

FY2015

FORT POLK

Army Defense Environmental Restoration Program

Installation Action Plan

Printed 10 August 2015

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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 US Army Environmental Command (USAEC), Fort Polk, the executing agencies, 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 Service
AEDB-R	Army Environmental Database Restoration
aka	also known as
AOC	Area of Concern
AOI	Area of Interest
ASP	Ammunition Supply Point
AST	Aboveground Storage Tank
ATT	At This Time
BTEX	Benzene, Toluene, Ethylebenzene, Xylene
CC	Compliance-related Cleanup
CDL	Construction Material Disposal Area
CMI	Corrective Measures Implementation
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operation)
CMS	Corrective Measures Study
CR	Compliance Restoration
cy	cubic yards
DD	Decision Document
DES	Design
DoD	Department of Defense
DOL	Directorate of Logistics
DRO	Diesel Range Organics
EOD	Explosive Ordnance Disposal
ER,A	Environmental Restoration, Army
FRA	Final Remedial Action
FS	Feasibility Study
ft	feet
FY	Fiscal Year
GRO	Gasoline Range Organics
HRR	Historical Records Review
HSWA	Hazardous and Solid Waste Amendments Act of 1984
IAP	Installation Action Plan
ID	Identification
IMCOM	Installation Management Command
IMP(O)	Implementation (Operations)
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
ISC	Initial Site Characterization
JRTC	Joint Readiness Training Center
K	thousand
LNAPL	Light Non-Aqueous Phase Liquid
LTM	Long-Term Management
LUC	Land Use Control
MC	Munitions Constituents

Acronyms

MCL	Mill Creek Landfill
MD	Munitions Debris
MEC	Munitions and Explosives of Concern
MFU	Motor Fuel Unit
MMRP	Military Munitions Response Program
MOGAS	Motor Gasoline
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MW	Monitoring Well
NFA	No Further Action
NPL	National Priorities List
OB	Open Burning
OD	Open Detonation
ORC	Oxygen Release Compound
PA	Preliminary Assessment
PBA	Performance-Based Acquisition
POL	Petroleum, Oil, and Lubricants
POLK	AEDB-R site designation for Fort Polk
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RECAP	Risk Evaluation/Corrective Action Program
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy in Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SS	Screening Standard
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit
TAPP	Technical Assistance for Public Participation
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USATHAMA	US Army Toxic and Hazardous Materials Agency
USEPA	US Environmental Protection Agency
USFS	US Forest Service
UST	Underground Storage Tank

VOC Volatile Organic Compound

Installation Information

Installation Locale

Installation Size (Acreage): 198555

City: Fort Polk

County: Vernon Parish

State: Louisiana (LA)

Other Locale Information

Fort Polk, located in Vernon Parish, six miles southeast of Leesville, LA, occupies 100,430 acres. It is divided into three cantonment areas and several large training ranges. The larger and more extensively developed cantonment area is known as South Fort Polk. North Fort Polk is contiguous. A third cantonment area is located on the east side of Peason Ridge which is approximately 20 miles north of the main post.

Training ranges are located in the remainder of Fort Polk's main post and at Peason Ridge. The US Forest Service (USFS) controls 98,125 acres on the main post. These lands are used by the Army under the conditions of a special use permit authorization. Access between the main post and Peason Ridge is via a tank trail over land leased from the state of Louisiana, Vernon Parish and private landowners. Total current acreage is 198,555 acres.

Installation Mission

Train Soldiers and grow leaders to deploy, fight and win.

Joint Readiness Training Center: Train Brigade Combat Teams for war.

Quality Installation: Provide a secure, thriving community for Soldiers, Army Civilians, Retirees and their families.

Assigned Units: Prepare, deploy, sustain, and redeploy trained and ready forces.

Power Projection Platform: Mobilize, validate, deploy and redeploy Active, National Guard, and Army Reserve Force.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

US Army Corps of Engineers (USACE)

Regulator Participation

Federal

US Environmental Protection Agency (USEPA), Region 6

State

Louisiana Department of Environmental Quality (LDEQ), Underground Storage Tank Division, Baton Rouge, LA

National Priorities List (NPL) Status

FORT POLK is not on the NPL

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

The community has expressed no sufficient, sustained interest in a RAB.

Installation Program Summaries

IRP

Primary Contaminants of Concern: Metals, Pesticides, Volatiles (VOC)

Affected Media of Concern: Groundwater, Sediment, 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: Light non-aqueous phase liquids (LNAPL), Metals, Petroleum, Oil and Lubricants (POL)

Affected Media of Concern: Groundwater, Soil

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Complete	200810	200909	2009
Underway	201310	201506	2015

Last Completed 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
Construction Material Disposal Area	POLK-11
IRAs at Mill Creek landfill	POLK-08

Results The landfill closure remedies at two landfills remain protective.

Actions Maintain the existing semi-annual sampling frequency at one landfill perimeter well (scheduled to transition to annual sampling) due to detection of VOCs on an increasing concentration trend. Replace one dry monitor well at MCL (MCMW-04).

Plans Continue planned monitoring and maintenance activities at the landfill sites, with the exception of maintaining semi-annual sampling at one well. New sampling schedule implemented in FY10. Dry well has been P&A and a new one drilled.

Recommendations and Implementation Plans:

The five-year review recommendations for the POLK-08 [Mill Creek Landfill (MCL)] site were as follows:

1. Benzene and vinyl chloride levels at MCL require further monitoring. Benzene and vinyl chloride continue to be present above their risk evaluation/corrective action program (RECAP) screening standard (SS) in both monitoring well (MW) 6 and 11 at the MCL. In MW 6, the concentrations of benzene and vinyl chloride have remained steady; however, the benzene and vinyl chloride concentrations have shown an increasing trend in MW 11. These wells will continue to be monitored.

2. MW 4 at the MCL has been dry since December 2005. The LDEQ suggested that this monitoring well should be plugged and abandoned, reworked to restore functionality, or replaced with a new functional well in a similar location.

ACTION TAKEN: MW 4 was replaced in September 2009 by drilling a new well approximately 30 feet (ft) west of its original location. The new designation is MW-4R. The old well was removed by overdrilling and the borehole was plugged with cement.

3. Benzene and vinyl chloride levels at the MCL require further monitoring. The LDEQ suggested that, due to the continued detection of benzene and vinyl chloride at MW 6 and 11 of the MCL, semiannual groundwater sampling should continue. The wells had been scheduled to change to an annual monitoring frequency for years six-30.

ACTION TAKEN: The MWs 6 and 11 now remain on a semiannual sampling schedule until LDEQ approves a different frequency.

There were no recommendations for the POLK-11 [construction debris landfill (CDL)] site in the five-year report.

The conclusion of the report was that the remedy for the natural attenuation of groundwater at POLK-08 and POLK-11 is protective of human health and the environment in the short-term. The constituents of concern are not elevating and appear to have stabilized but require monitoring under Louisiana RECAP.

Land Use Control (LUC) Summary

LUC Title: Mill Creek Landfill LUC

Site(s): POLK-08

ROD/DD Title: IRAs at Mill Creek landfill

Location of LUC

The Mill Creek Landfill is located on Mill Creek Road between the North Fort and South Fort Cantonment areas.

Land Use Restriction: Landfill restriction - Prohibit activities that would impact the LF cap (or cover system) and drainage system, Landfill restriction - Prohibit excavation on LF cap or cover system, Landfill restriction - Restrict access to the site, Landfill restriction - Restrict construction of buildings that may interfere with LF cap or cover system, Landfill restriction - Restrict plantings that interfere LF cap or cover system (roots that penetrate the cap or cover system), Landfill restriction - Restrict vehicular traffic

Types of Engineering Controls: Fences, Signs

Types of Institutional Controls: Notations in Master Plan

Date in Place: 200503

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200503

LUC Enforcement: Annual Inspections

Contaminants: METALS, ORGANICS, PESTICIDES

Additional Information

LUCs are recorded at the Vernon Parish Courthouse as Conveyance Notice documents.

The Fort Polk -Directorate of Public Works - Master Planning Division maintains records of LUCs. Land use restrictions are noted on the installation's Buildable Acres map.

Cleanup Program Summary

Installation Historic Activity

Camp Polk was established in 1941 as an armored division training center as a result of the Louisiana Maneuvers. It was named in honor of the Right Reverend Leonidas Polk, the first Episcopal Bishop of Louisiana, also known as (aka) "The Fighting Bishop," who was killed while fighting for the Confederacy in 1864. The camp was originally planned as a sister post to three Louisiana Army Installations: Camps Claiborne, Livingston and Beauregard.

Prior to World War II, the entire west part of Louisiana was used in the 'Great Louisiana Maneuvers.' The Louisiana Maneuvers were a series of military exercises held all over north and west-central Louisiana, including Fort Polk, in August and September 1941. The training exercise involved half a million men in 19 Army Divisions, taking place over 3400 square miles (8,800 square kilometers) of Louisiana. The exercise was designed to test US troop training, logistics, doctrine, and commanders.

During World War II, Camp Polk was the preparation and training camp for over 800,000 soldiers who took part in the invasion of North Africa and Europe. Units receiving training included the 3d, 5th, 7th, 8th, 9th, and 11th Armored Divisions, the 95th Infantry Division and the 11th Airborne Division. After the war Camp Polk was deactivated and put on standby status between 1947 and 1950. Limited reactivation occurred when Louisiana and Arkansas National Guard units trained at Camp Polk, during the summers of 1948 and 1949.

With the onset of the Korean Conflict in 1950, activity at Camp Polk increased. The entire post was renovated. Military units stationed at the camp between 1950 and 1954 included the 45th Infantry Division - Oklahoma National Guard, the XV Corps, the 37th Infantry Division - National Guard, and the 1st Armored Division.

Fort Polk was again deactivated for a short period in 1959 and 1960 and reactivated in 1961 during the Berlin Crisis. It became an infantry training center in 1962. Later, it was selected to conduct Vietnam-oriented advanced training. Soldiers trained in its advanced infantry school (nick-named Tigerland). This school was known as the "Birthplace of Combat Infantrymen for Vietnam."

Also during this period, the installation became the base for the 49th Armored Division - Texas National Guard. As the number of inductees increased, an infantry training center was established at Fort Polk. On Oct. 23, 1968, Fort Polk was designated as a permanent installation.

In January 1973, more Army reorganization resulted in Fort Polk becoming the US Army Infantry Training Center under the US Army Training and Doctrine Command.

The 5th Infantry Division (Mechanized) became Fort Polk's major unit, redesignated when the 2nd Armored Division moved to Fort Hood, Texas. In 1992, the 108th ADA Brigade was moved to Fort Polk, Louisiana, becoming a Patriot unit. In 1996, the 5th Division was transferred to Fort Bliss, Texas.

On March 12, 1993, Fort Polk officially became the home of the Joint Readiness Training Center (JRTC). The JRTC had relocated from Fort Chaffee, Arkansas. Fort Polk is also home to 1st Maneuver Enhancement Brigade, which contains several combat support units. Various medical, dental, and military police commands are based at the installation. The 4th Brigade, 10th Mountain Division, one of the Army's new modular brigades was officially activated in January 2005.

The area occupied by Fort Polk has been used for training various Army and National Guard units. Inactive periods occurred in 1947, 1954, 1955, 1959, and 1960. Typical military and industrial activities and practices resulted in the contamination of some area of the installation. The storage and use of petroleum products has been the main constituent of the contamination. Site inspections (SI), assessments, and corrective actions have been ongoing since 1983, when the US Army Toxic and Hazardous Materials Agency (USATHAMA) first conducted a site assessment. Subsequent Resource Conservation and Recovery Act (RCRA) facility investigations (RFI) and corrective actions have been completed at the South Fort and North Fort Cantonment areas. The LDEQ has provided regulatory oversight for all site assessments and corrective actions.

Installation Program Cleanup Progress

IRP

Prior Year Progress: POLK-08 - Continued long-term management (LTM).
POLK-11 - Continued LTM.

Future Plan of Action: POLK-08 - Continue LTM.
POLK-11 - Continue LTM.

Cleanup Program Summary

MMRP

Prior Year Progress: Began the design (DES) and remedial action (construction) [RA(C)] phases.

Future Plan of Action: Implement the RA(C) and RA(O) phases and site close out.

CR

Prior Year Progress: CCSWMU23 - Continued corrective measures implementation (operation) CMI(O).
CCBldg1725 - Continued implementation (operations) IMP(O).
CCBldg7016 - Regulator approval of no further action (NFA) is pending.
CCBldg3401 - Completed RFI/corrective measures study (CMS).
CCBldg8716 - Completed CMI(O).
CCSWMU26 - Completed the RFI/CMS.
CCBldg7199 - Completed the FS.
CC2600-2700, CC3100-3200, CC3500-3600, CC3700 - Completed interim removal action and SI.

Future Plan of Action: CCSWMU23 - Site closeout.
CCBldg7016 - Complete site closeout based on regulator approval of NFA.
CCBldg8716 - The site is closed.
CCSWMU26 - Complete the DES, CMI(C) and begin CMI(O) phase.
CCBldg3401 - Begin DES, CMI(C), and CMI(O) phases.
CCBldg1725 - Continue IMP(O) until site closeout.
CCBldg7199 - Complete FS, begin CMI(C) and CMI(O).
CC2600-2700 - CC3100-3200 - CC3500-3600- CC3700 - Progress with the RI/feasibility study (FS) phase.

FORT POLK
Army Defense Environmental Restoration Program
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 23/21

Installation Site Types with Future and/or Underway Phases

2 Landfill
(POLK-08, POLK-11)

Most Widespread Contaminants of Concern

Metals, Pesticides, Volatiles (VOC)

Media of Concern

Groundwater, Sediment, Soil, Surface Water

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

Site ID	Site Name	Action	Remedy	FY
POLK-06	RANGE 23A CHEMICAL AGENT BURIAL SITE	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1988
POLK-03	SOUTH FORT POLK WASTEWATER LAGOON	FRA	GROUND WATER TREATMENT	1994
POLK-03	SOUTH FORT POLK WASTEWATER LAGOON	FRA	WASTE REMOVAL - LIQUIDS	1994
POLK-03	SOUTH FORT POLK WASTEWATER LAGOON	FRA	IN-SITU SOIL TREATMENT	1994
POLK-03	SOUTH FORT POLK WASTEWATER LAGOON	FRA	WASTE REMOVAL - SOILS	1994
POLK-06	RANGE 23A CHEMICAL AGENT BURIAL SITE	IRA	INSTITUTIONAL CONTROLS	1998
POLK-21	FORMER BURNING GROUND	IRA	CAPPING	1998
POLK-22	K AVENUE MOGAS SITE	IRA	WASTE REMOVAL - SOILS	1998
POLK-08	MILL CREEK LANDFILL	IRA	REMOVAL	2000
POLK-02	DOL SOLVENT WASTE STORAGE AREA	FRA	WASTE REMOVAL - SOILS	2001
POLK-11	CONSTRUCTION MATERIAL DISPOSAL AREA	FRA	DRAINAGE CONTROLS	2003
POLK-08	MILL CREEK LANDFILL	IRA	CAPPING	2004
POLK-08	MILL CREEK LANDFILL	FRA	CAPPING	2004
Bldg 7602	Chemical Agent Area	FRA	REMOVAL	2009

Duration of IRP

Date of IRP Inception: 198709

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201409/200410

Date of IRP completion including Long Term Management (LTM): 203409

IRP Contamination Assessment

Contamination Assessment Overview

In 1983, an installation assessment was conducted by the USATHAMA to determine past and current use of toxic and hazardous materials as well as the potential for these substances to migrate off the installation. The assessment determined that off-post migration of contaminants via surface water or groundwater was not evident.

In 1987 and 1989, the US Army Environmental Hygiene Agency conducted an evaluation of solid waste management units (SWMU). Twenty-one SWMUs were identified on Fort Polk. An RI/FS was conducted at three sites: South Fort Polk Wastewater Lagoon, the MCL, and the Former Burning Ground. No additional sampling was recommended for 11 sites. Surface water, sediment, and waste samples were collected at one site and monitoring wells were installed. Groundwater, surface water, sediment, and soil samples were collected at six sites.

In 1989, the results of the RI/FS were addressed in the Fort Polk RI report prepared for USATHAMA by Roy F. Weston, Inc. The MCL was found to be contaminating the groundwater in the shallow aquifer with low levels of certain organics VOC, and semi-volatile organic compounds (SVOC)], nitro aromatics, and metals, but the endangerment assessment concluded that there were no unacceptable risks. Closure was recommended for the Wastewater Lagoon and it was determined that all contamination was within the physical confines of the lagoon. The former burning ground RI indicated that no appreciable migration of the constituents of concern had occurred beyond the fenced-in site area.

In September 1993, an RA at the wastewater lagoon, consisting of sludge removal and regrading, commenced and was completed in July 1994. LTM was conducted through 1998.

Fort Polk applied for and received a RCRA Subpart X (federal regulations for miscellaneous units) permit in 1995 for their open burning (OB)/open detonation (OD) range. In 1993, in response to the permit application, a RCRA facility assessment (RFA) report was prepared for the USEPA by PRC Environmental Management, Inc. The RFA report identified 57 SWMUs and five AOCs. Thirty-one of the SWMUs plus two AOCs were recommended for an RFI. In December 1993 in response to this, a draft scope of work for these investigations was completed. The corrective action portion of the permit was issued in June 1995.

In January 1995, the Phase I MCL RFI began and was completed in June 1995. Samples were collected from creek water and sediment, seeps, and groundwater. The results were compared to action levels established by the USEPA. Action levels were exceeded for VOCs, pesticides, and metals in groundwater, pesticides and metals in creek water, pesticides and metals in creek sediment, and VOCs, pesticides, herbicides, and metals in seeps.

In March 1996, Phase II of the MCL RFI began and was completed in October 1997. Samples were collected from creek water and sediment, seeps, groundwater, and soil borings. The results were compared to action levels established by the LDEQ. Action levels were exceeded for explosives and metals in soil; pesticides, herbicides, metals, and explosives in groundwater; pesticides in creek water; metals in creek sediment; and pesticides and metals in seeps.

A CMS and baseline human health and ecological risk assessment was completed for the MCL and submitted to the LDEQ in 1999. Based on the results of these reports, a clay cap was designed as a corrective action for part of the Mill Creek area. The final design was submitted to the LDEQ in 2000.

In April 1995, the Phase I RFI for the installation-wide SWMUs (all SWMUs with the exception of the MCL) began and was completed in March 1997. In October 1997 the Phase II RFI for the installation-wide SWMUs began and was completed in June 1999. The installation-wide SWMU Phase III RECAP assessment was completed in 2001.

In 1999, POLK-24, Former Ammunition Supply Point (ASP), was added to the installation restoration program (IRP). The constituents of concern at this site are metals and potential ordnance material. In May 2002, a final risk assessment was released for comment with a recommendation of NFA. Closure of 14 groundwater monitoring wells was completed in fiscal year (FY)03.

A five-year review was conducted in FY09 which included POLK-08 (MCL) and POLK-11 (Construction Debris Landfill). The five-year review report concluded that the corrective measures taken at both POLK-08 and POLK-11 remain protective of human health and the environment.

Cleanup Exit Strategy

POLK-08 and POLK-11 LTM will continue.

IRP Previous Studies

Year	Title	Author	Date
1983	Installation Assessment of Headquarters, 5th Infantry Division (Mechanized) and Fort Polk and Peason Ridge, LA. Report No. 333	Environmental Science and Engineering, Inc., Gainesville, FL 32602	JAN-1983
1989	Groundwater Quality Survey No. 38-26-8809-90, Evaluation of Solid Waste Management Units, US Army 5th Infantry Division (Mechanized) and Fort Polk	US Army Environmental Hygiene Agency, Aberdeen Proving Ground, MD 21010-5422	AUG-1989
	Fort Polk Remedial Investigation Report, Contract No. DAAA15-85-D-0015, Task Order 8	Roy F. Weston, Inc., West Chester, PA 19380	AUG-1989
1993	RCRA Facility Assessment	PRC Environmental Management, Inc., Baton Rouge, LA	DEC-1993
1994	Site Visit Report, RCRA Corrective Action Program	Radian Corporation, Baton Rouge, LA.	JAN-1994
1995	Mill Creek Landfill Phase I RI	Radian Corporation, Baton Rouge, LA	OCT-1995
1996	RCRA Facility Investigation Installation-Wide SWMU	Radian Corporation, Baton Rouge, LA	MAR-1996
1997	RFI Interim Report Installation-Wide SWMUs	Radian International LLC, Baton Rouge, LA	JAN-1997
	Mill Creek Landfill Phase II RFI	Radian International LLC, Baton Rouge, LA	OCT-1997
1998	Relative Risk Ranking Site Evaluations	Radian International LLC, Baton Rouge, LA	SEP-1998
	Interim Stabilization Measures Report, Former Chemical Agent Burial Ground, Former Burning Ground, Avenue K MOGAS Site	Radian International LLC, Baton Rouge, LA	SEP-1998
	Corrective Measure Implementation Program Plan, Evaluation and Design of Mill Creek Landfill	Radian International LLC, Baton Rouge, LA	SEP-1998
	Additional Investigation for Installation-Wide SWMUs Phase II RFI	Radian International LLC, Baton Rouge, LA	SEP-1998
	Background Study for Metals, Pesticides, and Herbicides	Radian International LLC, Baton Rouge, LA	OCT-1998
	Mill Creek Landfill Secondary Site Reconnaissance Report	Radian International LLC, Baton Rouge, LA	DEC-1998
1999	RFI Report, Installation-Wide SWMUs	Radian International LLC, Baton Rouge, LA	JAN-1999
	Relative Risk Ranking Site Evaluation Report, Range 1 Area	Radian International LLC, Baton Rouge, LA	FEB-1999
	Mill Creek Landfill Secondary Site Reconnaissance	Radian International LLC, Baton Rouge, LA	MAR-1999
	Additional Investigations Report, Installation-Wide SWMUs 25A, 26, 27A, 41A	Radian International LLC, Baton Rouge, LA	JUN-1999

IRP Previous Studies

1999	Title	Author	Date
	Phase I Site Assessment Report, Former Ammo Supply Point	Radian International LLC, Baton Rouge, LA	JUN-1999
	DOL Waste Solvent Storage Area Site Investigation	Radian International LLC, Baton Rouge, LA	JUN-1999
	RRSE, Former Ammo Supply Point	Radian International LLC, Baton Rouge, LA	JUN-1999
	Relative Risk Ranking Site Evaluation Report, Block 100	Radian International LLC, Baton Rouge, LA	JUL-1999
	Additional Activities for the Installation-Wide SWMUs RFI (Construction Debris Landfill)	Radian International LLC, Baton Rouge, LA	OCT-1999
	Activities for SWMU 26	Radian International LLC, Baton Rouge, LA	NOV-1999
2000	Construction Debris Landfill Erosion Control Plan, Site Reconnaissance	Radian International LLC, Baton Rouge, LA	JAN-2000
	RECAP Assessment, Installation-Wide SWMUs Phase III RFI	URS, Baton Rouge, LA	FEB-2000
	Mill Creek Landfill Corrective Action Design	URS, Baton Rouge, LA	JUN-2000
	DOL Waste Solvent Storage Area Site Remediation Definition	URS, Baton Rouge, LA	JUL-2000
	Phase II SI, Former Ammo Supply Point	URS, Baton Rouge, LA,	JUL-2000
	RFI and RECAP Assessment, AOC 2 and AOC 3	URS, Baton Rouge, LA	AUG-2000
2001	Mill Creek Landfill Corrective Action Revised Design	URS, Baton Rouge, LA	FEB-2001
	Borrow Area Study, Mill Creek Landfill	URS, Baton Rouge, LA	MAY-2001
	Background Study for Metals in Groundwater	URS, Baton Rouge, LA	JUN-2001
	Mill Creek Landfill Borrow Area Design	URS, Baton Rouge, LA	JUL-2001
	Construction Debris Landfill Seep Management System Design	URS, Baton Rouge, LA	AUG-2001
	Construction Debris Landfill Erosion Control Design	URS, Baton Rouge, LA	AUG-2001
2004	Groundwater Monitoring for Mill Creek Landfill	URS, Baton Rouge, LA	JAN-2004
	Mill Creek Landfill Monitoring Well Installation and Groundwater Sampling Report	URS, Baton Rouge, LA	MAR-2004
	Plugging and Abandonment of the Former ASP Groundwater Monitoring Wells	URS, Baton Rouge, LA	MAR-2004
	Mill Creek Landfill Monitoring Well Installation Work Plan	URS, Baton Rouge, LA	APR-2004
	Corrective Measure Study	URS, Baton Rouge, LA	MAY-2004
2005	Mill Creek Landfill Monitoring Well Installation Report	URS, Baton Rouge, LA	JAN-2005
	Operation and Maintenance Plan, Mill Creek Landfill	Shaw, Houston, TX	MAR-2005
	Mill Creek Landfill Cover System Construction Certification Report	URS, Baton Rouge, LA	MAY-2005
	Mill Creek Landfill Long Term Monitoring Program, Year 1 Report	URS, Baton Rouge, LA	SEP-2005

IRP Previous Studies

Year	Title	Author	Date
2005	Mill Creek Landfill Inspection and Maintenance Report	URS, Baton Rouge, LA	SEP-2005
	Seep Management System Sampling Activities Report, Construction Debris Landfill September 2004 to June 2005	URS, Baton Rouge, LA	OCT-2005
	Addendum No. 1 for Construction Certification Report for Mill Creek Landfill	URS, Baton Rouge, LA	NOV-2005
2006	Groundwater Monitoring for Mill Creek Landfill at Fort Polk, Louisiana	URS, Baton Rouge, LA	OCT-2006
	Mill Creek Landfill Inspection and Maintenance Report	URS, Baton Rouge, LA	OCT-2006
	Seep Management System Sampling Activities Report September 2005 - June 2006 Construction Debris Landfill	URS, Baton Rouge, LA	NOV-2006
	Groundwater Monitoring Report for Mill Creek Landfill at Fort Polk, Louisiana - 2006 Groundwater Sampling Work Plan Year 3	URS, Baton Rouge, LA	NOV-2006
2007	Mill Creek Landfill Long Term Monitoring Program - Years 2 and 3 Report	URS, Baton Rouge, LA	MAR-2007
	Seep Management System Sampling Activities Report - Construction Debris Landfill - Sept 2006 to May 2007	URS, Baton Rouge, LA	SEP-2007
2008	Mill Creek Landfill Inspection and Maintenance Report - 2006 to 2007	URS, Baton Rouge, LA	JAN-2008
	Mill Creek Landfill- Long Term Monitoring Program - Years 3-4	URS, Baton Rouge	NOV-2008
2009	Mill Creek Landfill Inspection / Maintenance Report 2007-2008	URS, Baton Rouge, LA	JAN-2009
	Mill Creek Landfill - Groundwater Sampling Work Plan - Year 5	URS, Baton Rouge, LA	FEB-2009
	Time Critical Removal Action Report BLDG7602	One Stop Environmental, Birmingham, AL	JUN-2009
	First-Five-year review, Mill Creek and Construction Debris Landfills, Fort Polk LA	ALL Consulting, Tulsa, OK	OCT-2009
2010	2009 Mill Creek Landfill Inspection and Maintenance Report Years 4 & 5	URS, Baton Rouge, LA	FEB-2010
	2009 Seep Management System Sampling Activities Report September 2009 - December 2009 Construction Debris Landfill	URS, Baton Rouge, LA	FEB-2010
	Mill Creek Landfill Long Term Monitoring Program, Years 4 & 5 Report	URS, Baton Rouge, LA	MAY-2010
2011	2010 Seep Management System Sampling Activities Report March 2010 - December 2010 Construction Debris Landfill	URS, Baton Rouge, LA	APR-2011
	2010 Mill Creek Landfill Long Term Monitoring Program, Year 6 Report	URS, Baton Rouge, LA	JUN-2011
	2010 Mill Creek Landfill Inspection and Maintenance Year 6 Report	URS, Baton Rouge, LA	JUN-2011

IRP Previous Studies

	Title	Author	Date
2013	Mill Creek Landfill Long Term Monitoring Program: Sampling Activities, Maintenance and Inspection Year 7 Annual Report: 2011	INNOVAR, Tulsa, OK	MAR-2013
	Construction Debris Landfill Seep Management System Sampling Activities and Maintenance Report March 2011-December 2011	INNOVAR, Tulsa, OK	MAR-2013
	Mill Creek Long Term Monitoring Program: Sampling Activities, Maintenance and Inspection Year 8 Annual Report: 2012	INNOVAR, Tulsa, OK	JUN-2013
	Construction Debris Landfill Seep Management System Sampling Activities and Maintenance Report March 2012-December 2012	INNOVAR, Tulsa, OK	AUG-2013
2014	Construction Debris Landfill-SWMU21 Seep Management System 2013 Annual Report	SEMS INC., Baton Rouge, LA	OCT-2014
2015	Mill Creek Landfill SWMU17 Monitoring and Maintenance Report- 2013	SEMS INC. Baton Rouge, LA	JAN-2015

FORT POLK
Installation Restoration Program
Site Descriptions

Site ID: POLK-08

Site Name: MILL CREEK LANDFILL

STATUS

Regulatory Driver: CERCLA

RRSE: HIGH

Contaminants of Concern: Metals, Pesticides, Volatiles (VOC)

Media of Concern: Groundwater, Sediment, Soil, Surface Water

Phases	Start	End
PA.....	198709.....	199005
SI.....	198709.....	199005
RI/FS.....	199501.....	199811
RD.....	199901.....	200006
IRA.....	200006.....	200403
RA(C).....	200403.....	200409
LTM.....	200410.....	203409

RIP Date: N/A

RC Date: 200409

SITE DESCRIPTION

POLK-08 [aka MCL or SWMU17] is a closed landfill that is located in the intensive use area of Fort Polk on Mill Creek Road. The entire site covers over 400 acres. A large portion of the landfill is now located within the boundaries of the ASP for Fort Polk. The landfill was operated from 1947 until 1986 and was used for the disposal of hazardous and nonhazardous wastes which included industrial, municipal, medical wastes and construction debris. A preliminary assessment (PA) and SI concluded that groundwater, surface water, soil, and sediment were contaminated with organics, pesticides, nitroaromatics and metals. In FY95 a Phase I RFI was conducted. A Phase II RFI was begun in March FY96. In FY99 a human health ecological risk assessment and CMS was completed and submitted to the LDEQ. The RFI results concluded that solvents and pesticides above the RECAP levels were present at many scattered areas on the site. In FY98 groundwater monitoring began. In FY00 all exposed debris was consolidated from AOCs and moved to a central location to be capped. The remedial design (RD) was completed in FY00. The remedy was to construct an engineered cover system eliminates the risk to human health In FY04 the RA, which involved capping the 32 acres, was initiated and RIP was achieved in FY04. The engineered cap consists of a drainage system covered by impermeable synthetic fabric. The synthetic fabric is covered with a clay cap, topsoil, and a thick grass cover.

In accordance with LDEQ guidance, two groundwater monitoring wells are sampled semiannually and 10 wells are sampled annually. The landfill is surveyed periodically to determine if settling of the contents has occurred. Maintenance and upkeep at the site includes grass mowing, seeding, fertilizing, erosion control, repairs to fences and access roads.

CLEANUP/EXIT STRATEGY

The site is currently under LTM, which is scheduled to continue through FY34. In accordance with LDEQ guidance, two groundwater monitoring wells are sampled semiannually and 10 wells are sampled annually. The landfill is surveyed periodically to determine if settling of the contents has occurred. Maintenance and upkeep at the site includes grass mowing, seeding, fertilizing, erosion control, and repairs to fences and access roads.

Site Name: CONSTRUCTION MATERIAL DISPOSAL AREA

STATUS

Regulatory Driver: CERCLA
RRSE: HIGH
Contaminants of Concern: Metals
Media of Concern: Surface Water

Table with 3 columns: Phases, Start, End. Rows include PA, SI, RI/FS, RD, RA(C), RA(O), LTM, RIP Date, and RC Date.

SITE DESCRIPTION

POLK-11 [aka construction material disposal area (CDL)] is a closed landfill. This former construction debris disposal site of approximately 20 acres is located less than one-half mile east of MCL (POLK-08). It is designated as SWMU 21. The landfill was used to dispose of debris from construction and demolition activities at the installation during the 1970s, but there are no reports of hazardous materials being disposed of at the CDL.

Construction of seep controls was completed in FY04. A five-year review conducted in FY09 concluded that the seep management system is working as designed and the remedy selected remains protective of human health and the environment. The LTM phase is currently underway. LTM is scheduled to continue through FY34.

The selected remedy identified in the DD for the site included construction of a collection/cutoff trench, a retention pond to control erosion, and two leach fields. This system is designed to collect runoff and seep water, channel back into the ground. The site achieved RIP in FY03.

The selected RA required drainage controls to be installed at the site. The final design included construction of a collection/cutoff trench, a retention pond to control erosion, and two leach fields to distribute the runoff over a larger area. In accordance with LDEQ guidance samples are collected quarterly.

CLEANUP/EXIT STRATEGY

This site is under LTM until FY34. In accordance with LDEQ guidance groundwater samples are collected quarterly. Erosion controls and seep monitoring will continue through 2034. Activities associated with LTM include general maintenance, erosion control, signage upkeep and quarterly sampling at 10 locations.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
Bldg 7602	Chemical Agent Area	200904	Time Critical Removal Action Report, 25 June 2009
POLK-01	HAZ WASTE CONTAINER STORAGE (BLDG 4053)	198803	The site is operational and not eligible at this time for ER,A funding. Because this site is still active, no further action is required under the IRP
POLK-02	DOL SOLVENT WASTE STORAGE AREA	200109	Site closure documentation was submitted to the LDEQ in April 2003. Still under review.
POLK-03	SOUTH FORT POLK WASTEWATER LAGOON	199902	Site closure documentation was submitted to the LDEQ in April 2003. NFA-ATT granted 19 October 2009.
POLK-04	NORTH TANK PREWASH FAC LAGOONS	199005	The site is operational and not eligible at this time for ER,A funds. No further action is required under the IRP.
POLK-05	SOUTH TANK PREWASH FAC LAGOONS	199005	The site is operational and not eligible at this time for ER,A funding. No further action is required under the IRP.
POLK-06	RANGE 23A CHEMICAL AGENT BURIAL SITE	200109	Site Closure documentation was submitted to the LDEQ in April 2003. NFA-ATT granted on 8 July 2003.
POLK-07	BAYOU ZOURIE LANDFILL	201409	No Further Action request submitted to LDEQ 16 April 2013. See MFR for detailed information.
POLK-09	LANDFILL-CHAFFEE ROAD	201303	This site was determined to be not eligible for DERA. Moved to CC program
POLK-10	SLUDGE LANDFARM Chaffee Road	201403	Approval to terminate permit P-0070 21 March 2012.
POLK-12	S FORT STP	199005	The site is operational and not eligible for ER,A funds at this time.
POLK-13	N FORT STP	199005	The site is operational and not eligible for ER,A funds at this time.
POLK-16	DEMO AREA, EOD (45TH)	199005	The site is operational and not eligible for ER,A funds at this time.
POLK-17	ORIGINAL FIREFIGHTER TRAINING AREA	201409	No Further Action Request submitted to LDEQ 26 Sep 13. See MFR for detailed information.
POLK-18	FORMER FIRE TRAINING PIT	201409	No Further Action Request submitted to LDEQ on 26 Sep 2013. See MFR for detailed information.
POLK-19	DOL STEAM CLEAN WASHRACK DISCHARGE	199005	This site is operational and not eligible for ER,A funding.
POLK-20	BATTERY SHOP DISCHARGE	199005	This site is an operational motor pool and not eligible for ER,A funding.
POLK-21	FORMER BURNING GROUND	201409	No Further Action request submitted to LDEQ on 3 Mar 2013. See MFR for detailed information.
POLK-22	K AVENUE MOGAS SITE	201409	No Further Action request submitted to LDEQ 26 Sep 2013. See MFR for detailed information.
POLK-23	DEH, PAINT BOOTH AND PAINT WASTE SAPS	201409	No Further Action Request submitted to LDEQ on 16 Apr 2013. See MFR for detailed information.
POLK-24	FORMER AMMO SUPPLY POINT	200409	This site was referred to and addressed in the MMRP Program Site Polk 009-R-01

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			and was recommended for NFA in the RI (URS, January 2013).

IRP Schedule

Date of IRP Inception: 198709

Past Phase Completion Milestones

1988

SI (POLK-01 - HAZ WASTE CONTAINER STORAGE (BLDG 4053))
PA (POLK-01 - HAZ WASTE CONTAINER STORAGE (BLDG 4053))
CS (POLK-21 - FORMER BURNING GROUND)
RFA (POLK-21 - FORMER BURNING GROUND)

1990

SI (POLK-02 - DOL SOLVENT WASTE STORAGE AREA , POLK-08 - MILL CREEK LANDFILL, POLK-11 - CONSTRUCTION MATERIAL DISPOSAL AREA, POLK-19 - DOL STEAM CLEAN WASHRACK DISCHARGE)
CS (POLK-03 - SOUTH FORT POLK WASTEWATER LAGOON, POLK-04 - NORTH TANK PREWASH FAC LAGOONS, POLK-05 - SOUTH TANK PREWASH FAC LAGOONS, POLK-06 - RANGE 23A CHEMICAL AGENT BURIAL SITE, POLK-07 - BAYOU ZOURIE LANDFILL, POLK-09 - LANDFILL-CHAFFEE ROAD, POLK-12 - S FORT STP, POLK-13 - N FORT STP, POLK-16 - DEMO AREA, EOD (45TH), POLK-17 - ORIGINAL FIREFIGHTER TRAINING AREA, POLK-20 - BATTERY SHOP DISCHARGE, POLK-22 - K AVENUE MOGAS SITE)
RFA (POLK-03 - SOUTH FORT POLK WASTEWATER LAGOON, POLK-04 - NORTH TANK PREWASH FAC LAGOONS, POLK-05 - SOUTH TANK PREWASH FAC LAGOONS, POLK-06 - RANGE 23A CHEMICAL AGENT BURIAL SITE, POLK-07 - BAYOU ZOURIE LANDFILL, POLK-09 - LANDFILL-CHAFFEE ROAD, POLK-10 - SLUDGE LANDFARM Chaffee Road, POLK-12 - S FORT STP, POLK-13 - N FORT STP, POLK-16 - DEMO AREA, EOD (45TH), POLK-17 - ORIGINAL FIREFIGHTER TRAINING AREA, POLK-18 - FORMER FIRE TRAINING PIT, POLK-20 - BATTERY SHOP DISCHARGE, POLK-22 - K AVENUE MOGAS SITE)
PA (POLK-02 - DOL SOLVENT WASTE STORAGE AREA , POLK-08 - MILL CREEK LANDFILL, POLK-11 - CONSTRUCTION MATERIAL DISPOSAL AREA, POLK-19 - DOL STEAM CLEAN WASHRACK DISCHARGE)

1991

RFI/CMS (POLK-03 - SOUTH FORT POLK WASTEWATER LAGOON)

1992

DES (POLK-03 - SOUTH FORT POLK WASTEWATER LAGOON)

1994

RFA (POLK-23 - DEH, PAINT BOOTH AND PAINT WASTE SAPS)
CS (POLK-18 - FORMER FIRE TRAINING PIT)
CMI(C) (POLK-03 - SOUTH FORT POLK WASTEWATER LAGOON)

1996

CS (POLK-23 - DEH, PAINT BOOTH AND PAINT WASTE SAPS)

1998

IRA (POLK-06 - RANGE 23A CHEMICAL AGENT BURIAL SITE, POLK-21 - FORMER BURNING GROUND, POLK-22 - K AVENUE MOGAS SITE)

1999

LTM (POLK-03 - SOUTH FORT POLK WASTEWATER LAGOON)
PA (POLK-24 - FORMER AMMO SUPPLY POINT)
RI/FS (POLK-08 - MILL CREEK LANDFILL)

2000

SI (POLK-24 - FORMER AMMO SUPPLY POINT)
RI/FS (POLK-02 - DOL SOLVENT WASTE STORAGE AREA , POLK-11 - CONSTRUCTION MATERIAL DISPOSAL AREA)
RD (POLK-02 - DOL SOLVENT WASTE STORAGE AREA , POLK-08 - MILL CREEK LANDFILL)

2001

RD (POLK-11 - CONSTRUCTION MATERIAL DISPOSAL AREA)
RFI/CMS (POLK-06 - RANGE 23A CHEMICAL AGENT BURIAL SITE)

RA(C)	(POLK-02 - DOL SOLVENT WASTE STORAGE AREA)
2003	
RA(C)	(POLK-11 - CONSTRUCTION MATERIAL DISPOSAL AREA)
RI/FS	(POLK-24 - FORMER AMMO SUPPLY POINT)
2004	
IRA	(POLK-08 - MILL CREEK LANDFILL)
RA(O)	(POLK-11 - CONSTRUCTION MATERIAL DISPOSAL AREA)
RA(C)	(POLK-08 - MILL CREEK LANDFILL)
2009	
PA	(Bldg 7602 - Chemical Agent Area)
RA(C)	(Bldg 7602 - Chemical Agent Area)
2013	
LTM	(POLK-09 - LANDFILL-CHAFFEE ROAD)
2014	
CS	(POLK-10 - SLUDGE LANDFARM Chaffee Road)
RFI/CMS	(POLK-07 - BAYOU ZOURIE LANDFILL, POLK-17 - ORIGINAL FIREFIGHTER TRAINING AREA, POLK-18 - FORMER FIRE TRAINING PIT, POLK-21 - FORMER BURNING GROUND, POLK-22 - K AVENUE MOGAS SITE, POLK-23 - DEH, PAINT BOOTH AND PAINT WASTE SAPS)

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: 200904

Schedule for Next Five-Year Review: 2015

Estimated Completion Date of IRP at Installation (including LTM phase): 203409

FORT POLK IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
POLK-08	MILL CREEK LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
POLK-11	CONSTRUCTION MATERIAL DISPOSAL AREA	LTM						

FORT POLK
Army Defense Environmental Restoration Program
Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 11/8

Installation Site Types with Future and/or Underway Phases

3 Small Arms Range
(POLK-001-R-01, POLK-003-R-01, POLK-004-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
N/A				

Duration of MMRP

Date of MMRP Inception 200206

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201610/201702

Date of MMRP completion including Long Term Management (LTM): 201702

MMRP Contamination Assessment

Contamination Assessment Overview

Nine Military Munitions Response Program (MMRP) sites have been identified at Fort Polk. Two sites (POLK-006-R-01 and POLK-008-R-01) were later determined to be ineligible for the MMRP. Initial SIs were conducted at each of the remaining seven closed ranges in 2008. Munitions debris (MD) and MCs were found at three of the sites during the SI. No evidence of MCs, MD, or contaminants was found at the other four MMRP sites. An RI/FS has been completed for all three MMRP sites and cleanup remedies have been determined.

Cleanup Exit Strategy

An FS has been completed for POLK-001-R-01 and MEC surface clearance of the remaining 44.29 acres will occur. Upon completion of the surface clearance, site closure documentation will be provided to LDEQ and a conveyance notice will be filed at the Vernon Parish Courthouse. For POLK-003-R-01 the RI/FS phase is completed pending approval from regulatory officials. The FS dated April 2015 recommends that NFA is required for this site. The FS recommended a MEC surface clearance of the remaining 17.93 acres at POLK-004-R-01. Upon completion of the surface clearance, site closure documentation will be provided to LDEQ and a conveyance notice will be filed at the Vernon Parish Courthouse.

MMRP Previous Studies

Year	Title	Author	Date
2002	Final US Army Closed, Transferring and Transferred Range/Site Inventory for Fort Polk and Peason Ridge, Louisiana	Engineering-Environmental Management, Inc., Englewood, CO	NOV-2002
2007	Final Historical Records Review, Fort Polk, Louisiana	Engineering-Environmental Management, Inc., Englewood, CO	SEP-2007
	Final Military Munitions Response Program Historical Records Review	Engineering-Environmental Management, Inc., Englewood, CO	SEP-2007
2008	WORK PLAN - MMRP - MRS SITE INSPECTION	Engineering-Environmental Management, Inc., Englewood, CO	MAR-2008
	Stakeholder Draft - Site Investigation Report	Engineering-Environmental Management, Inc., Englewood, CO	AUG-2008
2009	Final Site Inspection Report, Military Munitions Response Program Fort Polk, LA	Engineering-Environmental Management, Inc., Englewood, CO	JUL-2009
2010	Explosives Site Plan- MMRP Remedial Inv/Characterization Action	URS, Omaha, NE	SEP-2010
	Final Project Management Plan MMRP Remedial Investigations	URS, Omaha, NE	NOV-2010
	Final Community Relations Plan MMRP Remedial Investigations	URS, Omaha, NE	NOV-2010
2012	Final Work Plan, MMRP Remedial Investigations	URS, Omaha, NE	FEB-2012
2013	Final Remedial Investigation Report, MMRP Remedial Investigations	URS, Omaha, NE	JAN-2013

FORT POLK

Military Munitions Response Program

Site Descriptions

Site ID: POLK-001-R-01
Site Name: CASTOR 5 TRAINING AREA A

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

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

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200206.....	200305
SI.....	200602.....	200907
RI/FS.....	200911.....	201509
RD.....	201601.....	201606
RA(C).....	201607.....	201609
RA(O).....	201610.....	201702
RIP Date:	201610	
RC Date:	201702	

SITE DESCRIPTION

POLK-001-R-01 (aka Castor 5 Training Area A) is a 511-acre site which is a former military range located in the northwest corner of Fort Polk. The site is a munitions response site (MRS). MD was found at the site during the site investigation in 2008. An historical records review (HRR) was conducted in 2007. The MRS was a block training area with a period of use between 1941 and 1980. It is identified on historical maps as Castor 5 Training Area.

Fort Polk range control personnel reported that the use of munitions and ordnance on block training areas was limited to small arms blank ammunition and pyrotechnics. An SI final report was completed in July 2009. At the beginning of the SI, the site covered a total of 908 acres. A residential development to the north named Maple Terrace subdivision was included in the original footprint. Extensive site excavation and grading occurred during construction of the housing development. During the SI, no evidence of MD and MEC, or MC was found in the residential subdivision portion of the MRS. The SI recommended that the housing development be removed from the MRS footprint. The 397 acres of residential area was segregated from the MRS and renamed POLK-001-R-02 (Castor 5 Area B).

The completed FS dated April 2015 recommends a MEC surface clearance of the remaining 44.29 acres. Upon completion of the surface clearance, site closure documentation will be provided to LDEQ and a conveyance notice will be filed at the Vernon Parish Courthouse.

CLEANUP/EXIT STRATEGY

The RI/FS phase is complete pending approval from regulatory officials. The FS dated April 2015 recommends a surface clearance of 44.29 acres. Upon completion of the surface clearance a request for NFA and appropriate closure documentation will be filed with LDEQ.

Site ID: POLK-003-R-01
Site Name: Mill Creek 1,2 & 3 Training Area A

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

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

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200206.....	200305
SI.....	200602.....	200907
RI/FS.....	200911.....	201606

RIP Date: N/A

RC Date: 201606

SITE DESCRIPTION

POLK-003-R-01 (aka Mill Creek 1,2,3 Training Area A) is a 73-acre site which is a former military range. The site is an MRS.

MD was found at the site during the site investigation in 2008. An HRR was conducted in 2007. The MRS was a block training area with a period of use between 1941 and 1980. The MRS is identified on historical maps as Mill Creek 1,2,3 training areas.

Fort Polk range control personnel report that munitions use on this training area consisted of small arms blank ammunition, artillery firing points and pyrotechnics. It was used as a training and maneuver area. Firing points and/or impact areas existed, but their exact location is not known. The exact type and frequency of training at the MRS is unknown. In 1989 the current ASP was constructed on 411 acres of the MRS. Because active ASPs are not eligible for inclusion in the MMRP, the ASP footprint was removed.

An SI final report was completed in July 2009. At the beginning of the SI, the site covered a total of 783 acres. During the SI, no evidence of MD, MEC, or MC was found in the western portion of the site. The SI recommended that this western portion be removed from the MRS footprint. The 338 acres were segregated from the MRS and renamed POLK-001-R-02 (Castor 5 Area B). In 1989 the current ASP was constructed on 372 acres of the MRS. Because active ASPs are not eligible for inclusion in the MMRP, the ASP footprint was removed. The removal of the western portion and the ASP footprint resulted in the MRS area reduction to 73 acres. This area (renamed Mill Creek 1,2,3 Training Area A) was recommended for further investigation in the SI.

LTM is anticipated to be performed from 201511 - 204512 and will consist of initial sign emplacement during the first year. LTM is not tracked in AEDB-R because there is no associated cost with this action since it will be performed in house. In all subsequent years of LTM performed by the Installation, annual inspections will be performed of the signage. Maintenance will include removal of foliage that could obscure the sign as well as replacement in the event the signs are damaged or stolen.

CLEANUP/EXIT STRATEGY

The RI/FS phase is completed pending approval from regulatory officials. The FS dated April 2015 recommends that NFA is required for this site. The decision is based on the results of the RI and no MEC being found.

Site ID: POLK-004-R-01
Site Name: BLUE HOLE REC AREA

STATUS

Regulatory Driver: CERCLA
MRSPP Score: 05
Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200206.....	200305
SI.....	200602.....	200907
RI/FS.....	200911.....	201509
RD.....	201601.....	201606
RA(C).....	201607.....	201609
RA(O).....	201610.....	201702
RIP Date:	201610	
RC Date:	201702	

SITE DESCRIPTION

POLK-004-R-01 (aka Blue Hole Recreation Area) MRS is located in the Kiskatchie National Forest. The site is a MRS. It was leased from the USFS during its use as a range. An HHR was conducted in 2007. An SI final report was completed in July 2009. MD was found at the site during the site investigation. The MRS was used as a block training area and as a fording/swim site for tanks and a float bridge training area with a period of use between 1941 and 1980. Fort Polk range control personnel report that munitions used on the range included small arms blank ammunition, pyrotechnics, smokes, and obscurants.

The completed FS dated April 2015 recommends MEC surface clearance of the remaining 17.93 acres. Upon completion of the surface clearance, site closure documentation will be provided to LDEQ and a conveyance notice will be filed at the Vernon Parish Courthouse.

CLEANUP/EXIT STRATEGY

The RI/FS phase is complete pending regulatory approval. The FS dated April 2015 recommends a surface clearance of 17.93 acres. Upon completion of the surface clearance a request for NFA and appropriate closure documentation will be filed with LDEQ.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
POLK-001-R-02	Castor 5 Training Area B	200907	The 2009 site investigation report recommended this northeastern residential area of the original Castor 5 footprint for No Further Action because no evidence of munitions and explosives of concern (MEC) and no evidence of munitions constituents (MC) were discovered.
POLK-002-R-01	BIVOUAC AND MANEUVER AREA	200907	The 2009 site investigation report recommended this site for No Further Action because no evidence of MEC and no evidence of MC was discovered and no known or suspected hazard exists at the site.
POLK-003-R-02	Mill Creek 1,2, & 3 Training Area B	200904	The 2009 site investigation report recommended this western portion of the Original MCL 1,2,3 footprint for No Further Action because no evidence of MEC and no evidence of MC was discovered.
POLK-005-R-01	LUA CYPRESS AND LONGLEAF	200907	The 2009 site investigation report recommended this site for No Further Action because no evidence of MEC was discovered and no known or suspected hazard exists at the site.
POLK-006-R-01	LUA COOTERS BOG	200305	Site is an operational range and therefore is ineligible for the MMRP (Ref. FDE Report, July 2004).
POLK-007-R-01	NATIONAL CEMETERY	200907	The 2009 site investigation report recommended this site for No Further Action because no evidence of MEC or MC was discovered and no known or suspected hazard exists at the site.
POLK-008-R-01	NORTHWESTERN STATE UNIVERSITY	200407	Site has been found to be in the FUDS program and not eligible for the active installation MMRP.
POLK-009-R-01	FORMER ASP	200907	The 2009 site investigation report recommended this site for No Further Action because no evidence of MEC or MC was discovered and no known or suspected hazard exists at the site.

MMRP Schedule

Date of MMRP Inception 200206

Past Phase Completion Milestones

2003

PA (POLK-001-R-01 - CASTOR 5 TRAINING AREA A, POLK-001-R-02 - Castor 5 Training Area B, POLK-002-R-01 - BIVOUAC AND MANEUVER AREA, POLK-003-R-01 - Mill Creek 1,2 & 3 Training Area A, POLK-003-R-02 - Mill Creek 1,2, & 3 Training Area B, POLK-004-R-01 - BLUE HOLE REC AREA, POLK-005-R-01 - LUA CYPRESS AND LONGLEAF, POLK-006-R-01 - LUA COOTERS BOG, POLK-007-R-01 - NATIONAL CEMETERY, POLK-008-R-01 - NORTHWESTERN STATE UNIVERSITY, POLK-009-R-01 - FORMER ASP)

2009

SI (POLK-001-R-01 - CASTOR 5 TRAINING AREA A, POLK-001-R-02 - Castor 5 Training Area B, POLK-002-R-01 - BIVOUAC AND MANEUVER AREA, POLK-003-R-01 - Mill Creek 1,2 & 3 Training Area A, POLK-003-R-02 - Mill Creek 1,2, & 3 Training Area B, POLK-004-R-01 - BLUE HOLE REC AREA, POLK-005-R-01 - LUA CYPRESS AND LONGLEAF, POLK-007-R-01 - NATIONAL CEMETERY, POLK-009-R-01 - FORMER ASP)

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 MMRP at Installation (including LTM phase): 201702

FORT POLK MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
POLK-001-R-01	CASTOR 5 TRAINING AREA A	RD						
		RA(C)						
		RA(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
POLK-003-R-01	Mill Creek 1,2 & 3 Training Area A	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
POLK-004-R-01	BLUE HOLE REC AREA	RD						
		RA(C)						
		RA(O)						

FORT POLK
Army Defense Environmental Restoration Program
Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 11/2

Installation Site Types with Future and/or Underway Phases

- 6 Above Ground Storage Tank
(CC2600-2700, CC3100-3200, CC3500-3600, CC3700, CCBLDG3401, CCSWMU26)
- 1 Contaminated Ground Water
(CCSWMU23)
- 2 Underground Storage Tank
(CCBldg1725, CCBldg7199)

Most Widespread Contaminants of Concern

Light non-aqueous phase liquids (LNAPL), Metals, Petroleum, Oil and Lubricants (POL)

Media of Concern

Groundwater, Soil

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

Site ID	Site Name	Action	Remedy	FY
CCBldg1725	Former AAFES Car Care Center	FRA	REMOVAL	2010
CCBldg1725	Former AAFES Car Care Center	FRA	IN-SITU SOIL TREATMENT	2011
CCSWMU23	2600 Block VMU -SWMU 23A	FRA	NATURAL ATTENUATION	2012
CC2600-2700	Motor Fuel Units 1 & 2	IRA	REMOVAL	2015
CC3100-3200	Motor Fuel Unit No 4	IRA	REMOVAL	2015
CC3500-3600	Motor Fuel Unit No. 6	IRA	REMOVAL	2015
CC3700	Motor Fuel Unit No. 7	IRA	REMOVAL	2015
CCBldg8716	NFWWTP Digester	FRA	REMOVAL	2015

Duration of CR

Date of CR Inception: 199306

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201801/204510

Date of CR completion including Long Term Management (LTM): 204510

CR Contamination Assessment

Contamination Assessment Overview

Fort Polk's Compliance Restoration (CR) program continues to provide management and execution of RAs and monitoring activities at SWMUs and AOCs in accordance with the Comprehensive Environment Response, Compensation and Liability Act, the Subpart X permit, and LDEQ RECAP requirements. The CR projects continue at Fort Polk in the following areas:

-SWMU 23 is under CMI(O) to monitor the effectiveness of a source removal action performed in FY09 and determine if future RAs will be required.

-SWMU 26 - The CMS was completed in FY13 with a design and implementation of a remedy to follow.

-Building 1725 - Source removal action was conducted in 2010. The IMP(O) phase began in 2011 and includes soil monitoring to determine the effectiveness of soil treatment.

-3400 Block - A phase II RFI of the site is being conducted to lay groundwork for a CMS and design to be developed.

-Building 7016 - The site investigation was completed in 2011. A NFA was submitted to the state on Jan. 31, 2013 for review and approval.

-Building 7199 - An investigation is being conducted.

-Building 8716 - An RFI was completed in 2011. Demolition of the digester and installation of monitoring wells are planned for FY13.

-Motor Fuel Units No. 1 and 2 (CC2600-2700): This site is located in the 2600 and 2700 blocks of south Fort Polk. Each block had a tank farm with four 12,000-gallon above ground storage tanks (AST). Fuel dispensing infrastructure consisted of filler boxes, a pump house, and remote areas with 13 fuel dispensing nozzles. Motor Fuel Units No. 1 and No. 2 are two of a set of seven fueling areas. An SI and IRA are currently underway.

Motor Fuel Unit No. 4 (CC3100-3200): This site is located in the 3100 and 3200 blocks of south Fort Polk. A tank farm with five 12,000-gallon ASTs was present. The fuel distribution network consisted of fill boxes, a pump house, fuel lines, and two fuel dispensing areas. The distribution piping leading from the pump house remains on-site. These fuel lines extend approximately 250 linear ft at the 3100 block and 250 ft at the 3200 block. An SI and IRA are currently underway.

-Motor Fuel Unit No. 6 (CC3500-3600): This site is located in the 3500 and 3600 blocks of south Fort Polk. The site is identified on as-built drawings, dated 1941, as Motor Fuel Unit No. 6. The drawings show that there was a tank farm consisting of three 12,000-gallon ASTs. The fuel storage and distribution network consisted of fill boxes, a pump house, underground fuel lines, and two areas with fuel dispensing nozzles. Underground fuel lines extend approximately 900 linear ft at the 3500 block and 450 ft at the 3600 block. An SI and IRA are currently underway.

-Motor Fuel Unit No. 7 (CC3700): The site is located in the 3700 block of south Fort Polk. It is identified on as-built drawings, dated 1941, as Motor Fuel Unit No. 7. There was a tank farm with three 12,000-gallon ASTs at the site. The fuel storage and distribution network consisted of three fill boxes, a pump house, underground fuel lines, and two areas with fuel dispensing nozzles. The fuel lines extend approximately 700 ft at the site. An SI and IRA are currently underway.

Cleanup Exit Strategy

For sites CC2600-2700, CC3100-3200, CC3500-3600, CC3700, and CCBLDG3401: Complete the RI/FS to determine the extent of contamination (if present) and cleanup to LDEQ RECAP standards. Use FS to determine projected costs to complete the project.

CCBLdg1725: Monitoring of the soil for three years followed by site closeout activities.

CCBLdg7016: An NFA-ATT will be prepared for this site.

CCBLdg7199: Complete a corrective action plan to determine RA.

CCBLdg8716: Sludge removal and digester demolition followed by groundwater monitoring and site closeout.

CR Contamination Assessment

CCSWMU23: Continued groundwater monitoring followed by site closeout activities.

CCSWMU26: Apply hydrogen peroxide to hydrocarbon impacted soils followed by groundwater monitoring to determine the effectiveness of the remedy.

CR Previous Studies

Year	Title	Author	Date
1996	CCSWMU23 and CCSWMU26 Phase I Installation-Wide SWMUs RFI	Radian International LLC	MAR-1996
1997	CCSWMU23 and CCSWMU26 RFI Interim Report Installation-Wide SWMUs	Radian International LLC	JAN-1997
1998	CCSWMU23 and CCSWMU26 Additional Investigation for Installation-Wide SWMUs Phase II RFI	Radian International LLC	SEP-1998
1999	Additional Investigations Report, Installation-Wide SWMUs 25A, 26, 27A, 41A	Radian International LLC	JUN-1999
	Activities for SWMU 26	Radian International LLC	NOV-1999
2004	CCSWMU23 and CCSWMU26 Corrective Measures Study	Radian International LLC	MAY-2004
2008	CCSWMU23 Corrective Measures Implementation Plan	URS Corporation	SEP-2008
	CCBldg3401 RFI Work Plan	URS Corporation	OCT-2008
2009	Final MO-2 RECAP Submittal AAFES Car Care Center Building 1725	URS, Baton Rouge, LA	JAN-2009
	Final Revised MO-2 RECAP Submittal AAFES Car Care Center Building 1725	URS, Baton Rouge, LA	JUL-2009
2010	Building 7016 Site Investigation Work Plan	URS, Baton Rouge, LA	MAY-2010
	Final MO-2 Corrective Action Plan AAFES Car Care Center / Building 1725	SpecPro Environmental Services, Oak Ridge, TN	SEP-2010
	Final Site Remedial Action Report Corrective Measures Implementation SWMU 23	SpecPro Environmental Services, Oak Ridge, TN	SEP-2010
	Final MO-2 Remedial Action Work Plan Corrective Measures Implementation AAFES Car Care Center / Building 1725	SpecPro Environmental Services, Oak Ridge, TN	SEP-2010
	Remedial Investigation Work plan CCbldg8716 Multi Digester at NFWWTP	JESCO, Jennings, LA	NOV-2010
	3400 Block Phase I Assessment	URS, Baton Rouge, LA	DEC-2010
2011	Groundwater Monitoring Report for November 2010 Corrective Measures Implementation Operations SWMU 23	SpecPro Environmental Services, LLC Oak Ridge, TN	FEB-2011
	3400 Block Phase II Remedial Investigation Work Plan	URS, Baton Rouge, LA	SEP-2011
	CCBLDG7199 Site Investigation Work Plan	URS, Baton Rouge, LA	SEP-2011
	Bldg 8716-Abandoned Digester Site Assessment and RECAP Evaluation Report Volumes 1,2 & 3	JESCO, Jennings, LA	NOV-2011
	Building 7016 RCRA Facility Investigation (RFI) Report and RECAP Evaluation	URS, Baton Rouge, LA	NOV-2011
2012			

CR Previous Studies

2012	Title	Author	Date
	Final QAPP for Site Investigation / Interim Removal Action at Four Motor Fuel Units	ERT, Laurel, MD	JAN-2012
	Final SWMU26 RCRA Facility Investigation Report Volumes 1 and 2	JESCO, Jennings LA	NOV-2012
	No Further Action Documentation Building 7016 CCBLDG7016-Cubic	URS, Baton Rouge, LA	DEC-2012
2013	CCBldg8716 Abandoned Multidigester Corrective Measure Study	JESCO, Jennings LA	FEB-2013
	Final Workplan for Interim Removal Action Motor Fuel Units 1&2,4,6, and 7	ERT, Laurel, MD	MAR-2013
	2013 Building 1725 Sampling Workplan	INNOVAR, Tulsa, OK	JUN-2013
	CCBldg Abandoned Multidigester Corrective Measure Design and Implementation Workplan	JESCO, Jennings, LA	JUL-2013
	BLDG7199 RCRA Facility Investigation (RFI) Report and UST Appendix I MO-2 RECAP Evaluation	URS, Baton Rouge, LA	JUL-2013
	Solid Waste Management Unit 23 Annual Groundwater Monitoring Report for 2011 Corrective Measures Implementation Operations	INNOVAR, Tulsa, OK	OCT-2013
	Solid Waste Management Unit 23 Annual Groundwater Monitoring Report for 2012 Corrective Measures Implementation Operation	INNOVAR, Tulsa, OK	OCT-2013
2014	June 2014 Sampling Event Field Activities Report for Building 1725	INNOVAR, Tulsa, OK	SEP-2014
	Final IRA Report, MFU's 1&2, 4, 6, 7	ERT, Laurel, MD	OCT-2014

FORT POLK
Compliance Restoration
Site Descriptions

Site ID: CC2600-2700
Site Name: Motor Fuel Units 1 & 2

STATUS

Regulatory Driver: CERCLA
Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200810.....	201001
SI.....	201102.....	201412
RI/FS.....	201409.....	201708
IRA.....	201201.....	201412

RIP Date: N/A
RC Date: 201708

SITE DESCRIPTION

CC2600-2700 (aka Motor Fuel Units 1 and 2) is located in both the 2600 and 2700 blocks of the south Fort Polk cantonment area. The sites lie west of Texas Avenue. It was originally constructed as a fueling area in the early-1940s. Based on historical narratives, fueling operations continued until approximately 1975. Fuel was delivered by railroad to the site. ASTs, pump houses, and distribution lines were located at the fueling site. The underground distribution lines led to two separate fueling sites, each with 13 fueling nozzles. All of the AST, pump houses and fueling islands have been removed or demolished. The site is currently being used as a vehicle maintenance facility.

The SI and IRA phases are complete. The RI/FS phase is currently underway. The RI/FS phase was awarded in FY14 and is therefore a zero cost site. The media of concern are soil and groundwater. Possible sources of contamination at this MFU site include leakage from the distribution lines and operational fuel spills. Because the two sites are located in close proximity and their construction was very similar, both blocks have been combined into a single AEDB-R site. The 2600 block area is identified on as-built drawings, dated 1941, as MFU No. 1. The 2700 block area was identified as MFU No. 2. Each site had a tank farm consisting of four 12,000-gallon ASTs.

CLEANUP/EXIT STRATEGY

Complete the RI/FS to determine the extent of contamination (if present). The risk assessment will determine if cleanup is required.

Site ID: CC3100-3200
Site Name: Motor Fuel Unit No 4

STATUS

Regulatory Driver: CERCLA
Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200810.....	201001
SI.....	201102.....	201412
RI/FS.....	201409.....	201708
IRA.....	201201.....	201412

RIP Date: N/A
RC Date: 201708

SITE DESCRIPTION

CC3100-3200 (aka MFU No. 4) straddles the 3100 and 3200 blocks of the south Fort Polk cantonment area. The site lies west of Texas Avenue. It was originally constructed as a fueling area in the early-1940s. Based on historical narratives, fueling operations continued until approximately 1975. Fuel was delivered by railroad to the site. The western portions of the site are currently being used as vehicle maintenance facilities. The remainder of the site is covered by grass and small trees.

The site is identified on as-built drawings and maps as MFU No. 4. The MFU consisted of three fill boxes, a pump house, five ASTs, four-inch underground fuel lines and two areas with fuel dispensing nozzles. At the north fueling site was a pump island with seven fueling nozzles. At the south fueling site was a pump island with five fueling nozzles. In 2005, a bulldozer unearthed and cut one of the fuel lines in the 3100 block. The line contained gasoline.

The SI and IRA phases are complete. The RI/FS phase is currently underway. The RI/FS was funded and awarded in FY14 and is therefore a zero cost site. The media of concern are soil and groundwater. The primary contaminant is fuels. The secondary contaminant is metals. Possible sources of contamination at this MFU site include leakage from the distribution lines and operational fuel spills.

CLEANUP/EXIT STRATEGY

Complete the RI/FS to determine the extent of contamination (if present). The risk assessment will determine if cleanup is required.

Site ID: CC3500-3600
Site Name: Motor Fuel Unit No. 6

STATUS

Regulatory Driver: CERCLA
Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200810.....	201001
SI.....	201102.....	201412
RI/FS.....	201409.....	201708
IRA.....	201201.....	201412
RIP Date:	N/A	
RC Date:	201708	

SITE DESCRIPTION

CC3500-3600 (aka Motor Fuel Unit No. 6) is located in the 3500 and 3600 blocks of the south Fort Polk cantonment area. The site lies east of Texas Avenue, covering both sides of Illinois Avenue. It was originally constructed as a fueling area in the early-1940s. Based on historical narratives, fueling operations continued until approximately 1975. Fuel was delivered by railroad to the site. The southern portion of the site is currently being used as vehicle maintenance facilities. The remainder of the site is covered by grass.

The site is identified on historic maps as Motor Fuel Unit No. 8. The MFU consisted of three fill boxes, a pump house, three 12,000-gallon ASTs, and underground fuel lines leading to two separate refueling areas. The northern refueling area was located in the middle of the 3500 block. The southern fueling area is in the eastern section of the 3600 block.

The SI and IRA phases are complete. The RI/FS phase is currently underway. The RI/FS was funded and awarded in FY14 and is therefore a zero cost site. The media of concern are surface soil and groundwater. Possible sources of contamination at this MFU site include leakage from the distribution lines and operational fuel spills.

CLEANUP/EXIT STRATEGY

Complete the RI/FS to determine the extent of contamination (if present). The risk assessment will determine if cleanup is required.

Site ID: CC3700

Site Name: Motor Fuel Unit No. 7

STATUS

Regulatory Driver: CERCLA

Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200810.....	201001
SI.....	201102.....	201412
RI/FS.....	201409.....	201708
IRA.....	201201.....	201412

RIP Date: N/A

RC Date: 201708

SITE DESCRIPTION

CC3700 (aka Motor Fuel Unit No. 7) is located in the 3700 block of the south Fort Polk cantonment area. The site lies east of Texas Avenue. It was originally constructed as a fueling area in the early-1940s. Based on historical narratives, fueling operations continued until approximately 1975. Fuel was delivered by railroad to the site. The western portion of the site is currently being used as a vehicle maintenance facility. The remainder of the site is covered by grass.

The site is identified on historic maps as Motor Fuel Unit No. 7. The motor fuel unit consisted of three fill boxes, a pump house, three 12,000-gallon ASTs, and underground fuel lines leading to a refueling area.

The SI and IRA phases are complete. The RI/FS phase is currently underway. The RI/FS was funded and awarded in FY14 and is therefore a zero cost site. The media of concern are soil and groundwater. Possible sources of contamination at this MFU site include leakage from the distribution lines and operational fuel spills.

CLEANUP/EXIT STRATEGY

Complete the RI/FS to determine the extent of contamination (if present). The risk assessment will determine if cleanup is required.

Site Name: BLDG 3401 Former AST and Pumphouse Area

STATUS

Regulatory Driver: RCRA

Contaminants of Concern: Light non-aqueous phase liquids (LNAPL), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199306.....	199308
CS.....	199404.....	199910
RFI/CMS.....	200709.....	201412
DES.....	201503.....	201512
CMI(C).....	201503.....	201712
CMI(O).....	201801.....	202101

RIP Date: 201801

RC Date: 202101

SITE DESCRIPTION

CCBLDG3401 is located in the 3400 block of south Fort Polk, on the west side of Texas Avenue. The site is identified on historic maps (as-built drawings) as Motor Fuel Unit No. 5. This site was identified for corrective action measures under the Hazardous and Solid Waste Amendments (HSWA) of RCRA Subpart X Operating Permit No. LA 0124022725-OP-RN-1. The MFU consisted of three fill boxes, a pump house, four 12,000-gallon ASTs, four-inch underground fuel lines and two areas with fuel dispensing nozzles. At the north fueling site was a pump island with three fueling nozzles, at the central fueling site was a pump island with five fueling nozzle, and at the south fueling site was a pump island with four fueling nozzles. A Phase I RFI was completed in 2010. Significant POL impacts were found. A Phase II RFI is underway as of this writing to delineate the nature and extent of contamination.

The environmental concern is the risk to surface water and groundwater. The primary media of concern is soil contamination. The secondary media of concern is groundwater contamination. The primary constituents of concern are fuel components such as total petroleum hydrocarbons, benzene, toluene, ethylbenzene and xylene (BTEX), diesel range organics and polycyclic aromatic hydrocarbons. Secondary constituents of concern are metals. The site is currently used as a very active industrial maintenance area and has a fence surrounding it.

A CMS was completed in December 2014. The recommendation was enhanced insitu bioremediation to address impacted soils for two areas of interest (AOI) and soil excavation and disposal for one AOI.

CLEANUP/EXIT STRATEGY

DES, CMI(C) and CMI(O) are required; The CMI-C phase will consist of the following: AOIs A and B will each have three recovery wells installed. AOI-C CMI-C phase will consist of excavation of approximately 500 cubic yards (cy) of soil, transportation of material off-site and then backfill with clean material. The CMI(O) phase will consist of enhanced in situ bioremediation, groundwater, soil monitoring, and an interim report submittals will occur until goals are meet with the LDEQ RECAP industrial setting standards.

Site ID: CCBI dg1725
Site Name: Former AAFES Car Care Center

STATUS

Regulatory Driver: RCRA
Contaminants of Concern: Volatiles (VOC)
Media of Concern: Soil

Phases	Start	End
ISC.....	200802.....	200803
DES.....	200810.....	201001
IMP(C).....	201001.....	201011
IMP(O).....	201012.....	204510
RIP Date:	201012	
RC Date:	204510	

SITE DESCRIPTION

CCBI dg1725 Former Army Air Force Exchange Service (AAFES) Car Care Center is located in the 1700 Block of the south Fort Polk cantonment area. The site lies in the median of the boulevard formed by Alabama and Georgia Avenues, one block north of their intersection with Louisiana Avenue. Between 1950 and 2006 AAFES operated a convenience store / service station at the site. A fuel distribution network of underground storage tanks (UST), underground pipes and fuel dispensers were present at the site. A separate building (B-1726) was used as a garage for auto repair and maintenance. New USTs were installed at the site in 1998. Fueling operations were halted in 2006 and the newer USTs were removed without incident. All buildings have been demolished and the site is now a vacant piece of land.

The regulatory driver for this site is RCRA-I. In 1997, two 4,000-gallon and three 10,000-gallon USTs were closed-in-place in the west boundary of the site, under Alabama Avenue. There are no fences at the site.

Soil sampling after UST removal confirmed that residual hydrocarbons were present above RECAP limits. SI results concluded that surface and subsurface contaminants existed at the site. An area of contaminated surface soil measuring 80 ft by 60 ft by 15 ft deep was excavated and hauled off-site in November 2010. The soil at the bottom of the excavation was treated with oxygen release compound (ORC-Advanced) before being backfilled. The site will require semiannual monitoring for xylene contamination in the subsurface soil.

Reports completed and submitted to the LDEQ include the tank excavation assessment report in 2008, an MO-2 RECAP submittal in 2009, a reply to notice of deficiencies, an amended MO-2 RECAP submittal in 2009, an additional investigation report in 2010, an updated MO-2 RECAP submittal in 2010, a final corrective measures implementation report in 2011, and a monitoring work plan in 2011.

The first sampling event for BETX occurred in 2014. LDEQ has approved sampling for xylene only in the second event due to the non-exceedances of BTEX. The second event took place in February 2015 and the results are pending validation and LDEQ review and approval.

CLEANUP/EXIT STRATEGY

The concentration of xylenes in subsurface soil will be monitored.

Site ID: CCBldg7199
Site Name: North Fort Fire Department

STATUS

Regulatory Driver: CERCLA

Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	200712.....	200712
SI.....	200908.....	201308
RI/FS.....	201308.....	201512
RD.....	201601.....	201606
RA(C).....	201607.....	201612
RA(O).....	201701.....	201712
RIP Date:	201701	
RC Date:	201712	

SITE DESCRIPTION

CCBldg7199 [aka North Fort Fire Department] is located in the north Fort Polk cantonment and is situated southwest of the intersection of North Fort Entrance Road and C Avenue. The site was formerly a convenience store/service station operated by AAFES between 1950 and 1993. Three 10,000-gallon USTs were removed in 1994. The USTs were used to store gasoline.

A fuel distribution network of USTs, underground pipes and fuel dispensers were present at the site. Fueling operations were halted in 1993 and the USTs were removed. Soil from the excavation was analyzed and found to be contaminated with BTEX. The soil was stockpiled at the site. A bioremediation treatment was performed which entailed placing three six-inch layers of soil on plastic. Each six-inch lift was treated with LFS-1 nutrient. The 18-inch piles were bioremediated for one month. Post-treatment samples were collected and lab results indicated that contamination was below LDEQ limits. The soil was used as backfill material and returned to its origin. Subsequently the tank pit was covered with concrete.

There are no fences at the site. The site is currently in use by the Fort Polk Fire Department as a fire station. The UST removal report indicated that residual hydrocarbons were present above LDEQ limits in effect at the time. An initial site characterization completed in 2007 found petroleum impacts above LDEQ RECAP standards in surface soil. An investigation was completed in 2012 to further define the extent of impact to surface soils. This investigation found that benzene and xylene are present in the surface soils above LDEQ RECAP standards. An RI found benzene and xylene to be above LDEQ RECAP levels. An FS was developed to address technologies available for remediation. An area of 0.5 acres (900 cy) will be excavated and disposed of off-site. Site restoration will include the revegetation of the area after confirmatory sampling and backfill with clean material occurs.

CLEANUP/EXIT STRATEGY

The strategy is to complete a design, excavation, and landscaping. Eight hundred and ninety-seven cys of soil will be excavated (per the FS) and confirmatory samples will be taken for analysis. Once samples demonstrate that nonindustrial standards have been met, the site will be backfilled with clean fill material in an area covering 0.020 acres as outlined in the FS. One acre was identified in AEDB-R as this is the lowest value available for selection. A NFA request will be included in the closure report.

Site ID: CCSWMU23
Site Name: 2600 Block VMU -SWMU 23A

STATUS

Regulatory Driver: RCRA
Contaminants of Concern: Volatiles (VOC)
Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199306.....	199308
CS.....	199404.....	199910
RFI/CMS.....	200310.....	200409
DES.....	200709.....	200809
CMI(C).....	201012.....	201110
CMI(O).....	201011.....	201512
RIP Date:	201110	
RC Date:	201512	

SITE DESCRIPTION

CCSWMU 23 (2600 Block VMU-SWMUA), a maintenance unit is located in the 2600 block of the south Fort Polk cantonment area, northeast of the intersection of Georgia and Mississippi Avenues. SWMU 23A is an active vehicle maintenance area. The Army began operations as a military vehicle maintenance unit and storage area around 1950. The maintenance area is fenced and is overlain by concrete. The AOI is grass covered and lies at the southern boundary of the site. Corrective action measures were required under the HSWA of the Fort Polk RCRA Subpart X Operating permit No. LA 0124022725-OP-RN-1.

Hazardous materials and RCRA listed waste components used at the site include leaded gasoline, solvents, paints, etc. Sources of contamination at this SWMU include waste POL and fuels released during vehicle maintenance activities. Benzene is present at the site above the regulatory action limits. Natural attenuation at the site consists of analyzing groundwater from four wells on a semiannual schedule.

Three years of semiannual sampling of four monitoring wells is complete. The site was monitored for the natural attenuation of benzene contamination in groundwater. LDEQ authorized the termination of monitoring and the approval to plug and abandon wells at this site in a letter dated Jan. 21, 2015. Well abandonment and closure documentation are all that remain.

CMI(O) began in FY11 and is anticipated to be completed in early FY16. Remaining tasks are well abandonment and closure documentation submission.

CLEANUP/EXIT STRATEGY

CMI(O) activities include residual waste management, site closeout documentation and well abandonment.

Site Name: Motor Fuel Unit at 2900-3100 blocks

STATUS

Regulatory Driver: RCRA

Contaminants of Concern: Light non-aqueous phase liquids (LNAPL), Petroleum, Oil and Lubricants (POL), Polycyclic Aromatic Hydrocarbons (PAH), Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199306.....	199308
CS.....	199404.....	199910
RFI/CMS.....	200310.....	201409
DES.....	201410.....	201602
CMI(C).....	201503.....	201702
CMI(O).....	201703.....	201809
LTM.....	201809.....	202202

RIP Date: 201703

RC Date: 201809

SITE DESCRIPTION

CCSWMU26 (aka Motor Fuel Unit No. 3) is located in the 2900, 3000 and 3100 blocks of the south Fort Polk cantonment area. The site lies west of Texas Avenue. The site is identified on as-built drawings and maps as Motor Fuel Unit No. 3. A fuel distribution network of USTs, underground pipes and fuel dispensers were present at the site. Originally constructed as a fueling area in the early-1940s, fueling operations continued until approximately 1975. Fuel was delivered by railroad to the site. The motor fuel unit consisted of three fill boxes, a pump house, six 12,000-gallon ASTs, four-inch underground fuel lines and two areas with fuel dispensing nozzles. At the north fueling site was a pump island with nine fueling nozzles. At the south fueling site was a pump island with five fueling nozzles. The western portions of the site are currently being used as vehicle maintenance facilities. All structures at the site have been removed, but a railroad spur runs through the middle of the site.

The RFI/CMS phase is complete. The media of concern are groundwater and surface soils. The primary contaminant is fuels. The secondary contaminant is metals. Possible sources of contamination at this site include leakage from the distribution lines and operational fuel spills. Soil sampling after AST removal confirmed that residual hydrocarbons were present above RECAP limits. LNAPL was present in some of the monitoring wells.

CLEANUP/EXIT STRATEGY

Quarterly treatment of soil and quarterly soil and groundwater samples will be collected to determine the effectiveness of this treatment.

LTM will consist of residual waste management, site closeout documentation and well abandonment.

Hydrogen peroxide/modified Fenton's reagent oxidation will be used to treat the impacted surface soils from 5 to 15 ft below ground surface in an approximate 10,250 sq. ft. area. The hydrogen peroxide and a ferrous catalyst will be injected into the contaminated aquifer on a 9 ft. x 9 ft. grid pattern. The injections will occur quarterly.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CCBldg7016	CUBIC AST	201409	No Further Action Request submitted to LDEQ on 31 Jan 2013. See MFR for detailed information.
CCBldg8716	NFWWTP Digester	201412	

CR Schedule

Date of CR Inception: 199306

Past Phase Completion Milestones

1993

RFA (CCBLDG3401 - BLDG 3401 Former AST and Pumphouse Area, CCSWMU23 - 2600 Block VMU -SWMU 23A, CCSWMU26 - Motor Fuel Unit at 2900-3100 blocks)

2000

CS (CCBLDG3401 - BLDG 3401 Former AST and Pumphouse Area, CCSWMU23 - 2600 Block VMU -SWMU 23A, CCSWMU26 - Motor Fuel Unit at 2900-3100 blocks)

2004

RFI/CMS (CCSWMU23 - 2600 Block VMU -SWMU 23A)

2008

RFA (CCBldg7016 - CUBIC AST)

PA (CCBldg7199 - North Fort Fire Department)

ISC (CCBldg1725 - Former AAFES Car Care Center)

DES (CCSWMU23 - 2600 Block VMU -SWMU 23A)

2009

RFA (CCBldg8716 - NFWWTP Digester)

2010

PA (CC2600-2700 - Motor Fuel Units 1 & 2, CC3100-3200 - Motor Fuel Unit No 4, CC3500-3600 - Motor Fuel Unit No. 6, CC3700 - Motor Fuel Unit No. 7)

DES (CCBldg1725 - Former AAFES Car Care Center)

2011

IMP(C) (CCBldg1725 - Former AAFES Car Care Center)

2012

CMI(C) (CCSWMU23 - 2600 Block VMU -SWMU 23A)

RFI/CMS (CCBldg8716 - NFWWTP Digester)

2013

SI (CCBldg7199 - North Fort Fire Department)

2014

RFI/CMS (CCBldg7016 - CUBIC AST, CCSWMU26 - Motor Fuel Unit at 2900-3100 blocks)

DES (CCBldg8716 - NFWWTP Digester)

Additional Past Phase Completion Milestones

POLK-7 Bayou Zourie Landfill. An NFA-ATT will be prepared for this site in FY12.

POLK-17 Original Firefighter Training Area. An NFA-ATT will be prepared for this site in FY12.

POLK-18 Former Firefighter Training Area. An NFA-ATT will be prepared for this site in FY12.

POLK-21 Former Burning Ground. An NFA-ATT will be prepared for this site in FY12.

POLK-22 Avenue K MOGAS. An NFA-ATT will be prepared for this site in FY12.

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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CR Schedule

Final RA(C) Completion Date: 201712

Schedule for Next Five-Year Review: 2015

Estimated Completion Date of CR at Installation (including LTM phase): 204510

FORT POLK CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CC2600-2700	Motor Fuel Units 1 & 2	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CC3100-3200	Motor Fuel Unit No 4	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CC3500-3600	Motor Fuel Unit No. 6	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CC3700	Motor Fuel Unit No. 7	RI/FS						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCBLDG3401	BLDG 3401 Former AST and Pumphouse Area	DES						
		CMI(C)						
		CMI(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCBldg1725	Former AAFES Car Care Center	IMP(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCBldg7199	North Fort Fire Department	RI/FS						
		RD						
		RA(C)						
		RA(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCSWMU23	2600 Block VMU -SWMU 23A	CMI(O)						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCSWMU26	Motor Fuel Unit at 2900-3100 blocks	DES						
		CMI(C)						
		CMI(O)						
		LTM						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201009

Restoration Advisory Board (RAB): No

Reason Not Established: The community has expressed no sufficient, sustained interest in a RAB.

Community Interest Solicited on: 201403

Efforts Taken to Determine Interest

A solicitation was published in two local newspapers (Beauregard Daily News and the Leesville Daily Leader) and it was also published in the Fort Polk Guardian, a weekly newspaper on the installation.

Results

No replies were received from citizens expressing interest in being on a RAB.

Follow-up Procedures

Fort Polk is in the process of again surveying the degree of public interest in the community in forming a RAB. These surveys will continue every two years as required by Army policy.

Additional Community Involvement Information

Public notices were placed in local newspapers announcing that the MMRP sites had been assigned munitions response site prioritization protocol scores. A public announcement was made in local newspapers that a copy of the five-year review report was available at a local library.

Awareness of the MMRP program and how to respond to any discovery of MD/MEC will be fostered through the USAEC Sgt. Woolf campaign and other Department of Defense (DoD) guidance. Educational material will be distributed to local schools, local neighborhood organizations, libraries and other public venues.

Administrative Record is located at

ENRMD-CMB
1647 23d Street Bldg 2516
Fort Polk, LA 71459

Telephone 337-531-6008

Information Repository is located at

Vernon Parish Public Library
1401 Nolan Trace
Leesville, LA 71446

Telephone 337-531-6008

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

TAPP Title: N/A

Potential TAPP: N/A

