FY2015

FORT SHAFTER

Army Defense Environmental Restoration Program

Installation Action Plan

(revision 2)

Printed 18 December 2015

Table of Contents

Statement Of Purpose	1
Acronyms	2
Installation Information	4
5-Year / Periodic Review Summary	5
Land Use Control (LUC) Summary	6
Cleanup Program Summary	9
Installation Restoration Program	11
IRP Summary	12
IRP Contamination Assessment	14
IRP Previous Studies	15
Installation Restoration Program Site Descriptions	18
FTSHF-46 FORMER FUEL STATION NEAR USARC, BLD 1537	19
FTSHF-48 FORMER LAUNDRY FACILITY, FLATS	20
FTSHF-50 FORMER REPAIR SHOP, BLDG 1553	21
FTSHF-51 WASHRACK T-1539	22
FTSHF-52 FORMER WAREHOUSE (T1542)	23
Installation Restoration Program Site Closeout (No Further Action) Sites Summary	24
Installation Restoration Program Schedule	27
Installation Restoration Program Milestones	27
IRP Schedule Chart	29
Military Munitions Response Program	30
MMRP Summary	31
MMRP Contamination Assessment	32
MMRP Previous Studies	33
Military Munitions Response Program Site Descriptions	34
FTSHF-004-R-01 Rifle Range 1 (TD)	35
Military Munitions Response Program Site Closeout (No Further Action) Sites Summary	37
Military Munitions Response Program Schedule	38

Table of Contents

Military Munitions Response Program Milestones	38
MMRP Schedule Chart	39
Compliance Restoration	40
CR Summary	41
CR Contamination Assessment	42
CR Previous Studies	43
Compliance Restoration Site Descriptions	44
CCFS0007 Lead-Impacted Site-frm Skeet Range	45
Compliance Restoration Site Closeout (No Further Action) Sites Summary	46
CR Schedule	47
Compliance Restoration Milestones	47
CR Schedule Chart	48

Statement of Purpose

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

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

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

Acronyms

- AEDB-R Army Environmental Database- Restoration
 - AOC Area of Concern
 - CC Compliance-related Cleanup
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act
 - CR Compliance Restoration
 - CTT Closed, Transferred or Transferring
 - DD Decision Document
 - DERA Defense Environmental Restoration Account
 - DERP Defense Environmental Restoration Program
 - DMM Discarded Military Munitions
 - DoD Department of Defense
 - DU Decision Unit
 - EAL Environmental Action Level
 - ER,A Environmental Restoration, Army
 - FRA Final Remedial Action
 - FS Feasibility Study
 - FY Fiscal Year
 - HDOH Hawaii Department of Health
 - HRR Historical Records Review
 - IAP Installation Action Plan
 - IMP(C) Implementation Construction
 - IRA Interim Remedial Action
 - IRP Installation Restoration Program
 - IS Incremental Sampling
 - kg kilogram
 - KMR Kahauiki Military Reservation
 - LTM Long-Term Management
 - LUC Land Use Control
 - MC Munitions Constituents
 - MCL Maximum Contaminant Level
 - MD Munitions Debris
 - MEC Munitions and Explosives of Concern
 - MMRP Military Munitions Response Program
 - MR Munitions Response
 - NCO Noncommissioned Officer
 - NCP National Contingency Plan
 - NFA No Further Action
- NFRAP No Further Response Action Planned
 - NPL National Priorities List
 - O&M Operations and Maintenance
 - PA Preliminary Assessment
 - PAH Polycyclic Aromatic Hydrocarbon
 - PBA Performance-Based Acquisition
 - PCB Polychlorinated Biphenyl
 - POL Petroleum, Oil, and Lubricants

Acronyms

PRG	Preliminary Remediation Goal
RA	Remedial Action
RA(C)	Remedial Action - Construction
RAB	Restoration Advisory Board
RC	Response Complete
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SVOC	Semi-Volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TCE	Trichloroethylene
TCRA	Time-critical Removal Action
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USAEHA	US Army Environmental Hygiene Agency
USAG-HI	US Army Garrison, Hawaii
USARPAC	US Army Pacific Command
USATHAMA	US Army Toxic and Hazardous Materials Agency
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
	Unexploded Ordnance
VOC	Volatile Organic Compound

XRF X-Ray Fluorescence

Installation Information

Installation Locale

Installation Size (Acreage): 593 City: Honolulu County: Honolulu State: Hawaii Other Locale Information

Fort Shafter is located on the Island of Oahu, approximately three miles northwest of downtown Honolulu. The 593-acre base is divided into two areas: Shafter Flats and the main post. The main post is the older section of the base. The two areas are divided by the Moanalua Highway, which cuts through the installation at the H-1 interchange and was installed in the early-1960s.

Installation Mission

Fort Shafter's mission is to train, equip, and sustain Army forces in the Pacific Theater.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

USAEC

Regulator Participation

State

State of Hawaii Department of Health (HDOH)

National Priorities List (NPL) Status

FORT SHAFTER is not on the NPL

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

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

Installation Program Summaries

IRP

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

Affected Media of Concern: Soil

MMRP

Primary Contaminants of Concern: Metals, Munitions constituents (MC)

Affected Media of Concern: Soil

CR

Primary Contaminants of Concern: Metals

Affected Media of Concern: Soil

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY	
Complete	201406	201410	2015	
Planned	201910	201910	2020	

Last Completed 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
FTSHF-46, DD	FTSHF-46, FTSHF-48, FTSHF-50, FTSHF-51, FTSHF-52

Results Current LTM efforts are protective of HH and the environment.

Actions Continue LTM. Abandon monitoring wells.

Plans Continue LTM. Abandon monitoring wells.

Recommendations and Implementation Plans:

Current long-term management (LTM) efforts are protective of human health and the environment. Abandon monitoring wells.

Land Use Control (LUC) Summary

LUC Title: FTSHF-46 LUCs Site(s): FTSHF-46 ROD/DD Title: FTSHF-46, DD Location of LUC AEDB-R Site FTSHF-46 at Fort Shafter Flats, HI Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use Types of Engineering Controls: None Types of Institutional Controls: Restrictions on land use Date in Place: 200909 Modification Date: N/A Date Terminated: N/A Inspecting Organization: State Record of LUC: Master Plan or Equivalent Documentation Date: 200909 LUC Enforcement: Annual Inspections, 5 Year Reviews Contaminants: METALS, PETROLEUM HYDROCARBON Additional Information N/A LUC Title: FTSHF-48 LUCs Site(s): FTSHF-48 ROD/DD Title: FTSHF-46, DD Location of LUC AEDB-R site FTSHF-48 at Fort Shafter, HI. Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use Types of Engineering Controls: Fences Types of Institutional Controls: Restrictions on land use Date in Place: 200909 Modification Date: N/A Date Terminated: N/A Inspecting Organization: State Record of LUC: Master Plan or Equivalent Documentation Date: 200909 LUC Enforcement: Annual Inspections, 5 Year Reviews Contaminants: METALS, PCBs, PESTICIDES Additional Information N/A

LUC Title: FTSHF-50 LUCs Site(s): FTSHF-50

Land Use Control (LUC) Summary

ROD/DD Title: FTSHF-46, DD Location of LUC AEDB-R site FTSHF-50 at Fort Shafter Flats, HI. Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use Types of Engineering Controls: None Types of Institutional Controls: Restrictions on land use Date in Place: 200909 Modification Date: N/A Date Terminated: N/A Inspecting Organization: State Record of LUC: Master Plan or Equivalent Documentation Date: 200909 LUC Enforcement: Annual Inspections, 5 Year Reviews Contaminants: METALS Additional Information N/A LUC Title: FTSHF-51 LUCs Site(s): FTSHF-51 ROD/DD Title: FTSHF-46, DD Location of LUC AEDB-R site FTSHF-51 at Fort Shafter Flats, HI Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use Types of Engineering Controls: None Types of Institutional Controls: Restrictions on land use Date in Place: 200909 Modification Date: N/A Date Terminated: N/A Inspecting Organization: State Record of LUC: Master Plan or Equivalent Documentation Date: 200909 LUC Enforcement: Annual Inspections, 5 Year Reviews Contaminants: METALS Additional Information N/A LUC Title: FTSHF-52 LUCs

Site(s): FTSHF-52 ROD/DD Title: FTSHF-46, DD Location of LUC

Land Use Control (LUC) Summary

AEDB-R site FTSHF-52 at Fort Shafter Flats, HI Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use Types of Engineering Controls: None Types of Institutional Controls: Restrictions on land use Date in Place: 200909 Modification Date: N/A Date Terminated: N/A Inspecting Organization: State Record of LUC: Master Plan or Equivalent Documentation Date: 200909 LUC Enforcement: Annual Inspections, 5 Year Reviews Contaminants: METALS, PAH Additional Information N/A

Installation Historic Activity

Fort Shafter is an active military installation that is part of the US Army Garrison Hawaii (USAG-HI) footprint. The installation was established in 1907 and serves as the US Army, Pacific Command (USARPAC) Headquarters. It is the oldest Army installation in Hawaii. The land in the area surrounding this installation is used as residential, park, school, business/commercial, light industrial and forest reserve.

Fort Shafter is situated in an area of approximately 1,438 acres formerly known as Kahauiki, which extended from sea level to 1,440 feet. The area was part of the Hawaiian Crown Lands that were ceded to the US government after annexation. The earliest recorded uses of Kahauiki were reported to indicate the presence of irrigated agricultural terraces fed by the Kahauiki Stream extending inland from the sea for about one-half mile.

An earthen-banked fishpond named Weli was a resource of Kahauiki and appeared to have received a portion of freshwater from Kahauiki Stream (McCallister, 1933:91). This man-made prehistoric structure was filled with dredge soil from construction of the Keehi seaplane harbor during the 1940s and is now located under the area seaward of Loop Road at Shafter Flats known as the Motor Park (Thompson, 1983:99).

The series of native Hawaiian land reforms adopted by Kamehameha III during the mid-1800s saw no Kuleana registrations or awards for cultivated lands in Kahauiki, which became Crown Lands. Most of this land was subsequently leased to the Dowsett Estate, who then subleased it to Star Dairy Company. The higher elevation lands that comprised the dairy were reportedly used for grazing cattle and the lower elevation lands for raising feed.

Following annexation in 1898, the Kahauiki Crown Lands were designated the Kahauiki Military Reservation (KMR). In 1902, all tenant leases were negotiated and completed; military construction began in 1905. In 1907, a portion of KMR was set aside and renamed Fort Shafter, and from 1907 to 1909, two areas were constructed consisting of the initial battalion cantonment at Palm Circle and Post Hospital (or old Tripler General Hospital), where the present noncommissioned officer (NCO) family housing area is serviced by Funston Loop.

In 1913, Fort Shafter was authorized to expand the original Palm Circle cantonment area, and construction was completed in December 1914. Construction consisted of a complete Regimental Post consisting of troop barracks, officer and NCO quarters, gun parks, and support facilities along the length of Wisser Road from the Shafter Bowling Alley to Shafter Patch Gate (Meeken, 1974:16).

In 1917, the Hawaiian Ordnance Depot was designated and formed in the area that included the high ground adjacent and north of the present Middle Street and east of King Street which overlooked the Kahauiki Stream and its wetlands to the west.

The depot served as a separate post within Fort Shafter with its own gate house, Post Headquarters (lost during H-1 Freeway construction), quarters along Montgomery Drive (the depot commander's quarters is currently T-305), a fire station, an officer's club (T-313), a series of warehouses served by railroad sidings (T-341 to T-347, T-434, T-435, T-438, T-441, and T-443), and barracks (now T-320, Headquarters 94th Army Air and Missile Defense Command), which became known as the Hawaii Arsenal Military Reservation at the end of 1918.

In October 1940, the Signal Corps area at Shafter Flats was initially occupied and consisted largely of warehouses, a Bachelor Officers Quarters, office buildings, and a photo lab. This area lies on a former tidal marsh area behind the old Weli fishpond which was covered with over one and a half million cubic yards of dredge fill to an average elevation of 12 feet above sea level.

Prior to 1949, much of the area seaward of King Street was cleared off and used as a storage area for the Signal Corps. By 1962, the Ordnance Corps was eliminated through the reorganization of the Army and the use of many of the standing structures was assigned to other commands. This area consists of the present-day 300-400 area, the Craft Shops and Child Care Center, the USARPAC Support Training Battalion Consolidated Motor Pool and Base Plant, and the Shafter Flats area.

Between 1956 and 1961, most of the 1914 Regimental Post barracks, offices, officer and NCO quarters, motor pool areas, and warehouse facilities were demolished and removed. After 1969, Parks Road was realigned and rerouted south of the Fourth Street intersection and extended to intersect with Chamberlain Road.

In 1984, the Palm Circle Historic District, which incorporates a majority of the original 1907 cantonment structures, was listed on the National Register of Historic Places, and in 1987 it was declared a National Historic Landmark.

Installation Historic Activity

References:

- McCallister, J. Gilbert, 1933, Archeology of Oahu. B.P. Bishop Museum Bulletin 104, Honolulu.
- Meeken, Stanley R., 1974, "A History of Fort Shafter, 1894-1974." Machine reproduced copy at Fort Shafter Library.
- Thompson, Erwin N., 1983, History of the US Army Corps of Engineers in the Pacific 1905-1980.
- Watanabe, Farley K., Archeologist, US Army Corps of Engineers, Pacific Ocean Division, June 1993, Verbal Conversation.

Installation Program Cleanup Progress

IRP	
Prior Year Progress:	LTM was conducted at FTSHF-46, FTSHF-48, FTSHF-50, FTSHF-51, and FTSHF-52. A five-year review was completed in October 2014.
Future Plan of Action: MMRP	LTM will continue for FTSHF-46, FTSHF-48, FTSHF-50, FTSHF-51, and FTSHF-52.
Prior Year Progress:	RA fieldwork began at FTSHF-004-R-01.
Future Plan of Action: CR	LTM is anticipated at FTSHF-004-R-01 beginning in fiscal year (FY)16.
Prior Year Progress:	A new site was opened under the Compliance Restoration (CR) program (CCFS0007) for the firmer MMRP site FTSHF-005-R-01 to determine nature and extent of lead contamination in the soil.
Future Plan of Action:	A contract will be awarded to conduct a RI/FS at CCFS0007.

FORT SHAFTER

Army Defense Environmental Restoration Program Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 46/41

Installation Site Types with Future and/or Underway Phases

2 Contaminated Ground Water (FTSHF-48, FTSHF-50)
1 Soil Contamination After Tank Removal (FTSHF-46)
1 Storage Area (FTSHF-52)
1 Washrack

(FTSHF-51)

Most Widespread Contaminants of Concern

Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern

Soil

Completed F Site ID	Remedial Actions (Interim Reme Site Name	dial Action	ns/ Final Remedial Actions (IRA/FRA)) Remedy	FY
0.00.12				
FTSHF-33	USARC BLDG A,FT SHAFTER FLATS UST SITE	IRA	WASTE REMOVAL - SOILS	1991
FTSHF-33	USARC BLDG A,FT SHAFTER FLATS UST SITE	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1991
FTSHF-15	USTS-USASCH MAINTN	IRA	WASTE REMOVAL - DRUMS, TANKS,	1992
11011-15	AREA, BLD422 (WSC#11)		BULK CONTAINERS	1332
FTSHF-45	LUST SOIL REMEDIATION -	FRA	WASTE REMOVAL - DRUMS, TANKS,	1992
	BLDG 1605		BULK CONTAINERS	
FTSHF-37	UST BLDG 508	FRA	WASTE REMOVAL - DRUMS, TANKS,	1994
			BULK CONTAINERS	
FTSHF-20	USTS AT BLDG 535 (SERVICE	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
	STAT)(WSC #16)		BULK CONTAINERS	
FTSHF-34	USTS BLDG 310	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
		1101	BULK CONTAINERS	1000
FTSHF-35	USTS BLDG 320	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
	00.0110000		BULK CONTAINERS	
FTSHF-36	USTS BLDG 430	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
			BULK CONTAINERS	
FTSHF-38	USTS BLDG 507	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
			BULK CONTAINERS	
FTSHF-39	UST BLDG 520	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
			BULK CONTAINERS	
FTSHF-41	UST BLDG 1500	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
			BULK CONTAINERS	
FTSHF-42	UST BLDG 1528	IRA	WASTE REMOVAL - DRUMS, TANKS,	1995
			BULK CONTAINERS	
FTSHF-43	UST BLDG 1535	FRA	WASTE REMOVAL - DRUMS, TANKS,	1995
			BULK CONTAINERS	
FTSHF-45	LUST SOIL REMEDIATION -	FRA	THERMAL DESORPTION	1996
	BLDG 1605			
FTSHF-15	USTS-USASCH MAINTN	FRA	THERMAL DESORPTION	1997
	AREA, BLD422 (WSC#11)			
FTSHF-01	BLD 225, 434 FORMER PEST	FRA	WASTE REMOVAL - SOILS	1998
	STG (WSC #20)			
FTSHF-23	PAINT/PLATING BLDG 1507-	FRA	WASTE REMOVAL - DRUMS, TANKS,	1998
-	WING A (WSC #22)		BULK CONTAINERS	

IRP Summary

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))					
Site ID	Site Name	Action	Remedy	FY	
FTSHF-42	UST BLDG 1528	FRA	WASTE REMOVAL - SOILS	2000	
FTSHF-46	FORMER FUEL STATION NEAR USARC, BLD 1537	FRA	INSTITUTIONAL CONTROLS	2010	
FTSHF-48	FORMER LAUNDRY FACILITY, FLATS	FRA	INSTITUTIONAL CONTROLS	2010	
FTSHF-50	FORMER REPAIR SHOP, BLDG 1553	FRA	INSTITUTIONAL CONTROLS	2010	
FTSHF-51	WASHRACK T-1539	FRA	INSTITUTIONAL CONTROLS	2010	
FTSHF-52	FORMER WAREHOUSE (T1542)	FRA	INSTITUTIONAL CONTROLS	2010	

Duration of IRP

Date of IRP Inception: 198306

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):200910/200910Date of IRP completion including Long Term Management (LTM):204509

Contamination Assessment Overview

Investigations at Fort Shafter were initially conducted from 1983 through 1984 as part of the Army's sub-installation assessment program. No significant sources of contamination were identified and no further action (NFA) was recommended.

In August 1990, the US Army Toxic and Hazardous Materials Agency (USATHAMA) conducted an assessment to establish baseline data for potential waste. Waste sites were broadly defined as locations from which hazardous constituents might be released into the environment, regardless of whether the material is a solid or a hazardous waste. The report identified 29 potential hazardous waste sites at Fort Shafter. Although the report did not differentiate between sites that are eligible for the Defense Environmental Restoration Account (DERA) funds under the sub-installation restoration program, it did form the basis of sites listed in the Defense Environmental Restoration Tracking System database.

In 1992, the US Army Corps of Engineers (USACE), Pacific Ocean Division conducted a preliminary assessment (PA)/site inspection (SI) at 13 selected sites that were eligible for DERA funds. The primary contaminants of concern were petroleum, oil, and lubricants (POL), heavy metals, and pesticides. The PA recommended seven sites for further investigation [Army Environmental Database-Restoration (AEDB-R) sites FTSHF-01, -02, -14, -16, -23, -24, and -25] and six sites for no further response action planned (NFRAP), RC (AEDB-R sites FTSHF-04, -07, -09, -13, -18, and 22). The SI recommended remediation of the former pesticide storage Building 225 (FTSHF-01), and in March 1998 the plating shop, Building 1507 (FTSHF-23), was completed. At the pesticide storage Building 225, approximately 290 tons of pesticide (chlordane) contaminated soil was excavated from the site. A subsequent risk assessment determined that there were no unacceptable risks present at the site. A sump and surrounding soil were removed from the former plating shop, Building 1507 (FTSHF-23). No further RAs are planned for the site.

The original database of potential hazardous waste sites (29 sites) was expanded in FY94 to 43 AEDB-R sites. The increase was primarily due to the inclusion of abandoned underground storage tanks (UST) (AEDB-R sites FTSHF-33 through -43). In FY94 removal actions were completed.

In June 1994, the US Army Environmental Hygiene Agency (USAEHA) conducted a PA on the remaining 16 sites identified in the USATHAMA Property Report. The purpose of the PA was to determine the potential threat to human health and the environment, and to identify any waste sites needing an SI. The PA recommended three sites for further action (AEDB-R sites FTSHF-17, -20, -27) and 13 sites for NFRAP RC (AEDB-R sites FTSHF-06, -08, -10, -11, -12, -15, -19, -21, -26, -28, -29, -30, and -43). For sites that require further action to be eligible for DERA funds, evidence of contamination must have resulted from past activities; however, in most cases this assessment was difficult. After review of the PA recommendations, sites FTSHF-21 and -28 were added to the list of sites requiring further investigation. Additional investigation conducted by Dames & Moore in 1995 recommended NFRAP RC for sites FTSHF-17, -21 and -28. In 1997, an SI was conducted at FTSHF-27 which concluded there was no risk to human health or the environment.

In a 1996 PA/SI, an additional seven sites were identified as requiring further investigation. The seven sites are referred to in the RI/Risk Assessment Report (2006) that has been accepted by the Hawaii Department of Health (HDOH). At these sites in 2009, 16 wells were abandoned and a remaining 16 will be maintained during LTM. A fence was constructed at FTSHF-48 as an engineering control at this site.

Cleanup Exit Strategy

An RI/RA was accepted by the HDOH. Two decision documents (DD) were signed in November 2009 (ECC, 2009): one for FTSHF-47 and FTSHF-49 selecting NFA and the other one collectively for the remaining five sites tracked under FTSHF-46 selecting land use controls (LUC) as the remedy. A five-year review was completed in FY15.

The LTM estimates for sites at FTSHF-46, FTSHF-48, FTSHF-50, FTSHF-51, and FTSHF-52 are covered under FTSHF-46. Please see the specific site cleanup exit strategies for more details.

IRP Previous Studies

	Title	Author	Date
984			
	Installation Assessment of US Army Support Command, Hawaii, Installations - Volume I: Fort Shafter and Subinstallations: Tripler Army Medical Center, Fort Kamehameha, and Kapalama Military Reservation, Oahu, Hawaii. Report 338	Environmental Science and Engineering, Inc	DEC-1984
	Installation Assessment of US Army Support Command, Hawaii. Prepared for the US Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, Maryland,	Roy F. Weston, Inc	DEC-1984
990			
	Regional Hawaii Army Solvent Recycling Study. Prepared for US Army Support Command, Hawaii, and US Army Western Command	Woodward-Clyde Consultants	JUL-1990
	Property Report. Prepared for the US Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, Maryland	Roy F. Weston, Inc	DEC-1990
991			
	Survey of Polychlorinated Biphenyls (PCBs), Fort Shafter Flats, Oahu, Hawaii. Prepared for the US Army Corps of Engineers, Pacific Ocean Division, Fort Shafter, Hawaii	Woodward-Clyde Consultants	JAN-1991
992			1
	Preliminary Assessment, Various Sites, Fort Shafter, Oahu, Hawaii	US Army Corps of Engineers, Pacific Ocean Division, Design Division/Military Division	JUL-1992
	Preliminary Assessment for Six Selected Sites, Fort Shafter, Hawaii, Pacific Ocean Division, Honolulu, Hawaii	US Army Corps of Engineers	NOV-1992
993			L.
	Site Inspection at the Underground Storage Tank Site, US Army Reserve Center, Fort Shafter Flats, Hawaii	US Army Corps of Engineers, Pacific Ocean Division, Honolulu, Hawaii by PRC Environmental Management Inc	AUG-1993
994			
	Site Investigation at Various Sites, Fort Shafter, Oahu, Hawaii, Pacific Ocean Division, Honolulu, Hawaii	US Army Corps of Engineers	JAN-1994
	Site Assessment No. 38-26-K28U-94, Waste Sites at Army properties, Hawaii. Prepared for USARPAC and USAG-HI	US Army Environmental Hygiene Agency	JUN-1994
995			
	Interim Preliminary Assessment Report, Various Sites, Fort Shafter, Hawaii	Dames and Moore	JUN-1995
996			
	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii Vols 1, 2, 3	Harding Lawson Associates	FEB-1996
997			
	Site Inspection Report, Fort Shafter Solid Waste Dump, Oahu, Hawaii Vols I and II	Dames and Moore	MAR-1997
998			

IRP Previous Studies

	Title	Author	Date
1998			
	Site Characterization and Remediation at the Pesticide	PRC Environmental	MAR-1998
	Storage Building 225 and Plating Shop Building 1507,	Management, Inc	
	Fort Shafter, Hawaii		
2006		1	
	Final Remedial Investigation and Risk Assessment for	Environment	SEP-2006
	Various Sites, Ft. Shafter, Oahu, Hawaii. Sites included	Environment	SLI-2000
	in this study included: FTSHF-46, -47, -48, -49, -50,		
	-51, -52, and -53, as outlined in other sections of this		
	write-up.		
2009	whe up.		
	Dropped Disp Soven Sites Fort Shofter Flats, Ophy	ECC	
	Proposed Plan Seven Sites Fort Shafter Flats, Oahu,	ECC	JUL-2009
	Hawaii (covers FTSHF-46, -47, -48, -49, -50, -51,		
	and -52) Final Land Las Controls Work Plan Fort Shofter Flate	ECC	SED 2000
	Final Land Use Controls Work Plan Fort Shafter Flats,		SEP-2009
	Sites 46, 48, 50, 51, and 52, Fort Shafter, Oahu, Hawaii Final Decision Document Fort Shafter Flats, Sites 47	ECC	OCT-2009
	and 49, Fort Shafter, Oahu, Hawaii	EUU	001-2009
	Final Decision Document Fort Shafter Flats, Sites 46,	ECC	OCT-2009
	48, 50, 51, and 52, Fort Shafter, Oahu, Hawaii		
	Final Semi-Annual Long Term Management Report,	ECC	DEC-2009
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52	200	2202000
2010			
	Final Semi-Annual Long Term Management Report,	ECC	JUL-2010
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort	200	002 2010
	Shafte, Oahu, Hawaii (January to June 2010)		
2011	Shake, Gand, Hawaii (January to Julie 2010)		
	Final Cami Annual Lang Tarm Managament Danat	500	
	Final Semi-Annual Long Term Management Report,	ECC	JAN-2011
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort		
	Shafter, Oahu, Hawaii (July to December 2010) Final Semi-Annual Long Term Management Report,	ECC	JUN-2011
		ECC	JUN-2011
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort Shafter, Oahu, Hawaii (January to June 2011)		
2012	Shaher, Oanu, Hawali (Sanuary to Sulle 2011)		
.012			
	Final Semi-Annual Long Term Management Report,	ECC	JAN-2012
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort		
	Shafter, Oahu, Hawaii (July to December 2011)	500	
	Final Semi-Annual Long Term Management Report,	ECC	JUN-2012
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort		
2013	Shafter, Oahu, Hawaii (January to June 2012)		
2013		500	
	Final Semi-Annual Long Term Management Report,	ECC	JAN-2013
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort		
	Shafter, Oahu, Hawaii (July to December 2012)	500	
	Final Semi-Annual Long Term Management Report,	ECC	JUL-2013
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort		
	Shafter, Oahu, Hawaii (January to June 2013)		
	Decision Document to Support No Further Action, Site	CH2M Hill	DEC-2013
	FTSHF-27 (Solid Waste Dump), Fort Shafter, Oahu,		
	Hawaii	500	
	Final Semi-Annual Long Term Management Report,	ECC	DEC-2013
	Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort		
	Shafter, Oahu, Hawaii (July to December 2013)		

IRP Previous Studies

	Title	Author	Date
2014			
	Final Semi-Annual Long Term Management Report, Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort Shafter, Oahu, Hawaii (January to May 2014)	ECC	MAY-2014
	Final First Five-Year Review Report, Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort Shafter, Oahu, Hawaii, October 2014 (October 2009 to July 2014)	ECC	OCT-2014
	Final Semi-Annual Long Term Management Report, Fort Shafter Flats, Sites 46, 48, 50, 51 & 52, Fort Shafter, Oahu, Hawaii (June to October 2014)	ECC	NOV-2014

FORT SHAFTER

Installation Restoration Program

Site Descriptions

Site ID: FTSHF-46 Site Name: FORMER FUEL STATION NEAR USARC, BLD 1537



Regulatory Driver: CERCLA

RRSE: MEDIUM

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

Media of Concern: Soil

Phases	Start	End
PA	199309	199605
SI	199309	199605
RI/FS	200206	200609
RA(C)	200901	200910
LTM	200910	204509
RIP Date:	N/A	

RC Date: 200910



This site was a fueling station and paint spray booth (Building T-1537) located in Area 4 (HLA, 1996) in the southwest corner of Fort Shafter. A review of historical aerial photographs and topographic maps indicates that gasoline and oil storage tanks were present at the site in 1952, and the structure was built prior to 1969. The buildings and structures, including the tanks, have been demolished and removed, and the area is currently an open field with short grasses and shrubs. The SI sampling results show low level trichloroethylene (TCE) groundwater contamination below maximum contaminant levels (MCL). The RI/RA concluded that the observance of TCE in the shallow groundwater is consistent with an off-site source.

In the RI/RA report (Environet, 2006), this site (FTSHF-46) is also known as Site G. Contaminants of potential concern for this site are arsenic, PCBs, polynuclear aromatic hydrocarbons, total petroleum hydrocarbons, and three volatile organic compounds (VOC). Based upon the risk assessment for this site, LUCs are the selected remedy in the DD to maintain this site as industrial use only. The LTM began in August 2008 to account for work conducted under a performance-based acquisition (PBA) contract.

Additional LUCs for this site include installation of a fence with warning signs along the drainage channel on the perimeter of this site.

The PBA contract covers five sites (FTSHF-46, -48, -50, -51, and -52). The DD, which was signed in November 2009 for these five sites, has LUCs as the selected remedy for the LTM. Programming for sites FTSHF-46, FTSHF-48, and FTSHF-50 to FTSHF-52 is tracked under site FTSHF-46.

The first five-year review was completed in October 2014 (FY15) and the next five-year review is planned for FY20.

CLEANUP/EXIT STRATEGY

Site ID: FTSHF-48 Site Name: FORMER LAUNDRY FACILITY, FLATS



Media of Concern: Soil

Phases	Start	End
PA	199309	199605
SI	199309	199605
RI/FS	200206	200609
RA(C)	200901	200910
LTM	200910	204509
RIP Date:	N/A	
RC Date:	200910	



The site, Bldg 305, is a former laundry facility in the Fort Shafter Flats area. A review of historical aerial photographs and topographic maps indicates that the structure was built prior to 1950 and demolished prior to 1978. Building 305 was located on the north side of Building 1547. About one-third of the former building would have been in the footprint of Building 1547. The area is currently a paved parking lot with some landscaping. The draft PA/SI report indicated mercury contamination in the groundwater and soil samples indicated the presence of VOCs below action levels.

In the RI/RA report (Environet, 2006) this site is also known as Site B. The risk assessment for the site itself will likely allow for closure for industrial use; however, this site (FTSHF-48) includes additional work that may be necessary to evaluate on-site concentrations and consideration of sources of contamination to differentiate between site-specific and regional anthropogenic contamination should a change in land use occur.

Based upon the risk assessment for this site, LUCs are the selected remedy in the DD to maintain this site as industrial use only. LTM began in August 2008 to account for work conducted under a PBA contract. Additional LUCs for this site include installation of a fence with warning signs along the drainage channel on the perimeter of this site.

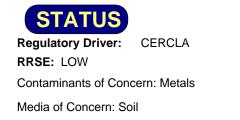
The PBA contract covers five sites (FTSHF-46, -48, -50, -51, and -52). The DD, signed in November 2009 for these five sites, have LUCs as the selected final remedy.

The first five-year review was completed in October 2014 (FY15) and the next five-year review is planned for FY20.

Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

CLEANUP/EXIT STRATEGY

Site ID: FTSHF-50 Site Name: FORMER REPAIR SHOP, BLDG 1553



Phases	Start	End
PA	199309	199605
SI	199309	199605
RI/FS	200206	200609
RA(C)	200901	200910
LTM	200910	204509
RIP Date:	N/A	

RC Date: 200910



This is the former repair shop site. It is located on the south side (near Middle Street) of what is now the US Army Reserve Center and includes former Buildings 1553 and 1567. A review of historical aerial photographs and topographic maps indicates that Building 1553 was built prior to 1950 and was demolished after 1969 and prior to 1978. The former repair shop, Building 1553, overlaps a portion of the southeast corner of the Unit Storage Warehouse (Building 1556), and the south end of the former building extended to what is now a part of the H-1 viaduct roadway. The location of the former building is now asphalt paved roadways and parking area and some landscaped grounds. The former motor pool repair shop, Building 1567, is also a part of the Building 1553 RI site. SI samples retrieved indicate concentrations of pentachlorophenol above US Environmental Protection Agency (USEPA) MCLs.

The RI/RA report (Environet, 2006) refers to this site as Site C. The risk assessment for the site will likely allow for closure for industrial use. Further evaluation of on-site concentrations and consideration of sources of contamination at this site (FTSHF-50) may be necessary to evaluate petroleum contamination in site soils should a change in land use occur. The LTM phase began in August 2008 to account for work conducted under a PBA contract.

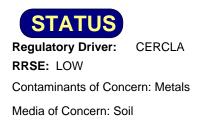
The PBA contract covers five sites (FTSHF-46, -48, -50, -51, and -52). The DD, signed in November 2009 for these five sites, have LUCs as the selected final remedy. Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

The first five-year review was completed in October 2014 (FY15) and the next five-year review is planned for FY20.

Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

CLEANUP/EXIT STRATEGY

Site ID: FTSHF-51 Site Name: WASHRACK T-1539



Phases	Start	End
PA	199309	199605
SI	199309	199605
RI/FS	200206	200609
RA(C)	200901	200910
LTM	200910	204509
RIP Date:	N/A	

RC Date: 200910



This site is located south (near Middle Street) of what is now the US Army Reserve Center. The vehicle washrack, Structure T1539 in Area 4, consists of a rectangular paved vehicle parking area that is surrounded by a 6-inch high asphalt concrete berm. A review of historical aerial photographs and topographic maps indicates that the structure was built prior to 1969. The area around the washrack and the buildings directly north of the washrack, T-1533 and T-1354, are being used by a contractor for materials and equipment storage and truck parking. The washrack is no longer in use, and vegetation is starting to grow in the pavement. Samples retrieved indicate concentrations of arsenic in groundwater just below USEPA MCLs. The arsenic concentrations are likely naturally occurring.

The RI/RA report (Environet, 2006) refers to this site as Site E. The risk assessment for the site will likely allow for closure for industrial use. Further evaluation of on-site concentrations and consideration of sources of contamination may be necessary at this site (FTSHF-51) should a change in land use occur. The LTM began in August 2008 to account for work conducted under a PBA contract.

The PBA contract covers five sites (FTSHF-46, -48, -50, -51, and -52). The DD, signed in November 2009 for these five sites, have LUCs as the selected final remedy. Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

The first five-year review was completed in October 2014 (FY15) and the next five-year review is planned for FY20.

Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

CLEANUP/EXIT STRATEGY

Site ID: FTSHF-52 Site Name: FORMER WAREHOUSE (T1542)



Regulatory Driver: CERCLA

RRSE: MEDIUM

Contaminants of Concern: Metals, Polycyclic Aromatic Hydrocarbons (PAH)

Media of Concern: Soil

Phases	Start	End
PA	199306	199602
SI	199306	199602
RI/FS	200206	200609
RA(C)	200901	200910
LTM	200910	204509
RIP Date:	N/A	

RC Date: 200910



This site is located on the southern edge of what is now the US Army Reserve Center in FTSHF. The warehouse structure (T1542) is no longer present at the site. A review of historical aerial photographs and topographic maps indicates that the structure was built prior to 1950. A portion of the former warehouse building location overlaps the west side of Building 1556, the Unit Storage Warehouse. The location of the former warehouse building is currently a paved driveway and parking area for Building 1556. The risk drivers for this site are polynuclear aromatic hydrocarbons and metals.

The RI/RA report (Environet, 2006) refers to this site as Site F. The risk assessment for the site will likely allow for closure; however, further evaluation will probably be required should the site be disturbed. The LTM began in August 2008 to account for work conducted under a PBA contract.

The PBA contract covers five sites (FTSHF-46, -48, -50, -51, and -52). The DD, signed in November 2009 for these five sites, have LUCs as the selected final remedy. Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

The first five-year review was completed in October 2014 (FY15) and the next five-year review is planned for FY20.

Programmed funding for sites FTSHF-46, FTSHF-48, and FTSHF-50 through FTSHF-52 is tracked under site FTSHF-46.

CLEANUP/EXIT STRATEGY

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTSHF-01	BLD 225, 434 FORMER PEST STG (WSC #20)	199805	Final Remediation Completion Report, Site Characterization and Remediation at the Pesticide Storage Building 225 and Plating Shop Building 1507, Fort Shafter, Hawaii, PRC Environmental, 1998
FTSHF-02	BLD 725 PESTICIDE STG (WSC #17)	199401	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-03	SHAFTER FLATS VEH MAINT BLD 1515/1519	199602	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-04	VEHICLE MAINT BLD 345 (WSC #19)	199211	Preliminary Assessment for Six Selected Sites, Fort Shafter, USACE, 1992
FTSHF-06	AUTOCRAFT SHOP (WSC #2)	199602	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-07	VEHICLE WASH AREA AT FSACS (WSC #3)	199602	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-09	VEH WASH AREA NR T1521 & T1522 (WSC #5)	199307	Site Inspection at the Underground Storage Tank Site, Fort Shafter Flats, PRC Environmental, 1993
FTSHF-10	VETERINARY CLINIC (WSC #6)	199602	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-11	PHOTO LAB (BLDG 1500) (WSC #7)	199602	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-12	ARTS AND CRAFTS CENTER (WSC #8)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort Shafter, Hawaii, 1990
FTSHF-13	MAINTENANCE AREA IN 400 BLOCK-6(WSC #9)	199211	Preliminary Assessment for Six Selected Sites, Fort Shafter, USACE, 1992
FTSHF-14	VEHICLE WASH AREA NR BLDG 405 (WSC #10)	199401	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-15	USTS-USASCH MAINTN AREA, BLD422 (WSC#11)	199610	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-16	VEHICLE WASH AREA NR BLDG 420 (WSC #12)	199401	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-17	USASCH MAINTEN AREA AT BLDG 420(WSC #13)	199605	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-18	FLAM MATLS STG (BLDG 346, 347) (WSC #14)	199207	Preliminary Assessment for Six Selected Sites, Fort Shafter, USACE, 1992
FTSHF-19	DENTAL CLINIC (WSC #15)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort Shafter, Hawaii, 1990
FTSHF-20	USTS AT BLDG 535 (SERVICE STAT)(WSC #16)	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-21	TRANSFORMER STG AREA (WSC #18)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			Shafter, Hawaii, 1990
FTSHF-22	FORMER HERBICIDE STG BLDG 310 (WSC #21)	199401	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-23	PAINT/PLATING BLDG 1507-WING A (WSC #22)	199805	Final Remediation Completion Report, Site Characterization and Remediation at the Pesticide Storage Building 225 and Plating Shop Building 1507, Fort Shafter, Hawaii, PRC Environmental, 1998
FTSHF-24	PHOTOGRAPHY LABS(435,1290,1292)(WSC #23)	199401	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-25	STORMWATER RUNOFF AREA (WSC #24)	199207	Preliminary Assessment for Six Selected Sites, Fort Shafter, USACE, 1992
FTSHF-26	LIFT STATION AT BLDG 1605 (WSC #25)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort Shafter, Hawaii, 1990
FTSHF-27	DUMP SITE (WSC #26)	201401	
FTSHF-28	WATER TREATMENT LAB (WSC #27)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort Shafter, Hawaii, 1990
FTSHF-29	WATER TREATMENT PLANT AT 511 (WSC #28)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort Shafter, Hawaii, 1990
FTSHF-30	INDOOR FIRING RANGE (WSC #29)	199008	USATHAMA Property Report, Fort Shafter, Property Number 15835, Fort Shafter, Hawaii, 1990
FTSHF-33	USARC BLDG A,FT SHAFTER FLATS UST SITE	199308	Final Site Inspection Report, Site Inspection at the Underground Storage Tank Site, US Army Reserve Center, Fort Shafter Flats, Volumes I to IV
FTSHF-34	USTS BLDG 310	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-35	USTS BLDG 320	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-36	USTS BLDG 430	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-37	UST BLDG 508	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-38	USTS BLDG 507	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-39	UST BLDG 520	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-41	UST BLDG 1500	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-42	UST BLDG 1528	200003	Final Remedial Investigation Report, Fort Shafter, Building 1528, Removal of USTs

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			and Remediation of Contaminated Soils, May 2003
FTSHF-43	UST BLDG 1535	199410	Site Investigation, Various Sites, Fort Shafter, Hawaii, USACE Design Division, 1994
FTSHF-45	LUST SOIL REMEDIATION - BLDG 1605	199612	Preliminary Assessment/Site Inspection, Fort Shafter Flats, Fort Shafter, Hawaii, Harding Lawson Associates, 1996
FTSHF-47	FORMER FUELING STATION, BLDG 1593	200911	A DD signed in FY10 recommended no further action at this site.
FTSHF-49	FORMER WAREHOUSE 45	200911	A DD signed in FY10 recommended no further action at this site.

IRP Schedule

Date of IRP Inception: 198306

Past Phase Co	ompletion Milestones
1984	
PA	(FTSHF-03 - SHAFTER FLATS VEH MAINT BLD 1515/1519)
1990	
ΡΑ	(FTSHF-06 - AUTOCRAFT SHOP (WSC #2), FTSHF-10 - VETERINARY CLINIC (WSC #6), FTSHF-11 - PHOTO LAB (BLDG 1500) (WSC #7), FTSHF-12 - ARTS AND CRAFTS CENTER (WSC #8), FTSHF-15 - USTS-USASCH MAINTN AREA, BLD422 (WSC#11), FTSHF-19 - DENTAL CLINIC (WSC #15), FTSHF-20 - USTS AT BLDG 535 (SERVICE STAT)(WSC #16), FTSHF-21 - TRANSFORMER STG AREA (WSC #18), FTSHF-26 - LIFT STATION AT BLDG 1605 (WSC #25), FTSHF-27 - DUMP SITE (WSC #26), FTSHF-28 - WATER TREATMENT LAB (WSC #27), FTSHF-29 - WATER TREATMENT PLANT AT 511 (WSC #28), FTSHF-30 - INDOOR FIRING RANGE (WSC #29))
1991	
PA	(FTSHF-33 - USARC BLDG A,FT SHAFTER FLATS UST SITE)
IRA	(FTSHF-33 - USARC BLDG A,FT SHAFTER FLATS UST SITE)
1992	
ISC	(FTSHF-34 - USTS BLDG 310, FTSHF-35 - USTS BLDG 320, FTSHF-36 - USTS BLDG 430, FTSHF-37 - UST BLDG 508, FTSHF-38 - USTS BLDG 507, FTSHF-39 - UST BLDG 520, FTSHF-41 - UST BLDG 1500, FTSHF-43 - UST BLDG 1535, FTSHF-45 - LUST SOIL REMEDIATION - BLDG 1605) (FTSHF-15 - USTS-USASCH MAINTN AREA, BLD422 (WSC#11))
PA	(FTSHF-01 - BLD 225, 434 FORMER PEST STG (WSC #20), FTSHF-02 - BLD 725 PESTICIDE STG (WSC
	#17), FTSHF-18 - FLAM MATLS STG (BLDG 346, 347) (WSC #14), FTSHF-22 - FORMER HERBICIDE STG BLDG 310 (WSC #21), FTSHF-23 - PAINT/PLATING BLDG 1507-WING A (WSC #22), FTSHF-24 - PHOTOGRAPHY LABS(435,1290,1292)(WSC #23), FTSHF-25 - STORMWATER RUNOFF AREA (WSC #24), FTSHF-42 - UST BLDG 1528)
1993	
PA	(FTSHF-04 - VEHICLE MAINT BLD 345 (WSC #19), FTSHF-07 - VEHICLE WASH AREA AT FSACS (WSC #3), FTSHF-09 - VEH WASH AREA NR T1521 & T1522 (WSC #5), FTSHF-13 - MAINTENANCE AREA IN 400 BLOCK-6(WSC #9), FTSHF-14 - VEHICLE WASH AREA NR BLDG 405 (WSC #10), FTSHF-16 - VEHICLE WASH AREA NR BLDG 420 (WSC #12)) (FTSHF-09 - VEH WASH AREA NR T1521 & T1522 (WSC #5), FTSHF-33 - USARC BLDG A,FT SHAFTER
	(FISHE-09 - VEH WASH AREA NR 11521 & 11522 (WSC #5), FISHE-33 - USARC BLDG A,FI SHAFTER FLATS UST SITE)
1994	
IMP(C)	(FTSHF-37 - UST BLDG 508)
SI	(FTSHF-01 - BLD 225, 434 FORMER PEST STG (WSC #20), FTSHF-02 - BLD 725 PESTICIDE STG (WSC #17), FTSHF-14 - VEHICLE WASH AREA NR BLDG 405 (WSC #10), FTSHF-16 - VEHICLE WASH AREA NR BLDG 420 (WSC #12), FTSHF-22 - FORMER HERBICIDE STG BLDG 310 (WSC #21), FTSHF-23 - PAINT/PLATING BLDG 1507-WING A (WSC #22), FTSHF-24 - PHOTOGRAPHY LABS(435,1290,1292)(WSC #23))
1995	
IMP(C) IRA	(FTSHF-34 - USTS BLDG 310, FTSHF-35 - USTS BLDG 320, FTSHF-36 - USTS BLDG 430, FTSHF-38 - USTS BLDG 507, FTSHF-39 - UST BLDG 520, FTSHF-41 - UST BLDG 1500, FTSHF-43 - UST BLDG 1535) (FTSHF-42 - UST BLDG 1528)
	(FTSHF-42 - UST BLDG 1526) (FTSHF-20 - USTS AT BLDG 535 (SERVICE STAT)(WSC #16))
RA(C)	(FISHF-20 - USIS AT DEDUS 333 (SERVICE STAT)(VVSC #10))
1996	
IMP(C) SI	(FTSHF-45 - LUST SOIL REMEDIATION - BLDG 1605) (FTSHF-03 - SHAFTER FLATS VEH MAINT BLD 1515/1519, FTSHF-06 - AUTOCRAFT SHOP (WSC #2), FTSHF-07 - VEHICLE WASH AREA AT FSACS (WSC #3), FTSHF-10 - VETERINARY CLINIC (WSC #6), FTSHF-11 - PHOTO LAB (BLDG 1500) (WSC #7), FTSHF-46 - FORMER FUEL STATION NEAR USARC, BLD 1537, FTSHF-47 - FORMER FUELING STATION, BLDG 1593, FTSHF-48 - FORMER LAUNDRY FACILITY, FLATS, FTSHF-49 - FORMER WAREHOUSE 45, FTSHF-50 - FORMER REPAIR SHOP, BLDG 1553, FTSHF-51 - WASHRACK T-1539, FTSHF-52 - FORMER WAREHOUSE (T1542))

IRP Schedule

PA 1997	(FTSHF-17 - USASCH MAINTEN AREA AT BLDG 420(WSC #13), FTSHF-46 - FORMER FUEL STATION NEAR USARC, BLD 1537, FTSHF-47 - FORMER FUELING STATION, BLDG 1593, FTSHF-48 - FORMER LAUNDRY FACILITY, FLATS, FTSHF-49 - FORMER WAREHOUSE 45, FTSHF-50 - FORMER REPAIR SHOP, BLDG 1553, FTSHF-51 - WASHRACK T-1539, FTSHF-52 - FORMER WAREHOUSE (T1542))
SI	(FTSHF-27 - DUMP SITE (WSC #26))
RA(C) 1998	(FTSHF-15 - USTS-USASCH MAINTN AREA, BLD422 (WSC#11))
RA(C)	(FTSHF-01 - BLD 225, 434 FORMER PEST STG (WSC #20), FTSHF-23 - PAINT/PLATING BLDG 1507- WING A (WSC #22))
2000	
RA(C)	(FTSHF-42 - UST BLDG 1528)
2006	
RI/FS	(FTSHF-46 - FORMER FUEL STATION NEAR USARC, BLD 1537, FTSHF-47 - FORMER FUELING STATION, BLDG 1593, FTSHF-48 - FORMER LAUNDRY FACILITY, FLATS, FTSHF-49 - FORMER WAREHOUSE 45, FTSHF-50 - FORMER REPAIR SHOP, BLDG 1553, FTSHF-51 - WASHRACK T-1539, FTSHF-52 - FORMER WAREHOUSE (T1542))
2010	
RA(C)	(FTSHF-46 - FORMER FUEL STATION NEAR USARC, BLD 1537, FTSHF-48 - FORMER LAUNDRY FACILITY, FLATS, FTSHF-50 - FORMER REPAIR SHOP, BLDG 1553, FTSHF-51 - WASHRACK T-1539, FTSHF-52 - FORMER WAREHOUSE (T1542))
LTM	(FTSHF-47 - FORMER FUELING STATION, BLDG 1593, FTSHF-49 - FORMER WAREHOUSE 45)
2014	
LTM	(FTSHF-27 - DUMP SITE (WSC #26))
	se Completion Milestones hed schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates Site ID Site Name ROD/DD Title

ROD/DD Date

Final RA(C) Completion Date: 200910

Schedule for Next Five-Year Review: 2019

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

FORT SHAFTER IRP Schedule

							= phase u	Inderway
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSHF-46	FORMER FUEL STATION NEAR USARC. BLD 1537	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSHF-48	FORMER LAUNDRY FACILITY, FLATS	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSHF-50	FORMER REPAIR SHOP, BLDG 1553	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSHF-51	WASHRACK T-1539	LTM						
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSHF-52	FORMER WAREHOUSE (T1542)	LTM						

FORT SHAFTER

Army Defense Environmental Restoration Program Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 5/4

Installation Site Types with Future and/or Underway Phases

1

(FTSHF-004-R-01)

Most Widespread Contaminants of Concern

Metals, Munitions constituents (MC)

Small Arms Range

Media of Concern

Soil

Completed R Site ID	emedial Actions (Interim Reme Site Name	edial Actior Action	ns/ Final Remedial Actions (IRA/FRA)) Remedy	FY
FTSHF-	PISTOL RANGE	FRA	WASTE REMOVAL - SOILS	2010
001-R-01 FTSHF- 005-R-01	Skeet Range	FRA	REMOVAL	2013

Duration of MMRP

Date of MMRP Inception 200204

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201604/201604 Date of MMRP completion including Long Term Management (LTM): 204509

Contamination Assessment Overview

The Department of Defense (DoD) has established the Military Munitions Response Program (MMRP) under the Defense Environmental Restoration Program (DERP) to address DoD sites with munitions and explosives of concern (MEC) including unexploded ordnance (UXO), discarded military munitions (DMM), and MC. The US Army's inventory of closed, transferred or transferring (CTT) military ranges and sites, identified three sites at Fort Shafter eligible for action under MMRP. The MMRP eligible sites include other than operational ranges where UXO, DMM, and MC is known or suspected. Properties classified as operational ranges are not eligible and, therefore, are excluded from the MMRP.

The MMRP began in the early 2000s as a result of key drivers such as processes outlined in the National Contingency Plan (NCP - 40 CFR 300) as authorized by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 US Code 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499, (hereinafter CERCLA). The process began with three phases of range inventories. Phase 1 consisted of installations completing an initial data call. The USAEC managed the implementation of phases 2 and 3 of the MMRP inventory. The Phase 2 inventory dealt with active and inactive range considerations. Phase 3 involved the CTT range inventory conducted in 2002. The inventories included extensive mapping, data collection for upload to the Army Range Inventory Database, assessment of explosives safety risk using the risk assessment code methodology for CTT ranges or sites with UXO or DMM identified in the inventory, and determination of which sites on the inventory potentially qualify for the MMRP.

There are five MMRP sites at Fort Shafter. A PA (final CTT inventory report) was completed for Fort Shafter and three small arms ranges were identified. They were FTSHF-001-R-01, FTSHF-002-R-01, and FTSHF-003-R-01. Two additional munitions response (MR) sites were identified through the research conducted for the final historical records review (HRR). One of the sites, FTSHF-004-R-01, is a transferred range. The other, FTSHF-005-R-01, is a skeet range. An SI was completed in FY09 for all sites which recommended NFA for FTSHF-002-R-01 and additional investigative actions for MC at the remaining four sites (FTSHF-001-R-01, FTSHF-003-R-01, FTSHF-004-R-01, and FTSHF-005-R-01). A time-critical removal action (TCRA) was performed at FTSHF-001-R-01 in the 1st Qtr of FY10 to remove lead-contaminated soil above HDOH environmental action level (EAL). After the TCRA was completed, an NFA letter was issued by HDOH for this site. An RI for the three remaining sites was completed in FY12 and recommended NFA for FTSHF-003-R-01. An NFA DD was signed by HDOH. Two sites, FTSHF-004-R-01 and FTSHF-005-R-01, require RA for MC.

Cleanup Exit Strategy

An RA including excavation, on-site stabilization and off-site disposal of soil, and LUCs is the recommended alternative in the FS. RA fieldwork commenced in July 2014 and the RA is expected to be complete by April 2016. It is expected that LTM consisting of operations and maintenance (O&M) and five-year reviews will be required after the RA.

	MI	MRP Previous	s Studies
	Title	Author	Date
2002			
	Final CTT Inventory Report	TechLaw	OCT-2002
2007			
	Final Historical Records Review	TLI Solutions, Inc.	JAN-2007
	Final Site Inspection Work Plan	TLI Solutions, Inc.	MAR-2007
009			
	Final SI Report	TLI Solutions, Inc.	FEB-2009
	Final Project Work Plan, Time Critical Response for Former Pistol Range Removal Action, Fort Shafter, Oahu, Hawaii	Project Resources, Inc.	AUG-2009
	Final Closure Report, Time Critical Response, Former Pistol Range Removal Action, Fort Shafter, Oahu, Hawaii	Project Resources, Inc.	DEC-2009
2010			
	Final Work Plan Fort Shafter Hawaii Phase 2 MMRP	Weston Solutions	FEB-2010
2011		1	
	Final RI Report, Fort Shafter Hawaii Phase 2 MMRP, Rifle Range 2, Rifle Range 1 (TD), Skeet Range	Weston Solutions	AUG-2011
2012		1	
	Final FS Data Collection Work Plan, Rifle Range 1 (TD) and Skeet Range, Fort Shafter, Oahu, Hawaii	CH2M Hill	FEB-2012
	Final Decision Document, Rifle Range 2, Fort Shafter, Oahu, Hawaii	CH2M Hill	AUG-2012
	Final FS Data Collection Report, Rifle Range 1 (TD) and Skeet Range, Fort Shafter, Oahu, Hawaii	CH2M Hill	SEP-2012
2013		1	1
	Final Feasibility Study Report, Rifle Range 1 (TD) (FTSHF-004-R-01) and Skeet Range (FTSHF-005- R-01)	CH2M Hill	MAR-2013
	Rinal Remedial Action Work Plan, Skeet Range (FTSHF-005-R-01), Ft Shafter, Oahu, HI	CH2M HIII	SEP-2013
2014			
	Final Remedial Action Work Plan, Rifle Range 1 (TD), MRS, Ft Shafter, Oahu, HI	CH2M Hill	JUL-2014
	Final Remedial Action Completion Report, Skeet Range MRS, Ft Shafter, Oahu, HI	CH2M Hill	AUG-2014

FORT SHAFTER

Military Munitions Response Program

Site Descriptions

Site ID: FTSHF-004-R-01 Site Name: Rifle Range 1 (TD)



Regulatory Driver: CERCLA

MRSPP Score: 05 Contaminants of Concern: Metals, Munitions constituents (MC)

Media of Concern: Soil

Phases	Start	End
PA	200204	200305
SI	200604	200903
RI/FS	200906	201309
RD	201103	201404
RA(C)	201103	201604
LTM	201604	204509
RIP Date:	N/A	
RC Date:	201604	



This site occupies approximately 1.27 acres of land located beyond the installation boundary on the eastern portion of the installation south of the south branch of Kahauiki Stream at the end of Hase Drive. It is the transferred portion of Rifle Range 1 and includes the 200-yard targets from that range. Rifle Range 1 was in operation from 1937 through the early-1960s and was identified as a known distance range for the use of rifles, carbines, Browning automatic rifles, and .30 caliber machine guns. There is also documentation limiting the weapons used at the range to shotguns and .22 caliber, .30 caliber, .38 caliber, and .45 caliber guns. Targets and other equipment were readily available for the range and included targets, frames, pasters, spotters, marking discs, and paste.

An SI was conducted in 2009 which identified four munitions debris (MD) items (three small arm projectiles and expended slap flare). The SI concluded that further investigation for MEC and MC was warranted.

The 2011 RI included 9.9 line miles of instrument aided visual survey for MEC, investigative intrusive activities, and Incremental Sampling (IS) of seven decision units (DU) for lead and antimony. During vegetation clearance, the UXO Safety identified one MEC item (partial M-9 rifle grenade) and one MD item (small arms projectile) on-site. Explosive ordnance disposal conducted a blow-in-place action, and explosives confirmation sampling was conducted. No other MEC or MD items were encountered during the RI. Five of the seven DUs reported lead and antimony at concentrations that exceed the Tier 1 EAL [200 mg/kg and 6.3 mg/kilogram (kg)]. The current land use of the site is commercial/industrial.

An additional data collection was performed in September 2012 to improve remedial alternatives development. Two DUs from the RI were subdivided into three subunits, and a new DU was created. IS samples were collected and analyzed for total lead. Resulting concentrations of total lead were above the recreational land use EAL (2,240 mg/kg) in shallow surface soil. Also, an X-Ray Fluorescence (XRF) correlation study was performed to conclude that the XRF device is useful to support real-time decisions during potential soil removal actions. Treatability testing was also performed to evaluate stabilization of soil that could be classified as hazardous waste. Results demonstrated that stabilization does not significantly reduce bioavailability; however, phosphate agent does reduce toxicity characteristics and classifies the soil as nonhazardous waste.

An FS was completed in March 2013 and recommended excavation, on-site stabilization, and off-site disposal of soil with LUCs as the most favorable remedial alternative. A proposed plan and DD were completed as well and formally document the RA decision.

The RA fieldwork began in July 2014. The site is anticipated to reach RIP/RC in April 2016. LTM with O&M and five-year reviews will be required in the future.



Site ID: FTSHF-004-R-01 Site Name: Rifle Range 1 (TD)

An RA including excavation, on-site stabilization and off-site disposal of soil, and LUCs is the recommended alternative in the 2013 FS. RA fieldwork commenced in July 2014 and the RA is expected to be complete by April 2016. It is expected that LTM consisting of O&M and five-year reviews will be required after the RA.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTSHF-001- R-01	PISTOL RANGE	200912	A December 2009 letter from HDOH agreed to NFA at this site.
FTSHF-002- R-01	RIFLE RANGE 1	200903	The Final SI Report (2009) recommended no further action at this site for MEC or MC. HDOH concurred with the report's recommendation in an NFA letter dated 18 Feb. 2009.
FTSHF-003- R-01	RIFLE RANGE 2	201209	The Final Decision Document signed in August 2012 recommended No Further Action.
FTSHF-005- R-01	Skeet Range	201309	

MMRP Schedule

Date of MMRP Inception 200204

Past Phase Completion Milestones

2003	
PA	(FTSHF-001-R-01 - PISTOL RANGE, FTSHF-002-R-01 - RIFLE RANGE 1, FTSHF-003-R-01 - RIFLE RANGE 2, FTSHF-004-R-01 - Rifle Range 1 (TD), FTSHF-005-R-01 - Skeet Range)
2009	.,
SI	(FTSHF-001-R-01 - PISTOL RANGE, FTSHF-002-R-01 - RIFLE RANGE 1, FTSHF-003-R-01 - RIFLE RANGE 2, FTSHF-004-R-01 - Rifle Range 1 (TD), FTSHF-005-R-01 - Skeet Range)
RI/FS	(FTSHF-001-R-01 - PISTOL RANGE)
2010	
RA(C)	(FTSHF-001-R-01 - PISTOL RANGE)
2012	
RI/FS	(FTSHF-003-R-01 - RIFLE RANGE 2, FTSHF-005-R-01 - Skeet Range)
2013	
RI/FS	(FTSHF-004-R-01 - Rifle Range 1 (TD))
RA(C)	(FTSHF-005-R-01 - Skeet Range)
RD	(FTSHF-005-R-01 - Skeet Range)

Projected Phase Completion Milestones

See attached schedule

2014 RD

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates **ROD/DD** Title Site ID Site Name

(FTSHF-004-R-01 - Rifle Range 1 (TD))

ROD/DD Date

Final RA(C) Completion Date: 201604

Schedule for Next Five-Year Review: 2019

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

FORT SHAFTER MMRP Schedule

							= phase u	Inderway
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
FTSHF-004-R-	Rifle Range 1 (TD)	RA(C)						
01		LTM						

FORT SHAFTER

Army Defense Environmental Restoration Program Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:	3/2				
Installation Site Types with Future and/or Underway Phases 1 Spill Site Area (CCFS0007)					
Most Widespread Contaminants of Concern					
Metals					
Media of Concern Soil					
Completed Remedial Actions (IRA/FRA))Site IDSite NameActionRemedyFYN/A					
Site ID Site Name Action Remedy FY					
Site ID Site Name Action Remedy FY					
Site ID Site Name Action Remedy FY N/A Duration of CR Date of CR Inception: 199209					
Site ID Site Name Action Remedy FY N/A Duration of CR					

CR Contamination Assessment

Contamination Assessment Overview

Lead-contaminated soil was encountered at CCFS0007 during the course of an RA at an MMRP site in the same area. The contamination was clearly not related to skeet range activities and therefore a Compliance-related Cleanup (CC) site was opened to address the lead-contaminated soil.

Cleanup Exit Strategy

An investigation to determine nature and extent will be funded/executed in FY15. Further response actions are to be determined.

CR Previous Studies

Title There are no Previous Studies Author

Date

FORT SHAFTER

Compliance Restoration

Site Descriptions

Site ID: CCFS0007 Site Name: Lead-Impacted Site-frm Skeet Range



Phases	Start	End
PA	201206	201408
SI	201206	201408
RI/FS	201408	201812
RIP Date:	N/A	
RC Date:	201812	



This site was initially addressed under MMRP at the Fort Shafter Skeet Range (FTSHF-005-R-01). Lead-impacted soil was detected at the site. An RA was conducted and lead-impacted soil was excavated/disposed of. However, during the course of the RA, it was determined that the lead-impacted soil continued much deeper than with what could be associated with skeet range activities. Therefore, the site was closed under MMRP and reopened under the CC program per guidance from both HDOH and USAEC.

An investigation to determine the nature and extent of lead contamination at the site will need to be funded in FY16.

CLEANUP/EXIT STRATEGY

RI/FS will need to be funded/executed to determine nature and extent of contamination.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CCFS0003	BLDG 1507 Consolidated Motor Pool	201003	
CCFS0006	Command and Control Facility	201003	

CR Schedule

Date of CR Inception: 199209

Past Phase Completion Milestones

2003	
RFA	(CCFS0003 - BLDG 1507 Consolidated Motor Pool)
2007	
PA	(CCFS0006 - Command and Control Facility)
2010	
RI/FS	(CCFS0006 - Command and Control Facility)
RFI/CMS	(CCFS0003 - BLDG 1507 Consolidated Motor Pool)
2014	
PA	(CCFS0007 - Lead-Impacted Site-frm Skeet Range)
SI	(CCFS0007 - Lead-Impacted Site-frm Skeet Range)

Projected Phase Completion Milestones

See attached schedule

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

To Be Determined

Final RA(C) Completion Date:

Schedule for Next Five-Year Review: 2019

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

FORT SHAFTER CR Schedule

				= phase underway				
SITE ID	SITE NAME	PHASE	FY16	FY17	FY18	FY19	FY20	FY21+
CCFS0007	Lead-Impacted Site-frm Skeet Range	RI/FS						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201402

Restoration Advisory Board (RAB): No

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

Community Interest Solicited on: 201303

Efforts Taken to Determine Interest

The installation solicited interest in establishing a RAB in March 2013. A public notice was published in the Honolulu Advertiser from March 3-5, 2013.

Results

No interest was received from the community. A RAB was not established in FY13.

Follow-up Procedures

Future solicitation to monitor community interest in establishing a RAB for Fort Shafter will occur every two years. The next solicitation will occur in FY15.

Additional Community Involvement Information

A community involvement plan was finalized in 2014.

Administrative Record is located at

Directorate of Public Works 948 Santos Dumont Ave, Bldg. 105 Wheeler AAF, Schofield Barracks, HI 96857-5013 (808)656-2419

Information Repository is located at

Salt Lake/Moanalua Public Library 3225 Salt Lake Blvd. Honolulu, HI 96818

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

TAPP Title: N/A

Potential TAPP: N/A