FY2008 as of Nov 2007

FORT RILEY

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 multi- year Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation- wide approach, with associated costs and schedules, to conduct investigations, and necessary remedial actions.

In an effort to coordinate planning information between the restoration manager, US Army Environmental Command (USAEC), Fort Riley, Installation Management Command (IMCOM), executing agencies, and regulatory agencies, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all 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. Project schedules are re- negotiated annually based on available resources or as needed due to project requirements.

The following persons contributed to the formulation and completion of this Installation Action Plan for FORT RILEY during a planning workshop/book update held on 23-24 May 2007:

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KDHE

Approval

See AEDB-R for Approval and Submittal of Data by Installation

Concurrence

See AEDB-R for Approval and Submittal of Data by Program Manager

- A/I Active/Inactive
- AEDB- CC Army Environmental Database Compliance- Related Cleanup
- AEDB-R Army Environmental Database Restoration
 - AGL Abandoned Gasoline Line
 - AST Aboveground Storage Tank
 - BTEX Benzene, Toluene, Ethylbenzene, and Xylene
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act of 1980
 - COC Contaminant of Concern
 - DCE cis-1,2-dichloroethylene
 - DCFA Dry Cleaning Facility Area
 - DDT Dichlorodiphenyltrichloroethane
 - ESI Expanded Site Investigation
 - FFA Federal Facility Agreement
- FORCOM US Army Forces Command
 - FY Fiscal Year
 - IAP Installation Action Plan
 - IMCOM Installation Management Command
 - IRP Installation Restoration Program
 - IWSA Installation- Wide Site Assessment
 - K Thousand \$
 - KDHE Kansas Department of Health and Envronment
 - KDWP Kansas Department of Wildlife and Parks
 - LTM Long-Term Management
 - MC Munitions Constituent
 - MCL Maximum Contaminant Level
 - MEC Munitions and Explosives of Concern
 - mg/kg milligrams/kilograms
 - mm millimeter
 - MMRP Military Munitions Response Program
 - MNA Monitored Natural Attenuation
 - N/A Not Applicable
 - NCP National Oil & Hazardous Substances Pollution Contingency Plan
 - NFA No Further Action
 - NFRAP No Further Remedial Action Planned
 - NPL National Priorities List
 - OB/OD Open Burning/Open Detonation
 - OU Operable Unit
 - PCB Polychlorinated Biphenyl
 - PCE Tetrachloroethylene
 - POL Petroleum, Oil & Lubricants
 - PP Proposed Plan
 - RAB Restoration Advisory Board
 - RACR Remedial Action Completion Report
 - RAP Remedial Action Plan
 - RC Response Complete

Acronyms

- RCRA Resource Conservation and Recovery Act
 - RD Remedial Design
- RI/FS Remedial Investigation/Feasibility Study
- ROD Record of Decision
- SEFL Southeast Funston Landfill
- SFL Southwest Funston Landfill
- SHSAR Sherman Heights Small Arms Range
 - TCE Trichloroethylene
- USACE US Army Corps of Engineers
- USAEC US Army Environmental Command
- USEPA US Environmental Protection Agency
 - UST Underground Storage Tank
 - UXO Unexploded Ordnance
 - VOC Volatile Organic Compound
 - WWI World War I
 - WWII World War II

Installation Information

Installation Locale

Installation Size (Acreage): 100656

City: Junction City

County: Clay, Geary, & Riley

State: Kansas

Other Locale Information

Fort Riley is located on 100,656 acres of land in portions of Clay, Geary, and Riley Counties in northeast Kansas. Interstate 70, Junction City (population 20,000), and Ogden (population 1,600) bound the installation to the south. Fort Riley is west of Manhattan (population 38,000). Milford Lake (16,020 acres) bounds part of the western side of the installation.

Installation Mission

Fort Riley, as an Installation of Excellence, working in close partnership with local, regional and state communities, provides trained and ready forces to meet Joint Force requirements across the full spectrum of current and future operations; transforms and manages unit readiness as directed by the Army Campaign Plan; executes unit re- stationing as directed by US Army Forces Command (FORSCOM); executes garrison operations as directed by the Installation Management Command, and conducts homeland defense operations and supports civil authorities.

Lead Organization

IMCOM - West

Lead Executing Agencies for Installation

USACE, Kansas City District

US Geological Survey

Regulator Participation

Federal

USEPA, Region VII

State

Kansas Department of Health and Environment (KDHE), Bureau of Environmental Remediation

and KDHE Bureau of Environmental Field Services - North Central District Office

National Priorities List (NPL) Status

A score of 33.8 was recorded on 199008.

Date for RA(C) Completion:

201609

Date for NPL Deletion

IR: N/A MR: N/A

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

RAB established 199709

Installation Information

Installation Program Summaries

IRP

Primary Contaminants of Concern: Explosives, Metals, Perchlorate, Pesticides, Petroleum, Oil and Lubricants, Semi-

volatiles, Volatiles

Affected Media of Concern: Groundwater, Soil, Surface Water

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

201209/201209

Prior Funding: \$68,106.4 K

Current Requirements:

\$1,095.0 K

Future Requirements:

\$5,482.0 K

MMRP

Primary Contaminants of Concern:

Munitions and explosives of concern, Munitions constituents

Affected Media of Concern: Groundwater, Soil

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

201609/201609

Prior Funding:

\$291.7 K

Current Requirements:

\$1,236.1 K

Future Requirements:

\$4,274.0 K

Cleanup Program Summary

Installation Historic Activity

Fort Riley's history is closely linked to the history of American westward expansion and development. As early as the 1840s, travelers along the Oregon and Santa Fe Trails began a massive migration across the high plains of Kansas, which created the need for a series of military installations to protect them as they traveled west.

In 1852, Major E.A. Ogden established a temporary camp called Camp Center, north of the Kansas River, near the junction of the Smoky Hill and Republican Rivers. The US Congress authorized a permanent installation to be established there in 1853 and renamed the encampment Fort Riley, in honor of Maj. Gen. Bennett C. Riley who led the first military escort along the Santa Fe Trail in 1829.

Fort Riley evolved from a frontier outpost to a military training installation in the first sixty years following its inception in 1853. Industry was limited to a few shops (e.g., blacksmiths) and storehouses in the beginning. Early sewers dumped directly into the rivers. Military operations were limited to small arms, horse-mounted Cavalry, and horse-drawn artillery. Practice ranges were located near the barracks areas in the lowlands, and river bluffs were used as natural backstops for the ranges.

During World War I (WWI), there was a build- up of forces at Fort Riley. Camp Funston was established during WWI and, in approximately three months, 1,401 temporary buildings were erected there to house troops. Camp Whitside was also built- up for WWI. Military training activities became more complex and infrastructure became more elaborate. Motor pools and auto repair shops replaced stables and blacksmith shops. Marshall Army Air Field became operational in 1921. The installation areas were electrified and wastewater treatment plants were constructed.

Prior to World War II (WWII) and through the 1940s, Fort Riley expanded its transportation and industrial activities. Many motor pools were established in Camp Funston, Camp Whitside, Camp Forsyth, and Main Post. Underground storage tanks (UST) were installed and a gasoline pipeline was run from the rail spur on the north side of the Kansas River to Marshall Army Air Field. The installation infrastructure included laundry and dry cleaning facilities, numerous vehicle repair shops, boiler plants, and an asphalt plant.

Through the early years of WWII, the installation included the last vestiges of horse- mounted troops, including an animal dip facility on the rail spur for animals brought onto the installation. The horse- mounted Cavalry was dissolved in 1949.

The heavy weapons training was focused on the main Impact Area, which was acquired in 1942, but small arms ranges were still prevalent along the river bluffs especially in the Camp Forsyth, Camp Whitside, and Camp Funston areas. During the period between WWII and Vietnam, many of the temporary facilities built for WWII, especially those in Camp Forsyth, Camp Funston, and Camp Whitside, became obsolete and surplus, so they were demolished. The First Infantry Division was assigned to Fort Riley in 1955. Troop barracks and tactical equipment shops were built on Custer Hill and integrated with troop support facilities for health and recreational services. Family housing also expanded. Small arms training shifted to the ranges around the Impact Area.

Prior to this period, solid, hazardous, and industrial liquid materials were disposed of in the most expedient possible way. A number of landfills were created in Funston, Forsyth, Main Post, and Whitside.

During the Vietnam Era, environmental concerns came to the forefront. The wastewater treatment plants and controlled landfills were put into use. The older industrial activities were frequently upgraded or centralized. Transportation and industrial facilities that had been abandoned were demolished. Systematic review and upgrade of facilities proceeded with regard to several environmental concerns including USTs, polychlorinated biphenyl (PCB)- containing transformers, and asbestos- containing materials used in buildings. With the passage of stricter federal and state laws governing air and water pollution, protection of natural resources, waste management, and environmental regulation progressively focused on the management of industrial and military activities.

New weapons and training forced the installation to acquire large new areas of land for armored vehicle fire and maneuver exercises.

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Fort Riley has been used to train Army personnel. The installation's history does not include large- scale manufacturing activities.

Cleanup Program Summary

Installation Historic Activity

Rather, development of Fort Riley included ancillary activities to support overall installation operations, including print shops, photographic process, laboratories, furniture repair, dry cleaning, paint shops, sewage treatment plants, and numerous vehicle maintenance and wash facilities. Hazardous materials used include the following:

- Ordnance (of which there is no evidence of release of toxic chemical agents and no evidence of release of radioactive substances);
- Chlorinated solvents associated with furniture repair, dry cleaning, and cleaning of printing equipment
- Pesticides, insecticides, and herbicides for clearing of brush, pest and termite control, and routine maintenance of facility grounds;
- A variety of small quantities of chemicals associated with laboratories;
- Silver- bearing solutions from the photographic processing and x- ray facilities;
- PCB fluids in electrical equipment; and
- Large quantities of petroleum- based fuels and cleaners associated with vehicle use, maintenance, and repair,

In addition to the waste outlined above, the installation has generated typical, non-hazardous municipal waste and construction debris throughout its operational life.

Past activities at Fort Riley have environmentally impacted several areas of the installation, primarily as the result of spills and leaks, and from previously approved waste disposal and handling practices. Cleanup of Fort Riley began in 1990-1991 in response to the Army's IRP and the Federal Facilities Agreement (FFA).

Major tenants include the Kansas Army National Guard, the Army Reserve, and the Irwin Army Community Hospital. The installation was listed on the NPL in 1990 and placed on the National Priorities List (NPL) with a Hazard Ranking System score of 33.8. A FFA was signed by the USEPA, Region VII, the KDHE, and the Army and became effective 28 February 1991. The FFA requires the installation address all significant environmental releases under Comprehensive Environmental Response, Compensation and Liability Act (1980) (CERCLA) and Resource Conservation and Recovery Act (RCRA).

Installation Program Cleanup Progress

IRP

Prior Year Progress: OU 003 - working on the Pilot Study & plan to complete the PP in FY07; OU 004 - completed

RD/RAP in late FY06 & now in MNA under LTM; OU 005 - completed ROD & RD/RAP in FY06 & now

in MNA under LTM

Future Plan of Action: OU 003 - complete ROD & RD/RAP; OU 004 - LTM; OU 005 - LTM; POL USTs - free-product

recovery & soil- vapor extraction; POL Tank Farm - free- product recovery; OB- OD - LTM

MMRP

Prior Year Progress: None

Future Plan of Action: RI/FS to be initiated in FY08.

FORT RILEY

Army Defense Environmental Restoration Program Installation Restoration Program

Installation Total Army Environmental Database- Restoration (AEDB-R) Sites/RC Sites:

72/68

Installation Site Types with Future and/or Underway Phases

- 1 Dip Tank
 - (FTRI- 047)
- 1 Explosive Ordnance Disposal Area
 - (FTRI- 009)
- 1 Fire/Crash Training Area
 - (FTRI-019)
- 3 Landfill
 - (FTRI- 003, FTRI- 036, FTRI- 038)
- 1 POL (Petroleum/Lubricants) Lines
 - (FTRI- 057)
- 1 Pesticide Shop
 - (FTRI-030)
- Soil Contamination After Tank Removal
- (FTRI- 056)
- 3 Spill Site Area
 - (FTRI-027, FTRI-031, FTRI-040)

Most Widespread Contaminants of Concern

Explosives, Metals, Perchlorate, Pesticides, Petroleum, Oil and Lubricants, Semi-volatiles, Volatiles

Media of Concern

Groundwater, Soil, Surface Water

	emedial Actions (Interim Remedia			(IRA/FRA))	E) (
Site ID	Site Name	Action	Remedy		FY	Cost
FTRI- 061	FORMER GAS SERVICE	IRA	WASTE REMOVAL -	• • • • • • • • • • • • • • • • • • • •	1989	TBD
ETDL 000	STATION BLDG 354	ED.	BULK CONTAINERS		4000	
FTRI- 008	PCB STORAGE CONEX (BUILDING 348)	FRA	IN- SITU SOIL TREA	IMENI	1990	TBD
FTRI- 059	REMOVE USTS	FRA	WASTE REMOVAL -		1990	TBD
FTD1 000	F145 51 50 4044 51055110114		BULK CONTAINERS			
FTRI- 063	FMR BLDG 1044 DISPENSING	3 IRA	WASTE REMOVAL -		1990	TBD
	STATION		BULK CONTAINERS			
FTRI- 066	FMR BLDG 1245 DISPENSING	SIRA	WASTE REMOVAL -	DRUMS, TANKS,	1990	TBD
	STATION		BULK CONTAINERS			
FTRI- 067	FMR BLDG 1539 DISPENSING	3IRA	WASTE REMOVAL -	DRUMS, TANKS,	1990	TBD
	STATION		BULK CONTAINERS			
FTRI- 068	FMR BLDG 1637 DISPENSING	SIRA	WASTE REMOVAL -	DRUMS, TANKS,	1990	TBD
	STATION		BULK CONTAINERS			
FTRI- 069	FMR BLDG 1890 DISPENSING	SIRA	WASTE REMOVAL -	DRUMS, TANKS,	1990	TBD
	STATION		BULK CONTAINERS			
FTRI- 054	CUSTER HILL PX USTS BLDG	RA	WASTE REMOVAL -	DRUMS, TANKS,	1991	\$99.0 K
	5320		BULK CONTAINERS			
FTRI- 061	FORMER GAS SERVICE	IRA	WASTE REMOVAL -	DRUMS, TANKS,	1991	TBD
	STATION BLDG 354		BULK CONTAINERS			
FTRI- 010	PESTICIDE (2-4D) UST AT	FRA	WASTE REMOVAL -	SOILS	1992	TBD
	CAMP FUNSTON (,		
FTRI- 013	ABANDONED VOC TANKS	FRA	WASTE REMOVAL -	DRUMS, TANKS,	1992	TBD
	NORTH OF IACH		BULK CONTAINERS	, ,		
FTRI- 049	MERCURY CONTAMINATION	FRA	REMOVAL	•	1992	TBD
	AREAS			.*	1002	.00
FTRI- 060	MAINPOST PX GAS STATION	IRA	WASTE REMOVAL -	DRUMS, TANKS	1993	TBD
	/218		BULK CONTAINERS	, ,	. 500	.55
	· — · · •					

IRP Summary

						•
	Completed Re Site ID	medial Actions (Interim Remedia Site Name	al Actions/F Action	inal Remedial Actions (IRA/FRA)) Remedy	FY	Cost
•	FTRI- 003	SOUTHWEST FUNSTON LANDFILL	IRA	OTHER	1994	\$27.0 K
	FTRI- 028	FMR FIRE TRAINING AREA CAMP FUNSTON	FRA	WASTE REMOVAL - SOILS	1994	TBD
	FTRI- 030	PESTICIDE STORAGE FACILITY (MIXING)	IRA	WASTE REMOVAL - SOILS	1994	\$1,115.0 K
	FTRI- 035	NON- IMPÀCT ARÉA SMALL ARMS RANGES	IRA	WASTE REMOVAL - SOILS	1994	TBD
	FTRI- 071	FMR BLDG 2345 DISPENSING STATION	SFRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994	TBD
	FTRI- 072	BLDG 8340 FUEL OIL UST	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994	TBD
	FTRI- 003	SOUTHWEST FUNSTON LANDFILL	IRA	CAPPING	1995	\$955.0 K
	FTRI- 027	DRY CLEANING FACILITIES AREA	IRA	SOIL VAPOR TREATMENT	1995	\$1,005.0 K
	FTRI- 064	FMR BLDG 1090 DISPENSING STATION	SFRA .	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995	TBD
	FTRI- 065	FMR BLDG 1190 DISPENSING STATION	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995	TBD
	`FTRI- 070	FMR BLDG 2341 DISPENSING STATION	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995	TBD ,
	FTRI- 073	BLDG 8360 FUEL OIL UST	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1995	TBD
	FTRI- 019	FORMER FIRE TRAINING AREA FFTA- MAAF	IRA	BIOREMEDIATION	1996	TBD
	FTRI- 019	FORMER FIRE TRAINING AREA FFTA- MAAF	IRA	SOIL VAPOR TREATMENT	1996	\$1,000.0 K
	FTRI- 003	SOUTHWEST FUNSTON LANDFILL	IRA	FENCE OR OTHER SITE ACCESS CONTROL MEASURES	1997	TBD
	FTRI- 003	SOUTHWEST FUNSTON LANDFILL	FRA	CAPPING	1997	\$338.0 K
	FTRI- 057	6200 AREA FUEL OIL LINE (ANCHOR)	IRA	WASTE REMOVAL - SOILS	1997	\$230.0 K
	FTRI- 062	TMP GAS STATION BLDG 388	BIRA	FREE PRODUCT RECOVERY	1997	\$637.0 K
	FTRI- 063	FMR BLDG 1044 DISPENSING STATION	GIRA	FREE PRODUCT RECOVERY	1997	\$9.0 K
	FTRI- 029	OLD INCINERATOR SITE SE- CAMP FUNSTON	IRA	WASTE REMOVAL - SOILS	2000	\$21.0 K
	FTRI- 036	SOUTHEAST FUNSTON LANDFILL (ANCHOR)	IRA `	CAPPING	2000	\$162.0 K
	FTRI- 038	FORSYTH LANDFILL(S)	IRA	OTHER ·	2001	\$16.0 K
	FTRI- 019	FORMER FIRE TRAINING AREA FFTA- MAAF	IRA	ALTERNATE WATER SUPPLYWATER SUPPLY TREATMENT	2002	\$544.0 K

Total Environmental Restoration, Army (ER,A) Funding

Prior Funding:

\$68,106.4 K

Current Requirements:

\$1,095.0 K

Future Requirements:

\$5,482.0 K

IRP Summary

Duration of IRP

Date of IRP Inception: 198312

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

201209/201209

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

202709

IRP Contamination Assessment

Contamination Assessment Overview

The Army initially began environmental restoration- related investigations as a result of the 1981 closure of the Southwest Funston

Landfill where monitoring indicated groundwater contamination.

Five IRP sites have been designated as Operable Units (OUs). The five OUs are: FTRI- 003 Southwest Funston Landfill, FTRI- 030 Pesticide Storage Facility, FTRI- 027 Dry Cleaning Facilities Area, FTRI- 019 Former Fire Training Area- Marshall Army Airfield, and FTRI- 031 354 Area Solvent Detections site. These sites have been identified as sites with contamination due to past operational activities resulting in spills and releases to the environment. The primary contaminants of concern are chlorinated solvents and pesticides.

The Southwest Funston Landfill (SFL) was operated from the mid- 1950s through 1981. Post- closure monitoring and Remedial Investigation/Feasibility Study (RI/FS) sampling efforts detected contaminants such as chlorinated solvents, petroleum hydrocarbons, and metals in the groundwater at low levels. The Record of Decision (ROD) was signed August 6, 1997. Institutional controls and LTM have been implemented. As a result of vinyl chloride being present above the Maximum Contaminant Level (MCL), five- year reviews will be conducted per the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

Prior to 1994, the Pesticide Storage Facility had pesticides stored and mixed at the site. Pesticides were released to the environment through past operational and disposal practices. Contamination by pesticide and arsenic was the primary concern. A ROD for No Further Action (NFA) for this site was completed in FY97. There is the potential for residual contamination, and therefore five- year reviews will be conducted per the NCP.

The Dry Cleaning Facilities Area has two sites with soil and ground- water contamination from dry cleaning operations using perchloroethylene/tetrachloroethylene (PCE). Dry cleaning occurred at Building 180/181 (demolished in 2000) and Building 183 (demolished in 2002). There is minimal contamination at Building 183. The eastern ground- water plume originates at Building 180/181 with two hotspots - one east of the building centered on a sewer manhole and one at the southwest corner of the building. A utility trench appears to be the conduit for transporting PCE to the west, with the western ground- water plume centered on well DCF02- 42. Both plumes move off the terrace into the alluvium and are not degrading Kansas River water quality.

The Former Fire Training Area- Marshall Army Airfield site has contamination that resulted from past operational practices. There were petroleum hydrocarbons and PCE present on and off post in the soil and groundwater. Private wells in the area could potentially be affected by the groundwater contamination plume and are being monitored. Two alternative wells were drilled to replace the impacted private wells and were drilled outside the boundaries of the groundwater plume. The ROD has been signed and the remedial design/remedial action plan (RD/RAP) approved.

The alternative of monitored natural attenuation (MNA) with institutional controls was put in place. If no contaminants remain above the MCLs for a period of three years, a Remedial Action Completion Reports (RACR) will be generated. There are no contaminants of concern above the MCLs currently.

The 354 Area Solvent Detections site has contamination that was discovered during investigations of a Petroleum, Oil, and Lubricants (POL)/Underground Storage Tank (UST) site. There are volatile organic compounds (VOC) to include PCE, trichloroethylene (TCE), dichloroethylene (DCE), and benzene. The ROD has been signed and the RD/RAP approved.

The alternative of MNA with institutional controls was put in place. If no contaminants remain above the MCLs for a period of three years, a RACR will be generated. There are no contaminants of concern above the MCLs currently. Exit Strategy from the NPL for Fort Riley (Revised 3/21/07)

The principal objectives of the Fort Riley Installation Restoration Program (IRP) are to protect human health and the environment while working toward the ultimate goal of delisting the installation from the NPL. There is the potential that some of the sites will not reach unlimited use/unrestricted exposure but they will be monitored and under the installation's control. The installation's Real Property Master Plan will preclude their utilization for unacceptable land uses. In order to accomplish these objectives, it has been determined that the efforts delineated in the following list are essential and must be achieved.

- 1. Complete the Record of Decision for OU 003 (FTRI- 027) by 2nd guarter FY08.
- 2. Conduct the long-term management for the Operable Units as prescribed in the Proposed Plans (PPs), documented by the

IRP Contamination Assessment

Contamination Assessment Overview

RODs, and determined to be required by the analysis of the data from the sampling events.

- 3. Produce RACR for those OUs that have attained the Remedial Action Objectives defined in the PPs and RODs and no longer have contaminants remaining in situ above actionable levels.
- 4. Perform the 5- Year Review requirements as required under the CERCLA for all sites that may have hazardous substances left in place above the MCLs, have not achieved the Remedial Action Objectives, and/or do not allow for unlimited use and unrestricted exposure.
- 5. Develop the Final Close- Out Report to begin the procedures for requesting delisting of the installation from the NPL.
- 6. Complete the Final Reports for an Extended Site Investigation- Multi Sites (ESI) to address 49 sites that were improperly placed in the response complete (RC) category. The data does not indicate that there are more than one or two sites that have contaminants that might require some remedial action. Many of the sites had no contaminants present. Upon acceptance of the reports' conclusions that no sites require any further action, obtain written regulator concurrence for site close out.
- 7. Conduct a complete site characterization of the soil and groundwater contamination at FTRI- 063, 066, & 068 POL sites. These three sites are located in Camp Funston that is undergoing massive build up to accommodate the mission changes and new missions assigned to the installation and are top priority to be addressed. The three sites will require extensive free-product recovery and other treatment at the sites in order to remediate the soil and groundwater contamination from fuels-related hydrocarbons. FTRI- 057 and FTRI- 062 are low priority as they do not constitute significant potential to impact human health or the environment.
- 8. FTRI- 009 OB/OD has perchlorate and TCE contamination. The site does not have identifiable risks to human health or the environment at this time but requires further monitoring and sampling for two to three more years. A decision will be required on the disposition of the site after the analysis of the existing data from the monitoring program. This site will remain active for training and emergency disposal of unexploded ordnance (UXO) only per a letter from the KDHE.
- 9. The Abandoned Gasoline Line (AGL) (FTRI- 056) is undergoing an in- situ treatment for the soil and groundwater contamination. There will be monitoring to determine if further treatment is warranted for at least two years. Once the groundwater contaminants have dropped below actionable levels, a close out will be sought for the site.
- 10. There is another site that requires additional consideration. FTRI- 046 is the Former DS/GS Bldg 1693 and Adjacent Areas. Two pits were capped with concrete but contain very high levels of metals and POL contamination. These contaminations exist in alluvial materials of the Kansas River just above the groundwater level and pose a potential contamination source for down- gradient well fields.
- 11. FTRI- 038 is the Forsyth Landfill(s) which has no contamination at any actionable levels as determined from previous sampling. There is a river- bank stabilization structure that is exceptionally strong and well designed. The inspections over the last four years have shown no impact from high water events. The potential for any failure is minimal and would take a catastrophic event. The only remaining issue is the exposed UXO in the Republican River that will be considered under the Military Munitions Response Program (MMRP).

Cleanup Exit Strategy

See Individual Sites.

IRP Previous Studies

	Title	Author	Date
2004			
	Abandoned Gas Line, Site Investigation Report AGL	McKinzie	SEP- 2004
	Terminus Area	İ	
	Technical Memorandum for Open Burning/Open	Burns & McDonnell	OCT- 2004
	Detonation Ground Range 16 at Fort Riley, Kansas		
	354 Area Solvent Detection Site, Draft Final Feasibility Study Report 354	Burns & McDonnell	DEC- 2004
	Petroleum/Underground Storage Tanks, Annual Report for Long-Term Monitoring of Groundwater March 2004 Sampling Event	Environmental Chemical Corporation	DEC- 2004
2005	Gamping 27011		
	354 Area Solvent Detection Site, Soil- Gas Investigation		FEB- 2005
	Report 354 Aea Solvent Detection		
	Dry Cleaning Facilities, Draft Feasibility Study	Burns & McDonnell	MAR- 2005
	Addendum		
	Former Fire Training Area- Marshall Army Airfield, Draft Final ROD	Burns & McDonnell	MAR- 2005
	354 Area Solvent Detection Site, Draft Final Proposed Plan 354 Area Solvent Detection		MAY- 2005
	Abandoned Gas Line, Engineering Evaluation/Cost Analysis	McKinzie	MAY- 2005
006			
	Former Fire Training Area- Marshall Army Airfield, Draft Final Remedial Design/Remedial Action Plan	Burns & McDonnell	JAN- 2006
	Southwest Funston Landfill, Long- Term Monitoring Report 2005	Environmental Chemical Corporation	MAR- 2006

FORT RILEY

Installation Restoration Program
Site Descriptions

FTRI- 003 SOUTHWEST FUNSTON LANDFILL

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Volatiles

Media of Concern: Groundwater

Phases	Start	End
	198312	
SI	198706	198909
RI/FS	199101	199603
RD	199510	199603
RA	199312	199708
	199601	
_TM:	199709	202709

RIP Date: N/A RC Date: 199709

SITE DESCRIPTION

The Southwest Funston Landfill site is located in the southern portion of Fort Riley, adjacent to the southwest corner of the Camp Funston cantonment area. This is an approximately 120- acre landfill that was closed in 1983.

The SFL ROD was signed in 1997. Three components of the remedy addressed the immediate risk of the landfill. Subsequently, repairs have been made to the landfill cover and bank stabilization structure.

Prior to 2006, there were detections of vinyl chloride in the groundwater (above MCLs). In 2006, no contaminants were present at concentrations above MCLs. LTM efforts include repair and management of the native grass and soil cover, use of institutional controls to prevent on- site groundwater use, and performance of long- term, annual, groundwater monitoring. An inspection of the landfill is performed annually.

The first Five- Year Review report was completed in August 2002; no changes in the remedy were needed. The second Five-Year Review was completed in 2007. The site does not present a risk to human health and the environment under current conditions and no changes to the remedy are needed.

CLEANUP/EXIT STRATEGY

Groundwater monitoring will continue on an annual basis.

Prescribed burns will be performed approximately every three years to enhance the native grass cover.

Annual inspections of the bank stabilization structure and cover will be conducted and periodic repair conducted as required.

Unnecessary monitoring wells will be removed.

Five-Year Review reports will be required. The next review is planned for 2012.

FTRI- 009 OB/OD GROUND (RANGE 16)

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Metals, Perchlorate, Volatiles

Media of Concern: Groundwater, Soil, Surface Water

Phases	Start	End
PA	198312	198412
SI	199111	199809
RI/FS		
LTM	.200410	202709

RIP Date: N/A RC Date: 200409

SITE DESCRIPTION

The Open Burning/Open Detonation Ground (Range 16) is used for emergency ordnance disposal and training (no public access permitted). Historical practices included the use of chlorinated solvents in an open burn area. This practice was discontinued in the early 1980s. In 1993, TCE was detected in the groundwater.

The complex hydrogeology made further characterization necessary. The ephemeral streams were sampled and contaminants of concern were not detected. It has been determined from interpretation of the data that no contaminants are exiting the site as a result of the complex hydrogeology.

An Ecological Risk Screening Evaluation was performed and found low risk to ecological receptors.

The groundwater sampling event conducted in April 2004, and subsequent samplings, identified the presence of perchlorate.

CLEANUP/EXIT STRATEGY

Groundwater and surface- water monitoring will continue on an annual basis until FY11.

In FY11, a decision will be made on site activities in relation to perchlorate, metals, and chlorinated solvent contamination after evaluation of the existing data.

FTRI- 019 FORMER FIRE TRAINING AREA FFTA- MAAF

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Volatiles

Media of Concern: Groundwater

Phases	Start	End
	198706	198909
SI	199111	199305
RI/FS	199303	200509
IRA	199411	200210
LTM	200510	201109

RIP Date: N/A RC Date: 200509

SITE DESCRIPTION

The Former Fire Training Area - Marshall Army Airfield site consists of a former fire training area and drum storage area located at Marshall Army Airfield near the installation boundary. The former fire training area consisted of an unlined pit filled with crushed stone. The fire training area operated from the mid 1960s to 1984. A drum of PCE was accidentally released into the fire training pit in 1982. Efforts were made to recover the spilled material, however, only a portion was recovered.

In the 1990s, it was determined that there was off-post, groundwater contamination above the MCLs based on the analysis of samples taken from private wells. The impacted private wells have been replaced by new wells drilled outside the groundwater contamination plume.

In 1995, a pilot study utilizing soil- vapor extraction and bioventing successfully treated the contaminated soil source.

Currently, all groundwater contaminant concentrations are below their respective MCLs.

The ROD was signed and the RD/RAP was approved by the USEPA, Region VII. The remedy is MNA with Institutional Controls.

This site was addressed in the Five-Year Review report that was completed in August 2002 and 2007.

CLEANUP/EXIT STRATEGY

The next Five- Year Review report is planned for 2012. If the contaminants of concern (COC) remain below the MCLs for three consecutive years, the Five- Year Review reports will not be applicable to this site.

Annual groundwater sampling will be conducted through FY09. After the sampling event results in 2009 have been analyzed, if the COCs are below the MCLs, a Removal Action Completion Report will be filed.

FTRI- 027 DRY CLEANING FACILITIES AREA

STATUS

Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Volatiles

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	198312	198412
SI	198706	198909
RI/ES:	199106	200803
RD	200804	200809
IRA	199406	199502
RA(C)	200810	201006
RA(O)	201007	201109
LTM	201110	201609

RIP Date: 201007 RC Date: 201109

SITE DESCRIPTION

The former Dry Cleaning Facilities Area (DCFA) is located in the southwest corner of the Main Post cantonment area, about 800 feet north of the Kansas River. The DCFA operated until 2002. The primary dry cleaning solvent was PCE. Chlorinated solvent contamination above regulatory standards was found in soil and groundwater.

In 1994, a soil vapor extraction pilot study recovered 20 pounds of PCE. Based on the low yields and minimal impact to groundwater contamination, this technology was determined to not be viable for this site.

The baseline risk assessment indicates minimal risk associated with the site under current and anticipated land use. A decision was made to conduct a pilot study to determine the best available technology(ies) to remediate the site.

A Pilot Study was conducted in 2006 that addressed soil contamination using land farming, excavation and groundwater contamination through enhanced bio- remediation and chemical oxidation.

This site was addressed in the Five- Year Review reports completed in August 2002 and 2007.

CLEANUP/EXIT STRATEGY

Complete Pilot Study Report.

Complete the Proposed Plan, ROD, and RD/RAP.

Groundwater monitoring will continue on an annual basis.

Five- Year Review reports will be required.

FTRI- 030 PESTICIDE STORAGE FACILITY (MIXING)

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Metals, Pesticides

Media of Concern: Soil

Phases	Start	End
PA:	198312	198412
SI	198706	198909
RI/FS	199106	199709
IRA	199312	199406
LTM	200201	202209

RIP Date: N/A RC Date: 199709

SITE DESCRIPTION

It has been determined that prior to the mid 1970s, pesticide wastewaters and inadvertent spills that occurred during pesticide-mixing were allowed to run onto the ground in the equipment- washing area behind the facility. Sampling conducted in 1983-1984 detected pesticide contamination in the soil and in sediments in the lined channel behind the building.

In 1994, a Removal Action to excavate pesticide- contaminated soil was conducted.

A No Further Action ROD was signed. This decision was based on continued industrial land use and was annotated in the installation master plan for consideration if land use is planned to change.

Five- Year Review Reports were completed in August 2002 and 2007; no changes to the remedy were needed.

Soil and sediment sampling was conducted to support production of the 2007 Five-Year Review Report.

CLEANUP/EXIT STRATEGY

File a Remedial Action Completion Report.

FTRI- 031 354 AREA SOLVENT DETECTIONS

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants.

Volatiles

Media of Concern: Groundwater

Phases	Start	End
PA	199111	199305
SI	199312	199507
RI/FS		
LTM	200608	201209

RIP Date: N/A RC Date: 200608

SITE DESCRIPTION

Fuel and solvent storage/dispensing occurred near building 354 in the Public Works yard. USTs were used to store fuel and removed in 1990- 1991. There are no existing records to determine if solvents were stored in drums, USTs, or above- ground storage tanks (ASTs). PCE, its degradation products, carbon tetrachloride, and fuel- related hydrocarbons are present. The site extends from just north of building 430 (Main Post Fire Station) to the "point bar" on the north bank of the Kansas River. At Building 430, the only contaminant is carbon tetrachloride below the MCL.

In 2004, a pilot study using land farming and potassium permanganate successfully treated the PCE- contaminated soil source adjacent to Building 367.

Currently, PCE and its degradation products are detected above the MCLs in groundwater samples only in three terrace wells that do not pose a risk and are, currently, not impacting the Kansas River alluvial aquifer. Two wells in the transition zone have benzene above the MCL.

This site was addressed in the site- wide Five- Year Review reports completed in August 2002 and 2007.

The ROD was signed and the RD/RAP has been approved.

CLEANUP/EXIT STRATEGY

The next Five- Year Review report is planned for 2012. If the COCs remain below the MCLs in the alluvium for three consecutive years, the Five- Year Review reports will not be applicable to this site.

Annual groundwater sampling will be conducted through FY09. After the sampling event results in 2009 have been analyzed, if the COCs are below the MCLs, a Removal Action Completion Report will be filed.

FTRI- 036 SOUTHEAST FUNSTON LANDFILL (ANCHOR)

Regulatory Driver:

CERCLA

RRSE: MEDIUM

Contaminants of Concern: Metals, Semi-volatiles, Volatiles

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	198312	198909
	199111	
RI/FS	199307	201010
	199901	

RIP Date: N/A RC Date: 201010

SITE DESCRIPTION

FTRI- 036 is the anchor site for sites FTRI- 036, - 004, - 011, - 029, - 037, and - 052. The anchor site is a result of the lack of a regulator- approved documentation officially closing out these listed sites. The listed sites are a subset of the 49 potentially contaminated sites being investigated under the ESI Multi-Sites. The intention is to take the data that exists in the IWSA, other SIs, and/or long-term monitoring reports and compare it to a new round of confirmatory sampling. After the analyses are complete, a determination of eligibility to close under a NFRAP designation will be made.

If any site is found to have COCs that exceed regulatory standards, it will be addressed under a separate action.

FTRI- 036 is the Southeast Funston Landfill (SEFL). The SEFL is a former municipal solid waste landfill that occupied approximately 50 acres in the southeast portion of the installation. The SEFL was divided into east and west areas by the construction of Highway K- 18 in the 1970s. The west area is approximately 15 acres. The east portion was excessed to the State of Kansas.

FTRI- 029 is the SEFL incinerator area in the east portion of the SEFL. The landfill and incinerator were operated into the mid-1950s. Groundwater sampling and analysis conducted since 1995 have not shown groundwater contamination. In 1999, the soil containing lead concentrations greater than the industrial risk level of 1,000 mg/kg was removed from the incinerator site and was placed in the SEFL.

FTRI- 004 is the Main Post Landfill north of the Kansas River and south of Marshall Avenue. This site was used for the disposal of refuse during the post-WWII era. The site is covered with well- established vegetation and contamination of surface soil covering the landfill is not expected. Results from groundwater sampling indicate arsenic contamination above the MCL.

FTRI- 011 is the Camp Funston Area Groundwater. This site will be dropped and viable wells associated with it will be dispersed to other sites.

FTRI- 037 is the Old Whitside Incinerator, located one- quarter mile southwest of the First Capitol of Kansas, just north of the Kansas River. This medical incinerator was used for Camp Whitside from WWI to perhaps 1955. Very little information is available regarding historical operations of the incinerator. The area is wooded with many mature trees. A public nature walk exists along the river and is adjacent to the incinerator on the north side. Soil sample results indicated arsenic, barium, cadmium, chromium, silver, and lead were present below regulatory standards. One shallow soil sample down slope from the incinerator had an elevated level of lead at 550 mg/kg.

FTRI- 052 is the Inactive Landfills- Camp Whitside. Very little is known about this site from existing documents, but is composed of two small debris landfills adjacent to a ravine.

This site is part of the overall effort to address improperly closed out sites. It is included under the AEDB- CC funding stream and is the anchor site.

These sites were included in an ESI that was completed in 2006.

FTRI- 036 SOUTHEAST FUNSTON LANDFILL (ANCHOR)

CLEANUP/EXIT STRATEGY

Achieve regulatory concurrence with NFA.

FTRI- 038 FORSYTH LANDFILL(S)

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Explosives, Metals

Media of Concern: Soil, Surface Water

Phases	Start	End
PA	198312	198909
SI	199111	199305
RI/FS	199403	200104
	199805	
LTM.	200201	201506

RIP Date: N/A RC Date: 200109

SITE DESCRIPTION

The Forsyth Landfill(s) consists of five separate areas. One area can be observed in aerial photos as early as 1936. There were no identified contaminants in either soil or groundwater in four of the five sites. In Area 2, as a result of the 1993 flood, landfill debris was exposed in the bank of the Republican River as observed from the riverbed.

In 1998, UXO eroded out of the landfill, was found on a sandbar adjacent to Area 2.

In 2000 and 2001, a rock revetment was built to prevent further erosion.

In May 2002, Fort Riley posted a series of warning signs between the Riverbank Stabilization Area and the nature trail to notify the public of the possibility of the presence of UXO in the area.

CLEANUP/EXIT STRATEGY

This site is considered Response Complete.

FTRI- 040 FORMER OIL TESTING LAB (ANCHOR)

STATUS

Regulatory Driver: CERCLA

RRSE: NOT EVALUATED

Contaminants of Concern: Metals, Pesticides, Petroleum, Oil

and Lubricants, Volatiles

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	199111	199305
LTM:	200510	200809

RIP Date: N/A

RC Date: 199305

SITE DESCRIPTION

FTRI- 040 is the anchor site for the combined fuel, metals, solvent, and pesticides related sites FTRI- 040, - 013, - 016, - 017, - 028, - 041, and - 051. The anchor site is a result of the lack of a regulator- approved documentation officially closing out these listed sites. The listed sites are a subset of the 49 potentially contaminated sites being investigated under the ESI Multi- Sites.

The intention is to take the data that exists in the IWSA, other SIs, and/or long- term monitoring reports and compare it to a new round of confirmatory sampling. After the analyses are complete, a determination of eligibility to close under a NFRAP designation will be made.

If any site is found to have COCs that exceed regulatory standards, it will be addressed under a separate action.

FTRI- 040 is the Former Oil Testing Lab (Bldg 1022) and consists of a building that was utilized for oil testing and storage of small quantities of various pesticides. There were no reported releases or any evidence of releases.

FTRI- 013 was the Abandoned VOC Tanks North of Irwin Army Community Hospital and consists of two ASTs that held various VOCs. They are no longer present.

FTRI- 016 was the Waste Oil AST for 3rd Battery and consists of a pod on the hardstand. The AST was a pod that was emptied and no evidence of contamination exists.

FTRI- 017 was the Waste Oil AST for 4th Battery and consists of a pod on the hardstand. The pod was emptied and no evidence of contamination exists.

FTRI- 028 was the Former Fire Training Area - Camp Funston - and consists of an area where practice fires were set and extinguished.

FTRI- 041 was the Furniture Repair Shops (3) and consists of three separate buildings where paint strippers containing VOCs were used. No evidence was found to indicate contamination.

FTRI- 051 was the Bldg 727 Waste Pit and consists of grease rack pit that contained petroleum hydrocarbons. The material was removed and the area covered by a concrete floor.

These sites were included in an ESI that was completed in 2006.

CLEANUPÆXIT STRATEGY

Achieve regulatory concurrence for site closure.

FTRI- 047 FORMER LIVESTOCK DIPPING FACILITY

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Metals, Pesticides

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	199111	199305
SI	199111	199305
RI/FS	199403	199504
LTM	200510	200809

RIP Date: N/A RC Date: 199507

SITE DESCRIPTION

FTRI- 047 is the anchor site for the following pesticide/PCB sites FTRI- 047, - 010, and - 048. The anchor site is a result of the lack of a regulator- approved documentation officially closing out these listed sites. The listed sites are a subset of the 49 potentially contaminated sites being investigated under the ESI Multi- Sites. The intention is to take the data that exists in the IWSA, other SIs, and/or long- term monitoring reports and compare it to a new round of confirmatory sampling. After the analyses are complete, a determination of eligibility to close under a NFRAP designation will be made.

If any site is found to have COCs that exceed regulatory standards, it will be addressed under a separate action.

FTRI- 047 is the Former Livestock Dipping Facility and consists of dipping tanks and other functional areas to treat livestock with possibly DDT, methylarsonic acid, and lead arsenate.

FTRI- 010 is the Pesticide (2,4D) UST - Camp Funston - and consists of an underground storage tank at a former service station that was utilized to store pesticide for a short period of time prior to the tank's removal.

FTRI- 048 is the Former Pesticides Facility and consists of a temporary wooden structure at the golf course used to store dry, granular, ready- to- use formulations of various pesticides and fertilizers.

These sites were included in an ESI that was completed in 2006.

CLEANUP/EXIT STRATEGY

Achieve regulatory concurrence for site closure.

FTRI- 056 ABANDONED GASOLINE LINE

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum, Oil and Lubricants,

Volatiles

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	199111	199409
	199408	
RI/FS	199803	201009
IRA	200609	200810-

RIP Date: N/A RC Date: 201009

SITE DESCRIPTION

The Abandoned Gasoline Line site consists of an abandoned 1.1- mile steel pipeline and the Terminus Area where three USTs (25,000- gallons each) were formerly located. The USTs, where various fuels were stored, were removed in 1987.

There is soil and groundwater contamination from fuels- related hydrocarbons at the terminus area above regulatory standards.

The Interim Removal Action was performed in 2006/2007 using chemical oxidation and enhanced bio-remediation.

CLEANUP/EXIT STRATEGY

Conduct groundwater monitoring.

FTRI- 057 6200 AREA FUEL OIL LINE (ANCHOR)

STATUS

Regulatory Driver: CERCLA

RRSE: LOW

Contaminants of Concern: Petroleum. Oil and Lubricants.

Volatiles

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	199010	199012
	199312	
RIÆS	199606.:	201109
IRA	199601	201209

RIP Date: N/A RC Date: 201209

SITE DESCRIPTION

FTRI- 057 is the anchor site and included for the following combined fuels- related sites: FTRI- 054, - 043, - 057, - 062, - 063, - 064, - 065, - 066, - 067, - 068, - 069, - 70, - 071, - 072, and - 073. These sites were improperly placed in Response Complete without regulatory acceptance. The sites FTRI- 043, 057, 064, 065, 067, 069, 070, 072, and 073 are covered under the Expanded Site Investigation (ESI) for 49 sites. This report has been submitted for regulatory concurrence for a No Further Remedial Action Planned (NFRAP). The sites FTRI- 054, 062, 063, 066 and 068 require additional work and will be addressed using Kansas Risk- Based Corrective Action (KRBCA) protocols in cooperation with the KDHE Bureau of Environmental Field Services, Salina Office.

FTRI- 057 will be retained as the anchor site as it is the only one with an open phase to cover the work on these sites. As a result of a pilot study that evaluated dual- phase extraction effectiveness, it was determined that there are high levels of soil and groundwater fuel contamination and measurable free product at FTRI- 063, 066, and 068. These sites require further extensive field work to adequately characterize the vertical, horizontal, and longitudinal extent of the contamination. These sites are located in Camp Funston. Camp Funston is undergoing a massive build up as a result of new missions and mission changes. This mandates that the contamination at these sites be fully described and addressed in an expedient manner in order to avoid potential mission impacts or human health issues.

The FTRI- 054 and 062 sites are low priority sites that are not in Camp Funston area with minimal potential to impact the mission, human health, or the environment at this juncture. The limited knowledge indicates that these sites could eligible for closure under the Kansas Risk- Based Corrective Action process with a minimum of work at a later date.

FTRI- 054 is the Custer Hill PX USTs Bldg 5320 site. This site was closed and soil contamination below KDHE action levels was documented during the tank removal. In 1997, the KDHE placed the site in "on hold" status for closure pending additional groundwater data to support "closure." Groundwater sampling results indicated BTEX above regulatory standards.

FTRI- 062 is the TMP Gas Station, Building 388 and consists of a former UST area located on Main Post. The site is currently an active dispensing station serving Main Post. Two 12,000- gallon capacity fiberglass underground storage tanks were used to store diesel and unleaded gasoline. They were replaced with ASTs in April 1998. Groundwater sampling results indicate BTEX is no longer present above regulatory standards and no free product remains.

FTRI- 063 is the Former Bldg 1044 Dispensing Station and consists of a former fuel dispensing station on the west side of Camp Funston with five 12,000- gallon steel USTs installed in 1942. The tanks were removed in July 1990 along with some of the associated underground piping. Contaminated soil encountered during the removal was excavated and treated.

FTRI- 066 is the Former Bldg 1245 Dispensing Station and consists of a former UST area located in Camp Funston with five 12,000- gallon steel USTs installed in 1942 that contained fuels. The tanks were removed in July 1990 along with some of the associated underground piping.

FTRI- 068 is the Former Bldg 1637 Dispensing Station and consists of a former UST area located in Camp Funston with seven 12,000- gallon steel USTs. The tanks were installed in 1942 and were used into the 1980s. They originally contained diesel, but

FTRI- 057 6200 AREA FUEL OIL LINE (ANCHOR)

prior to removal in 1990, they stored used oil. Approximately 7,200 feet of underground piping may remain in place.

CLEANUP/EXIT STRATEGY

For the majority of the sites, limited groundwater and soil sampling will be conducted to confirm the status found in the Installation-Wide Site Assessment (IWSA) and specific SIs in order to achieve regulatory site closure.

For FTRI- 063, - 066, & - 068, extensive data collection was conducted in the spring of 2007. The data analysis are to be utilized to develop a design to remediate these sites that are heavily contaminated with POL. Sites FTRI- 054 & - 062 will be addressed at a later date, as they do not appear to have the potential to impact human health or the environment at this time.

Response Complete (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTRI- 001	CUSTER HILL SANITARY LANDFILL	199308	POST- CLOSURE MONITORING & CARE BEING PERFORMED UNDER RCRA D AND OMA FUNDING.
FTRI- 002	WHITSIDE CID LANDFILL- CLOSED	199803	Landfill closed and inspected by the KDHE in 2002. This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 036 SEFL.
FTRI- 004	MAIN POST LANDFILL	199712	This site is part of the overall effort to address improperly closed out sites. It is part of the anchor site FTRI- 036 SEFL.
FTRI- 005	CUSTER HILL ROAD RUBBLE DUMP	199305	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 036 SEFL.
FTRI- 006	DRMO STORAGE AREA	199809	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 007	PCB STORAGE BUILDING 343	198909	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 008	PCB STORAGE CONEX (BUILDING 348)	199012	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 010	PESTICIDE (2-4D) UST AT CAMP FUNSTON	199204	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 011	CAMP FUNSTON GW DETECTIONS	200501	
FTRI- 012	WASTE STORAGE DRMO SECONDARY AREA	199509	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 013	ABANDONED VOC TANKS NORTH OF IACH	199202	This site is part of the overall effort to address improperly closed out sites. It is being inlouded under the AEDB- R funding

Response Complete (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			stream and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 014	HOSPITAL INCINERATOR- IRWIN ACH	198909	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- CC and the anchor site is FTRI- 036 SEFL.
FTRI- 015	FORMER DRMO LOCATION (DRMO AREA 2)	199509	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 016	WASTE OIL AST- 3RD BATTERY	198909	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 017	WASTE OIL AST- 4TH BATTERY	198909	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 018	FIRE TRAINING AREA FACILITY (892)	198909	This site part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 020	INDUSTRIAL WASTEWATER SYSTEM (CUSTER HL)	199803	This site is part of the overall effort to addrress improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 022 Former WWTP and Sludge Beds- Camp Funston.
FTRI- 022	FORMER WWTP & SLUDGE BEDS (ANCHOR)	200705	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and is the anchor site for the following Wastewater Treatment Plant (WWTP) sites: FTRI- 020, - 023, - 024, - 025, and - 026. The anchor site is a result of the lack of a regulator- approved document officially closing out these listed sites.
FTRI- 023	CUSTER HILL WWTP AND SLUDGE BEDS	199305	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC

Site ID	Site Name	NFA Date	Documentation
			funding stream and the anchor site is FTRI- 022 Former WWTP & Sludge Beds- Camp Funston.
FTRI- 024	FORSYTH WWTP AND SLUDGE BEDS	199305	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 022 Former WWTP & Sludge Beds - Camp Funston.
FTRI- 025	MAIN POST WWTP AND SLUDGE BEDS	199305	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 022 Former WWTP & Sludge Beds - Camp Funston.
FTRI- 026	RANGE COMPLEX WW LAGOONS	199305	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 022 Former WWTP & Sludge Beds - Camp Funston.
FTRI- 028	FMR FIRE TRAINING AREA CAMP FUNSTON	199402	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 029	OLD INCINERATOR SITE SE- CAMP FUNSTON	200308	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 036 SEFL.
FTRI- 032	IMPACT ZONE	199309	This site is active and therefore ineligible for ER,A funding.
FTRI- 033	DOUTHIT RANGE	199305	This site is active and therefore ineligible for ER,A funding.
FTRI- 034	IMPACT AREA PERIMETER SMALL ARM RANGES	199612	This site is active and therefore ineligible for ER,A funding.
FTRI- 035	NON- IMPACT AREA SMALL ARMS RANGES	200007	Undisturbed ranges were not previously considered for additional investigations/action
FTRI- 037	OLD WHITSIDE INCINERATOR AREA	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 036 SEFL.
FTRI- 039	CONSOLIDATED MAINTENANCE FACILITY	199305	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor iste is

Site ID	Site Name	NFA Date	Documentation
			FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 041	FURNITURE REPAIR SHOPS (3)	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 042	TAC VEHICLE MAINTENANCE SHOPS	199305	This site is part of the overall effort to address improperly closed out istes. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 043	FORMER GAS STATIONS/GARAGES	199305	This site is part of the overall effort to address improperly closed out istes. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 044	FORMER ASPHALT PLANT (NEAR BLDG 354)	199509	This is site was addressed in the 354 Area Solvent Detections RI/FS/PP and will fall under the ROD developed for FTRI- 031.
FTRI- 045	PHOTO AND PRINT PLANTS	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 040 Former Oil Testing Lab (Bldg 1022).
FTRI- 046	FRMR DS/GS Bldg 1693 Adj Areas	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 048	FORMER PESTICIDES FACILITIES	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 049	MERCURY CONTAMINATION AREAS	199305	This site is part of the overall effort to address improperly closed out istes. It is being included in the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 050	PCB SPILL AREAS /TRANSFORMER SITES	199803	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 051	BLDG. 727 WASTE PIT	199903	This site is part of the overall effort to address improperly closed out sites. It is

Site ID	Site Name	NFA Date	Documentation
			being included under the AEDB- R funding stream and the anchor site is FTRI- 040 Formeer Oil Testing Lab (Bldg 1022).
FTRI- 052	INACTIVE LANDFILLS - CAMP WHITSIDE	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 036 SEFL.
FTRI- 053	POL TANK FARM	200505	This site has been transferred to the Compliance- Related Cleanup Program.
FTRI- 054	CUSTER HILL PX USTS BLDG 5320	199709	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 055	MILFORD LAKE CAMPGROUND/MARINA WELLS	199507	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 047 Former Livestock Dipping Facility.
FTRI- 059	REMOVE USTS	199012	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- CC funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 060	MAINPOST PX GAS STATION / 218	199506	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 061	FORMER GAS SERVICE STATION BLDG 354	199510	This site is part of the overall effort to address improperly closed out sites. It is being included under the AEDB- CC funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 062	TMP GAS STATION BLDG 388	200501	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 063	FMR BLDG 1044 DISPENSING STATION	200501	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 064	FMR BLDG 1090 DISPENSING STATION	199506	This site is part of the overall effort to address improperly closed out sites. It is

Site ID	Site Name	NFA Date	Documentation
			being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 065	FMR BLDG 1190 DISPENSING STATION	199506	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 066	FMR BLDG 1245 DISPENSING STATION	200501	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 067	FMR BLDG 1539 DISPENSING STATION	199708	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 068	FMR BLDG 1637 DISPENSING STATION	200501	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 069	FMR BLDG 1890 DISPENSING STATION	199708	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 070	FMR BLDG 2341 DISPENSING STATION	199601	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB-R funding stream and the anchor site is FTRI-057 6200 Area Fuel Oil Line.
FTRI- 071	FMR BLDG 2345 DISPENSING STATION	199411	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB-R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 072	BLDG 8340 FUEL OIL UST	199411	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057 6200 Area Fuel Oil Line.
FTRI- 073	BLDG 8360 FUEL OIL UST	199505	This site is part of the overall effort to address improperly closed out sites. It is being included in the AEDB- R funding stream and the anchor site is FTRI- 057

Site ID	Site Name	NFA Date	Documentation
			6200 Area Fuel Oil Line.
FTRI- 074	WWI INCINERATOR, NW CAMP FUNSTON	200109	

Date of IRP Inception:

198312

Past Phase Completion Milestones

1985

RFA

(FTRI- 008 - PCB STORAGE CONEX (BUILDING 348), FTRI- 039 - CONSOLIDATED MAINTENANCE

FACILITY)

SI

(FTRI-032 - IMPACT ZONE)

PA

(FTRI- 003 - SOUTHWEST FUNSTON LANDFILL, FTRI- 004 - MAIN POST LANDFILL, FTRI- 009 - OB/OD GROUND (RANGE 16), FTRI- 023 - CUSTER HILL WWTP AND SLUDGE BEDS, FTRI- 024 - FORSYTH WWTP AND SLUDGE BEDS, FTRI- 025 - MAIN POST WWTP AND SLUDGE BEDS, FTRI- 027 - DRY CLEANING FACILITIES AREA, FTRI- 030 - PESTICIDE STORAGE FACILITY (MIXING), FTRI- 032 - IMPACT ZONE, FTRI- 033 - DOUTHIT RANGE, FTRI- 034 - IMPACT AREA PERIMETER SMALL ARM RANGES, FTRI-

035 - NON-IMPACT AREA SMALL ARMS RANGES)

1989

CS

(FTRI- 007 - PCB STORAGE BUILDING 343, FTRI- 008 - PCB STORAGE CONEX (BUILDING 348), FTRI- 010 - PESTICIDE (2-4D) UST AT CAMP FUNSTON, FTRI-013 - ABANDONED VOC TANKS NORTH OF IACH,

FTRI- 016 - WASTE OIL AST- 3RD BATTERY, FTRI- 017 - WASTE OIL AST- 4TH BATTERY)

INV (FTRI-018 - FIRE TRAINING AREA FACILITY (892))

SI

(FTRI- 001 - CUSTER HILL SANITARY LANDFILL, FTRI- 003 - SOUTHWEST FUNSTON LANDFILL, FTRI- 014 HOSPITAL INCINERATOR- IRWIN ACH, FTRI- 022 - FORMER WWTP & SLUDGE BEDS (ANCHOR), FTRI-023 - CUSTER HILL WWTP AND SLUDGE BEDS, FTRI- 024 - FORSYTH WWTP AND SLUDGE BEDS, FTRI-025 - MAIN POST WWTP AND SLUDGE BEDS, FTRI- 027 - DRY CLEANING FACILITIES AREA, FTRI- 030 -PESTICIDE STORAGE FACILITY (MIXING), FTRI- 034 - IMPACT AREA PERIMETER SMALL ARM RANGES,

FTRI- 035 - NON- IMPACT AREA SMALL ARMS RANGES)

RFA

(FTRI- 002 - WHITSIDE C/D LANDFILL- CLOSED, FTRI- 007 - PCB STORAGE BUILDING 343, FTRI- 010 -PESTICIDE (2-4D) UST AT CAMP FUNSTON, FTRI- 012 - WASTE STORAGE DRMO SECONDARY AREA. FTRI- 013 - ABANDONED VOC TANKS NORTH OF IACH, FTRI- 016 - WASTE OIL AST- 3RD BATTERY, FTRI- 017 - WASTE OIL AST- 4TH BATTERY, FTRI- 041 - FURNITURE REPAIR SHOPS (3), FTRI- 045 -PHOTO AND PRINT PLANTS, FTRI- 046 - FRMR DS/GS Bldg 1693 Adj Areas, FTRI- 050 - PCB SPILL AREAS /TRANSFORMER SITES)

PA

(FTRI- 001 - CUSTER HILL SANITARY LANDFILL, FTRI- 014 - HOSPITAL INCINERATOR- IRWIN ACH, FTRI-019 - FORMER FIRE TRAINING AREA FFTA- MAAF, FTRI- 020 - INDUSTRIAL WASTEWATER SYSTEM (CUSTER HL), FTRI- 022 - FORMER WWTP & SLUDGE BEDS (ANCHOR), FTRI- 026 - RANGE COMPLEX WW LAGOONS, FTRI- 028 - FMR FIRE TRAINING AREA CAMP FUNSTON, FTRI- 029 - OLD INCINERATOR SITE SE- CAMP FUNSTON, FTRI- 036 - SOUTHEAST FUNSTON LANDFILL (ANCHOR), FTRI- 038 -

FORSYTH LANDFILL(S))

ISC (FTRI-018 - FIRE TRAINING AREA FACILITY (892)) DES (FTRI- 008 - PCB STORAGE CONEX (BUILDING 348))

1990

DES (FTRI-013 - ABANDONED VOC TANKS NORTH OF IACH)

1991 ISC

(FTRI- 059 - REMOVE USTS, FTRI- 061 - FORMER GAS SERVICE STATION BLDG 354, FTRI- 063 - FMR BLDG 1044 DISPENSING STATION, FTRI- 064 - FMR BLDG 1090 DISPENSING STATION, FTRI- 065 - FMR BLDG 1190 DISPENSING STATION, FTRI- 066 - FMR BLDG 1245 DISPENSING STATION, FTRI- 067 - FMR BLDG 1539 DISPENSING STATION, FTRI- 068 - FMR BLDG 1637 DISPENSING STATION, FTRI- 069 - FMR BLDG 1890 DISPENSING STATION, FTRI- 070 - FMR BLDG 2341 DISPENSING STATION)

(FTRI-059 - REMOVE USTS)

IMP(C) (FTRI-057 - 6200 AREA FUEL OIL LINE (ANCHOR)) PA

INV (FTRI- 064 - FMR BLDG 1090 DISPENSING STATION, FTRI- 065 - FMR BLDG 1190 DISPENSING STATION)

DES (FTRI-010 - PESTICIDE (2-4D) UST AT CAMP FUNSTON)

IRA (FTRI- 066 - FMR BLDG 1245 DISPENSING STATION, FTRI- 067 - FMR BLDG 1539 DISPENSING STATION,

FTRI- 068 - FMR BLDG 1637 DISPENSING STATION, FTRI- 069 - FMR BLDG 1890 DISPENSING STATION)

CMI(C) (FTRI-008 - PCB STORAGE CONEX (BUILDING 348))

IRP Schedule

1992 ISC (FTRI- 054 - CUSTER HILL PX USTS BLDG 5320, FTRI- 072 - BLDG 8340 FUEL OIL UST, FTRI- 073 - BLDG 8360 FUEL OIL UST) **IRA** (FTRI- 054 - CUSTER HILL PX USTS BLDG 5320, FTRI- 061 - FORMER GAS SERVICE STATION BLDG 354) (FTRI- 010 - PESTICIDE (2-4D) UST AT CAMP FUNSTON, FTRI- 013 - ABANDONED VOC TANKS NORTH CMI(C) OF IACH, FTRI-049 - MERCURY CONTAMINATION AREAS) (FTRI-049 - MERCURY CONTAMINATION AREAS) **RFA** 1993 (FTRI- 005 - CUSTER HILL ROAD RUBBLE DUMP, FTRI- 006 - DRMO STORAGE AREA, FTRI- 011 - CAMP PA FUNSTON GW DETECTIONS, FTRI- 015 - FORMER DRMO LOCATION (DRMO AREA 2), FTRI- 031 - 354 AREA SOLVENT DETECTIONS, FTRI- 037 - OLD WHITSIDE INCINERATOR AREA. FTRI- 040 - FORMER OIL TESTING LAB (ANCHOR), FTRI- 043 - FORMER GAS STATIONS/GARAGES, FTRI- 044 - FORMER ASPHALT PLANT (NEAR BLDG 354), FTRI-047 - FORMER LIVESTOCK DIPPING FACILITY, FTRI-055 -MILFORD LAKE CAMPGROUNDMARINA WELLS) ISC (FTRI-053 - POL TANK FARM, FTRI-060 - MAINPOST PX GAS STATION / 218) (FTRI- 002 - WHITSIDE C/D LANDFILL- CLOSED, FTRI- 012 - WASTE STORAGE DRMO SECONDARY CS AREA, FTRI- 039 - CONSOLIDATED MAINTENANCE FACILITY, FTRI- 041 - FURNITURE REPAIR SHOPS (3), FTRI- 045 - PHOTO AND PRINT PLANTS, FTRI- 046 - FRMR DS/GS Bldg 1693 Adj Areas, FTRI- 048 -FORMER PESTICIDES FACILITIES, FTRI- 050 - PCB SPILL AREAS /TRANSFORMER SITES, FTRI- 051 -BLDG. 727 WASTE PIT, FTRI- 052 - INACTIVE LANDFILLS - CAMP WHITSIDE) RI/FS (FTRI- 001 - CUSTER HILL SANITARY LANDFILL, FTRI- 028 - FMR FIRE TRAINING AREA CAMP FUNSTON, FTRI-032 - IMPACT ZONE) SI (FTRI- 004 - MAIN POST LANDFILL, FTRI- 006 - DRMO STORAGE AREA, FTRI- 015 - FORMER DRMO LOCATION (DRMO AREA 2), FTRI- 019 - FORMER FIRE TRAINING AREA FFTA- MAAF, FTRI- 020 -INDUSTRIAL WASTEWATER SYSTEM (CUSTER HL), FTRI- 026 - RANGE COMPLEX WW LAGOONS, FTRI-028 - FMR FIRE TRAINING AREA CAMP FUNSTON, FTRI- 029 - OLD INCINERATOR SITE SE-CAMP FUNSTON, FTRI- 033 - DOUTHIT RANGE, FTRI- 036 - SOUTHEAST FUNSTON LANDFILL (ANCHOR), FTRI-037 - OLD WHITSIDE INCINERATOR AREA, FTRI- 038 - FORSYTH LANDFILL(S), FTRI- 047 - FORMER LIVESTOCK DIPPING FACILITY, FTRI- 055 - MILFORD LAKE CAMPGROUNDMARINA WELLS) (FTRI- 042 - TAC VEHICLE MAINTENANCE SHOPS, FTRI- 048 - FORMER PESTICIDES FACILITIES, FTRI-**RFA** 051 - BLDG. 727 WASTE PIT, FTRI- 052 - INACTIVE LANDFILLS - CAMP WHITSIDE) 1994 (FTRI-056 - ABANDONED GASOLINE LINE) PA (FTRI- 030 - PESTICIDE STORAGE FACILITY (MIXING), FTRI- 035 - NON- IMPACT AREA SMALL ARMS IRA RANGES, FTRI- 060 - MAINPOST PX GAS STATION / 218) ISC (FTRI- 062 - TMP GAS STATION BLDG 388, FTRI- 071 - FMR BLDG 2345 DISPENSING STATION) (FTRI- 070 - FMR BLDG 2341 DISPENSING STATION, FTRI- 072 - BLDG 8340 FUEL OIL UST) INV (FTRI-028 - FMR FIRE TRAINING AREA CAMP FUNSTON) RA(C) 1995 CAP (FTRI- 064 - FMR BLDG 1090 DISPENSING STATION, FTRI- 065 - FMR BLDG 1190 DISPENSING STATION) INV (FTRI- 060 - MAINPOST PX GAS STATION / 218, FTRI- 061 - FORMER GAS SERVICE STATION BLDG 354. FTRI- 062 - TMP GAS STATION BLDG 388, FTRI- 066 - FMR BLDG 1245 DISPENSING STATION, FTRI- 067 - FMR BLDG 1539 DISPENSING STATION, FTRI- 068 - FMR BLDG 1637 DISPENSING STATION, FTRI- 069 - FMR BLDG 1890 DISPENSING STATION, FTRI- 071 - FMR BLDG 2345 DISPENSING STATION, FTRI- 073 - BLDG 8360 FUEL OIL UST) (FTRI- 011 - CAMP FUNSTON GW DETECTIONS, FTRI- 031 - 354 AREA SOLVENT DETECTIONS, FTRI- 044 SI - FORMER ASPHALT PLANT (NEAR BLDG 354), FTRI- 057 - 6200 AREA FUEL OIL LINE (ANCHOR)) (FTRI- 015 - FORMER DRMO LOCATION (DRMO AREA 2), FTRI- 037 - OLD WHITSIDE INCINERATOR RI/FS AREA, FTRI- 047 - FORMER LIVESTOCK DIPPING FACILITY, FTRI- 055 - MILFORD LAKE CAMPGROUND/MARINA WELLS) (FTRI- 064 - FMR BLDG 1090 DISPENSING STATION, FTRI- 065 - FMR BLDG 1190 DISPENSING STATION, IMP(C) FTRI- 071 - FMR BLDG 2345 DISPENSING STATION, FTRI- 072 - BLDG 8340 FUEL OIL UST, FTRI- 073 -

IRP Schedule

BLDG 8360 FUEL OIL UST) **IRA** (FTRI- 027 - DRY CLEANING FACILITIES AREA) RFI/CMS (FTRI- 002 - WHITSIDE C/D LANDFILL- CLOSED, FTRI- 012 - WASTE STORAGE DRMO SECONDARY AREA, FTRI- 041 - FURNITURE REPAIR SHOPS (3), FTRI- 045 - PHOTO AND PRINT PLANTS, FTRI- 046 -FRMR DS/GS Bldg 1693 Adj Areas, FTRI- 048 - FORMER PESTICIDES FACILITIES, FTRI- 052 - INACTIVE LANDFILLS - CAMP WHITSIDE) 1996 SI (FTRI- 056 - ABANDONED GASOLINE LINE) INV (FTRI- 053 - POL TANK FARM, FTRI- 063 - FMR BLDG 1044 DISPENSING STATION) IMP(C) (FTRI- 070 - FMR BLDG 2341 DISPENSING STATION) RI/FS (FTRI- 003 - SOUTHWEST FUNSTON LANDFILL) RD (FTRI-003 - SOUTHWEST FUNSTON LANDFILL) 1997 INV (FTRI- 054 - CUSTER HILL PX USTS BLDG 5320) CAP (FTRI- 062 - TMP GAS STATION BLDG 388, FTRI- 063 - FMR BLDG 1044 DISPENSING STATION, FTRI- 066 FMR BLDG 1245 DISPENSING STATION, FTRI- 067 - FMR BLDG 1539 DISPENSING STATION, FTRI- 068 FMR BLDG 1637 DISPENSING STATION, FTRI-069 - FMR BLDG 1890 DISPENSING STATION) (FTRI-003 - SOUTHWEST FUNSTON LANDFILL) RA(C) **IRA** (FTRI- 003 - SOUTHWEST FUNSTON LANDFILL, FTRI- 062 - TMP GAS STATION BLDG 388, FTRI- 063 -FMR BLDG 1044 DISPENSING STATION) RI/FS (FTRI- 004 - MAIN POST LANDFILL, FTRI- 030 - PESTICIDE STORAGE FACILITY (MIXING)) 1998 SI (FTRI- 009 - OB/OD GROUND (RANGE 16)) RI/FS (FTRI- 006 - DRMO STORAGE AREA, FTRI- 020 - INDUSTRIAL WASTEWATER SYSTEM (CUSTER HL)) (FTRI-050 - PCB SPILL AREAS /TRANSFORMER SITES, FTRI-051 - BLDG. 727 WASTE PIT) RFI/CMS 2000 RI/FS (FTRI- 035 - NON- IMPACT AREA SMALL ARMS RANGES) **IRA** (FTRI- 029 - OLD INCINERATOR SITE SE- CAMP FUNSTON) 2001 **IRA** (FTRI- 036 - SOUTHEAST FUNSTON LANDFILL (ANCHOR), FTRI- 038 - FORSYTH LANDFILL(S)) PA (FTRI- 074 - WWI INCINERATOR, NW CAMP FUNSTON) (FTRI-074 - WWI INCINERATOR, NW CAMP FUNSTON) SI RI/FS (FTRI-038 - FORSYTH LANDFILL(S)) 2003 (FTRI-019 - FORMER FIRE TRAINING AREA FFTA-MAAF) IRA RI/FS (FTRI-029 - OLD INCINERATOR SITE SE-CAMP FUNSTON) 2004 RIÆS (FTRI-009 - OB/OD GROUND (RANGE 16)) 2005 (FTRI- 011 - CAMP FUNSTON GW DETECTIONS, FTRI- 019 - FORMER FIRE TRAINING AREA FFTA- MAAF) RIFS CAP (FTRI-053 - POL TANK FARM) (FTRI- 011 - CAMP FUNSTON GW DETECTIONS, FTRI- 062 - TMP GAS STATION BLDG 388, FTRI- 063 -LTM FMR BLDG 1044 DISPENSING STATION, FTRI- 066 - FMR BLDG 1245 DISPENSING STATION, FTRI- 068 -FMR BLDG 1637 DISPENSING STATION) 2006 RI/FS (FTRI-031 - 354 AREA SOLVENT DETECTIONS)

IRP Schedule

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: 201006

NPL Deletion Date:

Schedule for Next Five- Year Review:

N/A

Estimated Completion Date of IRP at Installation (including LTM phase): 202709

FORT RILEY IRP Schedule

							= phase i	
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 003	SOUTHWEST FUNSTON LANDFILL	PA						
		SI						
		RI/FS						
		RD						
		IRA						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 009	OB/OD GROUND (RANGE 16)	PA						
		SI						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 019	FORMER FIRE TRAINING AREA	PA						
	FFTA- MAAF	SI						
		RI/FS						
		IRA						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 027	DRY CLEANING FACILITIES AREA	PA						
		SI						
		RI/FS						
		RD						
		IRA						
		RA(C)	77					
		RA(O)						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 030	PESTICIDE STORAGE FACILITY	PA	1 100	1 103	1110		1112	1 113
	(MIXING)	SI						
		RI/FS						
		IRA						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 031	354 AREA SOLVENT DETECTIONS	PA	1 100	1103			1112	1113
		SI						
		RI/FS						
		LTM						
		L I IVI	Terror District					

FORT RILEY IRP Schedule

SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13+
FTRI- 036	SOUTHEAST FUNSTON LANDFILL	PA						
	(ANCHOR)	SI						
		RI/FS						
		IRA						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13-
FTRI- 038	FORSYTH LANDFILL(S)	PA						
		SI						
		RI/FS						
		IRA						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 040	FTRI- 040 FORMER OIL TESTING LAB (ANCHOR)	PA						
	(ANCHOR)	LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 047	FORMER LIVESTOCK DIPPING FACILITY	PA						
	I ACIEIT	SI						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
FTRI- 056	ABANDONED GASOLINE LINE	PA						
		SI						
		RI/FS						
		IRA						
SITE ID FTRI- 057	SITE NAME 6200 AREA FUEL OIL LINE	PHASE	FY08	FY09	FY10	FY11	FY12	FY13
F I KI- 03/	(ANCHOR)							
		SI						
		RI/FS						
		IRA						

IRP Costs

Total Funding Prior Funding	through FY 2004: \$63,841.	0 K		
FY	Phase	Site ID	Obligations	FY Total
2005	· LTM	FTRI- 003	\$49.0 K	\$2,076.4 K
	•	FTRI- 009	\$224.2 K	
		FTRI- 011	\$21.0 K	
		FTRI- 022	\$14.1 K	
		FTRI- 040	\$83.2 K	
•		FTRI- 047	\$40.1 K	
	RAB/TAPP	RAB/TAPP	\$1.4 K	
	RD	FTRI- 019	\$46.6 K	•
	RI	FTRI- 019	\$90.0 K	
		FTRI- 027	\$981.4 K	
		FTRI- 031	\$79.0 K	
		FTRI- 036	\$68.0 K	
		FTRI- 053	\$15.0 K	
		FTRI- 056	\$22.0 K	
		FTRI- 057	\$341.4 K	
2006	LTM _.	FTRI- 003	\$163.0 K	\$2,189.0 K
		FTRI- 009	\$140.0 K	
		FTRI- 019	\$207.0 K	
		FTRI- 022	\$5.0 K	
		FTRI- 030	\$20.0 K	
		FTRI- 031	\$25.0 K	
•	RAB/TAPP	RAB/TAPP	\$3.0 K	
•	RD .	FTRI- 031	\$10.0 K	
	RI	FTRI- 027	\$458.0 K	
		FTRI- 031	\$74.0 K	
		FTRI- 036	\$12.0 K	
		FTRI- 056	\$386.0 K	
		FTRI- 057	\$686.0 K	
TOTAL PRIO		N.		
Current Requi	rements	•		
FY	Phase	Site ID	Requirements	FY Total
2007	LTM	FTRI- 003	\$123.0 K	\$1,095.0 K
		FTRI- 009	\$91.0 K	
		FTRI- 019	\$65.0 K	
		FTRI- 022	\$25.0 K	
		FTRI- 031	, \$81.0 K	•
	RD	FTRI- 027	\$2.0 K	
	RI/FS	FTRI- 027	\$121.0 K	
		FTRI- 036	\$40.0 K	
		FTRI- 056	\$140.0 K	

FTRI- 057

\$407.0 K

TOTAL CURRENT REQUIREMENTS:

\$1,095.0 K

TOTAL FUTURE REQUIREMENTS:

\$5,482.0 K

TOTAL PROGRAM COST:

\$74,683.4 K

Required Cost- to- Complete

SITE ID	SITE NAME	Phase	FY08	FY09	FY10	FY11	FY12	FY13	FY14	Out Yrs	Site Total	Description of Work
FTRI- 003	SOUTHWEST FUNSTON	LTM	338	88	128	102	374	244	306	186	1766	Monitoring, System Water- VOCs; Long-
	LANDFILL											term Operation
FTRI- 009	OB/OD GROUND (RANGE 16)	LTM	102	102	102	102				264	672	
FTRI- 019	FORMER FIRE TRAINING AREA	LTM	71	71	58	100					300	Monitoring, System Water- VOCs
	FFTA- MAAF											
FTRI- 027	DRY CLEANING	RI/FS	10								10	Remedial Investigation
	FACILITIES AREA	RD	100		en:						100	Remedial Design
		RA(C)		94	160			-			254	Injection Wells, Consolidated
		RA(O)			74	207					281	Injection Wells, Consolidated
		LTM					99	244		146	489	Monitoring, System Water- VOCs
FTRI- 030	PESTICIDE STORAGE FACILITY	LTM		80			20				100	
	(MIXING)											
FTRĮ- 031	354 AREA SOLVENT DETECTIONS	LTM	79	79	99	50	40					Monitoring, System Water- VOCs
FTRI- 036	SOUTHEAST FUNSTON LANDFILL	RIÆS	64		23	58		•			145	In Situ Biodegradation (Saturated Zone), Direct Push
FTRI- 040	(ANCHOR) FORMER OIL TESTING LAB	LTM	50								50	In Situ Biodegradation (Saturated Zone),
	(ANCHOR)	•										Direct Push
FTRI- 047	FORMER LIVESTOCK	LTM	100								100	Injection Wells, Unconsolidated
	DIPPING FACILITY											
FTRI- 056	ABANDONED GASOLINE LINE	RI/FS			30						30	Site Close Out Documentation
		IRA	35	20							55	Monitoring, System Water- Fuels
FTRI- 057	6200 AREA FUEL OIL LINE (ANCHOR)	RI/FS				20					20	Site Close Out Documentation
		IRA	310	232	221						763	Free Product Removal, Mechanical
Totals			1259	766	895	639	533	488	306	596	5482	

Programmed Cost- to- Complete

SITE ID	SITE NAME	Phase	Start Date		FY08	FY09	FY10	FY11	FY12	FY13	FY14	Out Yrs	Site Total	Description of Work
FTRI- 003	SOUTHWEST FUNSTON LANDFILL	LTM	199709	202709	338	88	128	102	374	244	306	186	1766	Monitoring, System Water- VOCs; Long- term Operation
FTRI- 009	OB/OD GROUND (RANGE 16)			202709		102	102	102				264	672	Monitoring, System Water- VOCs
FTRI- 019	FORMER FIRE TRAINING AREA FFTA-	LTM	200510	201109	71	71	58	100					300	Monitoring, System Water- VOCs
FTRI-	MAAF DRY	RI/FS	199106	200803	10								10	Remedial
027	CLEANING FACILITIES	RD	200804	200809	100								100	Investigation Remedial Design
	AREA		1	201006	100	94	160						254	Injection Wells, Consolidated
		RA(O)	201007	201109			74	207					281	Injection Wells, Consolidated
;		LTM	201110	201609			,		99	244		146	489	Monitoring, System Water- VOCs
FTRI- 030	PESTICIDE STORAGE FACILITY (MIXING)	LTM	200201	202209		80	,	ı	20				100	Monitoring, System Soil- Pesticides
FTRI- 031	354 AREA SOLVENT DETECTIONS			201209	79	79	99	50	40				347	Monitoring, System Water- VOCs
FTRI- 036	SOUTHEAST FUNSTON LANDFILL (ANCHOR)	RI/FS	199307	201010	64		23	58					145	In Situ Biodegradation (Saturated Zone), Direct Push
FTRI- 040	FORMER OIL TESTING LAB (ANCHOR)	LTM	200510	200809	50								50	In Situ Biodegradation (Saturated Zone), Direct Push
FTRI- 047	FORMER LIVESTOCK DIPPING	LTM	200510	200809	100								100	Injection Wells, Unconsolidated
FTRI-	FACILITY ABANDONED	RI/FS	199803	201009			30						30	Site Close Out
056	GASOLINE	ID A	200600	200810	25									Documentation
	LINE	IRA	200609	200810	35	20							,55 ,	Monitoring, System Water- Fuels
FTRI- 057	6200 AREA FUEL OIL	RI/FS	199606	201109				20						Site Close Out Documentation
	LINE (ANCHOR)	IRA	199601	201209	310	232	221				,		763	Free Product Removal, Mechanical
Totals					1259	766	895	639	533	488	306	596	5482	

FORT RILEY

Army Defense Environmental Restoration Program
Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database- Restoration (AEDB-R) Sites/RC Sites:

4/2

Installation Site Types with Future and/or Underway Phases

1 Landfill

(FTRI- 003- R- 01)

1 Small Arms Range

(FTRI-001-R-02)

Most Widespread Contaminants of Concern

Munitions and explosives of concern, Munitions constituents

Media of Concern

Groundwater, Soil

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

Site ID

Site Name

Action Rer

Remedy

FY

Cost

N/A

Total Environmental Restoration, Army (ER,A) Funding

Prior Funding:

\$291.7 K

Current Requirements:

\$1,236.1 K

Future Requirements:

\$4,274.0 K

Duration of MMRP

Date of MMRP Inception: 200303

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

201609/201609

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

204609

MMRP Contamination Assessment

Contamination Assessment Overview

The Military Munitions Response Program (MMRP) manages the environmental and health issues associated with munitions constituents (MC); and munitions and explosives of concern (MEC). In 2000, Fort Riley completed the Advance Range Survey followed by an Active/Inactive (AI) Range Inventory in 2002. The Closed, Transferring, and Transferred Range/Site Inventory Report was completed in 2003. That report identified the Sherman Heights Small Arms Range (SHSAR) and the Southeast Funston Landfill Incinerator Site as inactive ranges requiring further investigation. The Historical Records Review on these two sites was completed in April 2005. Site Inspection Work Plan was completed July 1, 2005 and the Site Inspection was initiated in 2005.

There is a low potential for MEC, MC or UXO at the two sites. Sherman Heights is a small arms range that is wholly contained on the installation. Lead- contaminated soil was removed from Sherman Heights (Colyer Manor) in 1994 under CERCLA. The Southeast Funston Landfill Incinerator Site was transferred to the Kansas Department of Wildlife and Parks (KDWP). Lead-contaminated soil and unexploded ordnance were removed from the Southeast Funston Landfill Incinerator Site in 1999. While the possibility exists for UXO, there is no supporting evidence for the need for further action at this time.

There is a third site at Forsyth Landfills along the Republican River that has been evaluated and established as another site. The site contains mainly inert munitions that eroded out of 1950s-1960s era landfills. During the 1993 flood, the edge of the landfill eroded and some munitions materials washed into the Republican River. There have been three occasions where UXO removal or blow- in- place has been required. The site is on the installation boundary and can be accessed by the general public in a relatively uncontrolled manner.

Cleanup Exit Strategy

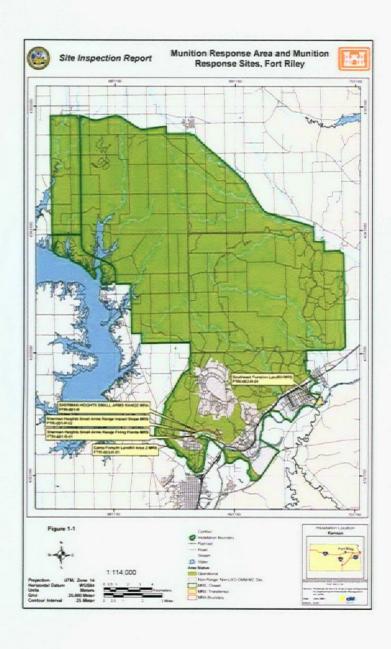
See individual sites for each exit strategy.

MMRP Previous Studies

	Title	Author	Date
1993			
	Action Memorandum for Removal Action Sensitive-		DEC- 1993
	Receptor Lead Site - Colyer Manor Area, Fort Riley		
	Military Installation, Fort Riley, Kansas		
1994			
	Draft Final Project Report for Rapid Response Removal		JUN- 1994
	of Contaminated Soils Pesticide Storage Facility and		
	Colyer Manor Sites, Fort Riley, Kansas (5 Volumes),		
2000			
	Action Memorandum and Responsiveness Summary		APR- 2000
	Removal Action at Southeast Funston Landfill and		
	Incinerator Area, Fort Riley, Kansas		
	Removal Action Report Landfill Cover Repair and		APR- 2000
	Incinerator Area Contaminated Material Removal		4
	Southeast Funston Landfill and Incinerator Area Fort		1
	Riley, Kansas		
2002			
	US Army Active/Inactive (A/I) Range Inventory Range		MAR- 2002
	Inventory Binder Fort Riley, Kansas		
2003			
	Closed, Transferring, and Transferred Range/Site		OCT- 2003
	Inventory Report Fort Riley, Kansas		33. 233
2005		·	· ·
	Stakeholder Final of the Military Munitions Response		APR- 2005
•	Program Historical Records Review Fort Riley, Kansas		711 17 2000
		·	

MMRP Installation Map(s)

FORT RILEY MMRP SITE MAP Map of MMRP Site locations



FORT RILEY

Military Munitions Response Program
Site Descriptions

FTRI- 001- R- 02 SHSAR Impact Slope

STATUS

Regulatory Driver:

CERCLA

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of

concerr

Media of Concern: Soil

Phases	Start	End
PA	200303	200310
SI	200406	200605
RI/FS	200910	201009
RD	201410	201509
RA(C)	201510	201609
LTM	201610	204609

RIP Date: N/A RC Date: 201609

SITE DESCRIPTION

The SHSAR MRA is located near the center of FTRI, northeast of Camp Forsyth and is bordered by Sherman Heights to the north and the Republican River to the south. The SHSAR was reportedly operational from the 1880s until about 1945. The SHSAR complex was used primarily as a practice firing range for small arms and machine guns. The ranges that comprised the SHSAR included pistol, 9 millimeter (mm), .22 caliber, .38 caliber, small caliber qualification anti- tank and .22 caliber anti- aircraft machine gun, .45 caliber, and 4.2- inch mortar ranges. The ranges covered approximately 198.93 acres and overlapped to form an arc shaped area north of the Republican River. Firing was to the north toward Sherman Heights. This site is the impact area of the Sherman Heights Small Arms Range.

CLEANUP/EXIT STRATEGY

Planned RI/FS will include MEC Site Characterization and Removal Assessment.

FTRI- 003- R- 01 Camp Forsyth Landfill Area 2 (038)



Regulatory Driver:

CERCLA

MRSPP Score: 04

Contaminants of Concern: Munitions and explosives of

concern. Munitions constituents

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200303	200310
SI	200406	200605
RI/FS	201110	201209
RD	201410	201509
RA(C)	201510	201609
LTM	201610	204609

RIP Date: N/A RC Date: 201609

SITE DESCRIPTION

The Camp Forsyth Former Landfill Area 2 (hereinafter referred to as Area 2) originally covered approximately 26.70 acres and lies between Camp Forsyth and the Republican River. Area 2 is located in a floodplain of the Republican River known as the Republican Flats, and is adjacent to a section of the Republican River extending 1500 feet along the northern bank. The northern 300 feet of the bank is vegetated and covered with concrete rubble. The remainder of the bank extending approximately 1200 feet downstream to the next channel bend is undergoing active erosion, with banks characterized by steep vertical walls in the top 10 feet of the bank which then falls off to approximately a 45- degree slope for the lower 10 feet of bank, which has minimal vegetation present.

Area 2 was identified as a landfill by the USEPA Environmental Monitoring Systems Laboratory in November 1983. Aerial photographs taken in 1950, 1956, and 1957 show evidence of trench-type land filling. Photographs taken later in 1962, 1969 and 1976 show no evidence of landfill activity. Inspections conducted along the banks of the Republican River adjacent to Area 2 identified miscellaneous debris protruding from the soil.

Regional flooding in the summer of 1993 caused significant erosion of the banks of the Republican River. In this flood, the Republican River overflowed its banks for a period of approximately 30 days. During the spring of 1994, a sand bar in the Republican River approximately 700 feet downstream from Area 2 was found to contain significant quantities of unexploded ordnance (UXO). The ordnance consisted of approximately two hundred 3.5- and 2.36- inch rockets, M1 mines and a variety of small arms ammunition.

The Fort Riley Explosive Ordnance Disposal Detachment detonated the rockets and mines in- place during the summer of 1994, and the remaining ordnance was relocated to the Fort Riley Explosive Ordnance Disposal Range and properly destroyed.

.EANUPÆXIT STRATEGY

MEC and MC regularly exposed by river action. Some MEC and MC may have been carried by the river off- post. Need to accelerate cleanup for public safety.

Site ID	Site Name	NFA Date	Documentation
FTRI- 001- R-	SHERMAN HEIGHTS SMALL ARMS	200605	Made RC after Site Investigation based on no MEC or MC Contamination.
FTRI- 002- R- 01	SOUTHEAST FUNSTON LANDFILL	200605	Made RC after Site Investigation based on no MEC or MC Contamination.

MMRP Schedule

Date of MMRP Inception: 200303

Past Phase Completion Milestones

2004

PΑ

(FTRI- 001- R- 01 - SHERMAN HEIGHTS SMALL ARMS, FTRI- 001- R- 02 - SHSAR Impact Slope, FTRI- 002-

R-01 - SOUTHEAST FUNSTON LANDFILL, FTRI-003- R-01 - Camp Forsyth Landfill Area 2 (038))

2006

SI

(FTRI-001- R-01 - SHERMAN HEIGHTS SMALL ARMS, FTRI-001- R-02 - SHSAR Impact Slope, FTRI-002-

R- 01 - SOUTHEAST FUNSTON LANDFILL, FTRI- 003- R- 01 - Camp Forsyth Landfill Area 2 (038))

Additional Past Phase Completion Milestones

2003

• Preliminary Assessment, Sites FTRI- 001- R- 01, FTRI- 002- R- 01, FTRI- 003- R- 01, October

2005

Site Investigation, Sites FTRI- 001- R- 01, FTRI- 002- R- 01, FTRI- 003- R- 01, December

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

NPL Deletion Date:

N/A

Schedule for Next Five- Year Review:

N/A

Estimated Completion Date of MMRP at Installation (including LTM phase): 204609

FORT RILEY MMRP Schedule

							= phase u	inderway
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13+
FTRI- 001- R- 02	SHSAR Impact Slope	PA						
		SI						
		RI/FS						
		RD						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY08	FY09	FY10	FY11	FY12	FY13+
FTRI- 003- R- 01	Camp Forsyth Landfill Area 2 (038)	PA						
		SI						
		RI/FS						Sec.
		RD						THE STATE OF
		RA(C)						
		LTM						

Total Funding through FY 2004:

\$268.7 K

Prior Funding

FY	Phase	Site ID	Obligations	FY Total
2005	SI	MMRP Sites	\$17.0 K	\$17.0 K
2006	SI	FTRI- 001- R- 01	\$3.0 K	\$6.0 K
		FTRI- 003- R- 01	\$3.0 K	

TOTAL PRIOR FUNDING:

\$291.7 K

Current Requirements

Current Re	equirements	·		
FY	Phase	Site ID	Requirements	FY Total
2007	RI	FTRI- 001- R- 02	\$600.0 K	\$1,236.1 K
		FTRI- 003- R- 01	\$616.1 K	
	SI	FTRI- 003- R- 01	\$20.0 K	

TOTAL CURRENT REQUIREMENTS:

\$1,236.1 K

TOTAL FUTURE REQUIREMENTS:

\$4,274.0 K

TOTAL PROGRAM COST:

\$5,801.8 K

Required Cost- to- Complete

SITE ID	SITE NAME	Phase	FY08	FY09	FY10	FY11	FY12	FY13	FY14	Ou Yrs		Description of Work
FTRI- 001- R- 02	SHSAR Impact Slope	RI/FS			1251						1251	Feasibility Study; Groundwater Monitoring Well, Unconsolidated; MEC Site Characterization and Removal Assessment; Remedial Investigation
		RD								23	23	Remedial Design
		RA(C)		·						762	762	Excavation, No Sidewall Protection; MEC Institutional Controls; MEC Removal Action; Off- site Transportation and Landfill Disposal, Hazardous Solids with Stabilization
		LTM								423	423	MEC Monitoring, 2 Events; MEC Monitoring, 2 Events; MEC Monitoring, 2 Events
	Camp Forsyth Landfill Area 2 (038)	RIÆS			1122							Feasibility Study; Groundwater Monitoring Well, Unconsolidated; MEC Site Characterization and Removal Assessment; Remedial Investigation
		RD								9	9	Remedial Design
		RA(C)								261		Excavation, No Sidewall Protection; MEC Institutional Controls; MEC Removal Action; Off- site Transportation and Landfill Disposal, Hazardous Solids with Stabilization
		LTM			·					423	423	MEC Monitoring, 2 Events; MEC Monitoring, 2 Events; MEC Monitoring, 2 Events
Totals					2373					190	1 4274	

Programmed Cost- to- Complete

SITE ID	SITE NAME	Phase	Start Date	End Date	FY08	FY09	FY10	FY11	FY12	FY13	FY14	Out Yrs	Site Total	Description of Work
FTRI- 001- R- 02	SHSAR Impact Slope	RI/FS	200910	201009			1251						1251	Feasibility Study; Groundwater Monitoring Well, Unconsolidated; MEC Site Characterization and Removal Assessment; Remedial
		RD	201410	201509								23	23	Investigation Remedial Design
		RA(C)	201510	201609								762		Excavation, No Sidewall Protection; MEC Institutional Controls; MEC Removal Action; Off- site Transportation and Landfill Disposal, Hazardous Solids with Stabilization
				204609								423	423	MEC Monitoring, 2 Events; MEC Monitoring, 2 Events; MEC Monitoring, 2 Events; MEC
FTRI- 003- R- 01	Camp Forsyth Landfill Area 2 (038)		201110						1122				1122	Groundwater Monitoring Well, Unconsolidated; MEC Site Characterization and Removal Assessment; Remedial Investigation
		RD	201410	201509								 9		Remedial Design
			201510				٠					261		Excavation, No Sidewall Protection; MEC Institutional Controls; MEC Removal Action; Off- site Transportation and Landfill Disposal, Hazardous Solids with Stabilization
		LTM	201610	204609								423	:	MEC Monitoring, 2 Events; MEC Monitoring, 2 Events; MEC Monitoring, 2 Events

Programmed Cost- to- Complete

SITE ID	SITE NAME	Phase	Start Date	End Date	FY08	FY09	FY10	FY11	FY12	FY13	FY14	 Out ∕rs	Site Total	Description of Work
Totals							1251		1122			901	4274	

Community Involvement

Technical Review Committee (TRC): 199201

Restoration Advisory Board (RAB): RAB established 199709

RAB Adjournment Date: N/A RAB Adjournment Reason: None

Additional Community Involvement Information

Formation of Fort Riley's Restoration Advisory Board (RAB):

Fort Riley held its orientation meeting September 30, 1997 for members of the community who were interested in participating on a RAB. Adjacent landowners, local environmental groups, local college professors, mayors and other public officials, members of the local Chambers of Commerce, and select individuals recommended to the Directorate of Environment and Safety were invited to the orientation meeting by direct mail. Newspaper advertisements and television and radio announcements were additional methods used to announce the formation of Fort Riley's RAB.

At the orientation meeting, interested community members were asked to complete an application, a biographic information form and a demographic information form, if they had not completed and returned an application to Fort Riley before the meeting. A Community Co- Chair was elected by community representatives in attendance. Due to the number of applications received at that time, everyone that applied to be a member of the RAB served. Approximately 20 people attended the orientation meeting.

RAB Membership:

The current members include representatives from the Fort Riley military community, local environmental businesses, private business, Unified School District 475, Geary County Extension Office, Riley County Planning Board, Geary County (Commissioner), Clay County (Commissioner), Kansas State University, city of Ogden (former Mayor and Mayor), USEPA, and KDHE.

RAB Activities:

In July 2004, the members provided public comment on the Former Fire Training Area (FTRI- 019) PP. The repository was eliminated in Clay Center, KS at Clay Center's request.

In 2005, a new Community Involvement Plan was developed. The members also provided public comment on the 354 Area Solvent Detections (FTRI- 031) Proposed Plan.

Over the next year, RAB members will continue to gain knowledge of Fort Riley's sites and regulatory issues; review documents; provide technical advice; and participate in formal public comment period activities.

The RAB meets on an as needed basis or once per year in January.

The annual meeting was held on March 28, 2007. Another meeting will be held late in 2007 for the public meeting for the Proposed Plan for the Dry Cleaning Facilities Area.

Administrative Record is located at

407 Pershing Court Ft. Riley, KS

Information Repository is located at Dorothy Bramlage Public Library Junction City, KS

Manhattan Public Library Manhattan, KS

Community Involvement

Current Technical Assistance for Public Participation (TAPP):

TAPP Title: N/A

Potential TAPP: N/A

FY2007

FORT RILEY

Army Defense Environmental Restoration Program
Installation Action Plan

Printed 13 November 2007