the surrounding soils contained elevated metals and petroleum hydrocarbons, and removal of these soils was recommended. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199803

# PRODUCT STORAGE AREA, SWMU D

## FTRU-179

### SITE DESCRIPTION

The site consisted of a concrete pad and steel rack where drums were stored. A metal roof was over the site. The drums contained motor oil, solvents, and hydraulic fluid. The drums were placed horizontally and tapped for dispensing. Under the taps were two tin drip trays. Soil samples were taken around the site and results indicated the presence of elevated concentrations of lead and petroleum hydrocarbons. Recommendations were to remove the soils. All contaminated material was removed from the site in 1998.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** TPH, Metals

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS, CMI(WP), CMI(C)

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199808

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# FORMER HAZ. MAT'L DRUM STORAGE, SWMU G

## FTRU-180

### SITE DESCRIPTION

The site was an area approximately 100-foot square that was used to store drums of hazardous material. The RCRA Facility Assessment Report indicated that pallets with drums were stored on the soil. Initial soil sampling indicated that metals and semi-volatile organics were present. Additional investigation was required to determine full nature and extent of contamination at this site. Based on findings of the Phase II RFI investigation, No Further Action is recommended at this site.

All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

### STATUS

**RRSE RATING:** Low

**CONTAMINANTS:** Organics, Metals

**MEDIA OF CONCERN:** Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199602

**SITE DESCRIPTION**

The site was a rectangular, aboveground tank under an open shed (Building 1435). The tank was made of concrete, about 20-feet by 6-feet and 6-feet deep. It was used in the 1970s to preserve wood products. Originally, creosote was the preservative; later pentachlorophenol (PCP) was used. In 1987/1988, the tank was drained, filled with soil, and covered with concrete. Asphalt pavement surrounds the tank. The soil surrounding the pit was sampled to determine if past operations had impacted the environment. Petroleum products and semi-volatile organics were detected in the soil. Additional investigation was required at this site to determine full nature and extent of contamination. Based on findings of the Phase II RFI investigation, No Further Action is recommended at this site.

Based on the findings of the Phase II RFI, No Further Action is planned for the groundwater portion of this site. All contaminated material has been removed from the site. Coordination with Region IV EPA and the State is ongoing concerning closure of this site. No Further Action is recommended at this site.

**STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** Organics, TPH

**MEDIA OF CONCERN:**

Groundwater, Soil

**COMPLETED PHASE:** RFA, CS

**CURRENT PHASE:** RC

**FUTURE PHASE:** RC

**RC DATE:** 199602

Draft Corrective Measures Study (CMS) Work Plans were submitted to Region IV EPA for review and comment on 4 November 1992. Comments to the draft work plans were delivered to the Army in April 1993 and a meeting to discuss these comments was held in May 1993. A Corrective Action Management Plan (CAMP) was also prepared by the Army, detailing the schedules for each action proposed (i.e., removal, CMS/RFI). The work plans were approved by the EPA in September 1993, and fieldwork in support of the work plans began 45 days after regulator approval of the CAMP and Final Work Plans. **The schedule for IRP actions is subject to change, since according to the Federal Facility Agreement (FFA) signed between Region IV EPA and Fort Rucker, there are no specified deadlines imposed on the regulatory community for reviewing and commenting on documents, and this greatly impacts schedules.** The Draft Phase II RFI report was submitted for Region IV EPA and ADEM review on September 15, 1994. The Army received approval to this report from Region IV EPA. The Corrective Measures Study (CMS) was completed and a draft report submitted for review in June 1996. Approval was received from both the State and Region IV EPA in FY 1998. See schedule below.

## PAST MILESTONES

IRP Phase	Completion Date
RCRA Facility Assessment, EPA Region IV .....	Sep 1988
RFI Award .....	Sep 1990
RFI Phase I .....	Nov 1993
RFI Phase II Initiated .....	Nov 1993
RFI Phase II Completion .....	Feb 1996
CMS Initiated .....	Jan 1996
Design Complete for Removal Sites .....	Dec 1996
Final CMS Study Approved (ADEM/EPA) .....	Jan 1998
CMS Completion .....	Jun 1997
Natural Attenuation/Monitoring Start .....	Oct 1997

## PROJECTED MILESTONES

Removals Completed (15 sites)* .....	Sep 2008
Projected completion date of IRP excluding LTM: ..	Sep 2008
Long Term Monitoring Completion .....	Oct 2015

\*Note: Removals completion date delayed to 2008 due to the low Relative Risk Score according to Department of Defense's (DoD's) Defense Planning Guidance (DPG)

The following sites currently require no further action under the ER,A program:

Site	Description	RC Date
FTRU-002	LF North of Aeromed Res Bld SWMU 3	200109
FTRU-004	LF Property Disposal Yard, SWMU 7	199410
FTRU-006	LF S of Castle Rd & N of Resv Bndry, SWMU 9	199602
FTRU-007	LF S of Dilly BR/N or Castle Rd, SWMU 11	199602
FTRU-010	SI Hatch Road Near Lake, SWMU 2C	199812
FTRU-022	Present Ammo Insp Pt Burn Trench, SWMU 66	198611
FTRU-023	Fmr Ammo Insp Pt Burn Trench, SWMU 67	198611
FTRU-030	Wastewater Treatment Plant, SWMU 20	199208
FTRU-041	Storage Waste POL - 10K Gal RR Tank, SWMU 27	199803
FTRU-042	Strg Waste POL (10K Gal RR Tank), SWMU 28	199803
FTRU-045	Storage Waste POL (30K Gal AST), SWMU 31	199803
FTRU-052	Wst Fuel Str SW Dilly Br Rd & Ave F SWMU 63	199803
FTRU-071	Pesticide Store/Handle (Bld 1424) SWMU 48	199712
FTRU-075	Pesticide/Herbicide Ste (Bld 20023) SWMU 51	199602
FTRU-079	Washrack W/ OW Sep (Bldg 1436), SWMU 80	199602
FTRU-080	Washrack W/ OW Sep (Lowe AHP), SWMU 71	199803
FTRU-081	Washrack W/ OW Sep (Bldg 6035), SWMU 72	199410
FTRU-082	Washrack W/ OW Sep (Bldg 1412), SWMU 73	199803
FTRU-083	Washrack W/ OW Sep (Alng Area), SWMU 74	199410
FTRU-101	Sump Drainage System - POL Shop SWMU 70	199803
FTRU-109	Material Storage (Bldg 6015), SWMU K	199803
FTRU-110	Former Haz Waste Storage Area, SWMU 61	199410
FTRU-114	Photographic Lab (Bldg 1109), SWMU 57	198611
FTRU-115	New PCB Mtr Store (Engr & Dilly Br) SWMU J	199803
FTRU-116	Fmr Waste PCB Strg (DPDO 113), SWMU 55	199602
FTRU-117	Fmr Waste PCB Strg (Lumber Yard), SWMU 54	199602
FTRU-119	Acid Pit B/T Bldg 6015 & 6016, SWMU 68	199410
FTRU-120	Storm Drn Outlets, Waste Strg Area, SWMU 60	199410
FTRU-157	Area of Oil Spill, SWMU L	199410
FTRU-158	Waste Oil (55 Gal Drums) (Bld 4004) SWMU 64	199803
FTRU-161	Demolished Vehicle Storage Yard, SWMU 62	199410
FTRU-162	Spent Battery Strg, Bldg 6015, SWMU 41B	199803
FTRU-165	Waste Oil (AST) (Bldg 6015), SWMU 41A	199803
FTRU-179	Product Storage Area, SWMU D	199808
FTRU-180	Former Haz. Mat'l Drum Storage, SWMU G	199602
FTRU-181	PCP Dip Tank, SWMU 69	199602

*No Further Action Sites continued on next page*

## NO FURTHER ACTION SITES, continued

The following sites currently require no further action under the ER,A program by Corrective Measures Permit:

Site	Description	RC Date
FTRU-001	LANDFILL SOUTH OF OLD HOSPITAL, SWMU 2A	198611
FTRU-009	LANDFILL NEAR ENTRANCE STOR YARD,SWMU 2B	198611
FTRU-011	LF GULLY ON AIRPORT RD/NEAR SH95,SWMU 13	198611
FTRU-013	CONSTRUCTION DEBRIS LANDFILL, SWMU 1	198611
FTRU-014	MUNICIPAL WASTE INCINERATOR, SWMU 22	198611
FTRU-015	HOSPITAL INCINERATOR, SWMU 23	198611
FTRU-020	MAIN POST LANDFILL, SWMU 5	198611
FTRU-031	HATCHEY ARMY HELIPORT STP(LAGOON),SWMU16	198611
FTRU-032	KNOX ARMY HELIPORT STP (LAGOON), SWMU 17	198611
FTRU-033	LOWE WSTEWTR PRETREAT(CRREDX)PLANT,SWM19	198611
FTRU-034	CAIRNS AHP SEWAGE TREAT PLANT, SWMU 21	198611
FTRU-043	STORAGE WASTE POL(10K GAL UST) SWMU 29	198611
FTRU-044	STORAGE WASTE POL(10K GAL UST) SWMU 30	198611
FTRU-046	WASTE POL(UST)(BLDG 4701) 2EA, SWMU 32AB	198611
FTRU-047	WASTE OIL(UST)(BLDG 6021) 2EA, SWMU 33AB	198611
FTRU-048	WASTE POL(UST) (BLDG 311) SWMU 34 A & B)	198611
FTRU-049	WASTE POL(UST) (BLDG 1102) SWMU 35	198611
FTRU-050	WASTE POL(UST) (BLDG 1013), SWMU 36	198611
FTRU-084	WASHRACK W/O W SEP(4000 BLOCK), SWMU 75	198611
FTRU-085	WASHRACK W/O W SEP(11TH & 2ND AVE)SWMU76	198611
FTRU-086	WASHRACK W/O W SEP(FIRE STATION), SWMU77	198611
FTRU-087	WASHRACK W/O W SEP(BLDG 405), SWMU 78	198611
FTRU-088	WASHRACK W/O W SEP(BLDG 708), SWMU 79	198611
FTRU-089	WASHRACK W/O W SEP(BLDG 706), SWMU 92	198611
FTRU-090	WASHRACK W/O W SEP(BLDG 709), SWMU 91	198611
FTRU-091	WASHRACK W/O W SEP(BLDG 1406), SWMU 89	198611
FTRU-092	WASHRACK W/O W SEP(BLDG 1416), SWMU 81	198611
FTRU-093	WASHRACK W/O W SEP(BLDG 4710), SWMU 82	198611
FTRU-094	WASHRACK W/O W SEP(BLDG 25104), SWMU 83	198611
FTRU-095	WASHRACK W/O W SEP(BLDG 50201), SWMU 85	198611
FTRU-096	WASHRACK W/O W SEP(BLDG 30306), SWMU 86	198611
FTRU-097	WASHRACK W/O W SEP(BLDG 30301), SWMU 87	198611
FTRU-098	WASHRACK W/O W SEP(BLDG 50201), SWMU 84	198611
FTRU-099	WASHRACK W/O W SEP(BLDG 30125), SWMU 88	198611
FTRU-100	WASHRACK W/O W SEP(BLDG 60115), SWMU 90	198611
FTRU-102	RADIOLOGICAL WASTE STG (BLDG1314) SWMU58	198611
FTRU-112	HAZ WASTE STG AREA BLDG 427, (SWMU 56)	198611

**NO FURTHER ACTION SITES, continued**

The following sites currently require no further action under the ER,A program by Corrective Measures Permit:

Site	Description	RC Date
FTRU-113	MATERIAL STORAGE YARD(1200 AREA), SWMU59	198611
FTRU-150	WASTEOIL (500 GAL TAK)(BLDG 405), SWMU C	198611
FTRU-151	WASTE OIL(500 GAL AST) (BLDG 702) SWMU38	198611
FTRU-152	FORMER PCB STORAGE AREA, SWMU 53	198611
FTRU-153	WASTE OIL(1000 GAL)(BLDG 1406)SWMU 7044	198611
FTRU-154	PCB STORAGE AREA, SWMU 52	198611
FTRU-156	VMS WASTE POL, UST, SWMU 37	198611
FTRU-159	WASTE OIL(200 GAL UST)(BLD 4004) SWMU 45	198611
FTRU-160	WASTE OIL(500 GAL AST)(BLD 4710) SWMU 39	198611
FTRU-163	WASTE OIL(UST) (BLDG 5410) SWMU 46	198611
FTRU-164	OLD DISMANTLED INCINERATOR,SWMU 24,25,26	198611
FTRU-166	WASTE OIL(200 GAL UST)(BLD 8304)SWMU 40A	198611
FTRU-167	WASTE OIL(50K GAL UST)(BLD 8303)SWMU 40B	198611
FTRU-168	EMPTY 50K GALLON TANK, SWMU A	198611
FTRU-169	8-BRAVO EOD RANGE, SWMU 65	198611
FTRU-170	WASTE OIL(UST) (ALNG SITE) SWMU 43	198611
FTRU-172	DIESEL, UST, SWMU H	198611
FTRU-173	UNKNOWN UST-LOWE AHP, SWMU I	198611
FTRU-174	OIL GAS STATION SITE, UST, SWMU E	198611
FTRU-175	OLD GAS STATION SITE, UST, SWMU F	198611
FTRU-176	INACTIVE CONSTRUCTION DEBRIS LF, SWMU 12	198611
FTRU-177	MAIN SEWAGE TREATMENT PLANT, SWMU 18	198611
FTRU-178	VMS, WASTE POL, UST, SWMU 42	198611
FTRU-182	BLDG 810, REFUELING POINT	199607
FTRU-183	CONTAMINATED SOIL, TANK HILL	199701

# Schedule

## Fort Rucker Installation Action Plan Schedule

CURRENT PHASE

FUTURE PHASE

AEDBR #	Site Name	RRSE	Phase	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
FTRU-003	LF SW Corner Red Cloud/Copter Rd SWMU 6	Med	LTM						
FTRU-005	LF S of Engr Rd & N of Resv Bndry, SWMU 8	Med	LTM						
FTRU-008	LF N of Dilly Br Rd/E of Test Std, SWMU 10	Med	LTM						
FTRU-012	Landfill Ozark City Leasee, SWMU 4	Med	LTM						
FTRU-040	Waste POL Disposal, SWMU 14	Med	LTM						
FTRU-051	Firefighting Tng Area, SWMU 15	High	LTM						
FTRU-070	Pesticide Stor/Handle (Bldg 1476) SWMU 49	Low	LTM						
FTRU-073	Herbicide Storage (Bldg 1448), SWMU 50	Low	LTM						
FTRU-171	Closed Sanitary Landfill, SWMU 2D	High	CMI(WP) CMI(C) LTM						

# Remediation Activities

**COMPLETED  
REM/IRA/RA:**

FTRU-002 - IRA - completed 200109  
FTRU-010 - FRA - Waste Removal Soils - completed 199809  
FTRU-041 - FRA - Waste Removal Soils - completed 199801  
FTRU-045 - FRA - Waste Removal Soils - completed 199801  
FTRU-051 - FRA - Thermal Desorption - completed 199809  
FTRU-052 - FRA - Waste Removal Soils - completed 199801  
FTRU-070 - IRA - Waste Removal Soils - completed 200209  
FTRU-071 - FRA - Waste Removal Soils - completed 199711  
FTRU-073 - FRA - Waste Removal Soils - completed 200109  
FTRU-080 - FRA - Waste Removal Soils - completed 199801  
FTRU-082 - FRA - Waste Removal Soils - completed 199801  
FTRU-101 - FRA - Waste Removal Soils - completed 199801  
FTRU-109 - FRA - Waste Removal Soils - completed 199801  
FTRU-115 - FRA - Waste Removal Soils - completed 199801  
FTRU-158 - FRA - Waste Removal Soils - completed 199801  
FTRU-162 - FRA - Waste Removal Soils - completed 199801  
FTRU-165 - FRA - Waste Removal Soils - completed 199801  
FTRU-179 - FRA - Waste Removal Soils - completed 199808

**CURRENT  
REM/IRA/RA:**

None at this time

**FUTURE  
REM/IRA/RA:**

FTRU-171 - FRA - Capping - planned for 200706  
FTRU-171 - FRA - Fence or other site access control measures - planned for 200706

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# Community Involvement

## **RESTORATION ADVISORY BOARD (RAB) STATUS**

Three notices were placed in local newspapers to solicit interest in establishing a Restoration Advisory Board (RAB). The notices informed the public of the role of the RABs and gave a window of opportunity to reply within 30 days. No public interest was expressed at that time.