

**FY2015**

**FORT STEWART**

**Army Defense Environmental Restoration Program**

**Installation Action Plan**

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## Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC), and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA).

In an effort to coordinate planning information between the restoration manager, the Installation Management Command (IMCOM), the US Army Environmental Command (USAEC), Fort Stewart (FTSW) the executing agencies, the regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

## Acronyms

AAFES	Army, Air Force Exchange Services
ACL	Alternate Concentration Limit
AEDB-CC	Army Environmental Database - Compliance-related Cleanup
AEDB-R	Army Environmental Database - Restoration
AOC	Area of Concern
AST	Aboveground Storage Tank
bgs	below ground surface
BMP	Base Master Plan
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
cal	caliber
CAP	Corrective Action Plan
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operations)
CMS	Corrective Measures Study
COC	Contaminant of Concern
COPC	Contaminant of Potential Concern
CR	Compliance Restoration
cy	cubic yard
CY	Calendar Year
DCE	Dichloroethene
DD	Decision Document
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DES	Design
DoD	Department of Defense
DPT	Direct-Push Technology
DPW	Directorate of Public Works
EFR	Event Free-Product Removals
EOD	Explosive Ordnance Disposal
ER,A	Environmental Restoration, Army
FRA	Final Remedial Action
FS	Feasibility Study
FSMR	Fort Stewart Military Reservation
FST	Designation for Fort Stewart in AEDB-R
FTA	Fire Training Area
FTSW	Fort Stewart
FY	Fiscal Year
GA	Georgia
GAEPD	Georgia Environmental Protection Division
GDNR	Georgia Department of Natural Resources
GIS	Geographic Information Systems
GUST	Georgia Underground Storage Tank (regulations)
HAAF	Hunter Army Airfield

## Acronyms

HE	High Explosives
HOT	Heating Oil Tank
HRR	Historical Records Review
IAP	Installation Action Plan
IC	Institutional Control
ID	Identification
IM	Interim Measures
IMCOM	Installation Management Command
IMP(C)	Implementation (Construction)
IMP(O)	Implementation (Operation)
INV	Investigation
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
ISC	Initial Site Characterization
JP-4	Jet Propellant Number 4
LNAPL	Light, Non-Aqueous Phase Liquid
LTM	Long-Term Management
LUC	Land Use Control
MC	Munitions Constituents
MCL	Maximum Contaminant Levels
MEC	Munitions and Explosives of Concern
mg/kg	milligrams/kilogram
MILCON	Military Construction
MIP	Multi-Interphase Probe
mm	millimeter
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MOGAS	Motor Gasoline
MR	Munitions Response
MRA	Munitions Response Areas
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
n/a	not available
NCO	Noncommissioned Officer
NFA	No Further Action
NGTC	National Guard Training Center
NPL	National Priorities List
O&M	Operations and Maintenance
OB	Open Burning
OD	Open Detonation
ODUSD(I&E)	Office of the Deputy Under Secretary of Defense for Installations and Environment
OMA	Operations and Maintenance - Army
ORC	Oxygen-Release Compound
OWS	Oil/Water Separator

## Acronyms

PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PBA	Performance-Based Acquisition
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
POL	Petroleum, Oil and Lubricants
ppb	parts per billion
PRG	Preliminary Remediation Goal
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAB	Restoration Advisory Board
RBC	Risk-Based Concentration
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy-In-Place
RL	Remedial Level
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SAR	SWMU Assessment Report
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TCE	Trichloroethylene
TCRA	Time Critical Removal Action
TPH	Total Petroleum Hydrocarbons
TRC	Technical Review Committee
ug/kg	micrograms/kilogram
ug/L	micrograms per liter
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USAEHA	US Army Environmental Hygiene Agency
USC	United States Code
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
USTMP	Underground Storage Tank Management Program
UXO	Unexploded Ordnance

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## Acronyms

VC Vinyl Chloride  
VOC Volatile Organic Compound  
WAAF Wright Army Airfield  
WWII World War II



## Acronym Translation Table

### CERCLA

Preliminary Assessment(PA)  
Site Inspection(SI)  
Remedial Investigation/Feasibility Study(RI/FS)  
Remedial Design(RD)  
Remedial Action (Construction)(RA(C))  
Remedial Action (Operation)(RA(O))  
Long Term Management(LTM)  
Interim Remedial Action(IRA)

### RCRA

= RCRA Facility Assessment(RFA)  
= Confirmation Sampling(CS)  
= RCRA Facility Investigation/Corrective Measures Study(RFI/CMS)  
= Design(DES)  
= Corrective Measures Implementation (Construction)(CMI(C))  
= Corrective Measures Implementation (Operation)(CMI(O))  
= Long Term Management(LTM)  
= Interim Measure(IM)

# Installation Information

## Installation Locale

**Installation Size (Acreage):** 279000

**City:** Hinesville

**County:** Liberty

**State:** Georgia

## Other Locale Information

The installation is bisected by Georgia Highway 119, that connects Pembroke to Hinesville in a north to south direction, and Georgia Highway 144, that connects Richmond Hill to Glennville in an east to west direction.

## Installation Mission

The mission of the Fort Stewart/Hunter Army Airfield complex is to sustain a quality of life and installation support at the level necessary for division, non-divisional, tenant, and reserve component units to accomplish their training mission.

## Lead Organization

IMCOM

## Lead Executing Agencies for Installation

US Army Corps of Engineers (USACE)

## Regulator Participation

**Federal** US Environmental Protection Agency (USEPA), Region 4

**State** Georgia Department of Natural Resources (GDNR), Environmental Protection Division

## National Priorities List (NPL) Status

FORT STEWART is not on the NPL

## Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

Installation is in the process of determining interest in establishing a RAB.

## Installation Program Summaries

### IRP

**Primary Contaminants of Concern:** Explosives, Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC), Volatiles (VOC)

**Affected Media of Concern:** Groundwater, Soil, Surface Water

### MMRP

**Primary Contaminants of Concern:** Munitions and explosives of concern (MEC), Munitions constituents (MC)

**Affected Media of Concern:** Groundwater, Soil

### CR

**Primary Contaminants of Concern:** Volatiles (VOC)

**Affected Media of Concern:** Groundwater

## 5-Year / Periodic Review Summary

### 5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Complete	201005	201109	2011
Planned	201506	201509	2015

### Last Completed 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
DD for FRA at SWMU 8 (ICs)	FST-008
DD for Inactive EOD Area No. 3 (FRA)	FST-010
DD for Inactive EOD Area No. 4 (FRA)	FST-011
DD for Inactive EOD Area Red Cloud (FRA)	FST-009
FST-001, FST-002, FST-003	FST-001, FST-002, FST-003

**Results** The remedies are generally functioning as intended by the DDs.

**Actions** Site locations in BMP GIS database appeared to be incorrect for some of the sites.

**Plans** Ensure BMP GIS database is correct for locations and conduct next periodic review in FY16.

### Recommendations and Implementation Plans:

TBD
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## Land Use Control (LUC) Summary

**LUC Title:** Camp Oliver Landfill

**Site(s):** FST-002

**ROD/DD Title:** DD for Camp Oliver Landfill (FRA)

**Location of LUC**

Fort Stewart Georgia (Camp Oliver sub-facility).

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes

**Types of Engineering Controls:** Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictive covenants, Zoning

**Date in Place:** 200107

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS, PCBs, PESTICIDES, VOC

**Additional Information**

N/A

**LUC Title:** Inactive EOD Area No. 1

**Site(s):** FST-008

**ROD/DD Title:** DD for FRA at SWMU 8 (ICs)

**Location of LUC**

Solid waste management unit (SWMU) 8 is located approximately nine miles northeast of the cantonment area, between Fort Stewart Roads 53 and 57, one mile south of Georgia State Highway 144. The site consists of almost two acres, mostly clear of trees and vegetation. The site is accessed by an unpaved road off of Tank Trail No. 57. The access road divides SWMU 8 into two sections approximately equal in area (0.99 acre on the east and 0.84 acre on the west). Three blast craters and one open burning trench are located within the site's boundaries.

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes

**Types of Engineering Controls:** Fences, Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictive covenants, Zoning

**Date in Place:** 200112

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS, PCBs, PESTICIDES, VOC

**Additional Information**

N/A

## Land Use Control (LUC) Summary

**LUC Title:** Inactive EOD Area No. 3

**Site(s):** FST-010

**ROD/DD Title:** DD for Inactive EOD Area No. 3 (FRA)

**Location of LUC**

SWMU 10 is located four miles north of the garrison area and one mile east of State Road 119. This EOD site is located in an area designated as B-8 on the Fort Stewart Installation Map, near firing point 101. The EOD area operated from 1975 to 1980, with open detonation (OD) of unexploded ordnance (UXO) taking place. The site is located approximately 1,500 feet east of Taylors Creek. This EOD area is reported to be inactive.

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes

**Types of Engineering Controls:** Fences, Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictive covenants, Zoning

**Date in Place:** 200112

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS

**Additional Information**

N/A

**LUC Title:** Inactive EOD Area No. 4

**Site(s):** FST-011

**ROD/DD Title:** DD for Inactive EOD Area No. 4 (FRA)

**Location of LUC**

SWMU 11 is located three miles northeast of the garrison area, about two miles south of State Road 144, and one mile northeast of Wright Army Airfield. This EOD area is located in an area designated as A-16 on the Fort Stewart Installation Map. The EOD area operated from 1953 to 1975, with open detonation of UXO taking place. Numerous blast craters are spread out over nearly one acre. The entire site is approximately 1.8 acres.

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes

**Types of Engineering Controls:** Fences, Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictive covenants, Zoning

**Date in Place:** 200112

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS

**Additional Information**

## Land Use Control (LUC) Summary

N/A

**LUC Title:** Inactive EOD Red Cloud

**Site(s):** FST-009

**ROD/DD Title:** DD for Inactive EOD Area Red Cloud (FRA)

**Location of LUC**

Located in the Red Cloud Range.

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes, Restrict land use - Mitigation area(s) protection, Restrict land use - No residential use

**Types of Engineering Controls:** Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictions on land use, Restrictive covenants, Zoning

**Date in Place:** 200112

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS

**Additional Information**

N/A

**LUC Title:** South Central Landfill

**Site(s):** FST-001

**ROD/DD Title:** DD for South Central Landfill (ICs)

**Location of LUC**

Inactive portion of South Central Landfill located at junction of Highways 144 and 119.

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes

**Types of Engineering Controls:** Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictive covenants, Zoning

**Date in Place:** 200010

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS, PCBs, PESTICIDES, VOC

**Additional Information**

N/A

## Land Use Control (LUC) Summary

**LUC Title:** TAC-X Landfill

**Site(s):** FST-003

**ROD/DD Title:** DD for TAC-X Landfill (FST-03)

**Location of LUC**

Fort Stewart, Georgia (near NCO Academy on Highway 196).

**Land Use Restriction:** Media specific restriction - prohibit use of groundwater for consumption or domestic purposes

**Types of Engineering Controls:** Signs

**Types of Institutional Controls:** Notations in Master Plan, Restrictions on Groundwater Withdrawal, Restrictive covenants, Zoning

**Date in Place:** 200107

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

**Record of LUC:** Master Plan or Equivalent

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections

**Contaminants:** METALS, PCBs, PESTICIDES, VOC

**Additional Information**

N/A

# Cleanup Program Summary

## Installation Historic Activity

Fort Stewart was originally established in June 1940 as an Anti-Aircraft Artillery Training Center to prepare artillery troops for overseas deployment. Training activities associated with World War II (WWII) decreased by the end of 1944. Between January 1945 and September 1945, the Installation operated as a prisoner-of-war camp, housed two Italian units, and served as a separation center. Fort Stewart was deactivated in September 1945.

In August 1950, Fort Stewart was reactivated to train anti-aircraft artillery units for the Korean Conflict. The training mission was expanded to include armor training concurrent with anti-aircraft artillery training in 1953. In 1956, Fort Stewart was designated a permanent Army installation. An element of the US Army Aviation School from Fort Rucker, Alabama was stationed there from 1966 to 1973.

The 1st Battalion, 75th Infantry (Ranger) was activated at Fort Stewart on Jan. 31, 1974. Fort Stewart became a training and maneuver area providing tank, field artillery, helicopter gunnery, and small arms training for regular Army, US Army Reserve, and National Guard units. The 24th Infantry Division (mechanized) was permanently stationed at Fort Stewart in 1975. The 24th Infantry Division was active during the Persian Gulf War in 1991 and was reflagged as the 3d Infantry Division in May 1996.

The Chief of Staff of the Army has directed reorganization of the 3d Infantry Division from brigades into smaller self-contained "units of action" that can survive independently on a battlefield, creating a complete battle ready combat force in a small package. With more units than brigades, Soldiers' deployment rotations would occur less frequently for shorter periods of time with Operation Iraqi Freedom and Operation Enduring Freedom ongoing, as well as many other possible future missions.

Fort Stewart presently accommodates three brigades that would be incorporated into four units of action, so additional facilities would be needed in order to accommodate four units of action. Fort Stewart currently accommodates many of these Soldiers and their equipment in their current brigade configuration that would be reassigned to the new 4th unit of action. Approximately 2,000 additional Soldiers to complete the unit of action arrived at Fort Stewart in July 2004.

## Installation Program Cleanup Progress

### IRP

**Prior Year Progress:** Continued groundwater monitoring at FST-13 and FST-26 and FST-25A3 Army, Air Force Exchange Services (AAFES) Car Care Center USTs 257-261.

**Future Plan of Action:** FST-13: LTM will continue. FST-24: Upon receipt of approval of the no further action (NFA) for the solid waste management unit (SWMU) assessment report (SAR), a total of nine site wells will be abandoned and site closeout. FST-26: LTM of a biosparge system is expected to continue until the approved remedial levels are reached. Based on recent sample results for FST-25A3 AAFES car care center anticipate receipt of a NFA and site close out.

### MMRP

**Prior Year Progress:** A Resource Conservation and Recovery Act (RCRA) facility investigation report was approved by Georgia Environmental Protection Division (GAEPD) for FTSW-002-R-01 and FTSW-006-R-01. A small-arms range berm area RFI Phase I report. Site FTSW-006--R-01 was submitted to GAEPD.

**Future Plan of Action:** Implementation of a CMS for FTSW-002-R-01. Phase II RFI at FTSW-006-R-01. Initiation of fieldwork for RFI at FTSW-09-R-01; FTSW-09-R-02; FTSW-10-R-01 and FTSW-11-R-01.

### CR

**Prior Year Progress:** Received NFA required for CCUSTVICT underground storage tanks (UST) 276-279 abandoned all monitoring wells and performed site closeout.

**Future Plan of Action:** A corrective action plan (CAP) is recommended to address remedial alternatives at CCFST-039. A pilot study will be implemented at CCHOTs-419 to address the free-phase product on site.



**FORT STEWART**  
**Army Defense Environmental Restoration Program**  
**Installation Restoration Program**

# IRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 85/79

## Installation Site Types with Future and/or Underway Phases

- 1 Contaminated Buildings  
(FST-024)
- 1 Contaminated Ground Water  
(FST-026)
- 1 Explosive Ordnance Disposal Area  
(FST-011)
- 1 Fire/Crash Training Area  
(FST-013)
- 1 Landfill  
(FST-001)
- 1 Underground Storage Tank  
(FST-25A3)

## Most Widespread Contaminants of Concern

Explosives, Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC), Volatiles (VOC)

## Media of Concern

Groundwater, Soil, Surface Water

## Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
FST-025B	UST BLDG 1820	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025CA	UST BLDG 1810	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025CB	UST BLDG 1811	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025D	UST BLDG 1720	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025DB	UST BLDG 1720	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025EA	UST BLDG 1720	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025F	UST BLDG 1720	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025N	UST BLDG 1130	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025QA	UST BLDG 1223	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZI	UST BLDG 4502	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZJ	UST BLDG 4502	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZK	UST BLDG 4502	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZL	UST BLDG 4502	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZO	UST BLDG 4577	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZP	UST BLDG 4577	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZQ	UST BLDG 4577	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995

## IRP Summary

### Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
FST-025ZR	UST BLDG 4577	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025ZU	UST BLDG 4578	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995
FST-025AA	UST BLDG 1840	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025EB	UST BLDG 1720	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025FA	UST BLDG 1720	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025J	UST BLDG 1542	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025JA	UST BLDG 1175	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025PA	UST BLDG 1280	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025V	UST BLDG 1330	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025VA	UST BLDG 1323/28	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025XA	UST BLDG 1339A	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025YA	UST BLDG 1349	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025Z1	UST BLDG 241	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZA	UST BLDG 260	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZB	UST BLDG 260	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZD	UST BLDG 230	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZH	UST BLDG 4502	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZM	UST BLDG 4520	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZV	UST BLDG 4586	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-025ZX	UST BLDG 241	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1996
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	IRA	REMOVAL	1996
FST-25A1	FORMER UNDERGROUND STORAGE TANKS: GRP I	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1997
FST-25A2	FORMER UNDERGROUND STORAGE TANKS: GRP II	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1997
FST-25A3	FORMER USTS: GR III, various phases	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1997
FST-013	FIRE TRAINING AREA AT WAAF (SWMU 13)	IRA	REMOVAL	1998
FST-031	DPW ASPHALT TANKS (SWMU 31)	IRA	REMOVAL	1999

## IRP Summary

### Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
FST-002	CAMP OLIVER LANDFILL (SWMU 2)	FRA	INSTITUTIONAL CONTROLS	2001
FST-002	CAMP OLIVER LANDFILL (SWMU 2)	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2001
FST-003	TAC-X LANDFILL (SWMU 3)	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2001
FST-003	TAC-X LANDFILL (SWMU 3)	FRA	INSTITUTIONAL CONTROLS	2001
FST-011	INACTIVE EOD AREA #4 (SWMU 11)	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2002
FST-013	FIRE TRAINING AREA AT WAAF (SWMU 13)	FRA	NATURAL ATTENUATION	2002
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	IRA	GROUND WATER TREATMENT	2002
FST-010	INACTIVE EOD AREA #3 (SWMU 10)	FRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2003
FST-25A3	FORMER USTS: GR III, various phases	IRA	BIOREMEDIATION - IN SITU GROUNDWATER	2003
FST-25A3	FORMER USTS: GR III, various phases	FRA	FREE PRODUCT RECOVERY	2003
FST-024	OLD PAINT BOOTH (SWMU 24B)Bid 1056	FRA	NATURAL ATTENUATION	2004
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	IRA	REMOVAL	2004
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	FRA	NATURAL ATTENUATION	2004
FST-035	WAAF BULK FUEL SYSTEM (SWMU 35)	FRA	BIOREMEDIATION	2004
FST-25A3	FORMER USTS: GR III, various phases	FRA	GROUND WATER TREATMENT	2004
FST-013	FIRE TRAINING AREA AT WAAF (SWMU 13)	FRA	BIOREMEDIATION - IN SITU GROUNDWATER	2008
FST-013	FIRE TRAINING AREA AT WAAF (SWMU 13)	FRA	REMOVAL	2008
FST-013	FIRE TRAINING AREA AT WAAF (SWMU 13)	FRA	IN-SITU SOIL TREATMENT	2008
FST-035	WAAF BULK FUEL SYSTEM (SWMU 35)	FRA	BIOREMEDIATION - IN SITU	2008
FST-035	WAAF BULK FUEL SYSTEM (SWMU 35)	FRA	REMOVAL	2010
FST-035	WAAF BULK FUEL SYSTEM (SWMU 35)	FRA	IN-SITU SOIL TREATMENT	2010
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	FRA	REMOVAL	2011
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	FRA	BIOREMEDIATION - IN SITU GROUNDWATER	2011
PBA@Stewart	Funding PBA at Stewart	FRA	OTHER	2013
FST-25A3	FORMER USTS: GR III, various phases	FRA	REMOVAL	2014
FST-25A3	FORMER USTS: GR III, various phases	FRA	CARBON ADSORPTION	2014

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## IRP Summary

### Duration of IRP

**Date of IRP Inception:** 198702

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 201310/204509

**Date of IRP completion including Long Term Management (LTM):** 204509

# IRP Contamination Assessment

## Contamination Assessment Overview

The Environmental Restoration, Army (ER,A) program at FTSW focuses on investigation and remediation of eligible sites, where contamination occurred due to past practices and activities conducted at the installation. The installation has identified 85 AEDB-R sites to include in the IAP. Of the following AEDB-R sites, only two (FST-001 and FST-011) are in the LTM phase.

Eighty of the 86 ER,A eligible and are considered to be response complete (RC) because further investigation is not required.

The following six AEDB-R sites are RC because further investigation is not required, they were not considered eligible for ER,A funding:

FST-020 FST-022 FST-023  
FST-028 FST-031 FST-033

The following six AEDB-R sites are RC under the ER,A program because they are currently active sites and are not eligible for ER,A funding:

FST-012 FST-018 FST-027  
FST-029 FST-032 FST-034

Thus, the following six of the 85 identified AEDB-R sites are ER,A sites and are at various stages of investigation or remediation:

FST-001 FST-011 FST-013  
FST-024 FST-25A3 FST-026

The following additional seven restoration sites are not in the AEDB-R and have received an NFA decision from GAEPD (Aug. 14, 1997 Subpart B permit or subsequent modifications):  
SWMU 5, SWMU 6, SWMU 7, SWMU 15, SWMU 16, SWMU 21 and SWMU 38.

Sites that under active remedial actions are primarily contaminated with petroleum hydrocarbons due to the operation of motor pool fueling systems (i.e., storage, product delivery lines, and other components) that were required to support unit activities. In addition, fuel tanker purging operations during Desert Storm (FST026) and fire training activities prior to 1992 (FST-013) also resulted in extensive petroleum hydrocarbon contamination.

The primary contaminants of concern (COC) at these sites are benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs), with a limited number also containing free phase product (i.e., light non-aqueous phase liquid [LNAPL]). To date, chlorinated solvent contamination has not been identified at FTSW.

Beginning in fiscal year (FY)97, FTSW consolidated and therefore reduced the number of AEDB-R sites by combining former UST sites that were in the same stage of investigation. Thus, in FY97 the following AEDB-R sites were regrouped:

FST-25A1:

FST-025A (Tank 1) E (Tank 20) H (Tank 28A) M (Tank 61)  
O (Tank 70) U (Tank 89) Y (Tank 100) AB (Tank 4A)  
DA (Tank 18) HB (Tank 29) NA (Tank 67) RA (Tank 82)  
UA (Tank 92) WA (Tank 94A) ZE (Tank 210) ZS (Tank 232)  
ZT (Tank 236)

FORT STEWART IAP -

FST-25A2:

FST-25I (Tank 38) P (Tank 71A) R (Tank 79) X (Tank 94B)  
Z (Tank 100B) HA (Tank 28B) KB (Tank 56) MA (Tank 64)  
OA (Tank 71) ZC (Tank 207) ZF (Tank 214) ZG (Tank 215)  
ZN (Tank 225) ZW (Tank 242) ZY (Tank 244) ZZ (Tank 261)

FST-25A3:

Tanks No. 2, No.3 No.11 No.12 No.15 No.16,

# IRP Contamination Assessment

## Contamination Assessment Overview

Nos.30-37 No.43 No.44 No.48 No.49 No.54  
No.55 No.63 No.68 No.69 No. 72 No.73  
No.77 No.78 No.80 No.81 No.87 No. 88  
No.90 No.91 Nos.95-97 No.200 No.201 Nos.202-204  
No.205 No.206 No.208 No.209 No.222 No.223  
No.226 No.227 No.234 No.235 No.239 No.240  
No.248 No.249 Nos.255-261 and National Guard Training Center (NGTC) 4, 5, 6, 7, 16.

In FY00, the non-RC sites in FST-25A1 and FST-25A2 were consolidated with the non-RC sites in FST-25A3. This enabled FST-25A1 and FST-25A2 to be entered in fall FY00 as RC and currently FST-25A3 consists of 36 former USTs. In FY08, a performance-based acquisition (PBA) contract was awarded to remediate FST-013, FST-024B, FST-26, and FST-035.

There are six sites that are currently in the Installation Restoration Program (IRP). Two sites (FST-001 and FST-011) are in the LTM phase. FST-001 has three sites associated with it; FST-002 and FST-003 were combined with FST-001 in 2003 in AEDB-R. These sites are landfills and in accordance with approved CAPs from GAEPD, site inspections are to take place annually along with submittal of annual reports until base closure. FST-011 has four sites associated with it: FST-008, -009, and -010 were combined with FST-011 in 2003 in AEDB-R. These sites are inactive explosive ordnance disposal (EOD) areas and in accordance with approved CAPs from GAEPD, site inspections are to take place annually along with annual reports until base closure.

Four sites are in the operations and maintenance (O&M) phase: FST-013, FST-024, FST-25A3, and FST-026. In FY15 a PBA contract was awarded that included FST-001, FST-011, FST-013, and FST-026.

## Cleanup Exit Strategy

The following are Fort Stewart IRP exit strategies for active sites:

FST-001: Land use institutional controls (ICs) are in place. Annual site and sign inspections are required until base closure. Site and sign inspections for FST-002 and FST-003 are also performed under FST-001.

FST-011: Land use ICs are in place. Annual site and sign inspections will be performed until base closure. The corrective action progress reports will be submitted in the third quarter of each FY. Site and sign inspections for FST-008 and FST-010 will also be performed under FST-011. Per a GAEPD letter, dated Oct. 20, 2011, approval was granted to defer annual inspection requirements required by the original CAP for FST-009 (SWMUNo.9) until such time that this area of the range is closed or transferred.

FST-013: It is recommended that further monitored natural attenuation (MNA) be continued as a remedy for groundwater at the site as detailed in the 2006 CAP Report. Annual gauging and sampling will continue with groundwater samples being submitted for laboratory analysis until concentrations drop below the approved remedial levels (RL) for three consecutive monitoring events. Details of the monitoring events will continue to be reported in the annual progress reports. Following three consecutive annual monitoring events with no detections exceeding the RLs, a request for NFA determination will be submitted to GAEPD. Upon receipt of approval of the NFA, all site monitoring wells will be properly abandoned and a site closeout report will be submitted to GAEPD.

FST-024: The GAEPD issued a letter in December 2011 stating that there are no site-related contaminants remaining that exceed the GAEPD's approved risk-based levels and a conditional approval has been received for NFA at FST-24B pending LUC determination of the active motor pool. Upon receipt of the NFA for the solid waste management assessment report, site wells will be abandoned and a site closeout report will be submitted to GAEPD.

FST-026: After the site reaches the approved RLs, a recommendation will be submitted to GAEPD requesting NFA. After receipt of approval for NFA, all site wells will be abandoned and a site closeout report will be submitted to GAEPD.

FST-025A3: USTs 257-261: Current concentrations for all monitoring wells on-site are below the risk-based concentration standards for benzene, a request for NFA will be recommended to the Georgia (GA) Underground Storage Management Program (USTMP). After approval for NFA, all groundwater monitoring wells will be abandoned and a site closeout report will be submitted to the GA USTMP.

## IRP Previous Studies

Year	Title	Author	Date
1985	Installation Assessment of Headquarters, 24th Infantry Division Report No. 334.	Environmental Science and Engineering (ESE);	JUN-1985
	Fort Stewart Military Reservation RCRA Studies: Final Engineering Report	ESE	JUN-1985
	RCRA Facility Assessment, Environmental Priorities Initiative, Preliminary Assessment	Georgia Department of Natural Resources (GDNR)	JUN-1985
	Interim Final Report, Hazardous Waste Consultation No. 37-26-1382-88, Evaluation of Solid Waste Management Units	USAEHA	JUN-1985
	Hazardous Waste Special Study No. 37-26-0127-88, Investigation of Soil Contamination	USAEHA	JUN-1985
	Wastewater Quality Engineering Consultation No. 32-62-0130-86, Disposal of Oily Sludge	USAEHA	JUN-1985
	Site Characterization Review- Review of Report No. 37-26-1382-88 Pertaining to SWMUs Present	Georgia Environmental Protection Division (GAEPD)	JUN-1985
	Environmental Program Review No. 32-24-37038-89, 24th Infantry Division (Mechanized)	U.S. Army Environmental Hygiene Agency (USAEHA)	JUN-1985
1990	Amendment to Fort Stewart RCRA Permit No. HW-045 (S&T)	GAEPD	JUN-1990
1991	U.S. Army Fort Stewart/Hunter Army Airfield Waste Analysis Plan	Advanced Science, Inc. (ASI)	APR-1991
1992	Preliminary Site Inspection Report for Fort Stewart Military Reservation	ASI	JUL-1992
1993	Field Report, Delivery Order #30, for Underground Storage Tank Removal	Anderson Columbia Environmental, Inc.	MAY-1993
1995	Prefinal RFI Workplan, SWMU FST013, Fire Training Pit, Wright Army Airfield	RUST Environmental & Infrastructure	JAN-1995
	Contamination Evaluation/Closure Plan for Fort Stewart Fire Training Areas	ESE	JUN-1995
	RCRA Facility Investigation Work Plan	Geraghty & Miller (G&M)	JUN-1995
	RCRA Facility Investigation Work Plan	Geraghty & Miller (G&M)	JUN-1995
	RCRA Facility Investigation Work Plan	Geraghty & Miller (G&M)	JUN-1995
	RCRA Facility Investigation Work Plan	Geraghty & Miller (G&M)	JUN-1995
	Closure Report for Tanks 2, 3, 4, 5, 6, 4A, 22, 24, 28B, 38, 41, 45, 56, 65, 66, 71, 71A, 74, 79, 87, 88, 94, 94B, 94C, 100A, 100B, 111,114, 115, 118, 122, 201A, 201B, 207, 207A, 214, 215, 216, 224, 2	Anderson Columbia Environmental, Inc	JUN-1995
	Field Report, Delivery Order #75, for Underground Storage Tank Removal:	Anderson Columbia Environmental, Inc	AUG-1995
100% specifications for Interim Measures, SWMU FST-013, Fire Training Pit, Wright Army Airfield	RUST Environmental & Infrastructure	AUG-1995	
1996	Corrected Final Phase I RCRA Facility Investigation Report for 24 Solid Waste Management Units	RUST Environmental & Infrastructure	MAY-1996



## IRP Previous Studies

1996	Title	Author	Date
	Field Report, Delivery Order #84, for Underground Storage Tank Removal:	Anderson Columbia Environmental, Inc	NOV-1996
	Final Phase I RFI Report for Bulk Fuel Storage System at Wright Army Airfield	Metcalf and Eddy	DEC-1996
1997			
	Corrective Action Plan-Part A for Tanks #11, 12, 14, 18, 20, 28A, 31, 32, 33, 34, 35, 61, 67, 68, 69, 72, 73, 90, 91, 92, 94A, 95, 96, 97, 98, 99	Science Applications International Corporation (SAIC)	MAR-1997
	Corrective Action Plan-Part A for Tank #1	SAIC	APR-1997
	Revised Final Sampling and Analysis Plan for 724th Tanker Purging Station, SWMU 26	SIAC	MAY-1997
	Revised Final Sampling and Analysis Plan for Burn Pits, SWMUs 4A-4F	SAIC	MAY-1997
	Final Sampling and Analysis Plan for South Central Landfill (FST-01)	SAIC	MAY-1997
	Corrective Action Plan-Part A for Tanks #70, 77, 78, 82, 89, 100, 210, 222, 223, 236, 237	SAIC	MAY-1997
	Closure Report for Tank 7, 13, 17, 19, 21, 23, 36, 37, 42, 50, 51, 52, 76, 200, 221, 228, 229, 230, 231	Fort Stewart Environmental Branch	JUL-1997
	Revised Final Sampling and Analysis Plan for Phase II RFIs of 16 SWMUs	SAIC	OCT-1997
	Addendum to the Revised Final Sampling and Analysis Plan for Phase II RFIs of 16 SWMUs:	SAIC:	OCT-1997
1998			
	Corrective Action Plan-Part B for Tanks #90 and #91	SAIC	FEB-1998
	Pre-Final Interim Measures Report, Fire Training Pit Site (SWMU FST-013)	Cape Environmental	MAR-1998
	Corrective Action Plan-Part B for Tanks #11, 12, 15, 16, 61, 67, 68, 69, 72, 73, 77, 78, 80, 81, 92, 94A, 95, 97, 205, 206, 208, 209, 210, 222, 223, 232, 233, 234, 235, 236, 237	SAIC	JUL-1998
	Corrective Action Plan-Part A Addendum for Tank #1	SAIC	AUG-1998
	Corrective Action Plan-Part B for Tank #70	SAIC	AUG-1998
	Corrective Action Plan-Part B for Tanks #226 and #227	SAIC	AUG-1998
	Revised Final Phase II RFI Work plan for SWMU 13: Fire Training Area at Wright Army Airfield	RUST Environmental	AUG-1998
	UST upgrade Report for UST #62 (DPW Yard)	Montemayor	SEP-1998
	UST upgrade Report for USTs #262 and #263 (Bryan Village Shoppette)	Montemayor	SEP-1998
	Revised Final Sampling and Analysis Plan for Phase II RFI at Wright Army Airfield Bulk Fuel System (SWMU 35)	SAIC	OCT-1998
	Corrective Action Plan-Part B for Tanks #30, #31, #32, #33, #34 and #35	SAIC	OCT-1998
	Revised Final Phase II RFI Report for Former Tanker Purge Facility (SWMU 26)	SAIC	NOV-1998
	Closure Report for UST #280 & 281	EarthTech	DEC-1998
	Corrective Action Plan-Part A for USTs #48, 49, 54, 55, 56, 71A	SAIC	DEC-1998

## IRP Previous Studies

1999

Title	Author	Date
SWMU 12A CALENDAR YEAR 1998 DETECTIO MONITORING REPORT	SAIC	JAN-1999
Closure Report for UST #7A	SAIC	FEB-1999
Revised Final Phase II RFI Report for Burn Pits (SWMUs 4A-4F)	SAIC	FEB-1999
Final Phase II RFI Report for 16 SWMUs	SAIC	FEB-1999
SWMU12A False Positive Demonstration for CY 1998 Detection Monitoring Data Active EOD Area	SAIC	MAR-1999
Corrective Action Plan-Part A for USTs #29, 82, 89, 255, 256, 257 and 260	SAIC	MAR-1999
Revised Final Phase II RFI Report for South Central Landfill (SWMU 1)	SAIC	MAR-1999
Closure Report for UST #28C	SAIC	MAR-1999
Corrective Action Plan-Part A for UST #111	SAIC	APR-1999
Corrective Action Plan-Part A for UST #118	SAIC	APR-1999
First Annual Monitoring Only Report for USTs #11, 12, 90, 91, 95, 96 and 97	SAIC	APR-1999
Closure Report for UST #282	SAIC	APR-1999
First Annual Monitoring Only Report for USTs #30 - #35, 208 and 209	SAIC	MAY-1999
Closure Report for UST #104, 107, 108, 109, 110, 112, 113, 120, 121, 124, 247, 251, 252, 253 and 254	Hussey, Gay, Bell, and DeYoung	JUN-1999
Corrective Action Plan-Part A for USTs #5, 6, 36, 37, 94	SAIC	JUN-1999
SWMU 12 B/12C First Semiannual Detection Monitoring Report for CY 1999	EARTHTECH	JUL-1999
SMWU 12 B/ 12C False Positive Demonstration for CY 1998 Detection Monitoring Data	SAIC	JUL-1999
Closure Report for UST #16 (NGTC), 106, 215	Fort Stewart Environmental Branch	JUL-1999
Final Phase II RFI WAAF Bulk Fuel Facility -SWMU 35	SAIC	JUL-1999
Revised Final Calendar Year 1998 Detection Monitoring Report for the OB and OD Units	SAIC	JUL-1999
Revised Final Calendar Year 1998 False Positive Report for the OB and OD Units	SAIC	JUL-1999
Final Corrective Action Plan for the former Tanker Purging Facility (SWMU 26)	SAIC	JUL-1999
Corrective Action Plan-Part A for UST #71	SAIC	JUL-1999
Final First Semiannual Detection Monitoring Report for the OB and OD Units	EarthTech	JUL-1999
Corrective Action Plan-Part A for USTs #2, 3, 28B, 38, 63, 64, 122, 123, 214, 225, 242, 244, 248, 249,	SAIC	AUG-1999
Corrective Action Plan-Part A for USTs #4, 5, 6 & 7 (NGTC)	SAIC	AUG-1999
Final RFI for WAAF Fire Training Area (SWMU 13)	RUST Environmental/EarthTech	SEP-1999
Corrective Action Plan-Part A for USTs #79, 87, 88, 100B	SAIC	OCT-1999
Corrective Action Plan -Part B Addendum #2 for USTs 11 & 12	SAIC	OCT-1999

## IRP Previous Studies

1999	Title	Author	Date
	First Annual Monitoring Only Report for UST #29, 77, 78, 82, 89, 226, and 227	SAIC	OCT-1999
	Second Annual Monitoring Only Report for UST #29	SAIC	OCT-1999
	Final Corrective Action Plan for the South Central Landfill (SWMU 1)	SAIC	DEC-1999
2000	SWMU 12B & 12C Revised Appendix D-8 Detection Monitoring Plan for the Open Detonation	SAIC	JAN-2000
	Corrective Action Plan-Part B for USTs #48, 49, 257-261	SAIC	JAN-2000
	Corrective Action Plan-Part B for USTs #255 and #256	SAIC	FEB-2000
	Second Annual Monitoring Only Report for USTs #11, 12, 90, 91, and 95-97	SAIC	APR-2000
	SWMU 12B & 12C Revised Section I Closure Plan, Post Closure Plan, and Financial Requirements	SAIC	MAY-2000
	SWMU 13 RCRA Facility Investigations Report Fire Training Area at WAAF	SAIC	MAY-2000
	UST 30-32 Second Annual Monitoring Only Report Bldgs 1621/1631	SAIC	MAY-2000
	Second Annual Monitoring Only Report for USTs #30 - 35, 208 and 209	SAIC	MAY-2000
	First Progress Report for Enhanced Bioremediation of the Tanker Purging Station (FST-026)	SAIC	JUN-2000
	Corrective Action Plan-Part A Addendum for UST #94A	SAIC	JUN-2000
	Closure Report for UST #101	Fort Stewart Environmental Branch	JUL-2000
	Corrective Action Plan-Part A Addendum #2 for UST #210 and 236	SAIC	JUL-2000
	Corrective Action Plan-Part B for USTs #15 and #16	SAIC	AUG-2000
	Corrective Action Plan-Part B for UST #36, 37, and 100B	SAIC	SEP-2000
	Corrective Action Plan- Part A for UST #93	SAIC	SEP-2000
	Second Annual Monitoring Only Report for UST #29, 77, 78, 82, 89	SAIC	OCT-2000
	First Annual Monitoring Only Report for UST #1, 2, 3, 255, & 256	SAIC	NOV-2000
	Corrective Action Plan-Part B for USTs #5 and 6	SAIC	NOV-2000
	SWMU 18 Compliance Monitoring Report for CY 2000	SAIC	DEC-2000
	First Annual Monitoring Only Report for UST #122, 28B, 38	SAIC	DEC-2000
2001	SWMU #1 Final Corrective Action Progress Report	EARTH TECH	JAN-2001
	First Semiannual Progress Report for USTs 11 and 12	SAIC	JAN-2001
	Final CAP for Evans Army Heliport Bulk Fuel (SWMU 29) (OMA)	SAIC	JAN-2001
	Third Progress Report for Enhanced Bioremediation of the Tanker Purging Station (FST-026)	SAIC	JAN-2001
	Revised Final Addendum for SWMU 27H (OMA)	SAIC	MAR-2001

## IRP Previous Studies

2001

Title	Author	Date
Final CAP for SWMU 2 (Camp Oliver Landfill)	SAIC	MAR-2001
Final CAP for SWMU 3 (TAC-X Landfill):	SAIC	MAR-2001
First Semi-Annual Monitoring Only Report for USTs 5, 6, 15, 16	SAIC	MAR-2001
CAP-Part B Addendum #2 for USTs 202-204	SAIC	MAR-2001
First Annual Monitoring Only Report for UST 61, 94, 100B, 210	SAIC	MAY-2001
Final CAP for SWMUs 8, 9 and 11	SAIC	MAY-2001
16 SWMUs Revised Final Addendum for SWMU 27F Phase II RCRA Facility Investigation Report	SAIC	JUN-2001
Fourth Progress Report for Enhanced Bioremediation of the Tanker Purging Station (FST-026)	SAIC	JUN-2001
Revised Final Addendum for SWMU 27F (OMA)	SAIC	JUN-2001
Revised Final Addendum for SWMU 24B	SAIC	JUN-2001
Final Compliance Monitoring Report for CY01 for the IWTP (SWMU 18) (OMA)	SAIC	JUN-2001
Revised Final CAP for SWMU 29 (OMA)	SAIC	JUN-2001
Second Semiannual Progress Report for USTs 11 and 12	SAIC	JUL-2001
CAP for Inactive EOD Area North of the Garrison Area (SWMU 10)	SAIC	JUL-2001
CAP for the Active EOD Area (SWMU 12A/12B/12C) (OMA)	SAIC	AUG-2001
CAP for the Industrial Wastewater Treatment Plant (SWMU 18) (OMA)	SAIC	AUG-2001
CAP Part B for USTs 276-279 (Victory Shoppette)	SAIC	AUG-2001
SWMU 18 Corrective Action Plan	SAIC	SEP-2001
SWMU 18 Corrective Action Plan	SAIC	SEP-2001
3rd Semiannual MO Tank 94A	SAIC	SEP-2001
CAP-Progress TAX-X Landfill (SWMU 3)	Earth Tech	SEP-2001
CAP-Progress Camp Oliver Landfill (SWMU 2)	EarthTech	SEP-2001
CAP-Sampling Evans Army Heliport POL Storage Facility (SWMU 29):	Earth Tech	OCT-2001
2nd Annual MO Tank 255-256	SAIC	NOV-2001
1st Annual MO Tank 15-16	SAIC	NOV-2001
SWMU 12A, 12B, 12C Letter Report for Inspection & Ordnance & Explosive Survey	SAIC	DEC-2001
Annual Detection Monitoring Only Report for CY 2001 SWMU 12B & 12C	SAIC	DEC-2001
Addendum #13 to the Work Plan Tank 257-261	SAIC	DEC-2001

2002

3rd Semiannual Progress Report Tank 11-12	SAIC	JAN-2002
Site Health & Safety Plan, Investigation at UST &	Earth Tech	JAN-2002

## IRP Previous Studies

2002

Title	Author	Date
Heating Oil Sites at Bldgs #1720, #1283, #1284, #1285, #1286		
Addendum #3 Work Plan for Preliminary Groundwater & CAP PartA/Part B Investigations at UST Sites & Heating Oil Tank Sites at Bldgs #1720, 1283, 1284, 1285, 1286	Earth Tech	JAN-2002
Closure Report, DPW Facility Bldg 1135 Gasoline UST #62	Earth Tech	MAR-2002
Master Field Report for Non-Regulated UST and Former Heating Oil Tanks at Site: Group I Bldg 1828, Group II Bldg 1720, Group III Bldg 1510, Group IV Bldg 1160, Group V Bldg 1283, 1284, 1285, 1286	Earth Tech	APR-2002
Closure Report, Holbrook Pond, Bldg T-8340 Heating Oil Tank	Earth Tech	APR-2002
Closure Report, Holbrook Pond, Bldg T-8340 Heating Oil Tank	Earth Tech	APR-2002
IRA, Former Fire Training Area at WAAF (SWMU 13)	Earth Tech	APR-2002
Final Interim Removal Action Report Former Fire Training Area at Wright Army Airfield	Earth Tech	APR-2002
Addendum #14 to Work Plan for Preliminary Groundwater & CAP Part A/ Part B Investigations	SAIC	MAY-2002
1st Annual MO Tank 202-204	SAIC	MAY-2002
2nd Annual MO Tank 122	SAIC	MAY-2002
Sampling & Analysis Plan Tank 257-261	SAIC	JUN-2002
Corrective Action Plan SWMU 24B, 27F and 35	SAIC	JUN-2002
Tank Secondary Containment Plans & Specifications	Earth Tech	JUN-2002
Washrack Canopies Curb and Trench Details	Earth Tech	JUN-2002
CAP for SWMU 27F	SAIC	JUN-2002
CAP Progress Report for CY 02 For SWMU 35	SAIC	JUN-2002
SWMU 27F Corrective Action Plan 3D Engineer Brigade NW of Bldg 1340	SAIC	JUL-2002
3rd Annual MO Tank 89	SAIC	JUL-2002
4th Semiannual Progress Report Tank 11-12	SAIC	JUL-2002
CAP-Progress, Inactive EOD Area Located approx. 3 Miles northeast of Garrison Area (SWMU 11)	Earth Tech	JUL-2002
CAP-Progress, Inactive EOD Area Located approx. 9 Miles northeast of Garrison Area (SWMU 8):	Earth Tech	JUL-2002
CAP Progress Report for SWMU 8 for CY 02	Earth Tech	JUL-2002
3rd Annual Progress Report for UST 89	SAIC	JUL-2002
CAP Progress Report for SWMU 11 for CY 02	Earth Tech	AUG-2002
Corrective Action Plan For SWMU 24B	SAIC	AUG-2002
4th Semi Annual Progress Report for USTs 11 &12	SAIC	AUG-2002
Corrective Action Plan for Fire Training Area at Wright Army Airfield (SWMU 13)	SAIC	SEP-2002
7th Corrective Action Progress Report for the Enhanced	SAIC	SEP-2002

## IRP Previous Studies

**2002**

Title	Author	Date
Bioremediation (PHOSter II) at the Former Tanker Purging Station SWMU 26		
5th semi annual progress report for UST 94A	SAIC	OCT-2002
SWMU 12B/12C CAP Progress Report for Site Monitoring CY 2002	SAIC	NOV-2002
3rd Annual Monitoring Only Report for USTs 255 & 256	SAIC	NOV-2002
CAP Progress Report for SWMU 1,2, and 3 for CY 02	SAIC	DEC-2002

**2003**

SWMU 27F Corrective Action Plan Progress Report 3D Engineer Brigade NW of Bldg 1340	SAIC	JAN-2003
Corrective Action Plan Progress Report For CY 2002 For the Industrial Waste Water Treatment Plant (SWMU 18)	SAIC	JAN-2003
5th semi annual progress report for USTs 11 & 12	SAIC	JAN-2003
5th semi annual progress report for UST 89	SAIC	JAN-2003
SWMU 18 Corrective Action Plan for CY 2002	SAIC	FEB-2003
SWMU 26 8TH Corrective Action Plan Progress Report Enhanced Bioremediation at the 724th Tanker Purging Station	SAIC	MAR-2003
SWMU 39 Final RCRA Facility Investigation Report	STEP	APR-2003
3rd Annual Progress Report for UST 94A	SAIC	APR-2003
4th semi Annual Progress Report for UST 122	SAIC	MAY-2003
3rd Semi annual progress report for USTs 15 & 16	SAIC	JUN-2003
SWMU 35 Addendum #4 to the Sampling and Analysis Plan	SAIC	JUL-2003
4th Annual Progress Report for UST 89	SAIC	JUL-2003
6th semi annual progress report for USTs 11 & 12	SAIC	AUG-2003
SWMU 26 Addendum #2 to the Sampling and Analysis Plan For Phase II RCRA Facility Investigations	SAIC	SEP-2003
SWMU 29 Final Corrective Action Plan Progress Report for CY 2003	SAIC	NOV-2003
SWMU 13 Corrective Action Plan Progress Report for CY 2003 Former Fire Training at WAAF	SAIC	DEC-2003

**2004**

9th Corrective Action Plan Progress Report for Enhanced Bioremediation (PHOSter II) At The Former 724th Tanker Purging Station SWMU 26	SAIC	JAN-2004
SWMU 18 Corrective Action Plan Progress Report for CY 2003	SAIC	MAR-2004
UST 276-279 First Annual Monitoring Only Report bldg 939	SAIC	MAY-2004
SWMU 26 Addendum #3 to Sampling and Analysis Plan	SAIC	JUN-2004
SWMU 26 Data Summary Report	SAIC	JUL-2004
SWMU 12B/ 12C Corrective Action Plan Progress Report for CY 2003	SAIC	AUG-2004

## IRP Previous Studies

2004

Title	Author	Date
UST 257-261 Final 3rd Semiannual Remedial Action MO Report for Corrective Action	JJ SOSA	AUG-2004
Soil Sampling Report for Building # 1056 SWMU 24 B Old Radiator Shop / Paint Booth	SAIC	SEP-2004
Corrective Action Plan Progress Report For CY 2003 SWMU 24 B Old Radiator Shop / Paint Booth	SAIC	SEP-2004
Work Plan for Interim Removal Activities at UST 89 and 94 A	STEP	SEP-2004
UST 276-279 3RD Semiannual MO Report	SAIC	SEP-2004
Corrective Action Plan Progress Report For CY 2003 SWMUs 8,9,10, & 11	SAIC	OCT-2004
SWMU 12B/12C CAP Progress Report for CY 2004	SAIC	OCT-2004
SWMU 18 Final Sampling and Analysis Plan for Phase II Pilot Studies and Quarterly Sampling	SAIC	OCT-2004
SWMU 35 Bulk Fuel Facility Addendum #5 to the Sampling and Analysis Plan	SAIC	NOV-2004
SWMU 26 Addendum to the Addendum #3 to the Sampling and Analysis Plan	SAIC	NOV-2004
SWMU 29 Corrective Action Confirmation Report for CY 2004	SAIC	NOV-2004
SWMU 27F Corrective Action Plan for the 3rd Engineering Brigade	SAIC	NOV-2004
SWMU 1, 2, 3 CAP Progress Report for CY 2003	SAIC	DEC-2004

2005

Revised Final Corrective Action Plan Progress Report for CY 2002 for SWMUs 1,2, and 3	SAIC	JAN-2005
Final Report for Interim Removal Activities at UST 89 and UST 94A	STEP	FEB-2005
UST 257-261 BLDG 430, Final 4th Semiannual Remedial Action MO Report for Corrective Action	JJ SOSA	FEB-2005
Corrective Action Plan Progress Report for CY 2004 for the Wright Army Airfield Bulk Fuel System SWMU 35	SAIC	MAR-2005
SWMU 18 Quarterly Monitoring Report	SAIC	MAR-2005
Corrective Action Plan Progress Report For CY 2004 for the Former Fire Training Area at Wright Army Airfield SWMU 13	SAIC	MAY-2005
Final Site Construction Report for Interim Remedial Action at Military Munitions Rule Program Site FTSW-008-R-01, Hero Road AOC	STEP	MAY-2005
Revised Final Corrective Action Plan Progress Report For CY 2004 Wright Army Airfield Bulk Fuel System SWMU 35	SAIC	MAY-2005
SWMU 18 Corrective Action Plan Progress Report for CY 2004	SAIC	MAY-2005
Fifth Annual Monitoring Only Report UST 89 & 94A	SAIC	JUN-2005
Ninth Semiannual Progress Report USTs 11/12	SAIC	JUN-2005
UST 276-279 Second Annual Monitoring Only Report bldg 939	SAIC	JUN-2005
CAP Progress Report for CY 2002 SWMU #1, 2 & 3	SAIC	JUN-2005

## IRP Previous Studies

2005

Title	Author	Date
UST 94A 5TH Annual MO Report bldg 1320	SAIC	JUL-2005
Addendum #4 To The Sampling and Analysis Plan For Phase II RCRA Investigations at the Former 724th Tanker Purging Station SWMU 26: August	SAIC	AUG-2005
UST 15 & 16 Final Closure Report for Abandonment of Monitoring Well bldg 1721	STEP	AUG-2005
UST 202, 203, 204 Final Closure Report for Abandonment of Monitoring Wells	CAPE	AUG-2005
Corrective Action Plan Progress Report for CY 2005 for SWMU 24 B, Old Radiator Shop / Paint Booth	SAIC	SEP-2005
UST 276-279 Fifth Semiannual Monitoring Only Report Bldg 939	SAIC	SEP-2005
Sixth Annual Monitoring Only Report USTs 255&256, Building 16012	SAIC	NOV-2005
Second Annual Monitoring Only Report UST #61	US Army Corps of Engineers	NOV-2005
Third Semiannual Monitoring Event UST 210	US Army Corps of Engineers	NOV-2005
Fifth Semiannual Monitoring Event UST 30-32	US Army Corps of Engineers	NOV-2005
Fifth Semiannual Monitoring Event UST 208 & 209	US Army Corps of Engineers	NOV-2005
Sixth Annual MO Report UST 255 & 256	US Army Corps Of Engineers	NOV-2005
CAP Progress Report for CY 2005 SWMU 12B/12C	US Army Corps of Engineers	NOV-2005
UST 208 & 209 CAP Part B Progress Report	SAIC	NOV-2005
SWMU 12B & 12C Corrective Action Plan Progress Report for CY 2005	SAIC	NOV-2005
SWMU 61 Second Annual Monitoring Only Report Bldg 1161	SAIC	NOV-2005
CAP Progress Report for CY 2002 SWMU 27F	US Army Corps of Engineers	DEC-2005
SWMU 39 Final RCRA & Interim Actions Report for UST #60 @ Bldg 1160	STEP, INC.	DEC-2005
SWMU 39 Final RCRA Facility Investigations & Interim Actions Report	STEP, INC.	DEC-2005
SWMU 39 Final RCRA Facility Investigation and Interim Actions Report	SAIC	DEC-2005

2006

CAP Completion Report for CY 2004 SWMU 29	SAIC	JAN-2006
SWMU 13 Former Fire Training Area Corrective Action Plan	SAIC	JAN-2006
CAP Progress Report for CY 2003, SWMU 13	SAIC	FEB-2006
CAP Progress Report for CY 2003 SWMU 12A/12B/12C	SAIC	MAR-2006
CAP Progress Report for CY 2004 SWMU 12A/12B/12C	SAIC	MAR-2006
CAP Progress Report for CY 2005 SWMU 12A/12B/12C	SAIC	MAR-2006
CAP Progress Report for CY 2002 SWMU 35	SAIC	MAR-2006
SWMU 12B & 12C Revised Final Corrective Action Plan	SAIC	MAR-2006



## IRP Previous Studies

2006

Title	Author	Date
Progress Report for CY 2005		
SWMU 12B & 12C Revised Final Corrective Action Plan Progress Report for CY 2004	SAIC	MAR-2006
Corrective Action Plan Progress Report for CY 2005 SWMU 13	SAIC	APR-2006
Corrective Action Plan Progress Report for CY 2005 SWMU 13	SAIC	APR-2006
Addendum #20 to the Work Plan for Preliminary Groundwater and CAP Part A/Part B Investigation	SAIC	APR-2006
Addendum #21 to the Work Plan for Preliminary Groundwater and CAP Part A/Part B Investigation	SAIC	APR-2006
CAP Progress Report for CY 2002 SWMU 12A/12B/12C	EARTH TECH	APR-2006
Final Corrective Action Plan Part B Bryan Village Shoppette UST 262-263	STEP, INC.	APR-2006
Corrective Action Plan Progress Report for CY 2004 SWMU 27F	SAIC	MAY-2006
Corrective Action Plan Progress Report for CY 2005 SWMU 35	SAIC	MAY-2006
SWMU 35 Addendum #7 to the Sampling and Analysis Plan for Phase II RCRA Facility Investigation	SAIC	MAY-2006
Completion Report UST #11 & 12	SAIC	JUL-2006
CAP Part B Report UST 94 A Bldg 1320	SAIC	JUL-2006
UST 61 Final Work plan for Interim Removal Activities Bldg 1161	STEP, INC.	JUL-2006
UST 82 Final Work Plan for Interim Removal Activities Bldg 1281	STEP, INC.	JUL-2006
Corrective Action Plan Completion Report for CY 2006 SWMU 18	SAIC	AUG-2006
Third Annual Monitoring Only Report UST # 276-279	SAIC	SEP-2006
Addendum #7 to the Sampling and Analysis Plan for Phase III RCRA Facility Investigations SWMU 35	SAIC	SEP-2006
CAP Progress Report for CY 2005 SWMU #1, 2, & 3	SAIC	SEP-2006
CAP Progress Report for CY 2005 SWMU #8, 9, 10 & 11	SAIC	SEP-2006
Letter Report for Subsurface Soil Investigation SWMU 27F	SAIC	SEP-2006
Historical Records Review	Malcolm Pirnie	SEP-2006
SWMU #1,2 & 3 Corrective Action Plan Progress Report for CY 2005	SAIC	SEP-2006
SWMU #8, 9, 10 & 11 Corrective Action Plan Progress Report for CY 2005	SAIC	SEP-2006
Final Fifth Semiannual Remedial Action MO Report for Corrective Action UST 257- 261	J.J. Sosa	SEP-2006
Tenth Corrective Action Plan Progress Report for the Enhanced Bioremediation SWMU 26	SAIC	OCT-2006
Underground Injection Control Permit Application for Injection Barrier Wall and Infiltration Gallery SWMU 35	SAIC	OCT-2006
SWMU 35 Underground Injection Control Permit Application for Injection Barrier Wall & Infiltration Gallery	SAIC	OCT-2006
Sixth Semiannual Monitoring Only Report USTs 208-	SAIC	DEC-2006

## IRP Previous Studies

2006

Title	Author	Date
209		
Final Work Plan for Interim Removal Action@ 260th Quartermaster Motor Pool Bldg 1345 UST 25 & 26 AND Semi-annual Sampling UST Corrective Action Part B Bryan Village Shopette Bldg 7336	STEP, INC.	DEC-2006
UST 210 Fourth Sampling Event Monitoring Only Report Bldg 272	SAIC	DEC-2006

2007

Third Annual Monitoring Only Report UST 82	SAIC	JAN-2007
Seventh Semiannual Monitoring Only Report UST 276-279	SAIC	JAN-2007
Final Work Plan for Interim Removal Activities UST 59 & 60, SWMU 39	STEP, INC.	JAN-2007
Well Abandonment Report Evans Army Heliport SWMU 29	SAIC	JAN-2007
SWMU 39, UST 59 & 60 Final Work Plan for Interim Removal Activities	SAIC	JAN-2007
Final Report for Interim Removal Activities Bldg 1281 UST 82	STEP, INC.	FEB-2007
Final Report for Interim Removal Activities Bldg 1161 UST 61	STEP, INC.	FEB-2007
UST 61 Final Report for Interim Removal Activities Bldg 1161	STEP, INC.	FEB-2007
Final Confirmatory Sampling Work Plan	Malcolm Pirnie	MAR-2007
Addendum #24 to the Work Plan for Preliminary Groundwater & CAP Part A/Part B Former UST Sites	SAIC	APR-2007
Annual Remedial Action Monitoring Report for the Corrective Action UST 257-261 Bldg 430	J.J. SOSA	APR-2007
Corrective Action Plan Progress Report for CY 2006 Former Fire Training SWMU 13	SAIC	APR-2007
Corrective Action Plan Progress Report for CY 2006	SAIC	APR-2007
SWMU 12A, 12B, 12C Final Well Abandonment Report	SAIC	APR-2007
Addendum #2 to the Sampling and Analysis Plan for Phase II RCRA Facility Investigations SWMU 26	SAIC	MAY-2007
Addendum #4 to the Sampling and Analysis Plan for Phase II RFIs SWMU 26	SAIC	MAY-2007
CAP Progress Report for CY 2006 SWMU #8, 9, 10 & 11	SAIC	MAY-2007
Third Annual MO Report Bldg 1281 UST 82	SAIC	MAY-2007
CAP Progress Report for CY 2006 SWMU #1, 2 & 3	SAIC	MAY-2007
Corrective Action Plan Part A UST 211 & 212 Formerly SWMU 35	SAIC	MAY-2007
Well Abandonment Report SWMU 18 Industrial Waste Water Treatment Plant	SAIC	MAY-2007
Addendum #7 to the Sampling and Analysis Plan for Phase II RCRA Facility Investigations (Part of 16 SWMUs)	SAIC	MAY-2007
Fifteenth Semiannual MO Report Bldg 16012, UST 255 & 256	SAIC	JUN-2007

## IRP Previous Studies

2007

Title	Author	Date
Final Report for Interim Remedial Action, USTs 59 & 60 SWMU 39	STEP, INC.	JUN-2007
UST 262 & 263 Final Work Plan for Remedial Action in Support fo UST CAP Part B Bryan Village Shoppette Bldg 7736	SpecPro Environmental Services (SES)	JUL-2007
Addendum #2 to the Work Plan for Preliminary Groundwater and Corrective Action Part A & B Investigations	SAIC	AUG-2007
UST 210 Third Annual Monitoring Only Report Bldg 272	SAIC	AUG-2007
UST 208 & 209 Fourth Annual Monitoring Only Report Bldg 275	SAIC	AUG-2007
SWMU 27F Completion Report for the Oil/Water Separator and Piping Evaluation	SAIC	SEP-2007
Sixth Sampling Event Monitoring Only Report Bldg 272 UST 210	SAIC	OCT-2007
Final Work Plan for RCRA Facility Investigation SWMU 39	SES	OCT-2007
July 2007 Sampling Event Data Package Bldg 16012 UST 255 & 256	SAIC	OCT-2007
Letter Report for Subsurface Soil and Groundwater Sampling SWMU 26	SAIC	OCT-2007
HAA-01 Former Fire Training Area Monitoring Only Report for CY 2006	SAIC	OCT-2007
SWMU 27F Corrective Action plan Progress Report for CY 2007	SAIC	OCT-2007
SWMU 39 Final Work Plan for RCRA Facility Investigation	SAIC	OCT-2007
UST 61 BLDG 1161 Third Annual Monitoring Only Report	STEP, INC.	NOV-2007
UST 208 & 209 BLDG 275 Eighth Sampling Event Monitoring Only Report	SAIC	NOV-2007
SWMU #1, 2, 3 CAP Progress Report for CY 2007	SAIC	NOV-2007
SWMU #8, 9, 10 & 11 CAP Progress Report for CY 2007	SAIC	NOV-2007
Final Confirmatory Sampling Report	Malcolm Pirnie	NOV-2007
Third Annual Monitoring Only Report UST 210 Bldg 272	SAIC	DEC-2007
CAP Progress Report for CY 2007 SWMU 12A/12B/12C	SAIC	DEC-2007
Final 7th Semiannual Remedial Action MO Report for the Corrective Action Bldg 430 UST 257-261	J2 ENGINEERING, INC.	DEC-2007

2008

Corrective Action Plan for CY 2007 SWMU #1, 2, & 3	SAIC	JAN-2008
Corrective Action Plan Progress Report for CY 2007 SWMU # 8, 9, 10 & 11	SAIC	JAN-2008
Corrective Action Plan Progress Report for CY 2007 SWMU 13 Former Fire Training Area	SAIC	JAN-2008
Final Work Plan for Interim Remedial Action Bldg 275 UST 208-209	SES	JAN-2008
Final Work Plan for Interim Remedial Action Bldg 272 UST 210	SES	JAN-2008
SWMU 12A, 12B, 12C Corrective Action Plan Progress Report for CY 2007	SAIC	JAN-2008

## IRP Previous Studies

**2008**

Title	Author	Date
5th Annual Monitoring Only Report UST 208/209	SES	APR-2008
Final Report for Interim Remedial Actions at Former USTs 208/209, Facility ID 9-089036, Building 275, Fort Stewart, GA	SES	AUG-2008
Twelfth Corrective Action Plan Progress Report for the Enhanced Bioremediation (PHOSter II) at The Former 724th Tanker Purging Station (SWMU 26) Fort Stewart, GA	SAIC	SEP-2008
Final Work Plan Remedial Action and Groundwater Monitoring at AAFES Car Care Center Former UST 257-261, Fort Stewart, GA	J2 Engineering Inc.	SEP-2008
Final Report For Interim Remedial Actions at Former UST 210, Facility ID 9-089035, Building 272, Fort Stewart, GA	SES	SEP-2008
Final Fourth Annual Monitoring Only Report for UST 61, Building 1161, Facility ID 6-089104, Fort Stewart, GA.	SES	SEP-2008
Final Eighth Semi-Annual Remedial Action Monitoring Report for Corrective Action at Underground Storage Tanks 257-261 Facility ID Number 9-089118, Building 430, Fort Stewart, GA	J2 Engineering Inc.	OCT-2008
Final Interim Removal Action and Corrective Action Progress Report at Wright Army Airfield Fire Training Area (SWMU 13) Fort Stewart, GA	SES	OCT-2008
Final Corrective Action Plan Progress Report for CY 2007 for SWMU 24B Old Radiator Shop/Paint Booth at Fort Stewart, GA.	SAIC	NOV-2008
Completion Report UST 94A, Facility ID #9-089078, Building 1320 Fort Stewart, GA	SAIC	DEC-2008
First Semiannual Monitoring Report UST 211 & 212, Facility ID 9-089082, Wright Army Airfield Bulk Fuel Facility, Fort Stewart, GA.	SAIC	DEC-2008
Corrective Action Plan Progress Report for Calendar Year 2008 for SWMUs 1, 2, and 3 at Fort Stewart, GA	SAIC	DEC-2008

**2009**

SWMU26 13th Annual CAP Progress Report	SAIC	FEB-2009
Completion Report UST 82 Facility ID # 9-089029	SAIC	FEB-2009
Final Completion Report UST 89	SAIC	FEB-2009
Completion Report USTs 255/256	SAIC	FEB-2009
SWMU 13 CAP Progress Report and Addendum	Arcadis	APR-2009
SWMU 26 CAP Addendum Revised	Arcadis	MAY-2009
SWMU 26 14th Annual CAP Progress Report	Arcadis	MAY-2009
UST 200/212 First Quarter 2009 Monitoring Only Report	Arcadis	MAY-2009
SWMU 24 B CAP Addendum	Arcadis	JUN-2009
9th Semiannual Monitoring Only Report UST 208/209	SES	SEP-2009
Final CAP Progress Report for CY09 SWMUs 8-11	SAIC	DEC-2009
Final CAP Progress Report for CY09 SWMUs 1-3	SAIC	DEC-2009

## IRP Previous Studies

2010	Title	Author	Date
	USTs 257-261 Revised Final Work Plan for Remedial Action and Groundwater Monitoring at AAFES Car Care Center	J2 Engineering Inc.	APR-2010
	USTs 211 & 212 Soil Excavation Completion Report	Arcadis	MAY-2010
	SWMU 24B CAP Progress Report	Arcadis	AUG-2010
	USTs 257-261 Monitoring Only Report (July 2010) Remedial Action and Groundwater Monitoring at AAFES Car Care Center	J2 Engineering Inc.	AUG-2010
	USTs 257-261 Monitoring Only Report (August 2010) Remedial Action and Groundwater Monitoring at AAFES Car Care Center	J2 Engineering	AUG-2010
	USTs 208 & 209 Final 11th Semiannual Monitoring Only Report	SES	SEP-2010
	SWMU 13 CY 2009 CAP Progress Report	Arcadis	OCT-2010
	USTs 211 & 212 2nd & 3rd Quarter Monitoring Report	Arcadis	NOV-2010
	SWMU 26 15th CAP Progress Report	Arcadis	DEC-2010
2011	SWMU #1-3 Corrective Action Progress Report for CY 2010	SAIC	JAN-2011
	SWMU #8-11 Corrective Action Plan Progress Report for CY2010	SAIC	JAN-2011
	USTs #257-261 Monitoring Only Report (Sept.-Nov. 2010)	J2	FEB-2011
	SWMU #35 4th Quarter Monitoring Report	ARCADIS	MAR-2011
	USTs #208 & 209 12th Semiannual Monitoring Only Report	SES	MAR-2011
	SWMU #24B SWMU Assessment Report	ARCADIS	JUN-2011
	SWMU #35 Completion & Certification Report	ARCADIS	AUG-2011
	USTs #208 & 209 Final Work Plan for IRAs	SES	AUG-2011
	SWMU #13 Calendar Year 2010 CAP Progress Report	ARCADIS	SEP-2011
	USTs #257-261 Monitoring Only Report (May-Aug 2011)	J2	OCT-2011
	USTs #257-261 Work Plan Addendum for Remedial Actions & Groundwater Monitoring	J2	NOV-2011
	UST #210 Monitor Well Abandonment Report	SES	NOV-2011
	SWMU #1-3 Corrective Action Plan Progress Report for CY2011	SAIC	DEC-2011
	SWMU #8-11 Corrective Action Plan Progress Report for CY2011	SAIC	DEC-2011
2012	SWMU #26 16th Corrective Action Plan Progress Report	ARCADIS	APR-2012
	USTs #208 & 209 Final Corrective Action Plan Part-A Status Report	SES	APR-2012
	SWMU #13 Calendar Year 2011 Corrective Action Plan Progress Report	ARCADIS	JUL-2012
2013			

## IRP Previous Studies

2013	Title	Author	Date
	SWMUs #8-11 Corrective Action Plan Progress Report for Calendar Year 2012	SAIC	JAN-2013
	SWMUs #1-3 Corrective Action Plan Progress Report for Calendar Year 2012	SAIC	JAN-2013
	SWMU #39 Final RFI Report	ARCADIS	FEB-2013
	USTs #257-261 CAP-Part B Report	J2	MAR-2013
	SWMU #26 17th Corrective Action Plan Progress Report Revised	ARCADIS	MAR-2013
	SWMU #26 18th Corrective Action Plan Progress Report Revised	ARCADIS	MAR-2013
	USTs 208 & 209 Final 14th S-A Monitoring Only Report	SES	MAY-2013
	USTs 208 & 209 Final 15th S-A Monitoring Only Report	SES	JUL-2013
	SWMU #13 Calendar Year 2012 Corrective Action Plan	ARCADIS	AUG-2013
	USTs 208 & 209 Final 16th S-A Monitoring Only Report	SES	OCT-2013
	SWMUs #1-3 Corrective Action Plan Progress Report	SAIC	DEC-2013
	SWMUs #8-11 Corrective Action Plan Progress Report	SAIC	DEC-2013
2014	USTs 208 & 209 Well Abandonment Report	SES	JAN-2014
	Final Monitoring Only Report USTs 257-261 AAFES Car Care Center (October 2013 - January 2014)	Seneca J2	APR-2014
	Final Monitoring Only Report USTs 257-261 AAFES Car Care Center (January 2014 - April 2014)	Seneca J2	JUN-2014
	Final Corrective Action Plan USTs 276-279 Victory Shoppette	SES	AUG-2014
	Final Monitoring Only Report USTs 257-261 AAFES Car Care Center (April 2014-July 2014)	Seneca J2	OCT-2014
	SWMU 26 19th CAP Progress Report	Arcadis	DEC-2014
2015	SWMU 16 20th CAP Progress Report	Arcadis	JAN-2015
	CY2014 SWMU 13 CAP Progress Report	Arcadis	FEB-2015

**FORT STEWART**  
**Installation Restoration Program**  
**Site Descriptions**

Site Name: POST SOUTH CENTRAL LANDFILL (SWMU 1)

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals, Pesticides, Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Soil, Surface Water

Phases	Start	End
RFA.....	198702.....	198711
CS.....	198902.....	198912
RFI/CMS.....	199401.....	200006
CMI(C).....	200008.....	200010
LTM.....	200109.....	204509

RIP Date: N/A

RC Date: 200010

SITE DESCRIPTION

The Post South Central Landfill (FST-001) is located northwest of Fort Stewart's main cantonment area. This 141-acre site is situated on a point of land bounded on the north, south, and west by Mill Creek, a tributary to Taylor's Creek. The site consists of two active permitted landfills, which are not being investigated, and a number of old inactive cells which were used throughout the last 50 years and is being managed with LUCs under the ER,A program. The old inactive section located on the eastern side of the AOC, which is separated from the active landfills by a large drainage canal, was used from 1942 to 1952. The inactive cells located on the eastern side of the AOC, which were used from 1945 to 1973, were investigated during the Phase I RFI. The only distinction between the active landfills and the eastern inactive cells is that the groundwater flows in opposite directions.

The two active landfills are permitted by the state of Georgia and groundwater monitoring is conducted on a semiannual basis. Monitoring of the active cells continues under the Installation's Subpart D Permit Operations and Maintenance-Army (OMA). In accordance with GAEPD requirements, methane wells were installed in FY98 and are sampled quarterly; and funded with non-ER,A sources. A Phase II RFI was conducted for SWMU 1 during the first quarter of FY98 and the revised final Phase II RFI report recommended NFA for the old, inactive portion of the landfill as long as restricted use of the groundwater was maintained and controlled through ICs. A CAP was prepared for the old, inactive portion of SWMU 1 to evaluate various levels of ICs, administered through the Installation base master plan (BMP) and approved by GAEPD. In accordance with the approved CAP, 54 site identification (ID) signs were installed at SWMU 1 in first quarter FY01.

Eleven wells were abandoned and the BMP was modified to incorporate ICs for this site. Well abandonment confirmation was conducted in FY02 and placed in the 2003 Annual Progress Report. Subsequent annual progress reports of sign inspections are submitted to GAEPD. Sites FST-002 and FST-003 were combined with FST-001 in third quarter 2003. FST-002 the Camp Oliver Landfill (SWMU 2) is located approximately 17 miles northeast of the Fort Stewart Military Reservation (FSMR) Garrison area on Fort Stewart Road 129. From the 1960s to 1979, the area was used for disposal of refuse from troop training activities and by nearby residents for open-pit burning. FST-003 TAC-X Landfill (SWMU 3) is located approximately 3.5 miles south-southwest of Pembroke, GA and less than one mile southeast of Dean Field and the Noncommissioned Officer's Academy and was active from the 1960s until 1982. Based on findings presented in the revised final Phase II RFI report for 16 SWMUs at FSMR, a NFA required status was assigned to the investigation of both sites. CAPs were recommended to control the intrusive activities at SWMUs 2 and 3. In accordance with the approved CAPs by the GAEPD, 14 warning signs were installed at SWMU 2 and 10 warning signs were installed at SWMU 3. LTM associated with these sites is incorporated with FST-001 site inspections and annual reports. Five year reviews for sites FST-001, 002, and 003 were conducted in FY05 and FY10. Warning signs located at SWMUs 1, 2, and 3 were found to be in good condition with no repairs required after last site inspection.

CLEANUP/EXIT STRATEGY

Currently land use ICs are in place. Annual site and sign inspections are required until base closure. Site and sign inspections for FST-002 and FST-003 are also performed under FST-001.



Site ID: FST-011

Site Name: INACTIVE EOD AREA #4 (SWMU 11)

STATUS

Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Explosives, Metals

Media of Concern: Soil

Phases	Start	End
RFA.....	198702.....	198711
CS.....	198902.....	198912
RFI/CMS.....	199401.....	200107
CMI(C).....	200201.....	200209
LTM.....	200301.....	204509

RIP Date: N/A

RC Date: 200209

SITE DESCRIPTION

Open detonation of unexploded ordnance (UXO) took place at inactive EOD area no. 4 (SWMU 11) from 1953 to 1975. The area is located three miles northeast of the cantonment area, about two miles south of Georgia Highway 144, and one mile northeast of Wright Army Airfield (WAAF). Blast craters cover a one-acre tract that is overgrown with trees and brush. Wastes characterized at the site included excess powder bags, small arms rounds, artillery and mortar rounds, illuminating projectiles, bulk explosives, explosive residues, rocket propellant, high explosive grenades, and smoke grenades. A surface sweep was conducted by EOD personnel and surface explosive hazards were removed. Phase I RI analyses indicated that concentrations of arsenic, lead, and silver were greater than action levels and GAEPD required a Phase II RFI be conducted at this site. Fieldwork for this investigation began second quarter FY98. The data was presented in the revised final Phase II RFI report that was submitted to GAEPD in the third quarter of FY00 and recommended an IC CAP and no further monitoring (constituents above screening levels were present and will remain on site).

The corrective actions for SWMUs 8, 9, and 11 were identified in the CAP for the inactive EOD Area located approximately nine miles northeast of the Garrison Area (SWMU 8), the inactive EOD Area located in the Red Cloud Range, Hotel Area (SWMU 9), and the inactive EOD Area located approximately three miles northeast of the Garrison Area (SWMU 11 at FSMR, dated May 2001).

The corrective actions for SWMU 10 were identified in the CAP for the inactive EOD Area north of the Garrison Area (SWMU 10) dated July 2001. In accordance with approved CAPs for SWMUs 8, 9, 10, and 11, ICs were installed at each SWMU and are enforced through best management practices. The following physical items were installed at the SWMUs:

- SWMU 8 - fencing, two gates, and eight warning signs,
- SWMU 9 - one warning sign,
- SWMU 10 - fencing, one gate, and four warning signs around the smaller area of the SWMU, and
- SWMU 11 - fencing, one gate, and five warning signs.

The O&M plan contained in each CAP required an annual inspection of each warning sign and fence and gate(s) (if required) around each SWMU. Any damage identified during the inspection requires documentation. Sites FST-008, FST-009, and FST-010 were combined with FST-011 as of the third quarter 2003. The first annual corrective action progress report was submitted to GAEPD in FY04 and included SWMUs 8, 9, and 11. A site inspection of SWMU 10 was not performed because warning signs were not installed until second quarter FY04. Locks were reinstalled and documented by FSMR personnel in November 2010. Five-year reviews for sites FST-008, FST-010 and FST-011 were conducted in FY05 and FY10. Diseased pine trees and natural occurring vegetation that were impacting the fences were removed by FTSW personnel and full integrity of the fences was reestablished. Per GAEPD letter, dated Oct. 20, 2011, approval was granted to defer annual inspection requirements required by the original CAP for FST-009 (SWMU No.9) until such time that this area of the range is closed or transferred. Warning signs located at SWMUs 8, 10, and 11 were found to be in good condition with no repairs required after last site inspection.

**Site ID: FST-011**

**Site Name: INACTIVE EOD AREA #4 (SWMU 11)**

## **CLEANUP/EXIT STRATEGY**

Land use ICs are in place. Annual site and sign inspections will be performed until base closure. The corrective action progress reports will be submitted in the third quarter of each fiscal year. Site and sign inspections for FST-008 and FST-010 will also be performed under FST-011.

Site Name: FIRE TRAINING AREA AT WAAF (SWMU 13)

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	198702.....	198711
CS.....	198902.....	198912
RFI/CMS.....	199401.....	200602
IRA.....	199706.....	199712
CMI(C).....	200207.....	200805
CMI(O).....	200403.....	204509

RIP Date: 200805

RC Date: 204509

SITE DESCRIPTION

WAAF is located in Liberty County near the south entrance to FTSW, about 1.5 miles from the community of Hinesville. The former fire training area (FTA) is located on the northwest periphery of WAAF, about 3,100 feet northwest of the control tower, which is in the southern portion of the FSMR. FST-013 was formerly utilized as a training area for the airfield's firefighters from 1982 until 1992. The former FTA consisted of a 5,000 square foot concrete pad with an integral berm, an oil/water separator (OWS) sump, underground piping, and an aboveground jet propellant number 4 (JP-4) fuel storage tank.

In 1997, an IM investigation was conducted to remove and properly dispose of the fire training facilities, including all structure and appurtenances and soil that exceeded the preliminary cleanup targets established in the project specification. In September 1999, a RFI was conducted at FST-013. The nature and extent of groundwater contamination at this site was determined during the Phase II RFI activities and submitted to GAEPD. The Phase II RFI recommended the development of a CAP in order to address groundwater contamination. The Phase II RFI was approved by GAEPD in April 2001. Results of baseline groundwater sampling activities, initiated in January 2001, indicated dissolved contamination near monitoring well MW-12 was not decreasing. Therefore, additional soil sampling was conducted in the vicinity of MW-12 in December 2000 and confirmed a small source area remained.

In the first and second quarter FY02 an IRA was conducted to remove a portion of an eight-inch thick concrete pad, that covered a 20- by 8-foot area. The IRA also included the removal of approximately 337 tons of soil and the removal of MW-12. Remaining soil and groundwater contamination was addressed in the CAP that was submitted to GAEPD for review in the fourth quarter of FY02. The CAP recommended no remediation be performed for the surface soil COC. The remedial response objective for FST-013 is to reduce the present concentrations of the site COCs in groundwater (benzene, ethylbenzene, 2-methylnaphthalene, and naphthalene) to RLs presented in the CAP. The BMP was modified to incorporate ICs for this site. The first round of annual sampling, conducted in the first quarter of FY03, included sampling of seven monitoring wells for VOCs, SVOCs, and natural attenuation parameters. A CAP progress report for calendar year (CY) 2004 was submitted in the third quarter FY05. Comments on the CAP were received from GAEPD in February 2004. A response to the comments was submitted in the first quarter of FY06.

In April 2006, subsurface soil samples were collected along the abandoned pipeline to determine the extent of potential remaining subsurface soil contamination that may be influencing groundwater contamination. The CAP recommended MNA with ICs during the MNA period. It was determined that residual subsurface soil contamination is contributing to petroleum contamination in the groundwater and reducing available oxygen for natural attenuation. In FY07, a 15- by 15-foot area of soil was excavated to approximately 15 feet below ground surface (bgs). In the second quarter FY08, a 20- by 20-foot area was excavated in the vicinity of the pipeline on the site to a depth of 15 feet or until groundwater was encountered. An application of an oxygen release compound (ORC) was applied to the floor of the excavation and the sidewalls. As an aid to further delineate the groundwater contamination at the site, three new groundwater wells were installed. In March 2008, SpecPro Environmental Services mobilized and performed an interim removal action. Groundwater monitoring well MW-18 was abandoned. The area of excavation covered an approximate area of 20 by 20 foot to a depth of 12-feet bgs. Upon completion of the excavation, three monitoring wells were installed.

**Site ID: FST-013**

## **Site Name: FIRE TRAINING AREA AT WAAF (SWMU 13)**

In May 2008, direct-push technology (DPT) was utilized to apply ORC® Advanced to nine injection points. The ORC impacted both the subsurface of a former excavation performed at this site and the groundwater downgradient of the newly excavated area. A groundwater sampling event conducted in December 2008 showed that concentrations of benzene were either non-detect or had decreased from previous levels measured during the December 2007 sampling event. In October 2009, soil investigation activities were initiated at SWMU 13 to complete delineation of soils to background concentration or non-detect values. Annual groundwater monitoring activities were conducted Dec. 3, 2009. Laboratory analytical results identified five constituents (benzene, naphthalene, chloroform, 2-methylnaphthalene, 1,1,2,2 tetrachloroethane) that exceeded the maximum contaminant levels (MCL). An additional phase of soil investigation was completed in April 2010. The results of the investigation were compared to values from the October 2009 investigation and it was determined that no correlation of the values reported was present. Based on this, the October 2009 laboratory data was considered uncharacteristic and disregarded. Based on the results of the soil investigations, it was recommended that no further delineation activities be requested for this site. In May 2010, groundwater samples were collected in an effort to complete delineation of benzene in groundwater. Laboratory analytical results showed no samples collected exceeded the reporting limits and based on these results, groundwater was determined to be adequately delineated in all directions. Annual groundwater monitoring activities were conducted in December 2010 on 10 monitor wells onsite. Three wells included as part of the standard monitoring program were identified as having inadequate water and were unable to be sampled. Per the requirement issued by GAEPD in a letter dated Jan. 26, 2011, in order to achieve NFA, three consecutive years of sampling with the concentrations of hazardous constituents must be below their respective remediation level. Previously identified compounds in soil and groundwater have been delineated to concentrations below the approved RLs. No additional delineation activities are planned at the site. Based on the limited area of impact, the low concentrations of benzene present, and the evidence of enhanced biodegradation being present, continued annual groundwater monitoring is recommended. Annual gauging and sampling will continue with groundwater samples being submitted for laboratory analysis until concentrations drop below the approved RLs for three consecutive monitoring events. In July 2013, the Installation submitted the calendar year 2013 CAP for SWMU 13, former FTA at WAAF, dated July 2013, to the GAEPD. The Installation received a GAEPD letter dated Sept. 20, 2013 which included approval comments based on their review of historical analytical results, to only monitor for the established COCs (benzene, ethylbenzene, naphthalene, and 2-methylnaphthalene). Annual groundwater monitoring was conducted in the 3rd quarter of FY14. This site was included in a new FY15 PBA contract that was awarded in March 2015. The required annual groundwater monitoring event for 2015 was included in the PBA base contract. The Defense Environmental Restoration Program (DERP) manual requires 30 years of continual monitoring unless a finite number of years are specified to reach the sites alternate concentration limits (ACL) for groundwater.

### **CLEANUP/EXIT STRATEGY**

It is recommended that further MNA be continued as a remedy for groundwater at the site as detailed in the 2006 CAP Report. Following three consecutive annual monitoring events with no detections exceeding the RLs, a request for NFA determination will be submitted to GAEPD. Upon receipt of approval of the NFA, all site monitoring wells will be properly abandoned and a site closeout report will be submitted to GAEPD.

Site Name: OLD PAINT BOOTH (SWMU 24B)Bld 1056

STATUS

Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Metals, Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil, Surface Water

Phases	Start	End
RFA.....	198702.....	198711
CS.....	198902.....	198912
RFI/CMS.....	199401.....	200409
CMI(C).....	200306.....	200409
CMI(O).....	200310.....	201509

RIP Date: 200409

RC Date: 201509

SITE DESCRIPTION

Site FST-024 consists of two sub-sites: the Radiator Repair Shop (SWMU 24A) and the Old Paint Booth (SWMU 24B). The Radiator Repair Shop (SWMU 24A) was located inside Building 1070, which burned down in February 1993. The shop was in operation from 1980 to 1992. Radiators were repaired by descaling and soaking them in an aqueous solution of sodium hydroxide. The radiator was then leak tested using a fluorescent dye and painted in a wet curtain spray paint booth located in Building 1056. Based on sampling results, there is no evidence of contamination at this sub-site. Therefore, SWMU 24A is RC and the GAEPD approved an NFA status. The Old Paint Booth (SWMU 24B) was located in Building 1056 and was used for painting operations. The facility has not been used for painting operations in more than 20 years, according to personnel who work in the building. The fieldwork for the RI was conducted in the second quarter of FY98. A Phase II RFI was conducted in the first quarter of FY00 and indicated moderate levels (above action levels) of VOCs, SVOCs, and RCRA metals in surface soil, subsurface soil and groundwater. The Phase II RFI addendum for this site was submitted to GAEPD in the fourth quarter of FY00. Comments were received in April 2001 and a revised Phase II RFI addendum was submitted to GAEPD in July 2001. In accordance with the recommendations of the Phase II RFI, a CAP was developed and submitted in the fourth quarter of FY02. The selected corrective action alternative for remediation of surface soil was ICs and groundwater monitoring. The BMP was modified to incorporate ICs at this site. The first round of biannual groundwater monitoring was conducted in the fourth quarter of FY03; it included six wells for VOCs, SVOCs, and RCRA metals. Subsequent sampling results indicate that groundwater contamination is now below action levels. In FY04, confirmatory soil samples were collected below the building slab, the soil results indicated no additional subsurface soil actions are needed. Demolition of Building 1056 was scheduled for 2006 and 2007.

The remedial alternatives developed for PAH in surface soil in the CAP (SAIC 2000) remain applicable. In CY07, confirmatory soil samples were collected in the locations of elevated PAH concentrations and one lower concentration point to evaluate the progress of the natural attenuation in the soil. Fort Stewart requested the biannual groundwater monitoring scheduled for CY07 not be conducted because groundwater sampling results did not indicate any new contaminants of potential concern (COPC) and the confirmation that potential COPC from the CY03 biannual groundwater sampling were not COPC. Therefore, the development of RLs or corrective action for constituents evaluated in groundwater is not required. The GAEPD responded to the request stating that another round of groundwater sampling was needed because the rationale for eliminating tetrachloroethylene (PCE) as a COPC was not clear. If a constituent is above its USEPA Region 3 risk-based concentration (RBC), it is a COPC and a risk evaluation must be performed. Low concentrations of PAH COCs were detected in the confirmation surface soil samples collected. Only one confirmation surface soil sample indicated benzo(a)pyrene as a COC above its RL of 890 milligrams per kilogram (mg/kg). The CAP progress report (SAIC 2008) recommended a second confirmatory sample be collected in December 2008 to evaluate if the concentration continued to attenuate below the established RL. Due to low-level naphthalene, 2-methylnaphthalene, and carbon disulfide detections in groundwater in a background well, GAEPD requested that additional investigation be conducted to delineate the detections in addition to a new background well being installed. In February 2009, a confirmation soil sample was collected and the results indicated that benzo(a)pyrene exceeded the established soil RL of 890 micrograms per kilogram (ug/kg).

Groundwater samples were collected in February and April 2009 and based on the results, it was deduced that the impacts of the soil contamination had not leached to the groundwater. In FY10, excavation of the area with soil contamination was conducted. A

**Site ID: FST-024**

**Site Name: OLD PAINT BOOTH (SWMU 24B)Bld 1056**

10- by 10-foot area was excavated to a depth of one foot below surface level. Confirmation soil samples were taken to confirm all soils that exceeded the soil RLs for benzo(a)pyrene were removed. One of the sidewall confirmation soil samples from the excavation exceeded the RL for benzo(a)pyrene. In a letter dated April 22, 2010, GAEPD requested that the CAP addendum be rescinded and the SVOCs in surface soil be handled separately from the SWMU 24B. Fort Stewart prepared a CAP progress report for SWMU 24B requesting NFA for SWMU 24B and to disassociate the PAH detections in surface soil from SWMU 24B. At the same time, Fort Stewart prepared an SAR for the PAH detections in surface soil to show that the associated contamination was the result of old asphalt paving and current activities ongoing in the general area and not those associated with the former paint booth. In a letter dated July 14, 2011, Fort Stewart recommended that no further investigation or remediation of the PAHs in surface soil be required. The cumulative results of the historical investigations indicated that there were no COCs in soil or groundwater associated with SWMU 24B. In a letter dated Dec. 9, 2011, GAEPD stated that there are no site-related contaminants remaining at the Old Radiator Shop/Paint Booth that exceed GAEPD approved risk-based levels. The Installation received a GAEPD letter dated Feb. 22, 2013, approving NFA and requiring industrial LUCs be implemented for this site. A site closeout report was resubmitted requesting no industrial LUCs at this site due to it being an active motor pool.

### **CLEANUP/EXIT STRATEGY**

A letter request will be made to GAEPD to not implement LUCs for FST-24B due to the site currently serving as an active motor pool.

Site Name: FORMER 724TH TANKER PURG STN (SWMU 26)

**STATUS**

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals, Petroleum, Oil and Lubricants (POL), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	198702.....	198711
CS.....	198902.....	198912
RFI/CMS.....	199401.....	200409
IRA.....	199608.....	200407
CMI(C).....	200002.....	201103
CMI(O).....	200306.....	202212
RIP Date:	201103	
RC Date:	202212	

**SITE DESCRIPTION**

The former 724th Tanker Purging Station (SWMU 26) is located on the western portion of the cantonment area near the fuel truck parking lot. The Tanker Purging Station is an area where tanker trailers that transported JP-4 jet fuel, diesel, and motor gasoline (MOGAS) were routinely cleaned. It consisted of an underground waste oil tank (FST-25A1, Tank 4A) and a 10,000-gallon aboveground storage tank (AST) that received recycled water after phase separation. Visual inspection of the area indicated the associated OWS had overflowed and petroleum residues were on the ground near the tank and on the edge of the drainage ditch adjacent to the tank. The Phase I RFI report documented total petroleum hydrocarbon (TPH) concentrations in soil samples. These concentrations exceeded GAEPD guidelines, confirming a release occurred at this site. In August 1996, IRA activities were conducted to address soil contamination. Activities included removal of the underground waste oil tank, the OWS, the 10,000-gallon AST, and the pump system for the facility. In addition, 500 cubic yards (cy) of contaminated soil were removed from the site. The site was backfilled with clean material, seeded, and erosion control measures were installed. A Phase II RFI report was required by GAEPD to define the extent of contamination; the fieldwork was completed in August 1997. Free-product was detected in one well in September 1998.

The revised Final Phase II RFI Report was submitted to GAEPD in November 1998 and approved in January 1999. The report recommended preparation of a CAP and was submitted to GAEPD in July 1999. The CAP recommended groundwater and soil remediation using in situ oxidation (such as PHOSTer® II technology) to enhance bioremediation, and confirmatory sampling. In January 2000, product removal was completed and the CAP was approved by GAEPD. The PHOSTer® II enhanced bioremediation system was installed in January 2000 and began operation in February 2000. The baseline sampling event indicated the horizontal extent of groundwater contamination was not fully delineated. Therefore, additional site investigation was conducted in the third quarter of FY00, delineating the site to a 500- by 250-foot area (three times the original size). Monthly groundwater data from August 2000 and September 2000 indicated the dissolved plume was not fully delineated. Based on the analytical groundwater data results presented in the Third Annual CAP Progress Report dated January 2001, further soil excavation was determined necessary in order to address the high levels of benzene concentrations detected in the soil.

In January 2001, a soil IRA removed approximately 2,700 cy and confirmatory sampling indicated that the bottom and northwest wall of the excavation contained hydrocarbon contamination above site-specific RLs. Additional injectors and monitoring wells were installed in March 2001 to extend the PHOSTer® II treatment system and complete the delineation of the horizontal extent of the BTEX contamination to five parts per billion (ppb). The PHOSTer® II system including the injector assemblies and tubing were removed from the site. Quarterly sampling of groundwater began at the site in March 2002. The eighth semiannual progress report was submitted to GAEPD in the third quarter of FY03, recommending additional soil samples be collected in order to define the extent of the contamination bound in the clay layer. Seasonal variations coupled with the effects of a long drought introduced significant complications. The ninth annual progress report was submitted to GAEPD in the fourth quarter of FY04. Source delineation (membrane interface probe-contaminant depth profile screening) and installation of deep wells were completed in FY04. Installation of the additional wells indicated the benzene contamination in the source area and immediate vicinity to be shallow, above 15-feet bgs.

**Site ID: FST-026**

**Site Name: FORMER 724TH TANKER PURG STN (SWMU 26)**

The resistivity probes indicated a clay layer in the downgradient area approximately 15- to 20-feet bgs. The September 2005 groundwater sampling event did not indicate significant changes in the benzene concentrations in source-area wells or those in the immediate vicinity of the source area. Installation of additional wells helped delineate the extent of the downgradient deep benzene plume. The October 2006 groundwater event indicated a significant increase in benzene concentrations in the source-area wells and those in the immediate vicinity of the source area. Three new monitoring wells (two shallow and one deep) were installed. Twenty new monitoring wells in the area defined by the new suspected soil contamination, as determined by the DPT investigations, were sampled. In 2007, an additional soil investigation was conducted to evaluate the impacts remaining within the clay at the source area. In December 2008 and June 2009, groundwater samples were collected from 30 monitoring wells at SWMU 26. Seven of the samples collected in December 2008 exceeded the site RL of 5 micrograms per liter (ug/L) for benzene. Seven of the 30 groundwater monitoring wells sampled in December 2008 exceeded the site RL for benzene and again in June 2009. In May 2009, a CAP addendum was submitted to GAEPD to address the residual impacts in the soil and the deep groundwater at SWMU 26. As part of the addendum, a site-specific conceptual model was developed to determine the presence and movement of benzene in the surficial aquifer system. The corrective action included source removal through soil excavation in December 2010 and aerobic degradation of benzene through biosparging. The excavation was completed in the first and second quarter of FY11. The biosparge system was installed in the third quarter of FY11 and has been operational through FY12. Semiannual groundwater monitoring will continue to evaluate the effectiveness of the corrective action activities. Due to the continual benzene impacts to the deep groundwater, the biosparge system was scheduled to operate during 2014 and semiannual groundwater monitoring events were performed. A new PBA was awarded for this site in FY15 to continue operation of the biosparge system and the semiannual monitoring events of 34 monitoring wells.

## **CLEANUP/EXIT STRATEGY**

When the site reaches the approved RLs, a recommendation will be submitted to GAEPD requesting NFA. Upon receipt of approval of the NFA, all site wells will be abandoned and a well abandonment report will be submitted to GAEPD.



# Site ID: FST-25A3

## Site Name: FORMER USTS: GR III, various phases

### STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
ISC.....	198810.....	199312
INV.....	199604.....	199610
CAP.....	199607.....	200109
IRA.....	199304.....	200306
IMP(C).....	200207.....	201310
IMP(O).....	200003.....	201510

RIP Date: 201310

RC Date: 201510

### SITE DESCRIPTION

In 1992 and 1993, 62 fuel tanks were removed and the excavated areas were backfilled with clean soil and compacted. The tanks were located at various locations in the cantonment area except for Tanks 248, 249, 255, and 256. Tanks 248 and 249 were located at Camp Oliver near the vehicle maintenance building. Tanks 255 and 256 were located at Taylor's Creek, a refueling station for US Army vehicles.

The GAEPD requires UST sites not considered a clean closure in accordance with Georgia Underground Storage Tank (regulations) (GUST), be investigated within 45 days of closure. The GAEPD CAP-part A regulation requires preparation of documentation showing soil and groundwater contamination and site-specific groundwater flow direction. Based on GAEPD's review of each CAP-part A and/or site-specific contamination, a CAP-part B can be required to fully delineate the horizontal and vertical extent of contamination and to recommend the course(s) of action; however, per negotiations with the GAEPD, full delineation of the contamination in the CAP-part A phase was highly encouraged.

In FY00, the UST sites from FST-25A1 and 25A2 that still required action were combined with this AEDB-R site.

In FY08, abandonment of monitoring wells and site closeout of former UST 82 and former USTs 255-256 (located in the vicinity of Buildings 16012 and 1281, respectively) were performed as required by GAEPD's NFA approval letters.

Prior to FY09 the following former USTs received NFA approval from GAEPD:

- 2/3 5/6 11/12 13 (FST-CA) 15/16
- 29 (FST-HB) 36/37 38 (FST-I) 43/44 48/49
- 54/55 62 63 64 68/69
- 72/73 77/78 80/81 82 87/88
- 89 90/91 92 93 95-97
- 100B (FST-Z) 122 123 200/201 202-204
- 205/206 219 222/223 225 (FSTZN) 226/227
- 234/235 236 239/240 248/249 255/256
- NGTC 4/5 NGTC 6/7 NGTC 16 FST25A (Tank 1)
- HA (Tank 28B) R (Tank 79).

#### Former UST 61

Located near Building 1161 at FTSW, UST 61 had a capacity of 500 gallons and stored used oil. The UST was excavated and removed in FY95. Measurable free-product was observed in MW 42-07. NFA was requested for UST 61 in a letter from Georgia Underground Storage Tank Management Program (USTMP) dated Jan. 5, 2009. Abandonment of wells and site closeout occurred in FY09.

#### Former UST 210

Located near Building 272 at FTSW, UST 210 had a capacity of 1,000 gallons, and stored used oil. The tank and associated

**Site ID: FST-25A3**

**Site Name: FORMER USTS: GR III, various phases**

pipings were excavated and removed in FY95. Measurable free-product was observed in MW 43-11. In FY07, excavation activities were performed at UST 210 in an effort to remediate the measurable free-product observed at the site. During the December 2008 sampling event, analytical results for UST 210 were below their respective regulatory levels and an NFA requirement was requested in the Fourth Annual Monitoring Only Report submitted to GAEPD in June 2009. The GAEPD approved the request for NFA in FY10 and three monitoring wells were abandoned and documented in the site closeout report.

#### USTs 257-261

A former AAFES gas station occupies an area of approximately 0.5 acre and exhibited extensive soil and groundwater contamination [maximum benzene 21,000 µg/L], which requires remediation to action levels. Site-specific conditions and facility operation concerns resulted in system modifications, design complications, and extended treatment duration. The GAEPD USTMP has approved a combination of soil vapor extraction (SVE), bioventing, product removal, and groundwater extractions wells. The system was installed in the third quarter of FY02. System operation began in September 2002 and was modified in summer 2004; it was contracted to operate until 2007. The site benzene ACL is 713 µg/L.

By November 2004, after two years of operation, the site contaminant level was reduced to a maximum of 2,300 µg/L. Plume migration has been contained. Semiannual (BTEX) sampling of ten groundwater wells has been conducted with semiannual and annual reports. The air sparge system was turned off in the fourth quarter FY09. A CAP was amended that recommended a sodium persulfate injection to address residual benzene contamination in the smear zone and the groundwater. The injection started in FY10. The continued high benzene concentrations after the second sodium persulfate injections indicate that additional remediation may be warranted. Remedial actions completed in April 2013 included source removal of contaminated soils, dewatering the excavation pit, ORC© application at the base of the soil excavation, post-remedial action monitoring, canopy removal and an air sparge system removal. Quarterly monitoring was implemented in July 2013 and semiannual monitoring was implemented in October 2014.

Former USTs 208 and 209 were located near Building 275 at FTSW. UST 208 was used to store gasoline and UST 209 was used to store diesel fuel. Both USTs were removed from the site in FY95. Measurable free-product was observed in MW-42-07. In FY07, excavation activities were performed at USTs 208 and 209 in an effort to remediate the measurable free-product observed at both sites. In FY09, measurable free-product was detected in MW-42-13. In FY10, free-product removal was performed. Free-product was delineated using DPT to determine the extent of the product downgradient. In FY11, the contractor excavated an area 25 by 25 feet. A replacement well was installed, denoted as MW-42-13R. Semiannual confirmatory sampling of three groundwater monitoring wells for BTEX with annual reports was conducted. Groundwater samples are taken from 11 monitoring wells on a quarterly basis and were analyzed for PAH compounds after every year of monitoring. Free-product was observed in MW-42-13. One additional monitor well was installed downgradient and was included in future sampling events. In FY12, free-product was delineated. An excavation pit measuring 17- by 19- by 14-feet deep was completed to address free-product and groundwater contamination. Four hundred pounds of ORC© was applied and the excavated pit floor confirmatory sampling was completed. In September 2012, one groundwater monitoring well was installed downgradient of the excavation area. Groundwater sampling was performed in the fourth quarter of FY12. The free-product has been removed, and the BTEX concentrations in the groundwater are at acceptable levels. Quarterly groundwater monitoring was recommended to continue for one year. The BTEX concentrations reached the regulatory ACLs and an NFA was requested on Oct. 15, 2013 and approved by the regulator on Nov. 20, 2013.

### **CLEANUP/EXIT STRATEGY**

USTs 257-261 - After groundwater BTEX concentrations reach approved ACLs for the required duration (2 years), an NFA will be requested from the regulator.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FST-002	CAMP OLIVER LANDFILL (SWMU 2)	200305	This site was closed and is currently tracked under FST-001
FST-003	TAC-X LANDFILL (SWMU 3)	200305	This site was closed and is currently tracked under FST-001
FST-004	BURN PITS 4A THROUGH 4G (SWMUS 4A-4G)	199906	RFI recommending NFA approved June 1, 1999
FST-008	INACTIVE EOD AREA #1 (SWMU 8)	200209	This site was closed and is currently tracked under FST-011
FST-009	INACTIVE EOD AREA #2 (SWMU 9)	200305	This site was closed and is currently tracked under FST-011
FST-010	INACTIVE EOD AREA #3 (SWMU 10)	200309	This site was closed and is currently tracked under FST-011
FST-012	ACTIVE EOD AREA (SWMUS 12A/12B/12C)	199608	This site is being addressed under CC program site.
FST-014	OLD FIRE TRAINING AREA (SWMU 14)	200009	Verbal approval Fall 2000 Revised Final Phase II RFI approved Dec. 8, 2000
FST-017	DRMO HAZ. WASTE STORAGE AREA (SWMU 17)	200009	Verbal approval Fall 2000 Revised Final Phase II RFI approved Dec. 8, 2000
FST-018	IND. WASTEWATER TREATMENT PLT (SWMU 18)	199608	Transferred to CC program- and has NFA
FST-019	OLD SLUDGE DRYING BEDS (SWMU 19)	200009	Phase II RFI submitted to GAEPD April 14, 2000
FST-020	LAND APPLICATION SYSTEM (SWMU 20)	199606	Site active and operates under NPDES permit.
FST-022	DPW WASTE OIL TANKS (SWMU 22)	199708	No Further Action, Approved By GAEPD (August 1997 SUBPART B PERMIT).
FST-023	WRIGHT ARMY AIRFD WATER POL PT (SWMU 23)	199606	Active site no further action required.
FST-025AA	UST BLDG 1840	199608	UST 4A site transferred under FST-25A3. Received letter of approval from GAEPD for NFA dated 199811.
FST-025B	UST BLDG 1820	199702	UST No.7 received letter of approval from GAEPD dated 200001.
FST-025BA	UST BLDG 1833	199412	UST 8, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025BB	UST BLDG 1833	199412	UST 9, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site,

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			E,RA funds would be appropriate.
FST-025C	UST BLDG 1820	199412	UST 10, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations. However, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025CA	UST BLDG 1810	199702	UST No.13 was removed in FY95, received letter of approval of NFA from GAEPD dated Jan. 19, 2000.
FST-025CB	UST BLDG 1811	199707	UST No.14 was removed in FY95, received letter of approval for NFA dated July 23, 1997.
FST-025D	UST BLDG 1720	199709	UST No.17 was removed in FY95, received letter of approval for NFA from GAEPD dated Sept. 11, 1997.
FST-025DB	UST BLDG 1720	199709	UST No.19 was removed in FY95, received letter of approval from GAEPD for NFA dated Sept. 11, 1997.
FST-025EA	UST BLDG 1720	199709	UST 21 was removed in FY95, received letter of approval from GAEPD for NFA dated Sept. 11, 1997.
FST-025EB	UST BLDG 1720	199611	UST 22 was removed in FY95, received letter of approval from GAEPD for NFA dated April 13, 1999.
FST-025F	UST BLDG 1720	199709	UST 23 was removed in FY95, received letter of approval from GAEPD for NFA dated Sept. 11, 1997.
FST-025FA	UST BLDG 1720	199701	UST 24 was removed in FY96, received letter of approval from GAEPD for NFA dated Jan. 17, 1997.
FST-025FB	UST BLDG 1720	199412	UST 25, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025G	UST BLDG 1720	199412	UST 26, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025GA	UST BLDG 1720	199412	UST 27, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025GB	UST BLDG 1720	199412	UST 28A, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025IA	UST BLDG 1514	199412	UST 39, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025IB	UST BLDG 1514	199412	UST 40, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025J	UST BLDG 1542	199912	UST 42 was removed in FY96, received

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			letter of approval from the GAEPD for NFA dated Nov. 2, 1999.
FST-025JA	UST BLDG 1175	199905	UST 45 was removed in FY96, received letter of approval from the GAEPD for NFA dated May 7, 1999.
FST-025K	UST BLDG 1170	199412	UST 46, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025KA	UST BLDG 1170	199412	UST 47, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025L	UST BLDG 1160	199412	UST 59, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025LA	UST BLDG 1160	199412	UST 60, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025N	UST BLDG 1130	199707	UST 64A was removed in FY95, received letter of approval from the GAEPD for

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			NFA dated July 23, 1997.
FST-025PA	UST BLDG 1280	199808	UST 74 was removed in FY95, received letter of approval from the GAEPD for NFA dated August 1998.
FST-025QA	UST BLDG 1223	199808	UST 76 was removed in FY95, received letter of approval from the GAEPD for NFA dated August 1998.
FST-025S	UST BLDG 1286	199412	UST 83, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025SA	UST BLDG 1285	199412	UST 84, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025T	UST BLDG 1284	199412	UST 85, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to be listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.
FST-025TA	UST BLDG 1283	199412	UST 86, listed as RC reason due to the fact that the UST is a non-regulated flow-through vessel. Therefore, it should not have been registered with the GAEPD. Installation requested that this site be delisted. Investigation of the site has not been conducted, as it is not required by Federal and/or State rules and regulations; however, if the GAEPD ever requires the UST to hbe listed as a regulated tank and/or requires investigation of the site, E,RA funds would be appropriate.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FST-025V	UST BLDG 1330	200003	UST 93 received letter of approval from the GAEPD for NFA dated March 16, 2001.
FST-025VA	UST BLDG 1323/28	199901	UST 94 was removed in FY96, received letter of approval from the GAEPD for NFA dated Jan. 11, 1999.
FST-025XA	UST BLDG 1339A	199803	UST 94C was removed in FY96, received letter of approval from the GAEPD for NFA dated March 3, 1998.
FST-025YA	UST BLDG 1349	199808	UST 100A was removed in FY96, received letter of approval from the GAEPD for NFA dated Aug. 14, 1998.
FST-025Z1	UST BLDG 241	199807	UST 241 received letter of approval from the GAEPD for NFA dated July 31, 1998.
FST-025ZA	UST BLDG 260	199904	UST 201A received letter of approval from the GAEPD for NFA dated April 20, 2001.
FST-025ZB	UST BLDG 260	199905	UST 201B received letter of approval from the GAEPD for NFA dated April 20, 2001.
FST-025ZD	UST BLDG 230	199811	UST 207A was removed in FY96, received letter of approval from the GAEPD for NFA dated November 1998.
FST-025ZH	UST BLDG 4502	199806	UST 216 was removed in FY96, received letter of approval from the GAEPD for NFA dated June 1998.
FST-025ZI	UST BLDG 4502	199905	UST 217 was removed in FY97, received letter of approval from the GAEPD for NFA dated May 1999.
FST-025ZJ	UST BLDG 4502	199905	UST 218 was removed in FY95, received letter of approval from the GAEPD for NFA dated May 1997.
FST-025ZK	UST BLDG 4502	199905	UST 219 received letter of approval from the GAEPD for NFA dated May 1999.
FST-025ZL	UST BLDG 4502	199806	UST 220 received letter of approval from the GAEPD for NFA dated June 1998.
FST-025ZM	UST BLDG 4520	199811	UST 224 received letter of approval from the GAEPD for NFA dated November 1998.
FST-025ZO	UST BLDG 4577	199807	UST 228 was removed in FY96, received letter of approval from the GAEPD for NFA dated July 1998.
FST-025ZP	UST BLDG 4577	199807	UST 229 was removed in FY95, received letter of approval from the GAEPD for NFA dated July 1998.
FST-025ZQ	UST BLDG 4577	199807	UST 230 was removed in FY95, received letter of approval from the GAEPD for NFA dated July 1998.
FST-025ZR	UST BLDG 4577	199807	UST 231 was removed in FY95, received letter of approval from the GAEPD for NFA dated July 1998.
FST-025ZU	UST BLDG 4578	199803	UST 237 was removed in FY95, received letter of approval from the GAEPD for NFA dated March 1998.
FST-025ZV	UST BLDG 4586	199808	UST 238 was removed in FY96, received letter of approval from the GAEPD for NFA dated Aug. 1998.



## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FST-025ZX	UST BLDG 241	199907	UST 243 was removed in FY96, received letter of approval from the GAEPD for NFA dated July 1999.
FST-027	MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V)	200204	This site was transferred to CC program
FST-028	724TH BATTERY SHOP (SWMU 28)	199606	Active site no further action required.
FST-029	EVANS ARMY HELIPRT POL FACTY (SWMU 29)	199606	This site is being addressed under CC program site.
FST-030	RECIRCULATING WASH IMPOUNDMENT (SWMU 30)	199507	Active site no further action required.
FST-031	DPW ASPHALT TANKS (SWMU 31)	200009	Revised Final Phase II RFI approved by the GAEPD
FST-032	SUPPLY DIESEL TANK (SWMU 32)	199608	Active site no further action required.
FST-033	DPW PESTICIDE WAREHOUSE (SWMU 33)	199606	Active site no further action required.
FST-034	DPW EQUIPMENT WASH RACK (SWMU 34)	199606	Active site no further action required.
FST-035	WAAF BULK FUEL SYSTEM (SWMU 35)	201105	Active site No Further Action Required (NFA). Fourth Quarter Monitoring Report Requesting NFA.
FST-25A1	FORMER UNDERGROUND STORAGE TANKS: GRP I	200008	Numerous UST sites with NFA letters from State.
FST-25A2	FORMER UNDERGROUND STORAGE TANKS: GRP II	200008	Numerous UST sites with NFA letters from State.
PBA@Stewart	Funding PBA at Stewart	201312	Funding Site Only.

# IRP Schedule

Date of IRP Inception: 198702

## Past Phase Completion Milestones

### 1988

INV (FST-025ZB - UST BLDG 260)

RFA (FST-001 - POST SOUTH CENTRAL LANDFILL (SWMU 1), FST-002 - CAMP OLIVER LANDFILL (SWMU 2), FST-003 - TAC-X LANDFILL (SWMU 3), FST-004 - BURN PITS 4A THROUGH 4G (SWMUS 4A-4G), FST-009 - INACTIVE EOD AREA #2 (SWMU 9), FST-010 - INACTIVE EOD AREA #3 (SWMU 10), FST-011 - INACTIVE EOD AREA #4 (SWMU 11), FST-012 - ACTIVE EOD AREA (SWMUS 12A/12B/12C), FST-013 - FIRE TRAINING AREA AT WAAF (SWMU 13), FST-014 - OLD FIRE TRAINING AREA (SWMU 14), FST-017 - DRMO HAZ. WASTE STORAGE AREA (SWMU 17), FST-018 - IND. WASTEWATER TREATMENT PLT (SWMU 18), FST-024 - OLD PAINT BOOTH (SWMU 24)Bld 1056 , FST-026 - FORMER 724TH TANKER PURG STN (SWMU 26))

ISC (FST-025AA - UST BLDG 1840, FST-025B - UST BLDG 1820, FST-025CA - UST BLDG 1810, FST-025CB - UST BLDG 1811, FST-025D - UST BLDG 1720, FST-025DB - UST BLDG 1720, FST-025EA - UST BLDG 1720, FST-025EB - UST BLDG 1720, FST-025F - UST BLDG 1720, FST-025FA - UST BLDG 1720, FST-025J - UST BLDG 1542, FST-025JA - UST BLDG 1175, FST-025N - UST BLDG 1130, FST-025PA - UST BLDG 1280, FST-025QA - UST BLDG 1223, FST-025V - UST BLDG 1330, FST-025VA - UST BLDG 1323/28, FST-025XA - UST BLDG 1339A, FST-025YA - UST BLDG 1349, FST-025Z1 - UST BLDG 241, FST-025ZA - UST BLDG 260, FST-025ZB - UST BLDG 260, FST-025ZD - UST BLDG 230, FST-025ZH - UST BLDG 4502, FST-025ZI - UST BLDG 4502, FST-025ZJ - UST BLDG 4502, FST-025ZK - UST BLDG 4502, FST-025ZL - UST BLDG 4502, FST-025ZM - UST BLDG 4520, FST-025ZO - UST BLDG 4577, FST-025ZP - UST BLDG 4577, FST-025ZQ - UST BLDG 4577, FST-025ZR - UST BLDG 4577, FST-025ZU - UST BLDG 4578, FST-025ZV - UST BLDG 4586, FST-025ZX - UST BLDG 241)

PA (FST-019 - OLD SLUDGE DRYING BEDS (SWMU 19), FST-020 - LAND APPLICATION SYSTEM (SWMU 20), FST-023 - WRIGHT ARMY AIRFD WATER POL PT (SWMU 23), FST-025BA - UST BLDG 1833, FST-025BB - UST BLDG 1833, FST-025C - UST BLDG 1820, FST-025FB - UST BLDG 1720, FST-025G - UST BLDG 1720, FST-025GA - UST BLDG 1720, FST-025GB - UST BLDG 1720, FST-025IA - UST BLDG 1514, FST-025IB - UST BLDG 1514, FST-025K - UST BLDG 1170, FST-025KA - UST BLDG 1170, FST-025L - UST BLDG 1160, FST-025LA - UST BLDG 1160, FST-025S - UST BLDG 1286, FST-025SA - UST BLDG 1285, FST-025T - UST BLDG 1284, FST-025TA - UST BLDG 1283, FST-027 - MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V), FST-028 - 724TH BATTERY SHOP (SWMU 28), FST-029 - EVANS ARMY HELIPRT POL FACTY (SWMU 29), FST-030 - RECIRCULATING WASH IMPOUNDMENT (SWMU 30), FST-031 - DPW ASPHALT TANKS (SWMU 31), FST-032 - SUPPLY DIESEL TANK (SWMU 32), FST-033 - DPW PESTICIDE WAREHOUSE (SWMU 33), FST-034 - DPW EQUIPMENT WASH RACK (SWMU 34))

### 1990

CS (FST-001 - POST SOUTH CENTRAL LANDFILL (SWMU 1), FST-002 - CAMP OLIVER LANDFILL (SWMU 2), FST-003 - TAC-X LANDFILL (SWMU 3), FST-004 - BURN PITS 4A THROUGH 4G (SWMUS 4A-4G), FST-009 - INACTIVE EOD AREA #2 (SWMU 9), FST-010 - INACTIVE EOD AREA #3 (SWMU 10), FST-011 - INACTIVE EOD AREA #4 (SWMU 11), FST-012 - ACTIVE EOD AREA (SWMUS 12A/12B/12C), FST-013 - FIRE TRAINING AREA AT WAAF (SWMU 13), FST-014 - OLD FIRE TRAINING AREA (SWMU 14), FST-017 - DRMO HAZ. WASTE STORAGE AREA (SWMU 17), FST-018 - IND. WASTEWATER TREATMENT PLT (SWMU 18), FST-024 - OLD PAINT BOOTH (SWMU 24)Bld 1056 , FST-026 - FORMER 724TH TANKER PURG STN (SWMU 26))

SI (FST-019 - OLD SLUDGE DRYING BEDS (SWMU 19), FST-020 - LAND APPLICATION SYSTEM (SWMU 20), FST-025BA - UST BLDG 1833, FST-025BB - UST BLDG 1833, FST-025C - UST BLDG 1820, FST-025FB - UST BLDG 1720, FST-025G - UST BLDG 1720, FST-025GA - UST BLDG 1720, FST-025GB - UST BLDG 1720, FST-025IA - UST BLDG 1514, FST-025IB - UST BLDG 1514, FST-025K - UST BLDG 1170, FST-025KA - UST BLDG 1170, FST-025L - UST BLDG 1160, FST-025LA - UST BLDG 1160, FST-025S - UST BLDG 1286, FST-025SA - UST BLDG 1285, FST-025T - UST BLDG 1284, FST-025TA - UST BLDG 1283, FST-027 - MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V), FST-028 - 724TH BATTERY SHOP (SWMU 28), FST-029 - EVANS ARMY HELIPRT POL FACTY (SWMU 29), FST-030 - RECIRCULATING WASH IMPOUNDMENT (SWMU 30), FST-031 - DPW ASPHALT TANKS (SWMU 31), FST-032 - SUPPLY DIESEL TANK (SWMU 32), FST-033 - DPW PESTICIDE WAREHOUSE (SWMU 33), FST-034 - DPW EQUIPMENT WASH RACK (SWMU 34))

INV (FST-025AA - UST BLDG 1840, FST-025B - UST BLDG 1820, FST-025CA - UST BLDG 1810, FST-025CB -

	UST BLDG 1811, FST-025D - UST BLDG 1720, FST-025DB - UST BLDG 1720, FST-025EA - UST BLDG 1720, FST-025EB - UST BLDG 1720, FST-025F - UST BLDG 1720, FST-025FA - UST BLDG 1720, FST-025J - UST BLDG 1542, FST-025JA - UST BLDG 1175, FST-025N - UST BLDG 1130, FST-025PA - UST BLDG 1280, FST-025QA - UST BLDG 1223, FST-025VA - UST BLDG 1323/28, FST-025XA - UST BLDG 1339A, FST-025YA - UST BLDG 1349, FST-025Z1 - UST BLDG 241, FST-025ZA - UST BLDG 260, FST-025ZD - UST BLDG 230, FST-025ZH - UST BLDG 4502, FST-025ZI - UST BLDG 4502, FST-025ZJ - UST BLDG 4502, FST-025ZK - UST BLDG 4502, FST-025ZO - UST BLDG 4577, FST-025ZP - UST BLDG 4577, FST-025ZQ - UST BLDG 4577, FST-025ZR - UST BLDG 4577, FST-025ZU - UST BLDG 4578) (FST-008 - INACTIVE EOD AREA #1 (SWMU 8))
RFA	
<b>1993</b>	
PA	(FST-022 - DPW WASTE OIL TANKS (SWMU 22))
<b>1994</b>	
RFI/CMS	(FST-012 - ACTIVE EOD AREA (SWMUS 12A/12B/12C), FST-018 - IND. WASTEWATER TREATMENT PLT (SWMU 18))
ISC	(FST-25A1 - FORMER UNDERGROUND STORAGE TANKS: GRP I, FST-25A2 - FORMER UNDERGROUND STORAGE TANKS: GRP II, FST-25A3 - FORMER USTS: GR III, various phases)
SI	(FST-023 - WRIGHT ARMY AIRFD WATER POL PT (SWMU 23))
RI/FS	(FST-020 - LAND APPLICATION SYSTEM (SWMU 20), FST-028 - 724TH BATTERY SHOP (SWMU 28), FST-030 - RECIRCULATING WASH IMPOUNDMENT (SWMU 30), FST-032 - SUPPLY DIESEL TANK (SWMU 32), FST-033 - DPW PESTICIDE WAREHOUSE (SWMU 33), FST-034 - DPW EQUIPMENT WASH RACK (SWMU 34))
<b>1995</b>	
INV	(FST-025ZL - UST BLDG 4502)
ISC	(FST-035 - WAAF BULK FUEL SYSTEM (SWMU 35))
IRA	(FST-025B - UST BLDG 1820, FST-025CA - UST BLDG 1810, FST-025CB - UST BLDG 1811, FST-025D - UST BLDG 1720, FST-025DB - UST BLDG 1720, FST-025EA - UST BLDG 1720, FST-025F - UST BLDG 1720, FST-025N - UST BLDG 1130, FST-025QA - UST BLDG 1223, FST-025ZI - UST BLDG 4502, FST-025ZJ - UST BLDG 4502, FST-025ZK - UST BLDG 4502, FST-025ZL - UST BLDG 4502, FST-025ZO - UST BLDG 4577, FST-025ZP - UST BLDG 4577, FST-025ZQ - UST BLDG 4577, FST-025ZR - UST BLDG 4577, FST-025ZU - UST BLDG 4578)
<b>1996</b>	
IRA	(FST-025AA - UST BLDG 1840, FST-025EB - UST BLDG 1720, FST-025FA - UST BLDG 1720, FST-025J - UST BLDG 1542, FST-025JA - UST BLDG 1175, FST-025PA - UST BLDG 1280, FST-025V - UST BLDG 1330, FST-025VA - UST BLDG 1323/28, FST-025XA - UST BLDG 1339A, FST-025YA - UST BLDG 1349, FST-025Z1 - UST BLDG 241, FST-025ZA - UST BLDG 260, FST-025ZB - UST BLDG 260, FST-025ZD - UST BLDG 230, FST-025ZH - UST BLDG 4502, FST-025ZM - UST BLDG 4520, FST-025ZV - UST BLDG 4586, FST-025ZX - UST BLDG 241)
INV	(FST-25A1 - FORMER UNDERGROUND STORAGE TANKS: GRP I, FST-25A2 - FORMER UNDERGROUND STORAGE TANKS: GRP II)
RI/FS	(FST-029 - EVANS ARMY HELIPRT POL FACTY (SWMU 29))
<b>1997</b>	
INV	(FST-025ZV - UST BLDG 4586, FST-035 - WAAF BULK FUEL SYSTEM (SWMU 35), FST-25A3 - FORMER USTS: GR III, various phases)
CAP	(FST-025B - UST BLDG 1820, FST-025CA - UST BLDG 1810, FST-025CB - UST BLDG 1811, FST-025D - UST BLDG 1720, FST-025DB - UST BLDG 1720, FST-025EA - UST BLDG 1720, FST-025F - UST BLDG 1720, FST-025N - UST BLDG 1130, FST-025QA - UST BLDG 1223, FST-025ZI - UST BLDG 4502, FST-025ZJ - UST BLDG 4502, FST-025ZK - UST BLDG 4502, FST-025ZO - UST BLDG 4577, FST-025ZP - UST BLDG 4577, FST-025ZQ - UST BLDG 4577, FST-025ZR - UST BLDG 4577, FST-025ZU - UST BLDG 4578)
IRA	(FST-25A1 - FORMER UNDERGROUND STORAGE TANKS: GRP I, FST-25A2 - FORMER UNDERGROUND STORAGE TANKS: GRP II)

## IRP Schedule

SI	(FST-022 - DPW WASTE OIL TANKS (SWMU 22))
<b>1998</b>	
IRA	(FST-013 - FIRE TRAINING AREA AT WAAF (SWMU 13))
INV	(FST-025ZM - UST BLDG 4520)
<b>1999</b>	
IRA	(FST-031 - DPW ASPHALT TANKS (SWMU 31))
CAP	(FST-025VA - UST BLDG 1323/28)
INV	(FST-025V - UST BLDG 1330, FST-025ZX - UST BLDG 241)
RFI/CMS	(FST-004 - BURN PITS 4A THROUGH 4G (SWMUS 4A-4G))
<b>2000</b>	
RI/FS	(FST-019 - OLD SLUDGE DRYING BEDS (SWMU 19), FST-031 - DPW ASPHALT TANKS (SWMU 31))
RFI/CMS	(FST-001 - POST SOUTH CENTRAL LANDFILL (SWMU 1), FST-014 - OLD FIRE TRAINING AREA (SWMU 14), FST-017 - DRMO HAZ. WASTE STORAGE AREA (SWMU 17))
CAP	(FST-025V - UST BLDG 1330, FST-25A1 - FORMER UNDERGROUND STORAGE TANKS: GRP I, FST-25A2 - FORMER UNDERGROUND STORAGE TANKS: GRP II)
<b>2001</b>	
CMI(C)	(FST-001 - POST SOUTH CENTRAL LANDFILL (SWMU 1), FST-002 - CAMP OLIVER LANDFILL (SWMU 2), FST-003 - TAC-X LANDFILL (SWMU 3), FST-009 - INACTIVE EOD AREA #2 (SWMU 9))
CAP	(FST-25A3 - FORMER USTS: GR III, various phases)
RFI/CMS	(FST-002 - CAMP OLIVER LANDFILL (SWMU 2), FST-003 - TAC-X LANDFILL (SWMU 3), FST-009 - INACTIVE EOD AREA #2 (SWMU 9), FST-010 - INACTIVE EOD AREA #3 (SWMU 10), FST-011 - INACTIVE EOD AREA #4 (SWMU 11))
<b>2002</b>	
RI/FS	(FST-027 - MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V))
RFI/CMS	(FST-008 - INACTIVE EOD AREA #1 (SWMU 8))
CMI(C)	(FST-011 - INACTIVE EOD AREA #4 (SWMU 11))
<b>2003</b>	
CMI(C)	(FST-010 - INACTIVE EOD AREA #3 (SWMU 10))
LTM	(FST-002 - CAMP OLIVER LANDFILL (SWMU 2), FST-003 - TAC-X LANDFILL (SWMU 3), FST-009 - INACTIVE EOD AREA #2 (SWMU 9))
IRA	(FST-25A3 - FORMER USTS: GR III, various phases)
<b>2004</b>	
IRA	(FST-026 - FORMER 724TH TANKER PURG STN (SWMU 26))
CAP	(FST-035 - WAAF BULK FUEL SYSTEM (SWMU 35))
CMI(C)	(FST-024 - OLD PAINT BOOTH (SWMU 24B)Bld 1056 )
RFI/CMS	(FST-024 - OLD PAINT BOOTH (SWMU 24B)Bld 1056 , FST-026 - FORMER 724TH TANKER PURG STN (SWMU 26))
<b>2006</b>	
RFI/CMS	(FST-013 - FIRE TRAINING AREA AT WAAF (SWMU 13))
<b>2008</b>	
RFA	(PBA@Stewart - Funding PBA at Stewart)
CMI(C)	(FST-013 - FIRE TRAINING AREA AT WAAF (SWMU 13))
<b>2010</b>	
IMP(C)	(FST-035 - WAAF BULK FUEL SYSTEM (SWMU 35))
<b>2011</b>	
IMP(O)	(FST-035 - WAAF BULK FUEL SYSTEM (SWMU 35))

CMI(C) (FST-026 - FORMER 724TH TANKER PURG STN (SWMU 26))

**2013**

CMI(C) (PBA@Stewart - Funding PBA at Stewart)

DES (PBA@Stewart - Funding PBA at Stewart)

RFI/CMS (PBA@Stewart - Funding PBA at Stewart)

**2014**

IMP(C) (FST-25A3 - FORMER USTS: GR III, various phases)

CMI(O) (PBA@Stewart - Funding PBA at Stewart)

**Projected Phase Completion Milestones**

See attached schedule

**Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates**

Site ID	Site Name	ROD/DD Title	ROD/DD Date
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**Final RA(C) Completion Date:** 201310

**Schedule for Next Five-Year Review:** 2015

**Estimated Completion Date of IRP at Installation (including LTM phase):** 204509

## FORT STEWART IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FST-001	POST SOUTH CENTRAL LANDFILL (SWMU 1)	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FST-011	INACTIVE EOD AREA #4 (SWMU 11)	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FST-013	FIRE TRAINING AREA AT WAAF (SWMU 13)	CMI(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FST-026	FORMER 724TH TANKER PURG STN (SWMU 26)	CMI(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FST-25A3	FORMER USTS: GR III, various phases	IMP(O)						

**FORT STEWART**  
**Army Defense Environmental Restoration Program**  
**Military Munitions Response Program**

# MMRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 12/6

**Installation Site Types with Future and/or Underway Phases**

- 1 Small Arms Range  
(FTSW-006-R-01)
- 5 Unexploded Munitions/Ordnance  
(FTSW-002-R-01, FTSW-009-R-01, FTSW-009-R-02, FTSW-010-R-01, FTSW-011-R-01)

**Most Widespread Contaminants of Concern**

Munitions and explosives of concern (MEC), Munitions constituents (MC)

**Media of Concern**

Groundwater, Soil

**Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))**

Site ID	Site Name	Action	Remedy	FY
FTSW-008-R-01	HERO ROAD TRENCH AREA	IRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2008
FTSW-009-R-01	Anti-Aircraft Range-4A	IRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	2012
FTSW-002-R-01	ANTI-AIRCRAFT RANGE 90 MM - 2	IRA	INSTITUTIONAL CONTROLS	2013
FTSW-006-R-01	SMALL ARMS RANGE - 2	IRA	WASTE REMOVAL - SOILS	2013
FTSW-009-R-01	Anti-Aircraft Range-4A	IRA	UXO CLEARANCE	2013

**Duration of MMRP**

**Date of MMRP Inception:** 200304

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 201812/201812

**Date of MMRP completion including Long Term Management (LTM):** 201812



# MMRP Contamination Assessment

## Contamination Assessment Overview

Department of Defense (DoD) environmental cleanup activities began in 1975 under the IRP before any formal federal requirements or program was established. The DoD instituted its IRP to address past practices that often did not take long-term environmental effects into account. The environmental law driving the present DERP is the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), commonly known as the Superfund. The DERP was formally established by Section 211 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and is codified in Sections 2710-2710 of Title 10 of the United States Code (USC). The SARA set requirements for the DERP and its funding mechanisms, the Defense Environmental Restoration Account (DERA). The DERA funding was available in 1984 before the formal establishment of the DERP. An installation-wide confirmatory sampling report was completed in FY08 for all eight sites. Two of those Military Munitions Response Program (MMRP) sites require further investigative actions.

In FY08 the cantonment area at Fort Stewart was expanded by 3,022 acres. FSTW-006-R-01, previously ineligible for MMRP because it was within the operational range footprint, is now eligible for MMRP. Construction has occurred within the area for FSTW-006-R-01 and a time-critical removal action (TCRA) was completed in FY10.

## Cleanup Exit Strategy

The following are Fort Stewart's MMRP exit strategies for active sites:

Anti-Aircraft Range 90MM-2 (alias site FTSW-002-R-01): Excavation with off-site transportation and disposal. Removal of MEC will be conducted based upon the results of the MEC site characterization and removal assessment. The MEC ICs of five-year reviews with monitoring will be implemented after MEC removal is complete until base closure.

Small Arms Range-2 (alias site FTSW-006-R-01): Upon completion of the RFI, if warranted an interim removal action will be performed followed by LTM with LUCs.

Anti-Aircraft Range 4A (alias site FTSW-009-R-01): This site was divided into two separate Munitions Response Sites (MRS) based on EOD responses during construction and as determined by the USACE Baltimore District Explosives Safety Division which will be instrumental in managing the munitions response areas (MRA) through future investigations. FTSW-009-R-01 is recommended for a CMS and MEC removal and associated monitoring.

Anti-Aircraft Range 4B (alias site FTSW-009-R-02): This site was divided into two separate MRSs based on EOD responses during construction and as determined by the USACE Baltimore District Explosives Safety Division which will be instrumental in managing the MRA through future investigations. FTSW-009-R-02 is recommended for a CMS and MEC removal and associated monitoring.

Anti-Tank Range 90-MM-2 (alias site FTSW-010-R-01): The findings of the MEC Phase II confirmatory sampling field activities indicate that MEC and munitions debris may be present on the anti-tank range 90mm-2. As a result, the site is recommended for CMS.

Grenade Launcher Range (FTSW-011-R-01): Munitions debris and range features were observed during the Phase II confirmatory sampling field activities. Therefore, the grenade launcher range is recommended for CMS.

## MMRP Previous Studies

Year	Title	Author	Date
2003	Closed, Transferring, and Transferred Range/Site Inventory Report for Fort Stewart, Hunter Army Airfield, Blichton Stagefield, Ogeechee Stagefield, and Sand Hill Stagefield, Georgia	Malcolm Pirnie, Inc.	OCT-2003
2006	Final Historical Records Review, Fort Stewart, Georgia	Malcolm Pirnie, Inc.	SEP-2006
2007	Final Work Plan, Fort Stewart, Georgia	Malcolm Pirnie, Inc.	MAR-2007
	Final Confirmatory Sampling Report, Fort Stewart, Georgia	Malcolm Pirnie, Inc.	NOV-2007
2008	Final Work Plan for Time Critical Removal Action Hero Road Trench Area MRS Site FTSW-008-R-01	SES	OCT-2008
2010	Stakeholder Draft Phase 2 Historical Records Review	Malcolm Pirnie, Inc.	MAR-2010
	Stakeholder Draft Phase 2 Confirmatory Sampling Report Work	Malcolm Pirnie, Inc.	MAY-2010
	Final Phase 2 Historical Records Review	Malcolm Pirnie, Inc.	JUN-2010
	Final Phase 2 Confirmatory Report Work Plan	Malcolm Pirnie, Inc.	AUG-2010
	Stakeholder Draft Phase 2 Confirmatory Sampling Report	Malcolm Pirnie, Inc.	DEC-2010
2011	MMRP Final Phase II Confirmatory Sampling Report	Malcolm Pirnie	SEP-2011
	Time Critical Removal Action Final Report for ACOE 10th Battalion/Dog Kennel Site	Bering Sea Environmental	NOV-2011
2012	Final MMRP RFI Work Plan for FTSW-002/008	ERT	JAN-2012
	Stakeholder Draft Final Military Munitions Response Program Land Use Controls Interim Measures Work Plan	ARCADIS	FEB-2012
	Final Preliminary Investigation/TCRA for the Small Arms Range Berm Area	SES	MAR-2012
	Final Revised RFI Work Plan for FTSW-002/008	ERT	JUL-2012
2013	Final Non-Time Critical Removal Action LUC Plan FTSW-002/006/008/009B/010/011	ARCADIS/MALCOLM PIRNIE, INC	OCT-2013
2014	Final MMRP RCRA Facility Investigation Report for Anti-Aircraft Range 90MM-2 (FTSW-002-R-01) and Hero Road Trench Area (FTSW-008-R-01)	ERT, Inc.	JAN-2014
	Final RCRA Facility Investigation Work Plan for Small Arms Berm Area FTSW-006-R-01	SES	JAN-2014
	Final RCRA Facility Investigation Work Plan for Site Investigation at Small Arms Range Berm Area FTSW-006-R-01	SES	JUL-2014

**FORT STEWART**  
**Military Munitions Response Program**  
**Site Descriptions**

**Site ID: FTSW-002-R-01**

**Site Name: ANTI-AIRCRAFT RANGE 90 MM - 2**

**STATUS**

**Regulatory Driver:** RCRA

**MRSPP Score:** 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	200310.....	200310
CS.....	200602.....	200803
RFI/CMS.....	201003.....	201712
IRA.....	201003.....	201308

**RIP Date:** N/A

**RC Date:** 201712

**SITE DESCRIPTION**

The Anti-Aircraft Range 90 millimeter (mm)-2 MRS is a 77-acre area located within a former 90mm anti-aircraft range fan; five other former anti-aircraft and tank ranges also overlap this MRS. The use of the Anti-Aircraft 90mm-2 MRS range began in 1941 and ceased in 1944. The six historical anti-aircraft and tank ranges that overlap this MRS were used from 1941 through 1964 and included two 90mm anti-aircraft ranges, two 40mm anti-aircraft ranges, a 90mm tank range, and a tank range with unknown munitions. The MRS is positioned in the downrange portion of these ranges and does not overlap impact/target areas or firing points. The known munitions associated with this MRS include 40mm and 90mm anti-aircraft projectiles. The munitions used on the tank range are not known; however, archival documents from 1941 indicate that 37, 40, and 90mm high explosives (HE) and 37, 40, and 90mm practice rounds with tracers were issued to Fort Stewart. Therefore, these munitions are assumed to have been used on this MRS.

Numerous EOD calls were reported on this site. They involved C-4 plastic explosives (secondary explosives), M-222 Dragon HE anti-tank guided missiles, M-7 grenades (riot control agent), and MK-2 fragmentation hand grenades. Currently there are LUCs in the form of signs and fencing. Explosive warning signs are attached to the fence. It is expected that this site will continue with the present land use for the foreseeable future. This MRS is kept secure at all times. The entire MRS is relatively flat and covered with maintained grass; buildings, gravel and paved roads and parking areas, and the munitions storage bunkers are all located within the fenced area. No activities occur in the buffer area surrounding the fence line. Due to findings during previous investigations, small amounts of MEC were anticipated to be present at this site. An RFI was conducted at the site consisting of installation of groundwater monitoring wells to determine nature and extent. The costs for the excavation included off site transportation and disposal of nonhazardous material. Removal of MEC was conducted based upon the results of the MEC site characterization and removal assessment. The MEC ICs with monitoring were implemented after MEC removal was completed.

In 2001, a PBA contract was awarded to perform an RFI. The RFI was conducted to adequately characterize the nature and extent of potential MC, contamination, and MEC hazards. The RFI was completed in FY13 and the final revision was approved by GAEPD in FY15. Based on the recommendation and conclusion of the RFI the associated human health and ecological risk assessments, there was no release of MC at the Anti-Aircraft 90MM-2 site. However, a release of MEC was identified and the RFI recommended a CMS.

In FY13, an RFI was completed and submitted GAEPD for review and approval. The RFI was prepared to adequately characterize the nature and extent of potential MC contamination and MEC hazards, determine the potential risks posed to human health and the environment from MC, collect or develop additional data for a CMS (as appropriate), and to determine corrective measures (including no further action required). In FY14, comments were received from GAEPD and the RFI was approved by GAEPD in January 2015. The RFI recommended a CMS for MEC.

**CLEANUP/EXIT STRATEGY**

A CMS is recommended to further investigate potential MEC hazards.

**Site ID: FTSW-006-R-01**  
**Site Name: SMALL ARMS RANGE - 2**

**STATUS**

**Regulatory Driver:** RCRA  
**MRSPP Score:** Evaluation pending  
**Contaminants of Concern:** Munitions constituents (MC)  
**Media of Concern:** Groundwater, Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
RFA.....	200310.....	200310
CS.....	200602.....	201109
RFI/CMS.....	201109.....	201812
IRA.....	200910.....	201210

**RIP Date:** N/A  
**RC Date:** 201812

**SITE DESCRIPTION**

This 287-acre MRS is located along the western perimeter of the cantonment area and historically was used for small arms training during the 1940s and 1950s. The combined acreage of the overlapping range fans is 2,091 acres, 287 acres of which overlap the other than operational area and make up Small Arms Range 2. The MRS is composed of the firing points of the four small arms ranges and the downrange area of Range M and H, B, A, N, and M Ranges. According to documents reviewed for the June 2010 historical records review (HRR), munitions used on the small arms range were .50-caliber (cal) or less; however, the exact calibers are unknown. Archival documents from 1941 document the use of .30-cal and .50-cal machine guns on Fort Stewart. Therefore, it is assumed that .30-cal and .50-cal small arms were used on this MRS.

Two documented EOD responses were identified at the site. The first involved a 105mm projectile and occurred in April 2003. The second occurred in 2008; however, the munition item encountered was not documented. While no MEC was found at the site, both a 9mm and a 25mm cartridge were found expended. The 9mm was likely present due to firing on the MRS. The 25mm was likely an expended cartridge disposed from a Bradley fighting vehicle located on the opposite side of the adjacent motor pool fence.

The berm of a former small arms range, identified as the Fire Station 5 Berm due to its proximity to a fire station, was identified within the Small Arms Range 2 MRS boundary. The USACE Savannah District conducted an investigation of this berm. During this investigation, soil samples were collected from the Fire Station 5 Berm on Aug. 7 and 8, 2008. In total, 22 samples were collected and analyzed for antimony, copper, and lead. Concentrations of antimony ranged from below the method detection limit to 2.38 mg/kg. Concentrations of copper ranged from 0.247 to 104 mg/kg. Concentrations of lead ranged from 2.19 to 1,000 mg/kg. Three samples exceeded the 400 mg/kg USEPA Region 9 Preliminary Remediation Goal (PRG) for lead. The Fire Station 5 Berm was subsequently removed.

A supplemental investigation and TCRA were conducted to ensure worker safety during the construction of a fire station on site in FY10. The investigational size of the site was expanded due to proposed new construction of several installation support buildings and a new sanitary sewer line that was installed in FY11. An investigation was completed in FY12 with two historical EOD responses and two debris discoveries.

In FY13, a contract was awarded to conduct an RFI at this site. In FY14 the RFI work plan was submitted to GAEPD for review and approval. Comments received from GAEPD and the revision of the work plan was submitted the first quarter of FY15. The Small Arms Range Berm Area Phase I RFI report, site FTSW-006--R-01, was submitted to GAEPD in the third quarter of FY15.

In FY14 the RFI Work Plan was submitted to GAEPD for review and approval. Comments received from GAEPD and the revision of the work plan was submitted the first quarter of FY15. The Small Arms Range Berm Area Phase I Resource Conservation and Recovery Act Facility Investigation Report. Site FTSW-006-R-01 was submitted to GAEPD in the third quarter of FY15.

**CLEANUP/EXIT STRATEGY**

Upon completion of the RFI/CMS, if warranted, an interim removal action will be performed followed by LTM and LUCs.

**Site ID: FTSW-009-R-01**  
**Site Name: Anti-Aircraft Range-4A**

**STATUS**

**Regulatory Driver:** RCRA  
**MRSPP Score:** 04  
 Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)  
 Media of Concern: Soil

Phases	Start	End
RFA.....	200910.....	200911
CS.....	201008.....	201209
RFI/CMS.....	201208.....	201609
IRA.....	201103.....	201211
<b>RIP Date:</b> N/A		
<b>RC Date:</b> 201609		

**SITE DESCRIPTION**

The Anti-Aircraft Range 4A MRS is 465 acres of an 1,128-acre MRA. The MRA is composed of the firing points of a total of three separate/colocated ranges. The expected munitions use associated with the MRA includes 40mm and 90mm anti-aircraft projectiles. From 1941 to 1979 this MRA was utilized as a surface danger zone and/or firing line, as well as a location for support facilities.

Munitions used on the range: From 1994 to present no munitions have been used in this area. During 1979 to 1994 the following munitions were fired 105mm, 155mm, 203mm HE, illumination and smoke. From 1941 to 1979 the following munitions were used: .50 cal or less, unknown type tank rounds; 90mm anti-aircraft rounds; and, 40mm anti-aircraft rounds.

The combined acreage covered by these three historical ranges is 85,325 acres. Of those acres, 1,128 acres are not in the operational range area and, thus, overlap the other than operational area and make up Anti-Aircraft Range-4A. The boundary of the MRA was expanded southeast beyond the firing point area to include a currently undeveloped area where an EOD response have been documented. Portions of this site are now a part of a Military Construction (MILCON) site. Prior to construction the following EOD responses occurred at the site: 40mm projectile (along the northern boundary of the site), mortar round (western central section of the site), M67 hand grenade (along the southeast boundary) and 2.75-inch rocket (southern central section of the site). Additionally, one EOD response [labeled EOD Response (no information)] was reported along the southern boundary and northern central section of the site. During the confirmatory sampling fieldwork the construction portion of this MRS was inaccessible; however, according to Fort Stewart's range control, 160 EOD responses were reported on the MRS during the construction activities area from Aug. 31, 2009 through October 2010. No MEC or munitions debris was discovered during confirmatory sampling activities.

Based on clearance activities conducted on the construction areas, the Anti-Aircraft Range-4 was broken into two MRS. Anti-Aircraft Range-4A (465 acres) encompasses the cleared construction area where there is assumed to be a low probability of encountering MEC. Following the February 2011 field effort, Fort Stewart requested that the USACE Baltimore District conduct a MEC investigation to depth of detection on a five-acre site. This investigation was conducted in April 2011. This site was divided into two separate MRSs based on EOD responses during construction and as determined by the USACE Baltimore District Explosives Safety Division which will be instrumental in managing the MRA through future investigations. FTSW-009-R-01 is recommended for a CMS for MEC. It is recognized that because CMS is recommended for MEC, MC may also be evaluated as part of the study. A contract for a CMS was awarded in FY13 that addresses both MEC and MC constituents at this MRS. Fences and signs currently exist on the MRS to indicate restricted LUC areas that are wetlands and are not cleared yet.

**CLEANUP/EXIT STRATEGY**

The corrective measures identified in the CMS will be applied to this MRS to address MEC constituents.

**Site ID: FTSW-009-R-02**  
**Site Name: Anti-Aircraft Range-4B**

**STATUS**

**Regulatory Driver:** RCRA  
**MRSP Score:** Evaluation pending  
Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)  
Media of Concern: Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
RFA.....	200910.....	200911
CS.....	201008.....	201209
RFI/CMS.....	201208.....	201609
<b>RIP Date:</b>	N/A	
<b>RC Date:</b>	201609	

**SITE DESCRIPTION**

The Anti-Aircraft Range 4B MRS is 663 acres of an 1,128-acre MRA. The MRA is composed of the firing points of a total of three separate/collocated ranges. The expected munitions use associated with the MRA includes 40mm and 90mm anti-aircraft projectiles. From 1941 to 1979 this MRA was utilized as a surface danger zone and/or firing line, as well as a location for support facilities.

Munitions used on the range: From 1994 to present no munitions have been used in this area. During 1979 to 1994 the following munitions were fired 105mm, 155mm, 203mm HE, illumination and smoke. From 1941 to 1979 the following munitions were used: .50 cal or less, unknown type tank rounds; 90mm anti-aircraft rounds; and 40mm anti-aircraft rounds.

The combined acreage covered by these three historical ranges is 85,325 acres, 1,128 acres of which are not in the operational range area and, thus, overlap the other than operational area and make up Anti-Aircraft Range-4A. The boundary of the MRA was expanded southeast beyond the firing point area to include a currently undeveloped area where an EOD response have been documented. Portions of this site are now a part of a MILCON site. Prior to construction the following EOD responses occurred at the site: 40mm projectile (along the northern boundary of the site), mortar round (western central section of the site), M67 hand grenade (along the southeast boundary) and 2.75-inch rocket (southern central section of the site). Additionally, one EOD response [labeled EOD Response (no information)] was reported along the southern boundary and northern central section of the site. During the confirmatory sampling fieldwork the construction portion of this MRS was inaccessible; however, according to Fort Stewart's Range Control, 160 EOD responses were reported on the MRS during the construction activities area from Aug. 31, 2009 through October 2010. No MEC or munitions debris was discovered during confirmatory sampling activities.

Based on clearance activities conducted on the construction areas, the Anti-Aircraft Range-4 was broken into two MRS. Anti-Aircraft Range-4A (465 acres) encompasses the cleared construction area where there is assumed to be a low probability of encountering MEC. Anti-Aircraft Range-4B (663 acres) encompasses the undeveloped areas and there is assumed to be a medium to high probability of encountering MEC. Following the February 2011 field effort, Fort Stewart requested that the USACE Baltimore District conduct a MEC investigation to depth of detection on a five-acre site. This investigation was conducted in April 2011. This site was divided into two separate MRS based on EOD responses during construction and as determined by the USACE Baltimore District Explosives Safety Division which will be instrumental in managing the MRA through future investigations. FTSW-009-R-02 is recommended for a CMS for MEC. It is recognized that because CMS is recommended for MEC, MC may also be evaluated as part of the study. A contract for a CMS was awarded in FY13 that addresses both MEC and MC constituents at this MRS. Fences and signs currently exist on the MRS to indicate restricted LUC areas that are wetlands and are not cleared yet.

**CLEANUP/EXIT STRATEGY**

The corrective measures identified in the CMS will be applied to this MRS to address MEC constituents.

**Site ID: FTSW-010-R-01**  
**Site Name: Anti-Tank Range 90 -MM-2**

**STATUS**

**Regulatory Driver:** RCRA  
**MRSPP Score:** Evaluation pending  
**Contaminants of Concern:** Munitions and explosives of concern (MEC)  
**Media of Concern:** Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
RFA.....	200910.....	200911
CS.....	201008.....	201008
RFI/CMS.....	201212.....	201609
<b>RIP Date:</b>	N/A	
<b>RC Date:</b>	201609	

**SITE DESCRIPTION**

This 546-acre MRS is located in the northwestern portion of the cantonment area and was used for anti-aircraft, anti-tank, grenade launcher, and small arms training during the 1940s. The MRS is composed of eight range fans. The total acreage covered by the eight historical ranges is 17,015 acres, 546 acres of which overlap the other than operational area and make up this site. The MRS is composed of the firing point of two separate collocated ranges and the downrange area of a grenade launcher range and a 120mm anti-aircraft range. The known munitions use associated with this MRS includes 40mm and 120mm anti-aircraft projectiles, 40mm grenades and 90mm anti-tank projectiles. No documented EOD responses were identified at this site. A magnetometer-assisted visual survey was conducted. One munitions debris item, an inert anti-personnel mine, was found during the investigation. Eight samples were collected and based on analytical results, no explosive compounds were detected above laboratory detection or reporting limits. The MRS is comprised of undeveloped area and the cantonment area. The site was recommended for a CMS for MEC based on the discovery of an inert land mine. It is recognized that because CMS is recommended for MEC, MC may also be evaluated as part of the study. A contract for a CMS was awarded in FY13 that addresses both MEC and MC constituents at this MRS.

**CLEANUP/EXIT STRATEGY**

The corrective measures identified in the CMS will be applied to this MRS to address MEC constituents.



**Site ID: FTSW-011-R-01**  
**Site Name: Grenade Launcher Range**

**STATUS**

**Regulatory Driver:** RCRA  
**MRSPP Score:** Evaluation pending  
**Contaminants of Concern:** Munitions and explosives of concern (MEC)  
**Media of Concern:** Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
RFA.....	200910.....	200911
CS.....	201008.....	201008
RFI/CMS.....	201208.....	201609
<b>RIP Date:</b>	N/A	
<b>RC Date:</b>	201609	

**SITE DESCRIPTION**

This 132-acre MRS is located along the western perimeter of the cantonment area and was historically used as a grenade launcher range, infiltration course, 120mm anti-aircraft range, and three small arms ranges during the 1940s. The total acreage covered by the six historical ranges is 10,947.6 acres, 132 acres of which overlap the other than operational range area and make up Grenade Launcher Range MRS. According to previous investigations, munitions used on the Grenade Launcher Range included 40mm practice grenades, small arms, and trinitrotoluene. Archival documents from 1941 document the use of .30-cal and .50-cal machine guns on Fort Stewart. Therefore, it is assumed that .30-cal and .50-cal small arms were used on this MRS. Additionally, 120mm anti-aircraft projectile use occurred on approximately 15 acres of the MRS. No EOD responses have been reported for this MRS. A magnetometer-assisted visual survey was conducted. The Grenade Launcher Range is comprised of the cantonment area, including an industrial area and warehouses, and undeveloped land and there are no known site-specific controls at this MRS. It is recognized that because CMS is recommended for MEC, MC may also be evaluated as part of the study. A contract for a CMS was awarded in FY13 that addresses both MEC and MC constituents at this MRS.

**CLEANUP/EXIT STRATEGY**

The corrective measures identified in the CMS will be applied to this MRS to address MEC constituents.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTSW-001-R-01	ANTI-AIRCRAFT RANGE - 1	200803	Based on the Final CS report dated November 2007, this MRS is not eligible under the MMRP because it is located within operational range area.
FTSW-003-R-01	ANTI-TANK RANGE 90 MM	200803	Based on the Final CS report dated November 2007, this MRS is not eligible under the MMRP because it is currently being monitored under the RCRA landfill permit.
FTSW-004-R-01	HAND GRENADE COURSE	200803	Based on the Final CS report dated November 2007, this MRS is not eligible under the MMRP because it is located within operational range area.
FTSW-005-R-01	SMALL ARMS RANGE - 1	200803	Based on the Final CS report dated November 2007, this MRS is not eligible under the MMRP because it is located within operational range area.
FTSW-007-R-01	SMALL ARMS RANGE - 3	200803	Based on the Final CS report dated November 2007, this MRS is recommended for No Further Action because MC results for soil sample did not exceed the Fort Stewart background values for inorganic compounds and no MEC because it's a small arms range.
FTSW-008-R-01	HERO ROAD TRENCH AREA	201412	Final MMRP RCRA Facility Investigation Report for Anti-Aircraft Range 90MM-2 (FTSW-002-R-01) and Hero Road Trench Area (FTSW-008-R-01, January 2014

# MMRP Schedule

Date of MMRP Inception 200304

## Past Phase Completion Milestones

### 2004

RFA (FTSW-001-R-01 - ANTI-AIRCRAFT RANGE - 1, FTSW-002-R-01 - ANTI-AIRCRAFT RANGE 90 MM - 2, FTSW-003-R-01 - ANTI-TANK RANGE 90 MM, FTSW-004-R-01 - HAND GRENADE COURSE, FTSW-005-R-01 - SMALL ARMS RANGE - 1, FTSW-006-R-01 - SMALL ARMS RANGE - 2, FTSW-007-R-01 - SMALL ARMS RANGE - 3, FTSW-008-R-01 - HERO ROAD TRENCH AREA)

### 2008

CS (FTSW-001-R-01 - ANTI-AIRCRAFT RANGE - 1, FTSW-002-R-01 - ANTI-AIRCRAFT RANGE 90 MM - 2, FTSW-003-R-01 - ANTI-TANK RANGE 90 MM, FTSW-004-R-01 - HAND GRENADE COURSE, FTSW-005-R-01 - SMALL ARMS RANGE - 1, FTSW-007-R-01 - SMALL ARMS RANGE - 3, FTSW-008-R-01 - HERO ROAD TRENCH AREA)

IRA (FTSW-008-R-01 - HERO ROAD TRENCH AREA)

### 2010

RFA (FTSW-009-R-01 - Anti-Aircraft Range-4A, FTSW-009-R-02 - Anti-Aircraft Range-4B, FTSW-010-R-01 - Anti-Tank Range 90 -MM-2, FTSW-011-R-01 - Grenade Launcher Range)

CS (FTSW-010-R-01 - Anti-Tank Range 90 -MM-2, FTSW-011-R-01 - Grenade Launcher Range)

### 2011

CS (FTSW-006-R-01 - SMALL ARMS RANGE - 2)

### 2012

CS (FTSW-009-R-01 - Anti-Aircraft Range-4A, FTSW-009-R-02 - Anti-Aircraft Range-4B)

### 2013

IRA (FTSW-002-R-01 - ANTI-AIRCRAFT RANGE 90 MM - 2, FTSW-006-R-01 - SMALL ARMS RANGE - 2, FTSW-009-R-01 - Anti-Aircraft Range-4A)

## Projected Phase Completion Milestones

See attached schedule

## Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

## Final RA(C) Completion Date:

Schedule for Next Five-Year Review: 2015

Estimated Completion Date of MMRP at Installation (including LTM phase): 201812

## FORT STEWART MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSW-002-R-01	ANTI-AIRCRAFT RANGE 90 MM - 2	RFI/CMS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSW-006-R-01	SMALL ARMS RANGE - 2	RFI/CMS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSW-009-R-01	Anti-Aircraft Range-4A	RFI/CMS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSW-009-R-02	Anti-Aircraft Range-4B	RFI/CMS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSW-010-R-01	Anti-Tank Range 90 -MM-2	RFI/CMS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSW-011-R-01	Grenade Launcher Range	RFI/CMS						

**FORT STEWART**  
**Army Defense Environmental Restoration Program**  
**Compliance Restoration**

## CR Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 4/2

### Installation Site Types with Future and/or Underway Phases

- 1 Oil Water Separator  
(CCFST-039)
- 1 Underground Storage Tank  
(CCHOTS-419)

### Most Widespread Contaminants of Concern

Volatiles (VOC)

### Media of Concern

Groundwater

### Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
CCFST-039	BUILDING 1160, UST 60, SWMU 39	IRA	GROUND WATER TREATMENT	2008
CCFST-039	BUILDING 1160, UST 60, SWMU 39	IRA	WASTE REMOVAL - SOILS	2008
CCHOTS-419	Heating Oil Tank, Bldg 419	IRA	FREE PRODUCT RECOVERY	2014
CCHOTS-419	Heating Oil Tank, Bldg 419	FRA	FREE PRODUCT RECOVERY	2015
CCUSTVICT	AAFES VICTORY SHOPPETTE	FRA	BIOREMEDIATION - IN SITU GROUNDWATER	2015

### Duration of CR

**Date of CR Inception:** 199801

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 201610/201912

**Date of CR completion including Long Term Management (LTM):** 201912

## CR Contamination Assessment

### Contamination Assessment Overview

Environmental restoration activities include the IRP and MMRP. On Dec. 29, 2008, the Office of the Deputy Under Secretary of Defense for Installations and Environment, ODUSD(I&E), issued an interim policy for DERP eligibility that rescinded the 1986 eligibility date for the IRP and the 2002 eligibility date for the MMRP. This made many sites previously addressed in the Army's Compliance-related Cleanup (CC) program eligible for the DERP. Sites that are now eligible for the Munitions Response (MR) program have been migrated from Army Environmental Database - Compliance-related Cleanup (AEDB-CC) and given the naming convention of other MR sites. The newly eligible non-MR type sites are considered to be Installation Restoration (IR) sites; however, the newly eligible sites are being coded as Compliance Restoration (CR) in AEDB-R to distinguish them from the original IR sites and IR metrics.

### Cleanup Exit Strategy

The following are the Fort Stewart CR exit strategies for active sites:

CCFST-039: A CAP will be submitted to GAEPD with the proposed remedial action.

CHOTS-419: Free-product recovery will continue during FY16 along with groundwater monitoring.

## CR Previous Studies

	<b>Title</b>	<b>Author</b>	<b>Date</b>
<b>2009</b>	SWMU #39 RFI Work Plan	ARCADIS	DEC-2009
<b>2010</b>	RTC SWMU #39 RFI Work Plan	ARCADIS	JUN-2010
	USTs #276-279 Final Work Plan for CAP-A	SES	OCT-2010
<b>2011</b>	USTs #276-279 Final Report for UST CAP-A	SES	DEC-2011
<b>2012</b>	CCHOTS419 Final Preliminary Assessment and Site Investigation Report	SAIC	AUG-2012
	USTs #276-279 Final Work Plan for CAP-A	SES	SEP-2012
	Final (Revision #1) Work Plan for CAP-A USTs #276-279	SES	OCT-2012
<b>2013</b>	SWMU #39 Final RFI	ARCADIS	FEB-2013
	Work Plan Addendum CCHOTS419	SES	MAY-2013
	CCHOTS419 Corrective Action Plan Part A	SES	NOV-2013
<b>2014</b>	Final Corrective Action Plan Part B USTs 276-279 Victory Shoppette (Short Form)	SES	APR-2014
	SWMU 39 RCRA Facility Investigation Report, Direct Support Maintenance Facility< Fort Stewart, Georgia Rev 4	Arcadis	AUG-2014
	Heating Oil Tank CCHOTS-419 Final CAP Part B	SES	AUG-2014
	Final Monitoring Only Report USTs 276-279 Victory Shoppette	SES	NOV-2014
<b>2015</b>	Final Completion Report for Monitor Well Abandonment (AAFES Victory Shoppette)	SES	FEB-2015



**FORT STEWART**  
**Compliance Restoration**  
**Site Descriptions**

**STATUS**

Regulatory Driver: RCRA

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater

Phases	Start	End
RFA.....	200001.....	200102
CS.....	200103.....	200403
RFI/CMS.....	200404.....	201501
IRA.....	200406.....	200801
CMI(C).....	200509.....	201609
CMI(O).....	201610.....	201912

RIP Date: 201610

RC Date: 201912

**SITE DESCRIPTION**

SWMU 39 is near Building 1160 (Direct Support Maintenance Facility), near the intersection of the Stephen Road and West 4th Street. Two former USTs, USTs 59 and 60, and the associated heating oil tanks (HOT) were west of Building 1160, at the tracked vehicle maintenance platform. SWMU 39 was used as a vehicle wash/service rack. The HOTs provided fuel oil to a high-pressure washer at the platform. USTs 59 and 60 were concrete storage tanks connected to non-regulated flow-through vessel OWSs associated with the M60 maintenance platforms that were rarely used due to design changes in military vehicle engines. The industrial drain line from this maintenance platform facility is connected to a common point downgradient from UST 61 (another former used oil storage tank, located approximately 150 feet away from this site).

In February 2001, a preliminary assessment (PA) was conducted at Building 1160. The PA indicated there was a release to groundwater. The IRA dual phase extraction was performed in 2004 and the concrete vaults were filled with concrete. Free-product was found during the RFI process. The Phase I RFI report was generated in January 2006. Trichloroethylene (TCE) was found at this site and the highest concentrations appear to be centered around the common drain-line intersection downgradient from USTs 59, 60, and 61 (which is on an adjacent site). Soil removal for two hot spots was completed during third quarter FY07. Contaminated soil was removed from this site and two replacement monitoring wells were installed in the excavated pits. No free-product was found during the hot spot excavations. The first six-month sample event after the IRA indicated all site BTEX levels were below the in-stream water quality standard; however, the next sampling event indicated free-product was found in an adjacent monitoring well.

In February 2008, a geoprobe investigation was conducted to collect discrete groundwater samples for on-site screening using a mobile laboratory. The samples were analyzed for PCE, TCE, 1,1-dichloroethene (DCE), cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride (VC). Screening samples were collected from 19 locations in the area of SWMU 39. Based on the screening results, seven additional MWs were installed in March 2008. Groundwater samples were collected in March and April of 2008. The 2008 sample results indicated detections of PCE and TCE south of the fenced area near Building 1143 located in the area of SWMU 39. SWMU 39 was added to a current PBA contract in the fourth quarter of FY09. The FY10 and FY11 investigation activities included DPT to evaluate the extent of LNAPL, PCE, and TCE, vertical aquifer profiling using DPT/multi- interphase probe (MIP) technology, installation of 27 additional monitoring wells, slug tests, groundwater sampling, surface water sampling, and sediment sampling. An RFI was submitted in FY13 and completed in FY15 for CCFST-39 which sufficiently characterized and delineated the site to allow for preparation of CAP to evaluate potential remedial alternatives to address site impacts. The Installation received the approval of the RFI in a GAEPD letter dated Jan. 30, 2015. A new five-year PBA contract was awarded in the third quarter of FY15 that included the cost for the CAP. This contract will also cover the corrective measures implementation construction [CMI(C)] and corrective measures implementation operation [CMI(O)] upon completion of the CAP.

**CLEANUP/EXIT STRATEGY**

A CAP will be prepared to evaluate potential remedial alternatives. LNAPL and PAH remedial alternatives will be included in the

**Site ID: CCFST-039**  
**Site Name: BUILDING 1160, UST 60, SWMU 39**

CAP.

**Site ID: CCHOTS-419**  
**Site Name: Heating Oil Tank, Bldg 419**

**STATUS**

**Regulatory Driver:** RCRA  
 Contaminants of Concern: Polycyclic Aromatic Hydrocarbons (PAH), Volatiles (VOC)  
 Media of Concern: Groundwater

Phases	Start	End
ISC.....	200801.....	200808
INV.....	200909.....	201312
CAP.....	201103.....	201312
IRA.....	201312.....	201401
IMP(C).....	201403.....	201506
IMP(O).....	201403.....	201702
<b>RIP Date:</b>	201506	
<b>RC Date:</b>	201702	

**SITE DESCRIPTION**

Site CCHOTS419 is located in the north central portion of the cantonment area and is approximately 0.25 acres. According to the fuel delivery inventory, 4,500 gallons of heating oil was released into the ground behind Building 419 on the west side of the loading dock. This release was discovered during a January 2008 customer complaint about excessive fuel deliveries. Free-product investigation and removal actions at Building 419 at Fort Stewart was completed in February 2008. Initial remedial investigation results conducted by SpecPro Environmental Services, awarded in August 2012 with the USACE, Savannah District indicated high levels of VOCs, BTEX, and PAHs in the soil and TPH in the groundwater. Contaminated soil was removed in FY09 during the excavation process of the UST. Approximately 150 tons (100 cy) of contaminated soil was removed during the initial removal of the 4,000-gallon fiberglass UST. Free-product removal began during the Installation spill cleanup process during 2009.

Three, eight-hour free-product removal (EFR) events took place between June and August 2011. The EFR system removed a total of 611 pounds of petroleum hydrocarbon vapor. Ninety equivalent gallons of free-product and 7,667 gallons of contaminated groundwater was removed from the site. Two samples were taken per boring. Six groundwater monitoring wells were installed to delineate possible groundwater contamination. Each well has ten feet of screen placed below groundwater and three feet of screen above groundwater to facilitate measuring free-product. Six groundwater samples from pre-existing wells and six samples from newly installed wells were analyzed for BTEX and PAH for a total of 12 samples. As a result of the initial site investigation, it was determined the soil contaminants above the state allowable levels are limited to the area containing free-product. The CAP Part-A recommended a pilot study consisting of surfactant injection and multiphase extraction to address the free-phase product which was approved by GAEPD in December 2013. During 2014, the free-phase product was delineated. The pilot study at the site was completed in FY14 which included two additional multiphase extraction events prior to the surfactant injection. Seven surfactant injections were completed in FY14 with associated quarterly monitoring to determine the effectiveness of the pilot test. The groundwater monitoring program was implemented at the site. In FY15, ECOVAC extraction and injections were conducted in October and December 2014 during these two events no free-product was measured. In February 2015, one recovery well indicated a rebound of free-product of 0.08 foot of product thickness.

**CLEANUP/EXIT STRATEGY**

A two-year groundwater monitoring program will continue with one year of quarterly sampling followed by one year of semiannual groundwater monitoring for evaluating the groundwater remediation approach and the progress toward established site cleanup goals. After remedial levels are achieved, associated site closeout and abandonment of 15 groundwater monitoring wells will occur.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CCFST-027F	MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V)	201002	CAP Report FY2008. No Further Action required.
CCUSTVICT	AAFES VICTORY SHOPPETTE	201501	Final Monitoring Only Report USTs 276-279 Victory Shoppette, November 2014

**Date of CR Inception:** 199801

## Past Phase Completion Milestones

### 1999

RFA (CCFST-027F - MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V))

### 2000

CS (CCFST-027F - MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V))

### 2001

RFA (CCFST-039 - BUILDING 1160, UST 60, SWMU 39)

### 2004

CS (CCFST-039 - BUILDING 1160, UST 60, SWMU 39)

### 2008

ISC (CCHOTS-419 - Heating Oil Tank, Bldg 419)

IRA (CCFST-039 - BUILDING 1160, UST 60, SWMU 39)

### 2010

ISC (CCUSTVICT - AAFES VICTORY SHOPPETTE)

RFI/CMS (CCFST-027F - MOTOR POOL OIL/WTR SPTRS (SWMUS 27A-27V))

### 2013

INV (CCUSTVICT - AAFES VICTORY SHOPPETTE)

### 2014

IRA (CCHOTS-419 - Heating Oil Tank, Bldg 419)

INV (CCHOTS-419 - Heating Oil Tank, Bldg 419)

CAP (CCHOTS-419 - Heating Oil Tank, Bldg 419)

## Projected Phase Completion Milestones

See attached schedule

## Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

**Final RA(C) Completion Date:** 201609

**Schedule for Next Five-Year Review:** 2015

**Estimated Completion Date of CR at Installation (including LTM phase):** 201912

## FORT STEWART CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCFST-039	BUILDING 1160, UST 60, SWMU 39	CMI(C)						
		CMI(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCHOTS-419	Heating Oil Tank, Bldg 419	IMP(O)						

## Community Involvement

**Technical Review Committee (TRC):** None

**Community Involvement Plan (Date Published):** 201211

**Restoration Advisory Board (RAB):** No

**Reason Not Established:** Installation is in the process of determining interest in establishing a RAB.

### **Additional Community Involvement Information**

Fort Stewart/Hunter Army Air Field (HAAF) conducted community interest surveys during FY97, FY00, FY03, FY07, FY08, FY10, FY12 and FY14 to evaluate community interest in the establishment of a RAB. A public notification announcing Fort Stewart/HAAF's community interest survey for a RAB was published in The Savannah Morning News and The Coastal Courier in August 1997, June 2000, May 2003, October 2006, July 2008, August 2010, 2012 and 2014. The individual surveys for public officials were mailed in September 1997, June 2000, May 2003, and October 2006, 2008, 2010 and 2012 respectively. HAAF is accessible to the public with proper identification.

### **Administrative Record is located at**

DPW Prevention and Compliance Branch  
1550 Veterans Parkway, Building No. 1137  
Fort Stewart, Georgia 31314-4927  
912-315-5144 or 912-767-2010

### **Information Repository is located at**

Fort Stewart's Home Internet Page  
[http://www.stewart.army.mil/dpw/EN\\_Downloads.asp](http://www.stewart.army.mil/dpw/EN_Downloads.asp)  
912-315-5144 or 912-767-2010

**Current Technical Assistance for Public Participation (TAPP):**N/A

**TAPP Title:** N/A

**Potential TAPP:** N/A



