

**FY2016**

**FORT HUACHUCA**

**Army Defense Environmental Restoration Program**

**Installation Action Plan**

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## Statement of Purpose

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

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), Fort Huachuca (FTHU), the Arizona Department of Environmental Quality (ADEQ), the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and 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

AAF	Army Air Force
AAFES	Army Air Force Exchange Service
ADEQ	Arizona Department of Environmental Quality
AEDB-CC	Army Environmental Database - Compliance-related Cleanup
AEDB-R	Army Environmental Database-Restoration
AOC	Area of Concern
AWQS	Arizona Water Quality Standards
bgs	below ground surface
CA	Consent Agreement
CACR	Corrective Action Completion Report
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CEWI	Combat Electronic Warfare Intelligence
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operation)
CO	Consent Order
CR	Compliance Restoration
CS	Confirmatory Sampling
CTT	Closed, Transferred or Transferring
DD	Decision Document
DDD	p,p'dichlorodiphenyldichloroethane
DERP	Defense Environmental Restoration Program
DES	Design
DRMO	Defence Reutilization and Marketing Office
EAA	East Artillery Area
FRA	Final Remedial Action
FS	Feasibility Study
ft	feet
FTHU	AEDB-R designation for Fort Huachuca
FY	fiscal year
HRR	Historical Records Review
IAP	Installation Action Plan
ICU	Inspection and Compliance Unit
IMCOM	Installation Management Command
IMP(C)	Implementation (Construction)
IMP(O)	Implementation (Operation)
INV	Investigation
IRA	Interim Remedial Action
IRP	Installation Restoration Program
ISC	Initial Site Characterization
JMM	James M. Montgomery
LAAF	Libby Army Airfield
LF	Landfill
LTM	Long-Term Management
LUC	Land Use Control

## Acronyms

LUST	Leaking Underground Storage Tank
MC	Munitions Constituents
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
N/A	Not Applicable
NETCOM	Network Enterprise Technology Command
NFA	No Further Action
NPL	National Priorities List
OB	Open Burning
OD	Open Detonation
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated biphenyls
POL	Petroleum, Oil and Lubricants
PP	Proposed Plan
ppm	parts per million
PX	Post Exchange
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RI	Remedial Investigation
RIP	Remedy-in-place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SRL	Soil Remediation Level
SRLF	South Range Landfill
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TRADOC	Training and Doctrine Command
TRC	Technical Review Committee
TRPH	Total Recoverable Petroleum Hydrocarbon
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USAEHA	US Army Environmental Hygiene Agency
USAG	US Army Garrison

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## Acronyms

USAICoE	US Army Intelligence Center of Excellence
USATHAMA	US Army Toxic and Hazardous Materials Agency
UST	Underground Storage Tank
UXO	Unexploded ordnance
VOC	Volatile Organic Compound

## Acronym Translation Table

### CERCLA

Preliminary Assessment(PA)

Remedial Investigation(RI)

Feasibility Study(FS)

Remedial Design(RD)

Remedial Action (Construction)(RA(C))

Remedial Action (Operation)(RA(O))

Long Term Management(LTM)

Interim Remedial Action(IRA)

### RCRA Underground Storage Tank (UST) Site Phase Terms

= Initial Site Characterization(ISC)

= Investigation(INV)

= Corrective Action Plan(CAP)

= Design(DES)

= Implementation (Construction)(IMP(C))

= Implementation (Operations)(IMP(O))

= Long Term Management(LTM)

= Interim Remedial Action(IRA)



# Installation Information

## Installation Locale

**Installation Size (Acreage):** 73000

**City:** Sierra Vista

**County:** Cochise

**State:** Arizona

## Other Locale Information

Fort Huachuca is located on approximately 73,000 acres of land in Cochise County, Arizona. It is bisected by Arizona State Highway 90. The city of Sierra Vista (population 37,800) is located on the eastern boundary of the installation. Huachuca City (population 2,000) is located on the northeastern boundary of the post. Coronado National Forest lies to the south, and to the west are privately-owned ranches along with the Appleton-Whittell Research Ranch managed by the Audubon Society.

## Installation Mission

Current missions at FTHU include the US Army Intelligence Center of Excellence (USAICoE) and their 111th Military Intelligence Brigade's training mission, as well as the headquarters of the Network Enterprise Technology Command (NETCOM) with their 11th Signal Brigade. Electronics testing missions are conducted by the Joint Interoperability Test Command, the Electronic Proving Ground, and other testing organizations.

In 2003, the FTHU Garrison was transferred from the US Army Training and Doctrine Command (TRADOC) to the Installation Management Command (IMCOM).

## Lead Organization

IMCOM

## Lead Executing Agencies for Installation

US Army Corps of Engineers (USACE) - Los Angeles District

USAEC

## Regulator Participation

**State** ADEQ

## National Priorities List (NPL) Status

FORT HUACHUCA 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), Volatiles (VOC)

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

### MMRP

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

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

## Installation Information

CR

**Primary Contaminants of Concern:** Petroleum, Oil and Lubricants (POL), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

**Affected Media of Concern:** Soil

## 5-Year / Periodic Review Summary

### 5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Complete	200901	200911	2010
Complete	201411	201511	2016
Planned	201911	202011	2021

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

Associated ROD/DD Name	Sites
FTHU-10 South Range Landfill	FTHU-10
FTHU-54A PX Gas Station	FTHU-54A
FTHU-65 East Range Mine Shaft	FTHU-65
FTHU-85 Greely Hall UST Diesel Release	FTHU-85
FTHU-90 Greely Hall Gasoline Release	FTHU-90

**Results** FTHU-65 requires continued monitoring/sampling until the next five year review.

**Actions** Monitoring/sampling

**Plans** Monitoring and inspection plan are being implemented.

### Recommendations and Implementation Plans:

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## Land Use Control (LUC) Summary

**LUC Title:** FTHU-65 LUCs

**Site(s):** FTHU-65

**ROD/DD Title:** FTHU-65 East Range Mine Shaft

**Location of LUC**

Site FTHU-65, East Range

**Land Use Restriction:** Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use

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

**Types of Institutional Controls:** Dig Permits

**Date in Place:** 200408

**Modification Date:** N/A

**Date Terminated:** N/A

**Inspecting Organization:** Installation

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

**Documentation Date:** N/A

**LUC Enforcement:** Annual Inspections, 5 Year Reviews

**Contaminants:** METALS

**Additional Information**

N/A

# Cleanup Program Summary

## Installation Historic Activity

The installation was founded in the 1880s as part of the western expansion. It operated as a cavalry post until the outbreak of World War II when it became a training base. The fort was inactive briefly in the early-1950s. Following reactivation in 1954, the fort's primary missions included signal communications and electronics testing. In 1954, the fort was designated as the US Army Electronics Proving Ground. Since that time, additional missions have been added. These include communications testing, military intelligence training, and various flight operations, from unmanned aerial vehicles to C-130 training. Other major tenants on the installation include the Joint Interoperability Test Command, NETCOM, and the USAICoE.

In 1990, FTHU was designated a TRADOC installation and command transferred to the USAICoE, which gained additional missions as part of the Base Realignment and Closure initiatives. In 2003, FTHU Garrison transferred from the TRADOC to the IMCOM.

The permanent population of service members and dependents is approximately 7,300. Several thousand civilian employees are employed at the installation during the day.

Fort Huachuca is not on the NPL. The compliance order, initially issued to the installation by the ADEQ in July 1991, has been dismissed without prejudice. During discussions, the installation agreed to enter into bilateral consent orders (CO) for hazardous waste, USTs, and solid waste.

The installation has negotiated COs with the state of Arizona for hazardous waste and USTs. No agreement for solid waste is required since sites in question were remediated. The FTHU will continue to work with the state in addressing Installation Restoration Program (IRP) and Military Munitions Response Program (MMRP) sites on the installation. Soil cleanup standards, adopted in December 1997, have resulted in the closure of many IRP sites. Additional site investigation work may be necessary based on future comments from state regulators.

## Installation Program Cleanup Progress

### IRP

**Prior Year Progress:** Monitoring is expected to continue at least through the next five-year review at both FTHU-10 and FTHU-65.

**Future Plan of Action:** Closeout of FTHU-90 is anticipated in fiscal year (FY) 16.

### MMRP

**Prior Year Progress:** A proposed plan (PP) and decision document (DD) will be developed for FTHU-007-R-01. No future actions will be required for FTHU-007-R-01. An FS for FTHU-013-R-01 will begin.

**Future Plan of Action:** An FS, PP and DD will be completed for site FTHU-013-R-01.

### CR

**Prior Year Progress:** For CCFTHU-91 (Abandoned Asphalt Batch Plant), a contract for an RI was put in place in FY15.

**Future Plan of Action:** Future actions at site CCFTHU-91 will depend on the outcome of the RI/FS phase.

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**Army Defense Environmental Restoration Program**  
**Installation Restoration Program**

# IRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 62/59

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

- 1 Landfill  
(FTHU-10)
- 1 Soil Contamination After Tank Removal  
(FTHU-90)
- 1 Surface Disposal Area  
(FTHU-65)

## Most Widespread Contaminants of Concern

Metals, Pesticides, Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

## Media of Concern

Groundwater, Soil

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

Site ID	Site Name	Action	Remedy	FY
FTHU-54A	PX GAS STATION	FRA	AIR SPARGING	1994
FTHU-71	OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR	FRA	EX SITU SOIL TREATMENT	1995
FTHU-72	11TH SIG MOTOR POOL SPILL SITES	FRA	IN-SITU SOIL TREATMENT	1995
FTHU-53	MIL GAS STATION LUST FILE 0155.05	FRA	OTHER	1997
FTHU-57	AIRCRAFT WASHRACK, LIBBY AAF	FRA	IN-SITU SOIL TREATMENT	1997
FTHU-85	GREELY HALL UST RELEASE SITE	FRA	BIOVENTING	1999
FTHU-90	GREELY HALL GASOLINE RELEASE	FRA	SOIL VAPOR EXTRACTION	2000
FTHU-52	FIRE FIGHTING TRAINING AREA LAAF	FRA	REMOVAL	2002
FTHU-65	EAST RANGE MINE SHAFT	FRA	CAPPING	2002

## Duration of IRP

**Date of IRP Inception:** 197910

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 200209/200809

**Date of IRP completion including Long Term Management (LTM):** 204609

# IRP Contamination Assessment

## Contamination Assessment Overview

Site inspections (SI) and groundwater monitoring were conducted by the US Army Environmental Hygiene Agency (USAEHA), the US Army Toxic and Hazardous Materials Agency (USATHAMA), now known as the USAEC, and the USACE Omaha and Sacramento districts. Additionally, the installation conducted investigations and groundwater monitoring through direct contracts. The Environmental and Natural Resources Division is responsible for the IRP program.

The Installation Assessment of FTHU, Report No. 172, was published by the USATHAMA in June 1980. The report identified explosive wastes, herbicides, pesticides, and arsenic as major contaminants of concern at the installation, and listed training areas, old landfills and burial sites, demolition/burning grounds, and the Willcox Dry Lake bed as areas with potential contamination.

In 1987, the USATHAMA revisited the initial FTHU site assessment to determine if conditions had changed and if such changes, coupled with interim changes in environmental regulations or mission, had altered the contaminant migration/hazard situation. The report concluded that soil contamination may exist at the former Fire Fighter Training Area, the POL Storage Facility-Libby Army Air Force (AAF), Military POL Filling Station, Post Exchange (PX) Service Station, and the 1970 to 1975 era landfill. The report recommended further testing and analysis at these sites. The report also identified potential sites from aerial photographs. Various additional assessments and SIs were performed in partnership with the USACE, Omaha District. Sites included FTHU-10, 17, 18, 51, 52, 53, and 57. In 1993, work was transferred to the Sacramento District; they investigated sites FTHU-66 through 84.

On Sept. 23, 1994, FTHU and the ADEQ signed a Resource Conservation and Recovery Act (RCRA) Consent Agreement (CA) (D-10-91). The CA required FTHU to remediate the 11th Signal Brigade Motor Pool sites FTHU-71 and FTHU-72. These sites were remediated in FY95.

A UST CO required the installation to prepare leaking underground storage tank (LUST) site characterizations for the following sites:

- FTHU-78,
- FTHU-79,
- FTHU-80,
- FTHU-81,
- FTHU-84,
- FTHU-86,
- FTHU-87, and
- FTHU-88.

The SIs for the releases were completed in 1998, and all associated LUST files have been closed by the ADEQ. The CO required initiation of corrective action at sites FTHU-54A (PX Service Station), FTHU-85 (Greely Hall Diesel Release), and FTHU-90 (Greely Hall Gasoline Release). An air sparging system was installed in 1994 for remediation of petroleum hydrocarbons, and in 1999, oxygen releasing compounds (ORC) were released into the groundwater for remediation of methyl tertiary butyl ether at FTHU-54A. Sampling conducted in December 2005 indicated that the CAP goals were met. The ADEQ then issued a case closure letter indicating that no further action (NFA) was required at FTHU-54A. The air sparging system was decommissioned and the monitoring wells were abandoned in FY07.

A bioventing system was installed in 1997 for the diesel release at FTHU-85. A soil vapor extraction (SVE) system was installed in 2000 at FTHU-90 for the gasoline release. The historical records for both sites indicated that the leaks had occurred prior to 1986. Risk assessments completed for both sites in January 2008 indicated that there is no unacceptable risk to receptors and that the sites are eligible for closure. A closure request for each site was submitted to the ADEQ. The ADEQ indicated that there was not sufficient data to close the sites owing to the potential for lateral migration of vapors into Greely Hall. It was suggested that indoor air monitoring be conducted to determine whether there remains an unacceptable risk to receptors. Monitoring was completed and a risk assessment is being sent to ADEQ requesting a "no further action" decision.

At FTHU-10, South Range Landfill (SRLF), groundwater monitoring and reporting have been conducted semiannually since 1999, when a well was installed to monitor the quality of groundwater from the regional aquifer downgradient from the site. The monitoring program has expanded over the years to include installation of three additional groundwater monitoring wells, in an attempt to define regional groundwater flow and the extent of groundwater contamination. A fifth well was drilled in 2003 in an attempt to define the boundary between the regional aquifer and the underlying, less permeable, bedrock; however, the borehole was abandoned at a depth of 220 feet (ft) below ground surface (bgs), after encountering refusal.



# IRP Contamination Assessment

## Contamination Assessment Overview

Beginning in FY06, monitoring and reporting have been conducted annually; however, two of the three regional aquifer monitoring wells at the site could not be sampled in FY07 as a result of declining water levels in the regional aquifer. A decision was made to develop a DD in FY08 in lieu of annual monitoring. The DD was signed in FY15. From FY09 through FY16, monitoring will occur. A five-year review is planned for FY20.

Site FTHU-65, East Range Mine Shaft, was reportedly used for disposal of trash and garbage, petroleum products (sometimes burned), small aircraft/drone bodies, and unexploded ordnance (UXO). During the RI phase completed in 1991, three monitoring wells were installed and the wells were monitored annually through 2004. No contaminants above action levels were detected in samples from the wells. In November 2000 a cap was installed to prevent surface water infiltration. In March 2004, a DD was completed. The DD requires annual inspections and if necessary, maintenance of the cap and perimeter fence. The DD also requires that a five-year review be initiated in 2009, to include sampling and analysis of groundwater from the monitoring wells.

In March 1999, the ADEQ submitted a review of FTHU's site summary report. The following sites required NFA by the ADEQ:

- FTHU-41,
- FTHU-75,
- FTHU-64,
- FTHU-68,
- FTHU-73, and
- FTHU-74.

The following sites required further action by the ADEQ:

- FTHU-10,
- FTHU-52,
- FTHU-65,
- FTHU-66,
- FTHU-69, and
- FTHU-70.

In April 2000, a different ADEQ reviewer submitted another review of the same FTHU site summary report. The following sites required NFA by the ADEQ:

- FTHU-41,
- FTHU-75,
- FTHU-64,
- FTHU-68,
- FTHU-69,
- FTHU-70, and
- FTHU-74.

To close these sites, the ADEQ requested that FTHU prepare a DD. The following sites required further action by the ADEQ: FTHU-10, FTHU-65, and FTHU-91.

A DD was submitted to the ADEQ for official closure of the NFA sites. Letter number FPU 057 from ADEQ dated Dec. 15, 2000 notified the installation that sites FTHU-41, FTHU-75, FTHU-64, FTHU-68, FTHU-69, FTHU-70, and FTHU-74 were officially closed as NFA sites. The state based this decision on a review of the NFA DD dated Aug. 18, 2000 and signed by FTHU and ADEQ representatives.

Additional sampling was conducted in 2000 at the Golf Course Pesticide Mix Area, FTHU-73, and at the Vehicle Paint Booth Site, FTHU-66. The results of the SIs showed no detectable arsenic at FTHU-73 and concentrations below the remediation limit at FTHU-66.

Also in 2000, the installation conducted soil sampling at the Libby Army Airfield (LAAF) Fire Fighting Training Area, FTHU-52, to adequately define the vertical and horizontal extent of contamination. In October 2001, soil sampling and minor soil remediation (removal) were conducted. In January 2002, an NFA DD was submitted to the state requesting closure of sites FTHU-52, 66, 67, and 73. Letter number FPU 02-104 from the ADEQ dated March 14, 2002, notified the installation that the four sites were officially closed out as NFA sites.

# IRP Contamination Assessment

## Contamination Assessment Overview

FTHU-10 and FTHU-65 were evaluated because wells for testing were either damaged or dry and cannot be sampled. An additional well was installed at FTHU-10 in FY15 and the wells at FTHU-65 have been rectified to allow for sampling. FTHU-85 and FTHU-90 underwent testing for possible impact to indoor air in FY12, and the results identified no issues with vapor intrusion. The installation is awaiting closure approval from the state regulatory agency for these sites.

## Cleanup Exit Strategy

The three remaining IRP sites, FTHU-10, FTHU-65, and FTHU-90, are in the long-term management (LTM) phase. For the first two LTM sites, the strategy is to exit the LTM phase in a way that satisfies Arizona regulators and fulfills the spirit and intent of applicable laws in a cost effective manner.

## IRP Previous Studies

1980	Title	Author	Date
	US Army Toxic and Hazardous Materials Agency (USATHAMA), APG, MD	Installation Files for Fort Huachuca	JAN-1980
	US Army Environmental Hygiene Agency (USAEHA) APG, MD; Pesticide Special Investigation No. 20-44-0571-81, Analysis of Transformer Fluid Samples for Polychlorinated Biphenyls (PCBs)	Fort Huachuca	JAN-1980
	US Army Environmental Hygiene Agency (USAEHA) APG, MD; Radiation Protection Survey No. 28-43-0024-80	US Army Medical Department/Dental Activity	JAN-1980
	US Army Toxic and Hazardous Materials Agency (USATHAMA), APG, MD; Installation Assessment of Fort Huachuca, Report No. 172	Chemical Systems Laboratory	JAN-1980
1981			
	US Army Environmental Hygiene Agency (USAEHA) APG, MD; Potable/Recreational Water Quality Survey No. 31-66-0181 and Wastewater Engineering Survey No. 32-66-0182-81	Fort Huachuca and Aurora, CO	JAN-1981
	Pesticide Resistance Assessment No. 18-660572-81, Insecticide Susceptibility/Resistance Testing of German Cockroaches from Ft. Huachuca	US Army Environmental Hygiene Agency (USAEHA) Aurora, CO	JAN-1981
1982			
	Nonionizing Radiation Protection Special Study No. 24-42-0715-82 AN/TSC-86 Satellite Terminal	US Army Environmental Hygiene Agency (USAEHA) APG, MD	JAN-1982
	Nonionizing Radiation Protection Special Study No. 24-42-0737-82, 20 Mhz-1 Ghz Radiation Test Van, US Army Intelligence and Security Board, Ft. Huachuca	US Army Environmental Hygiene Agency (USAEHA) APG, MD	JAN-1982
1983			
	Radiation Protection Survey No. 28-43-00327-83, US Army Medical Department/Dental Activity	US Army Environmental Hygiene Agency (USAEHA) APG, MD	JAN-1983
	Integrated Pest Management Assessment No. 18-660554-83, Cockroach and House Fly Control	US Army Environmental Hygiene Agency (USAEHA) Aurora, CO	JAN-1983
1984			
	Radiation Protection Survey No. 28-43-0407-84, US Army Medical Department Activity/Dental Activity	US Army Environmental Hygiene Agency (USAEHA) APG, MD	JAN-1984
	Radiation Protection Survey No. 28-43-0905-84, US Army Medical Department Activity/Dental Activity	US Army Environmental Hygiene Agency (USAEHA) APG, MD	JAN-1984
	Pest Resistance Laboratory Study No. 16-66-0542-84, Insecticide Susceptibility/Resistance Testing of German Cockroaches from Ft. Huachuca, AZ	US Army Environmental Hygiene Agency (USAEHA) Aurora, CO	JAN-1984
1986			
	Installation Assessment Relook Program Working Document, Ft. Huachuca Army Reservation, Cochise County, AZ TS-PIC-85X	US Environmental Photographic Interpretation Center, Warrenton, VA	JAN-1986
1989			
	Environmental Program Review No. 37-26-7157-90, Ft. Huachuca, AZ	US Army Environmental Hygiene Agency (USAEHA) APG, MD	JAN-1989

## IRP Previous Studies

1989	Title	Author	Date
	Environmental Program Review No. 37-26-7157-90, Ft. Huachuca, AZ	US Army Environmental Hygiene Agency, APG, MD	JAN-1989
	Groundwater Quality Survey No. 38-26-8875-89 Potential Groundwater Contamination Sites, Ft. Huachuca	Environmental Engineering Consultants	MAR-1989
1991	UST Site Investigation, Post Exchange Gas Station	Kleinfelder, Inc.	MAR-1991
	Report on Removal of an Underground Storage Tank at Greely Hall	Kleinfelder, Inc.	JUN-1991
1992	Remedial Investigation Report UST Site: Military POL Filling Station, PX Service Station	James M. Montgomery (JMM) Consulting Engineers, Inc.	MAY-1992
	Subsurface Investigation Building 30126, Underground Storage Tank Excavation, Ft. Huachuca	Hydro Geo Chemical, Inc.	MAY-1992
	Final Remedial Investigation Report UST Site: Military POL Filling Station, PX Service Station	JMM	MAY-1992
	Tank Trails Dump Sites Remedial Investigation Report	JMM	MAY-1992
	RCRA Facilities Investigation Report: Libby Army Airfield (LAAF) Fire Fighting Training Area, LAAF Aircraft Wash Rack Area, LAAF POL Storage Facility	JMM	MAY-1992
	Final RCRA Facilities Investigation Report: LAAF Fire Fighting Training Area, LAAF Aircraft Wash Rack Area, LAAF POL Storage Facility, May	JMM	MAY-1992
	UST Management; Permanent Closure of Four 10,000 Gallon USTs Initial Site Characterization, AAFES Service Station, Smith Avenue & Whitside Road, Ft. Huachuca	Environmental Engineering Consultants	JUN-1992
1993	Limited Excavation and Disposal of Petroleum Contaminated Soil Miller & Associates, Inc., Ft. Huachuca AAFES Fuel Facility	Western Technologies, Inc.	JAN-1993
	Draft Interim Report, PX Service Station Interim Response Action, Ft. Huachuca	International Technology Corporation	AUG-1993
	Draft Interim Report, PX Service Station Interim Response Action, Ft. Huachuca	International Technology Corporation	AUG-1993
	Report on Subsurface Soil Assessment of JP-4 Fuel Contamination From an Underground Storage Tank System at Libby Army Airfield; USAG Ft. Huachuca	Environmental Engineering Consultants	AUG-1993
1994	Draft Report on the Remediation of Petroleum Impacted Soil From Various Sites at USAG Ft. Huachuca	Environmental Engineering Consultants	FEB-1994
	Report on Assessment of Petroleum Hydrocarbon Contamination at Greely Hall, Ft. Huachuca	Environmental Engineering Consultants	FEB-1994
	Report on Assessment of Soil and Perched Groundwater at Bldg 31210, AAFES PX Service Station	Environmental Engineering Consultants	FEB-1994
	Final Preliminary Assessment/Site Investigation Report Miscellaneous Non-UST Sites	Montgomery Watson, Inc.	APR-1994
	Final Preliminary Assessment/Site Investigation Report Miscellaneous UST Removal Sites	Montgomery Watson, Inc.	APR-1994
	Project Work Plan Soil Sampling and Analysis Investigation Open Burning/Open Detonation Units	Basin & Range Hydrogeologists, Inc.	MAY-1994

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1994

Title	Author	Date
South and East Ranges		
Final Report: Assessment of Subsurface Petroleum Hydrocarbon Impacted Soils at Former Waste Soil Piles (AAFES, Brainard, Radar Station, and Defueling Point), Ft. Huachuca	Environmental Engineering Consultants	JUN-1994
Air Sparging System Installation, PX Service Station, Ft. Huachuca, Volumes I & II	International Technology Corporation	OCT-1994
Air Sparging System Installation, PX Service Station, Ft. Huachuca	International Technology Corporation	OCT-1994
Report on the Remediation of Petroleum Hydrocarbon Impacted Soil From Various Sites at USAG Ft. Huachuca	Environmental Engineering Consultants	OCT-1994
Report on Removal of One 2,000 Gallon Waste Oil Underground Storage Tank, and Subsequent Soil Assessment and Corrective Action at the Auto Craft Shop (Building 71810) Ft. Huachuca	Environmental Engineering Consultants	DEC-1994

1995

Soil Sampling and Analysis Investigation Open Burning/Open Detonation Units South and East Ranges, Ft. Huachuca	Basin & Range Hydrogeologists, Inc.	FEB-1995
Project Work Plan Amendment Soil Sampling and Analysis Investigation Open Burning/Open Detonation Units South East Ranges	Basin & Range Hydrogeologists, Inc.	AUG-1995
Site N12 Site Characterization Report (TMP Steam Cleaning Facility), Ft. Huachuca	International Technology Corporation	AUG-1995
UST Site 6 Site Characterization Report	International Technology Corporation	AUG-1995
UST Site 8 Site Characterization Report	International Technology Corporation	AUG-1995
Site N6 Site Characterization Report	International Technology Corporation	AUG-1995
UST Site 9 Site Characterization Report	International Technology Corporation	AUG-1995
UST Site 7 Site Characterization Report	International Technology Corporation	AUG-1995
Site Characterization Report AAFES Service Station Dispenser Release, Ft. Huachuca Army Post, ADEQ LUST File # 4715.2289	Engineering and Environmental Consultants, Inc.	OCT-1995
Report on Excavation, Sampling and Thermal Treatment of Petroleum Impacted Soil at 11th Signal Brigade USAG Ft. Huachuca, Spill Site #13, ADEQ Consent Order #D10-91	Engineering and Environmental Consultants, Inc.	DEC-1995
Corrective Action Program Plan Deliver Order #27, ADEQ LUST File #0299.03	Engineering and Environmental Consultants, Inc.	DEC-1995

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Site Characterization Report Building # 61801, Greely Hall, ADEQ LUST File 0299.03 Ft. Huachuca Army Post, ADEQ LUST File # 4715.2289	Engineering and Environmental Consultants, Inc.	JAN-1996
Leachate Report for South Range Landfill	International Technology Corporation	FEB-1996
Site Characterization Report CEWI Motor Pool, Bldg 30113, Ft. Huachuca Army Post, ADEQ LUST File # 4178.01	Engineering and Environmental Consultants, Inc.	MAR-1996

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1996	Title	Author	Date
	Report on Soil Boring at East Range Open Burning Open Detonation Site, East Range of Ft. Huachuca	Engineering and Environmental Consultants, Inc.	MAR-1996
	Proposed Phase 2 Investigation Program Open Burning/Open Detonation Units West Range and East Range (Sites 1,2,3)	Basin and Range Hydrogeologists, Inc.	AUG-1996
1997			
	Soil Sampling and Analysis Investigation Open Burning/ Open Detonation Units South, East, and West Ranges, Ft. Huachuca	Basin and Range Hydrogeologists, Inc	JUN-1997
	Site Characterization Report UST Spill Site #8, Contingency Tank, Ft. Huachuca, ADEQ LUST file #0155.15	Environmental Engineering Consultants	JUN-1997
	Report Request for Closure Ft. Huachuca's South Range Asbestos Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	JUN-1997
	Report on Site Characterization Investigation at Ft. Huachuca AAFES PX Former Service Station, Bldg. #31209, ADEQ LUST file #s 0155.45, 0155.46, 0155.47	Environmental Engineering Consultants	JUN-1997
	Report on Site Characterization Investigation at Ft. Huachuca AAFES PX Former Service Station, Bldg. #31209, ADEQ LUST file #s 0155.45, 0155.46, 0155.47	Environmental Engineering Consultants	JUN-1997
	Report on Initial Site Characterization Investigation at Antenna Test Facility Bldg 15680, USAG Ft. Huachuca	Environmental Engineering Consultants	DEC-1997
1998			
	Report on Groundwater Investigation at Former Location of Gasoline Product Line, AAFES PX Service Station Bldg # 31210 & 31209, Ft. Huachuca	Environmental Engineering Consultants	JUL-1998
	Closure Plan Open Burning/Open Detonation Units South, East and West Ranges, Ft. Huachuca	Basin and Range Hydrogeologists, Inc	SEP-1998
	Groundwater Monitoring Quarterly Report, AAFES Service Station, Air Sparging System Area, USAG Ft. Huachuca	Environmental Engineering Consultants	SEP-1998
	Remedial Action Plan at Bldg 61801 Greely Hall, USAG Ft. Huachuca, ADEQ LUST file #0155.06	Environmental Engineering Consultants	OCT-1998
	Corrective Action Plan Amendment AAFES PX Service Station USAG Ft. Huachuca	Environmental Engineering Consultants	OCT-1998
	Report on Demolition of Concrete Pads, the Removal of Three Hydraulic Lifts and One Oil Water Separator at the Former AAFES PX Service Station, Bldg 31210, Ft. Huachuca	Environmental Engineering Consultants	NOV-1998
	Report On-site Characterization Investigation Libby Army Airfield USAG Ft. Huachuca	Environmental Engineering Consultants	NOV-1998
	Report on Remediation of Petroleum Contaminated Soil at the Angenna Test Facility Bldg 15680	Environmental Engineering Consultants	DEC-1998
	Report on Remediation of Petroleum Contaminated Soil at the Angenna Test Facility Bldg 15680	Environmental Engineering Consultants	DEC-1998
	Groundwater Monitoring Report, East Range Mine Shaft USAG Ft. Huachuca	Environmental Engineering Consultants	DEC-1998
	Groundwater Monitoring Quarterly Report, AAFES Service Station, USAG Ft. Huachuca, ADEQ LUST file 0155.01	Environmental Engineering Consultants	DEC-1998
	Groundwater Monitoring Report, East Range Mine Shaft USAG Ft. Huachuca	Environmental Engineering Consultants	DEC-1998
	Groundwater Monitoring Quarterly Report, AAFES	Environmental Engineering	DEC-1998

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<b>1998</b>	Service Station, USAG Ft. Huachuca, ADEQ LUST file 0155.01, December	Consultants		
	Leachate Monitoring Quarterly Report, South Range Landfill USAG Ft. Huachuca	Environmental Engineering Consultants	DEC-1998	
<b>1999</b>	Groundwater Monitoring Quarterly Report, AAFES Service Station, USAG Ft. Huachuca	Environmental Engineering Consultants	SEP-1999	
	Soil Vapor Extraction Pilot Test; Greely Hall, USAG Ft. Huachuca	Environmental Engineering Consultants	SEP-1999	
	Report on Installation and Sampling of Groundwater Monitoring Well; South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	OCT-1999	
<b>2000</b>	Report on Amendment of Corrective Action Plan AAFES PX Service Station USAG	Environmental Engineering Consultants	MAR-2000	
	Groundwater Monitoring Quarterly Report, AAFES Service Station, USAG Ft. Huachuca	Environmental Engineering Consultants	MAR-2000	
	Groundwater Monitoring Quarterly Report, East Range Mine Shaft, USAG Ft. Huachuca	Environmental Engineering Consultants	MAR-2000	
	Leachate and Groundwater Monitoring Quarterly Report, South Range Landfill, USAG	Environmental Engineering Consultants	MAR-2000	
	Report on Respiration Study Greely Hall Bldg 61801, Ft. Huachuca Army Post	Environmental Engineering Consultants	APR-2000	
	Leachate and Groundwater Monitoring Quarterly Report, South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	JUL-2000	
	Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	JUL-2000	
	Fort Huachuca Installation Restoration Program No Further Action Decision Document to Support Closure of Sites FTHU-64, FTHU-68, FTHU-69, FTHU-70, FTHU-74, and FTHU-41 & 75, USAG Ft. Huachuca	Environmental Engineering Consultants	AUG-2000	
	Air Quality Monitoring Report for Soil Vapor Extraction System, Bldg 61801 (Greely Hall), USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Environmental Engineering Consultants	OCT-2000	
	Groundwater Monitoring Quarterly Report, East Range Mine Shaft, USAG Ft. Huachuca	Environmental Engineering Consultants	OCT-2000	
	Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	OCT-2000	
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	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Environmental Engineering Consultants	DEC-2000	
	Report on Cap Installation, East Range Mine Shaft, USAG Ft. Huachuca	Environmental Engineering Consultants	DEC-2000	
	<b>2001</b>	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Environmental Engineering Consultants	JAN-2001
		Groundwater Monitoring Quarterly Report, East Range Mine Shaft, USAG Ft. Huachuca	Environmental Engineering Consultants	JAN-2001

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Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	FEB-2001
Report on Installation of Groundwater Monitoring Wells, Site FTHU 10, South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	MAY-2001
Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Environmental Engineering Consultants	MAY-2001
Report on Respiration Study Greely Hall Bldg 61801, Ft. Huachuca Army Post	Environmental Engineering Consultants	JUN-2001
Groundwater Monitoring Quarterly Report, AAFES Service Station, USAG Ft. Huachuca	Environmental Engineering Consultants	JUL-2001
Groundwater Monitoring Quarterly Report, East Range Mine Shaft, USAG Ft. Huachuca	Environmental Engineering Consultants	JUL-2001
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Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Environmental Engineering Consultants	NOV-2001
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Fort Huachuca Installation Restoration Program No Further Action Decision Document to Support Closure of Sties FTHU-52, FTHU-66, FTHU-67 and FTHU-73, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JAN-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Engineering and Environmental Consultants, Inc	JAN-2002
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Groundwater Monitoring Quarterly Report, AAFES Service Station, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	FEB-2002
Groundwater Monitoring Quarterly Report, East Range Mine Shaft, USAG Ft. Huachuca	Environmental Engineering Consultants, Inc	MAR-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Engineering and Environmental Consultants, Inc	MAR-2002



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Title	Author	Date
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Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Engineering and Environmental Consultants, Inc	APR-2002
Installation of Groundwater Monitoring Well, SRLF MW-4 at Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAY-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Engineering and Environmental Consultants, Inc	MAY-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall) USAG Ft. Huachuca, ADEQ Air Quality Permit 1001046	Engineering and Environmental Consultants, Inc	JUN-2002
Report on Respiration Study Bioremediation of Diesel Release at Bldg 61801 (Greely Hall) USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUN-2002
Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUN-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUN-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	AUG-2002
Groundwater Monitoring Quarterly Report, AAFES Service Station, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	SEP-2002
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Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	OCT-2002
Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	OCT-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	NOV-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	DEC-2002
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	DEC-2002

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Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JAN-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JAN-2003

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Title	Author	Date
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	FEB-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAR-2003
Confirmation Soil Sampling Report for Bioremediation Project at Bldg 61801 (Greely Hall) USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAR-2003
Confirmation Soil Sampling Report for Soil Vapor Extraction System Project at Bldg 61801 (Greely Hall) USAG	Engineering and Environmental Consultants, Inc	MAR-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	APR-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAY-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUN-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUL-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	AUG-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	SEP-2003
Groundwater Monitoring Report, AAFES Service Station, USAG Fort Huachuca	Engineering and Environmental Consultants, Inc	SEP-2003
Groundwater Monitoring Report, East Range Mine Shaft, USAG Fort Huachuca	Engineering and Environmental Consultants, Inc	SEP-2003
Leachate and Groundwater Monitoring Quarterly Report, Site FTHU-10, South Range Landfill, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	OCT-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	OCT-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	NOV-2003
Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	DEC-2003
Well Installation and Abandonment Report: Pantano Interface Monitoring Well MW-5, South Range Landfill, Ft. Huachuca Army Garrison	Engineering and Environmental Consultants, Inc	DEC-2003
Groundwater Monitoring Report, AAFES Service Station, USAG Fort Huachuca	Engineering and Environmental Consultants, Inc	DEC-2003

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2003	Title	Author	Date
	Leachate and Groundwater Monitoring Semiannual Report, Site FTHU-10, South Range Landfill, USAG	Engineering and Environmental Consultants, Inc	DEC-2003
2004	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JAN-2004
	Groundwater Sampling Report, East Range Mine Shaft, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JAN-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	FEB-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAR-2004
	Groundwater Sampling Report, East Range Mine Shaft, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAR-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAR-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	APR-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	MAY-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUN-2004
	Groundwater Monitoring Report, AAFES Service Station, USAG Fort Huachuca	Engineering and Environmental Consultants, Inc	JUN-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	JUL-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	AUG-2004
	Fort Huachuca IRP Decision Document in Support of the Change of Status for Site FTHU-65, USAG Fort Huachuca	Engineering and Environmental Consultants, Inc	AUG-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	SEP-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	OCT-2004
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	NOV-2004
2005	Monthly Air Quality Monitoring Report, Soil Vapor	Engineering and	JAN-2005

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2005	Title	Author	Date
	Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Environmental Consultants, Inc	
	Groundwater Monitoring Report, AAFES Service Station, USAG Fort Huachuca	Engineering and Environmental Consultants, Inc	JAN-2005
	Leachate and Groundwater Monitoring Semiannual Report, Site FTHU-10, South Range Landfill, USAG	Engineering and Environmental Consultants, Inc	JAN-2005
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	FEB-2005
	Leachate and Groundwater Monitoring Semiannual Report, Site FTHU-10, South Range Landfill, USAG	Environmental Engineering Consultants, Inc.	OCT-2005
	Monthly Air Quality Monitoring Report, Soil Vapor Extraction System, Bldg 61801 (Greely Hall), ADEQ Air Quality Permit 1001046, USAG Ft. Huachuca	Engineering and Environmental Consultants, Inc	DEC-2005
2006			
	Leachate and Groundwater Monitoring Semiannual Report, Site FTHU-10, South Range Landfill, USAG	Environmental Engineering Consultants, Inc.	MAR-2006
2007			
	Leachate and Groundwater Monitoring Annual Report, Site FTHU-10, South Range Landfill, USAG	Environmental Engineering Consultants, Inc.	JUN-2007
	Summary Report: Well Abandonment and Remediation System Decommissioning, IRP Site FTHU-54a, Former AAFES Service Station	Environmental Engineering Consultants, Inc.	DEC-2007
2008			
	Risk Assessment, Greely Hall LUST sites 0155.06 and 0155.21	Environmental Engineering Consultants, Inc.	JAN-2008

**FORT HUACHUCA**  
**Installation Restoration Program**  
**Site Descriptions**

**Site ID: FTHU-10**

**Site Name: SOUTH RANGE LF (OLD LF 6 AND 7)**

**STATUS**

**Regulatory Driver:** CERCLA

**RRSE:** LOW

**Contaminants of Concern:** Metals, Pesticides

**Media of Concern:** Groundwater

<b>Phases</b>	<b>Start</b>	<b>End</b>
PA.....	199203.....	199404
SI.....	199203.....	199404
RI/FS.....	199203.....	200105
LTM.....	200106.....	204609

**RIP Date:** N/A

**RC Date:** 200105

**SITE DESCRIPTION**

FTHU-10 is located on FTHU South Range and covers about 100 acres. This site consists of two adjacent alleged solid waste disposal areas (Locations 10 and 11) originally identified in the report titled "Installation Assessment of Fort Huachuca" done by USATHAMA in 1980. Location 10 was allegedly a landfill from 1972 to 1975 with disposal of unknown quantities of chemicals including pesticides, herbicides/sterilants, and sodium arsenite.

Location 11, adjacent to Location 10 on the east, was identified as having been used from 1970 to 1975 for the disposal of routine trash and garbage. Interviews and review of aerial photographs were conducted to evaluate disposal activity. No written records exist to document the activities.

In April 1994, a preliminary assessment (PA)/SI was completed. The PA/SI included soil, perched groundwater, and surface water sampling whereas site characterization included drilling and sampling of six soil borings to characterize the nature and extent of contamination. Analytes included VOC, base neutral acids, organochlorine pesticides/PCBs, organophosphorus pesticides, herbicides, and priority pollutant metals. The only analytes detected above regulatory limits (i.e., health-based guidance levels established by the ADEQ) were total cadmium, lead, dieldrin, p,p'dichlorodiphenyldichloroethane (DDD), and total petroleum hydrocarbons (TPH).

In 1999, a single well was installed and semiannual monitoring was initiated. Over the years, three additional monitoring wells were installed to define regional groundwater flow and extent of contamination. In FY03, at ADEQ's request, a fifth well was drilled in an attempt to define the boundary between the regional aquifer and the underlying, less permeable, bedrock; however, the borehole was abandoned at a depth of 220 ft below ground surface (bgs) after encountering refusal. In 2006, ADEQ concurred with a change from semiannual to annual monitoring of three regional groundwater wells and two leachate wells.

In the April 2007 report it was noted that the water table had dropped leaving SRLF MW-3 dry, unable to be purged, and SRLF MW-2 dry after purging only 2 gallons of water. Similar declines in water levels were observed in the regional aquifer of the Upper San Pedro Basin. Three of the four remaining monitoring wells were abandoned in 2008, two of them because they had gone dry and the third because evidence indicated that it was not hydrologically connected with groundwater beneath the site. SRLF MW-1, located downgradient from the site, has since gone dry.

In groundwater samples collected since 1999 no pesticides, VOCs, or semi-volatile organic compounds (SVOC) have been detected above Arizona Aquifer Water Quality Standards (AWQS). There were only three instances in which metals (lead and cadmium) exceeded their respective AWQS. ADEQ has indicated that LTM should continue.

Work in FY12 included evaluations of existing data to address the mitigating factors reducing risk, such as evapotranspiration, and from these evaluations, it was determined that the installation of one additional well at a downgradient location will be required to provide defensible chemistry data confirming that there has been no release in the intervening years since 2007. With the installation of another well, it is agreed that there will be at least two sampling events (semiannual) limited to analytes for which there are previous detections: VOCs, chlorinated pesticides and priority metals. LTM is required until the ADEQ determines that enough information was acquired to do an NFA as indicated in the DD. A well was installed in 2014 and the other wells in the area were abandoned. ADEQ has agreed to annual sampling. Existing installation land restrictions are in place at this site.

**Site ID: FTHU-10**  
**Site Name: SOUTH RANGE LF (OLD LF 6 AND 7)**

The most recent groundwater sampling and inspection activities were performed in June 2015. The ADEQ has agreed to annual sampling until the next five-year review in FY20.

The costs for installation-wide five-year reviews are tracked under site FTHU-65.

**CLEANUP/EXIT STRATEGY**

A DD, which recommends yearly monitoring and five-year reviews, will be finalized in FY16. Monitoring frequencies will be evaluated during the next five-year review.

Site ID: FTHU-65

Site Name: EAST RANGE MINE SHAFT

### STATUS

Regulatory Driver: CERCLA  
RRSE: LOW  
Contaminants of Concern: Metals  
Media of Concern: Groundwater, Soil

Phases	Start	End
PA.....	199003.....	199111
SI.....	199003.....	199111
RI/FS.....	199003.....	199111
RA(C).....	200011.....	200209
LTM.....	200209.....	204609

RIP Date: N/A  
RC Date: 200209

### SITE DESCRIPTION

FTHU-65 is located on the remote East Range. Anecdotal information indicated that the mine shaft had been used since the 1940s for disposal of a variety of waste including refuse, petroleum products (sometimes burned), small aircraft/drone bodies and possibly UXO.

In August 1989, the site included the remains of a small earthen berm, partially surrounding a depression in the soil. By November 1989, a portion of the depression had settled or collapsed.

By early February 1990, the post had refilled the depression/hole with earth to minimize surface water entry and added a fence around the area. Groundwater is approximately 280 ft bgs. The potential that a direct pathway existed between possible contaminants and the groundwater was of special concern. From 1992 to 2004, the installation monitored three groundwater wells at the site. Groundwater has been sampled for the presence of VOCs, hydrocarbons, metals, and explosives. To date, no contaminants above action levels have been encountered in the wells, although lead was detected in an upgradient well.

In November 2000, at the request of the ADEQ, a cap was installed to prevent surface water from infiltrating the site. The DD requires annual inspections and, if necessary, maintenance of the cap and perimeter fence. The DD also required that a five-year review be conducted in 2015, which included sampling and analysis of groundwater from the monitoring wells. A five-year review was completed in 2010 without monitoring. The monitoring event did not occur due to inaccessibility of water in the wells. Past data, along with the current tests, have been reviewed and analyzed to demonstrate the lack of contamination risk at this site. Two new wells were installed in 2014 at locations agreed to by ADEQ. Three monitoring wells were sampled and no contamination was found. ADEQ agreed in January 2015 that no additional sampling is required at the site.

The costs for installation-wide five-year reviews are tracked under this site.

The most recent groundwater sampling and inspection activities were performed in Jun 2015. Monitoring/inspections will continue up to the next five-year review (FY20).

### CLEANUP/EXIT STRATEGY

The installation will perform annual inspections of the cap and fence at the site and provide annual reports to ADEQ in accordance with the DD. The site will be included in the installation's five-year reviews and in the installation's LUC plan.



Site Name: GREELY HALL GASOLINE RELEASE

STATUS

Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Soil

Phases	Start	End
ISC.....	199506.....	199507
INV.....	199804.....	199805
CAP.....	199810.....	199906
DES.....	199910.....	199912
IMP(C).....	200001.....	200008
IMP(O).....	200009.....	200809
LTM.....	201009.....	201612

RIP Date: 200009

RC Date: 200809

SITE DESCRIPTION

This site is located at the rear southern service area of the Greely Hall Building 61801. Greely Hall was built in 1959. A gasoline generator and associated UST were installed in the 1970s to provide emergency power for the communication center. Site FTHU-90 is associated with the release of gasoline from a UST that provided fuel to emergency generators. The generator was removed during the 1970s. In 1995, the storage tank was removed, at which time the contaminant plume, from years of gasoline spillage from overfilling the generators, was discovered. The extent of impacted soil is less than 65 ft deep and less than 70 ft in diameter. In April of 1998, the site was assessed, and 65 parts per million (ppm) of benzene was detected. A CAP was prepared for the gasoline release. In August 1999, a SVE pilot test was conducted to assist in obtaining an air quality permit from the ADEQ. The regional groundwater at the site is estimated at approximately 400 to 450 ft below the land surface.

To reduce levels of benzene that exceeded state residential soil remediation levels (SRL), the SVE system was installed and started on July 31, 2000 at this location. In January 2003, soil borings and sampling were conducted. Benzene was detected above its residential SRL (0.62 ppm) from 20 to 30 ft bgs, with the highest concentration of 22 ppm of benzene at 20 ft bgs. An SVE well was grouted, from a depth of 60 ft, to facilitate remediation at the depth where contamination concentrations remain above residential SRLs.

Results from a confirmation soil boring placed in May 2007 indicated that various contaminants exceeded their respective residential SRLs but not the respective non-residential SRLs. A decision was made to attempt to close the site using a risk based assessment consistent with Arizona regulations. The risk assessment was completed and a report submitted to the ADEQ for approval. The ADEQ indicated that there was not sufficient data to close the site owing to the potential for lateral migration of vapors into Greely Hall. It was suggested that indoor air monitoring be conducted to determine whether there remains an unacceptable risk to receptors. This monitoring was conducted September 2012. As discussed in the conclusions and recommendations section published in the Final Report of the Indoor Air Evaluation of Greely Hall (October 2012), the petroleum contaminants from this site, in indoor air, do not pose unacceptable risks to workers in Greely Hall. A corrective action completion report was approved by ADEQ on Oct. 23, 2014.

LUST 155.02, 155.03, and 155.54, not formally closed by the Army or ADEQ, were identified and captured under this site. ADEQ requires confirmation sampling prior to site closeout to be accomplished by August 2016.

CLEANUP/EXIT STRATEGY

CACRs were submitted to the state, and site closeout is anticipated in FY16.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTHU-01	RAD SOURCE STRG BLDG 12508	198006	Identified as 1 of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980); however, this facility contained only sealed sources of radioactivity and there has never been a known release of material from this site. The report recommended no further investigation, a conclusion reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-02	ABANDONED T, BLDG 90322 AND SLUDGE BEDS	198006	Number 2 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-05	LANDFILL 1 1930-1945	198804	Number 5 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-06	LANDFILL 2 1945-1950	198804	Number 6 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-07	LANDFILL 3 1976-1979	198804	Number 7 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-08	LANDFILL 4 1939-1975(A)	198804	Number 8 on a list of 24 locations of

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-09	LANDFILL 5 1939-1975(B)	198804	Number 9 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-12	LANDFILL 8 1939-1970	198804	Number 12 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-13	LANDFILL 9 1903-1939	198804	Number 13 on a list of 24 locations of known or suspected waste materials in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of potential contamination was found for this landfill. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-17	EAST RANGE OB/OD AREA	200101	Site remediated as a RCRA Corrective Action. Acknowledgement of closure letter dated June 1, 2006 was issued by the ADEQ formally closing this site.
FTHU-18	SOUTH RANGE OB/OD AREA	200101	Site remediated as a RCRA Corrective Action. Acknowledgement of closure letter dated June 1, 2006 was issued by the ADEQ formally closing this site.
FTHU-30	BLDG 72909 WOOD SHOP	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-31	BLDG 72908 WELD SHOP	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-32	BLDG 72908 MACH AND PT. SHP	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-33	MUNITIONS REPAIR, BLDG 73902	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-34	BLDG 73903 PAINTING	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-36	BLDG 75902 TIRE REPAIR	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			by USATHAMA in 1988.
FTHU-37	BLDG 75901 MOTOR POOL	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-38	BLDG 51419, VEHICLE MAINTENANCE	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-39	BLDG 30013 MOTOR POOL	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-40	BLDG 30113 CEWI MOTOR POOL	198006	There are several LUST files associated with this facility including 0155.39 (formerly 4715.4178) for a leaking 200 gallon used oil UST and 0155.10 (formerly 4715.1185) for a 16,000 gallon used oil tank in an underground vault. LUST file 0155.39 was closed by ADEQ in a letter dated 17 October 1996 and LUST file 0155.10 was referred to the Solid Waste Compliance and Inspection Unit of ADEQ for eventual closure with no further action in a letter dated Sept. 30, 1996.
FTHU-41	BLDG 75801 MOTOR POOL	198006	Technical Document to support the NFA Declaration signed on 11/27/2000.
FTHU-42	BLDG 74902 PAINT SHOP	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTHU-43	BLDG 91110 AVIATION MAINTENANCE SHOP	198006	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-44	BLDG 90201, POST LAUNDRY	198606	Identified as one of 37 industrial operations in "Installation Assessment of Fort Huachuca" prepared by USATHAMA (June 1980). No evidence of contamination was found at this facility. The report recommended no further investigation. This conclusion was reiterated in "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988.
FTHU-51	POL STG, LIBBY AAF LUST FILE	199908	LUST Case Closure Letter from ADEQ dated March 31, 1999 (LUST File #0155.33)
FTHU-52	FIRE FIGHTING TRAINING AREA LAAF	200203	Technical Document to Support the No Further Action Declaration signed on 3/13/2002; no contaminants above ADEQ SRLs.
FTHU-53	MIL GAS STATION LUST FILE 0155.05	199709	ADEQ LUST case closure letter dated April 15, 1998. LUST file number associated with site is 0155.04, not 0155.05.
FTHU-54	POST ELECTRICAL SHOP	198006	The report "Update of the Initial Assessment of Fort Huachuca" prepared by USATHAMA in 1988, noted that 50 transformers were stored in the open at the rear of this facility, but no leaking transformers were observed, none of the transformers reportedly contained PCBs, and all 50 transformers were subsequently transferred to DRMO for disposal. The report recommended no further investigation.
FTHU-54A	PX GAS STATION	200709	ADEQ LUST Case Closure Letter dated June 20, 2006.
FTHU-55	BLDG 73904 BATT SHOP	198804	ADEQ issued a letter on 16 July 1996 acknowledging that "No Further Action" was required at this site.
FTHU-57	AIRCRAFT WASHRACK, LIBBY AAF	199610	This site was originally identified as a LUST site under authority of the ADEQ UST Unit; however, the release at this site was not from a UST. The site was subsequently transferred to and closed by the ADEQ Solid Waste Unit.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTHU-61	IMPACT AREA-EAST RANGE	198006	Impact area on East Range is part of an active military range. Until status of range changes, no activities are planned for the site.
FTHU-62	IMPACT AREA SOUTH RANGE	198006	Impact area on South Range is part of an active military range. Until status of range changes, no activities are planned for the site.
FTHU-64	TANKTRAILS DUMP SITE (6)	199706	Technical Document to Support the "No Further Action Declaration" signed on 11/27/2000; no contaminants above ADEQ SRLs
FTHU-66	VEHICLE PAINT BOOTH BLDG 72907	200108	Technical Document to Support the "No Further Action Declaration" signed on 3/13/2002; no contaminants above ADEQ SRLs.
FTHU-67	TMP DRUM STG AREA	200203	Technical Document to Support the "No Further Action Declaration" signed on 3/13/2002; no contaminants above ADEQ SRLs
FTHU-68	TMP AUTOMATIC WASHRACK, BLDG 76925	199506	Technical Document to Support the "No Further Action Declaration" signed on 11/27/2000; no contaminants above ADEQ SRLs
FTHU-69	TMP ABOVEGROUND WASTE TANK SITE	200012	Technical Document to Support the "No Further Action Declaration" signed on 11/27/2000; no contaminants above ADEQ SRLs
FTHU-70	TMP STEAM CLEANING FACILITY	200012	Technical Document to Support the "No Further Action Declaration" signed on 11/27/2000; no contaminants above ADEQ SRLs
FTHU-71	OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR	199505	A Preliminary Assessment/Site Investigation was performed at this site by James M. Montgomery, Consulting Engineers, in 1992 ("Preliminary Assessment/Site Investigation Report Miscellaneous Non-UST Sites"). Samples collected from the AOC were analyzed for VOCs, lead, and Total Recoverable Petroleum Hydrocarbons (TRPHs). No VOCs were detected and no samples contained lead or TRPH above the respective ADEQ Health Based Guidance levels for these constituents.
FTHU-72	11TH SIG MOTOR POOL SPILL SITES	199511	This is one of the sites investigated and remediated in accordance with Consent Order D-10-91. Following a review of the report titled "Report on Excavation, Sampling, and Thermal Treatment of

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			Petroleum Impacted Soil at 11th Signal Brigade" prepared by Environmental and Engineering Consultants, ADEQ issued a letter dated Jan. 24, 1999 approving work performed at the site and concluding that requirements of the consent order pertaining to this site have been met.
FTHU-73	GOLF COURSE PESTICIDE MIX AREA	200203	Technical Document to Support the "No Further Action Declaration" signed on 3/13/2002; no contaminants above ADEQ SRLs
FTHU-74	BLDG 35033 PESTICIDE MIX AREA	199308	Technical Document to Support the "No Further Action Declaration" signed on 11/27/2000; no contaminants above ADEQ SRLs
FTHU-75	AMSA WASHRACK DISCHARGE	199908	Technical Document to Support the "No Further Action Declaration" signed on 11/27/2000; no contaminants above ADEQ SRLs
FTHU-76	UST SITE # 4715-0980 OLD BOILER SITE#1	199607	Case Closure Letter from ADEQ dated 30 September 1996 (LUST File #4715.0980)
FTHU-77	UST SITE # 4715-1192 SITE #2 CLARKSON ST	199609	Case Closure Letter from ADEQ dated 23 January 1997 (LUST File #4715.1192)
FTHU-78	UST SITE # 4715-1185 CEWI MOTOR POOL	199903	Release from 16,000 gallon used oil tank contained within an underground vault originally assigned LUST file 4715.1185 by ADEQ then changed to 0155.10. Tank determined to be under jurisdiction of Solid Waste Inspection and Compliance Unit (ICU) of ADEQ since it was contained in a vault. ICU closed this case (PCS file #1319-S) in a letter dated Sept. 30, 1996 indicating no further action required.
FTHU-79	UST SITE # 4715-0716 (11TH SB) 0155.08	199902	Case closure letter from ADEQ dated 31 March 1999 for LUST file 0155.08.
FTHU-80	UST SITE # 4715-1191 UST REMOVAL SITE #6	199712	In August 1995, IT Corporation completed a site characterization report for this site. The site, near the intersection of Irwin Street and Railroad Avenue, was the location of two diesel fuel USTs that were removed in December 1989. ADEQ assigned a new LUST number to this site (0155.18) in April 1996. The old file number was 4715.1191. ADEQ issued a case closure letter for this site on 1 December 1997 formally acknowledging "No Further Action" required at the site.
FTHU-81	UST SITE # 4715-1190 SITE 7 OLD FUEL PT	199809	Case Closure Letter from ADEQ dated Dec. 14, 1998 (LUST Files 0155.16 and 0155.17).
FTHU-82	UST SITE # 4715-1189 SITE 8 DIESEL UST	199710	LUST case closure letter from ADEQ dated Dec. 8, 1997. New LUST file 0155.26 replaced original LUST file



## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
			4715.1189.
FTHU-83	UST SITE # 4715-1188 HOSPITAL UST BURN	199302	Case Closure Letter from ADEQ dated Oct. 8, 1999 (LUST File 0155.14).
FTHU-84	UST SITE # 4715-1187 SITE 10 EPG 0155.13	199708	Case Closure Letter from ADEQ dated Aug. 27, 1997 (LUST File 0155.13)
FTHU-85	GREELY HALL UST RELEASE SITE	201410	Corrective Action Completion Report, Oct. 23, 2014.
FTHU-86	ABANDONED PIPELEINE IRWIN ST RELEASE SIT	199812	ADEQ issued a "Satisfaction and Termination" letter on Oct. 22, 1998 formally documenting closure of this LUST site. This LUST file number applicable to this site was 0155.26.
FTHU-87	OLD AUTOCRAFT SHOP BLDG 30126 RELEASE	199601	ADEQ issued a "Satisfaction and Termination" letter on Jan. 8, 1998 formally documenting closure of this LUST site. This LUST file number applicable to this site was 0155.27.
FTHU-88	BLD 30113 WASTE OIL TANK LUST#0155.39	199809	Case Closure Letter from ADEQ dated Feb. 6, 1998 (LUST File 0155.39).
FTHU-89	WEST RANGE OB/OD DISPOSAL UNIT	199908	Site remediated as a RCRA Corrective Action. Acknowledgement of closure letter dated June 1, 2006 was issued by the ADEQ formally closing this site.

# IRP Schedule

Date of IRP Inception: 197910

## Past Phase Completion Milestones

### 1980

PA (FTHU-01 - RAD SOURCE STRG BLDG 12508, FTHU-02 - ABANDONED T,BLDG 90322 AND SLUDGE BEDS, FTHU-30 - BLDG 72909 WOOD SHOP, FTHU-31 - BLDG 72908 WELD SHOP, FTHU-32 - BLDG 72908 MACH AND PT. SHP, FTHU-33 - MUNITIONS REPAIR, BLDG 73902, FTHU-34 - BLDG 73903 PAINTING, FTHU-36 - BLDG 75902 TIRE REPAIR, FTHU-37 - BLDG 75901 MOTOR POOL, FTHU-38 - BLDG 51419, VEHICLE MAINTENANCE, FTHU-39 - BLDG 30013 MOTOR POOL, FTHU-41 - BLDG 75801 MOTOR POOL, FTHU-42 - BLDG 74902 PAINT SHOP, FTHU-43 - BLDG 91110 AVIATION MAINTENANCE SHOP, FTHU-44 - BLDG 90201, POST LAUNDRY, FTHU-54 - POST ELECTRICAL SHOP, FTHU-61 - IMPACT AREA-EAST RANGE, FTHU-62 - IMPACT AREA SOUTH RANGE)

INV (FTHU-40 - BLDG 30113 CEWI MOTOR POOL )

SI (FTHU-01 - RAD SOURCE STRG BLDG 12508, FTHU-02 - ABANDONED T,BLDG 90322 AND SLUDGE BEDS, FTHU-30 - BLDG 72909 WOOD SHOP, FTHU-31 - BLDG 72908 WELD SHOP, FTHU-32 - BLDG 72908 MACH AND PT. SHP, FTHU-33 - MUNITIONS REPAIR, BLDG 73902, FTHU-34 - BLDG 73903 PAINTING, FTHU-36 - BLDG 75902 TIRE REPAIR, FTHU-37 - BLDG 75901 MOTOR POOL, FTHU-38 - BLDG 51419, VEHICLE MAINTENANCE, FTHU-39 - BLDG 30013 MOTOR POOL, FTHU-41 - BLDG 75801 MOTOR POOL, FTHU-42 - BLDG 74902 PAINT SHOP, FTHU-43 - BLDG 91110 AVIATION MAINTENANCE SHOP, FTHU-54 - POST ELECTRICAL SHOP, FTHU-61 - IMPACT AREA-EAST RANGE, FTHU-62 - IMPACT AREA SOUTH RANGE)

ISC (FTHU-40 - BLDG 30113 CEWI MOTOR POOL )

### 1986

SI (FTHU-44 - BLDG 90201, POST LAUNDRY)

### 1988

PA (FTHU-05 - LANDFILL 1 1930-1945, FTHU-06 - LANDFILL 2 1945-1950, FTHU-07 - LANDFILL 3 1976-1979, FTHU-08 - LANDFILL 4 1939-1975(A), FTHU-09 - LANDFILL 5 1939-1975(B), FTHU-12 - LANDFILL 8 1939-1970, FTHU-13 - LANDFILL 9 1903-1939, FTHU-55 - BLDG 73904 BATT SHOP)

SI (FTHU-05 - LANDFILL 1 1930-1945, FTHU-06 - LANDFILL 2 1945-1950, FTHU-07 - LANDFILL 3 1976-1979, FTHU-08 - LANDFILL 4 1939-1975(A), FTHU-09 - LANDFILL 5 1939-1975(B), FTHU-12 - LANDFILL 8 1939-1970, FTHU-13 - LANDFILL 9 1903-1939, FTHU-55 - BLDG 73904 BATT SHOP)

### 1992

RI/FS (FTHU-65 - EAST RANGE MINE SHAFT)

ISC (FTHU-53 - MIL GAS STATION LUST FILE 0155.05, FTHU-54A - PX GAS STATION)

INV (FTHU-53 - MIL GAS STATION LUST FILE 0155.05, FTHU-54A - PX GAS STATION)

RFA (FTHU-52 - FIRE FIGHTING TRAINING AREA LAAF, FTHU-57 - AIRCRAFT WASHRACK, LIBBY AAF, FTHU-64 - TANKTRAILS DUMP SITE (6))

PA (FTHU-51 - POL STG, LIBBY AAF LUST FILE , FTHU-65 - EAST RANGE MINE SHAFT)

CS (FTHU-52 - FIRE FIGHTING TRAINING AREA LAAF, FTHU-57 - AIRCRAFT WASHRACK, LIBBY AAF, FTHU-64 - TANKTRAILS DUMP SITE (6))

SI (FTHU-65 - EAST RANGE MINE SHAFT)

### 1993

RFA (FTHU-17 - EAST RANGE OB/OD AREA, FTHU-18 - SOUTH RANGE OB/OD AREA, FTHU-66 - VEHICLE PAINT BOOTH BLDG 72907, FTHU-67 - TMP DRUM STG AREA, FTHU-68 - TMP AUTOMATIC WASHRACK, BLDG 76925, FTHU-69 - TMP ABOVEGROUND WASTE TANK SITE, FTHU-70 - TMP STEAM CLEANING FACILITY, FTHU-71 - OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR, FTHU-72 - 11TH SIG MOTOR POOL SPILL SITES, FTHU-75 - AMSA WASHRACK DISCHARGE)

ISC (FTHU-76 - UST SITE # 4715-0980 OLD BOILER SITE#1, FTHU-77 - UST SITE # 4715-1192 SITE #2 CLARKSON ST, FTHU-78 - UST SITE # 4715-1185 CEWI MOTOR POOL, FTHU-79 - UST SITE # 4715-0716 (11TH SB) 0155.08, FTHU-80 - UST SITE # 4715-1191 UST REMOVAL SITE #6, FTHU-81 - UST SITE # 4715-1190 SITE 7 OLD FUEL PT, FTHU-82 - UST SITE # 4715-1189 SITE 8 DIESEL UST, FTHU-83 - UST SITE # 4715-1188 HOSPITAL UST BURN, FTHU-86 - ABANDONED PIPELEINE IRWIN ST RELEASE SIT)

PA (FTHU-73 - GOLF COURSE PESTICIDE MIX AREA, FTHU-74 - BLDG 35033 PESTICIDE MIX AREA, FTHU-84 - UST SITE # 4715-1187 SITE 10 EPG 0155.13)

## IRP Schedule

CAP	(FTHU-53 - MIL GAS STATION LUST FILE 0155.05, FTHU-54A - PX GAS STATION)
CS	(FTHU-17 - EAST RANGE OB/OD AREA, FTHU-18 - SOUTH RANGE OB/OD AREA, FTHU-66 - VEHICLE PAINT BOOTH BLDG 72907, FTHU-67 - TMP DRUM STG AREA, FTHU-68 - TMP AUTOMATIC WASHRACK, BLDG 76925, FTHU-70 - TMP STEAM CLEANING FACILITY, FTHU-71 - OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR, FTHU-72 - 11TH SIG MOTOR POOL SPILL SITES, FTHU-75 - AMSA WASHRACK DISCHARGE)
RFI/CMS	(FTHU-57 - AIRCRAFT WASHRACK, LIBBY AAF, FTHU-64 - TANKTRAILS DUMP SITE (6))
SI	(FTHU-73 - GOLF COURSE PESTICIDE MIX AREA, FTHU-74 - BLDG 35033 PESTICIDE MIX AREA, FTHU-84 - UST SITE # 4715-1187 SITE 10 EPG 0155.13)
INV	(FTHU-76 - UST SITE # 4715-0980 OLD BOILER SITE#1, FTHU-77 - UST SITE # 4715-1192 SITE #2 CLARKSON ST, FTHU-78 - UST SITE # 4715-1185 CEWI MOTOR POOL, FTHU-80 - UST SITE # 4715-1191 UST REMOVAL SITE #6, FTHU-82 - UST SITE # 4715-1189 SITE 8 DIESEL UST, FTHU-83 - UST SITE # 4715-1188 HOSPITAL UST BURN)
<b>1994</b>	
CS	(FTHU-69 - TMP ABOVEGROUND WASTE TANK SITE)
ISC	(FTHU-87 - OLD AUTOCRAFT SHOP BLDG 30126 RELEASE)
RFI/CMS	(FTHU-75 - AMSA WASHRACK DISCHARGE)
IMP(C)	(FTHU-54A - PX GAS STATION)
INV	(FTHU-87 - OLD AUTOCRAFT SHOP BLDG 30126 RELEASE)
SI	(FTHU-10 - SOUTH RANGE LF (OLD LF 6 AND 7))
PA	(FTHU-10 - SOUTH RANGE LF (OLD LF 6 AND 7))
<b>1995</b>	
CAP	(FTHU-85 - GREELY HALL UST RELEASE SITE)
DES	(FTHU-71 - OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR, FTHU-72 - 11TH SIG MOTOR POOL SPILL SITES)
INV	(FTHU-79 - UST SITE # 4715-0716 (11TH SB) 0155.08, FTHU-85 - GREELY HALL UST RELEASE SITE)
RFI/CMS	(FTHU-17 - EAST RANGE OB/OD AREA, FTHU-18 - SOUTH RANGE OB/OD AREA, FTHU-68 - TMP AUTOMATIC WASHRACK, BLDG 76925, FTHU-71 - OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR, FTHU-72 - 11TH SIG MOTOR POOL SPILL SITES)
ISC	(FTHU-85 - GREELY HALL UST RELEASE SITE, FTHU-90 - GREELY HALL GASOLINE RELEASE )
CMI(C)	(FTHU-71 - OLD 11TH SB MOTORPOOL WASHRACK DISCHG AR, FTHU-72 - 11TH SIG MOTOR POOL SPILL SITES)
<b>1996</b>	
DES	(FTHU-53 - MIL GAS STATION LUST FILE 0155.05)
RFA	(FTHU-89 - WEST RANGE OB/OD DISPOSAL UNIT)
CAP	(FTHU-87 - OLD AUTOCRAFT SHOP BLDG 30126 RELEASE)
CMI(O)	(FTHU-72 - 11TH SIG MOTOR POOL SPILL SITES)
ISC	(FTHU-88 - BLD 30113 WASTE OIL TANK LUST#0155.39)
INV	(FTHU-88 - BLD 30113 WASTE OIL TANK LUST#0155.39)
<b>1997</b>	
CS	(FTHU-89 - WEST RANGE OB/OD DISPOSAL UNIT)
RI/FS	(FTHU-84 - UST SITE # 4715-1187 SITE 10 EPG 0155.13)
CMI(C)	(FTHU-57 - AIRCRAFT WASHRACK, LIBBY AAF)
IMP(C)	(FTHU-53 - MIL GAS STATION LUST FILE 0155.05)
DES	(FTHU-57 - AIRCRAFT WASHRACK, LIBBY AAF)
<b>1998</b>	
INV	(FTHU-81 - UST SITE # 4715-1190 SITE 7 OLD FUEL PT, FTHU-90 - GREELY HALL GASOLINE RELEASE )

# IRP Schedule

LTM	(FTHU-88 - BLD 30113 WASTE OIL TANK LUST#0155.39)
CAP	(FTHU-80 - UST SITE # 4715-1191 UST REMOVAL SITE #6, FTHU-82 - UST SITE # 4715-1189 SITE 8 DIESEL UST)
<b>1999</b>	
CAP	(FTHU-79 - UST SITE # 4715-0716 (11TH SB) 0155.08, FTHU-90 - GREELY HALL GASOLINE RELEASE )
SI	(FTHU-51 - POL STG, LIBBY AAF LUST FILE )
RFI/CMS	(FTHU-89 - WEST RANGE OB/OD DISPOSAL UNIT)
RI/FS	(FTHU-51 - POL STG, LIBBY AAF LUST FILE )
IMP(C)	(FTHU-85 - GREELY HALL UST RELEASE SITE)
INV	(FTHU-86 - ABANDONED PIPELEINE IRWIN ST RELEASE SIT)
LTM	(FTHU-78 - UST SITE # 4715-1185 CEWI MOTOR POOL)
<b>2000</b>	
IMP(C)	(FTHU-90 - GREELY HALL GASOLINE RELEASE )
DES	(FTHU-90 - GREELY HALL GASOLINE RELEASE )
<b>2001</b>	
RFI/CMS	(FTHU-52 - FIRE FIGHTING TRAINING AREA LAAF, FTHU-66 - VEHICLE PAINT BOOTH BLDG 72907, FTHU-69 - TMP ABOVEGROUND WASTE TANK SITE, FTHU-70 - TMP STEAM CLEANING FACILITY)
DES	(FTHU-52 - FIRE FIGHTING TRAINING AREA LAAF)
RI/FS	(FTHU-10 - SOUTH RANGE LF (OLD LF 6 AND 7))
<b>2002</b>	
RFI/CMS	(FTHU-67 - TMP DRUM STG AREA)
RA(C)	(FTHU-65 - EAST RANGE MINE SHAFT)
CMI(C)	(FTHU-52 - FIRE FIGHTING TRAINING AREA LAAF)
RI/FS	(FTHU-73 - GOLF COURSE PESTICIDE MIX AREA)
<b>2006</b>	
IMP(O)	(FTHU-54A - PX GAS STATION)
<b>2007</b>	
LTM	(FTHU-54A - PX GAS STATION)
<b>2008</b>	
IMP(O)	(FTHU-85 - GREELY HALL UST RELEASE SITE, FTHU-90 - GREELY HALL GASOLINE RELEASE )
<b>2015</b>	
LTM	(FTHU-85 - GREELY HALL UST RELEASE SITE)

**Projected Phase Completion Milestones**

See attached schedule

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

Site ID	Site Name	ROD/DD Title	ROD/DD Date
FTHU-10	SOUTH RANGE LF (OLD LF 6 AND 7)	FTHU-10 South Range Landfill	20161220

**Final RA(C) Completion Date:** 200209

**Schedule for Next Five-Year Review:** 2020

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

## FORT HUACHUCA IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTHU-10	SOUTH RANGE LF (OLD LF 6 AND 7)	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTHU-65	EAST RANGE MINE SHAFT	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTHU-90	GREELY HALL GASOLINE RELEASE	LTM						

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

# MMRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 16/14

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

2 Firing Range  
(FTHU-007-R-01, FTHU-013-R-01)

**Most Widespread Contaminants of Concern**

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

**Media of Concern**

Groundwater, Soil

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

Site ID	Site Name	Action	Remedy	FY
N/A				

**Duration of MMRP**

**Date of MMRP Inception** 200110

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 201707/201707

**Date of MMRP completion including Long Term Management (LTM):** 201707

# MMRP Contamination Assessment

## Contamination Assessment Overview

A closed, transferred, or transferring (CTT) inventory was completed under the MMRP in 2003. The CTT inventory identified 16 Munitions Response Sites (MRS); however, one site was found to be operational and was, therefore, ineligible for the MMRP. The remaining MRSs include three small arms ranges and 12 multiuse ranges. The potential for MEC and MC was suspected at these sites.

The SI phase was initiated in 2005 and was completed in FY08. Based on the historical records review (HRR) in 2006, four MRSs were deemed ineligible for MMRP funding: FTHU-008-R-01, FTHU-012-R-01, FTHU-014-R-01, and FTHU-016-R-01.

Based on the final SI, NFA for MEC and/or MC was recommended at FTHU-001-R-01 through FTHU-006-R-01, FTHU-009-R-01 through FTHU-011-R-01, and FTHU-015-R-01. The final SI recommended further investigations for MEC and MC at FTHU-007-R-01 and FTHU-013-R-01.

RIs were conducted for both FTHU-007-R-01 and FTHU-013-R-01.

## Cleanup Exit Strategy

A PP and DD for NFA will be completed for FTHU-007-R-01. An FS will be required for FTHU-013-R-01.



## MMRP Previous Studies

	<b>Title</b>	<b>Author</b>	<b>Date</b>
<b>2003</b>	Closed Transferring and Transferred Inventory	Techlaw, Inc.	JAN-2003
<b>2006</b>	Historical Records Review, Military Munitions Response Program, Fort Huachuca, Arizona	URS Group, Inc.	AUG-2006
<b>2007</b>	Work Plan, Site Inspection, Military Munitions Response Program, Fort Huachuca, Arizona	URS Group, Inc.	MAR-2007
<b>2008</b>	Site Investigation Report, Military Munitions Response Program, Fort Huachuca, Arizona	URS Group, Inc.	JAN-2008
<b>2009</b>	Final RI Work Plan for Mine Field Near Airport and Eastern AAR 2, Fort Huachuca, AZ	URS Group, Inc.	AUG-2009

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

**Site ID: FTHU-007-R-01**  
**Site Name: MINE FIELD NEAR AIRPORT**

**STATUS**

**Regulatory Driver:** CERCLA

**MRSPP Score:** 05

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

Media of Concern: Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
PA.....	200110.....	200305
SI.....	200506.....	200802
RI/FS.....	200809.....	201706

**RIP Date:** N/A

**RC Date:** 201706

**SITE DESCRIPTION**

This range, comprised of 0.40 acres near the installation airport to the north of the cantonment area, is owned currently by the US Army. It is part of an undeveloped open field near the airport runways. The area was reviewed in 1987 for spent munitions. A total of six mines were found: three high-explosive landmines, the practice version of an M4 anti-tank mine, and two training mines. These mines were cleared shortly thereafter, but the Army would not offer a certificate of clearance for this area. Munitions debris was observed during the SI in 2007. The final SI report in 2008 recommended that the site be further investigated for both MEC and MC. NFA is anticipated after the RI/FS phase is completed. The RI was completed and the determination was "no further action necessary." This was concurred with by ADEQ.

Contract was awarded to perform the FS, PP, and DD. The FS is anticipated to be completed.

**CLEANUP/EXIT STRATEGY**

A PP and DD recommending NFA are anticipated to be complete by FY17.

**Site ID: FTHU-013-R-01**  
**Site Name: EAA RANGE 2**

**STATUS**

**Regulatory Driver:** CERCLA

**MRSPP Score:** 04

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

Media of Concern: Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
PA.....	200110.....	200305
SI.....	200506.....	200802
RI/FS.....	200809.....	201707

**RIP Date:** N/A

**RC Date:** 201707

**SITE DESCRIPTION**

This is a transferred range, with private ownership, comprised of 315 acres north and adjacent to the installation's East Artillery Range. No historical information was collected regarding this land's use as a range, except for acquisition documents that described the property as land that was to be used as part of the installation's East Artillery Range. This area is now primarily residential with 40 private land parcels. The munitions found in the East Artillery Area (EAA) ranges were assumed to be the same as the munitions used and found in the East Artillery Range, because these parcels were obtained as range land as part of the East Artillery Range. Army ownership of the land for this range began sometime in the late-1930s or early-1940s. When this land was transferred back to other owners is unknown. During the SI, ordnance fragments were observed at the site. The final SI report in 2008 recommended that the site be further investigated for MEC and MC.

Based on the results of the initial RI, ADEQ requested additional investigations be completed on several portions of the MRS. Results of the additional investigation confirmed that no MEC or MC was present.

Contract was awarded to perform the FS, PP, and DD.

**CLEANUP/EXIT STRATEGY**

An FS will be conducted for this site. It is assumed that the site will be closed out with an NFA DD.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
FTHU-001-R-01	RANGE 18	200802	The SI report (2008) recommended no further action at this site.
FTHU-002-R-01	1934 ARTILLERY PRACTICE FIRING AREA	200802	The SI report (2008) recommended no further action at this site.
FTHU-003-R-01	CHARLESTON COMBAT CITY	200802	The SI report (2008) recommended no further action at this site.
FTHU-004-R-01	RANGE 11	200802	The SI report (2008) recommended no further action at this site.
FTHU-005-R-01	1977 TRAINING AREA A/GOLF COURSE	200802	The SI report (2008) recommended no further action at this site.
FTHU-006-R-01	1977 TRAINING AREA B/AEROSTAT SITE	200802	The SI report (2008) recommended no further action at this site.
FTHU-008-R-01	RANGE 12 A/B	200511	Still active
FTHU-009-R-01	INFILTRATION RANGE	200802	The SI report (2008) recommended no further action at this site.
FTHU-010-R-01	TRANSITION RANGE	200802	The SI report (2008) recommended no further action at this site.
FTHU-011-R-01	UNIDENTIFIED WESTERN RANGE FAN	200802	The SI report (2008) recommended no further action at this site.
FTHU-012-R-01	EAA RANGE 1	200802	The 2006 HRR determined this site was not eligible because it is located on an active range.
FTHU-014-R-01	EAA RANGE 3	200802	The 2006 HRR determined this site was not eligible because it is located on an active range.
FTHU-015-R-01	OPEN FIELD ARTILLERY RANGE	200802	The SI report (2008) recommended no further action at this site.
FTHU-016-R-01	1977 TRAINING AREA C	200802	The 2006 HRR determined this site was not eligible because it is located on an active range.

# MMRP Schedule

**Date of MMRP Inception** 200110

## **Past Phase Completion Milestones**

### **2003**

PA (FTHU-001-R-01 - RANGE 18, FTHU-002-R-01 - 1934 ARTILLERY PRACTICE FIRING AREA, FTHU-003-R-01 - CHARLESTON COMBAT CITY, FTHU-004-R-01 - RANGE 11, FTHU-005-R-01 - 1977 TRAINING AREA A/GOLF COURSE, FTHU-006-R-01 - 1977 TRAINING AREA B/AEROSTAT SITE, FTHU-007-R-01 - MINE FIELD NEAR AIRPORT, FTHU-008-R-01 - RANGE 12 A/B, FTHU-009-R-01 - INFILTRATION RANGE, FTHU-010-R-01 - TRANSITION RANGE, FTHU-011-R-01 - UNIDENTIFIED WESTERN RANGE FAN, FTHU-012-R-01 - EAA RANGE 1, FTHU-013-R-01 - EAA RANGE 2, FTHU-014-R-01 - EAA RANGE 3, FTHU-015-R-01 - OPEN FIELD ARTILLERY RANGE, FTHU-016-R-01 - 1977 TRAINING AREA C)

### **2008**

SI (FTHU-001-R-01 - RANGE 18, FTHU-002-R-01 - 1934 ARTILLERY PRACTICE FIRING AREA, FTHU-003-R-01 - CHARLESTON COMBAT CITY, FTHU-004-R-01 - RANGE 11, FTHU-005-R-01 - 1977 TRAINING AREA A/GOLF COURSE, FTHU-006-R-01 - 1977 TRAINING AREA B/AEROSTAT SITE, FTHU-007-R-01 - MINE FIELD NEAR AIRPORT, FTHU-009-R-01 - INFILTRATION RANGE, FTHU-010-R-01 - TRANSITION RANGE, FTHU-011-R-01 - UNIDENTIFIED WESTERN RANGE FAN, FTHU-012-R-01 - EAA RANGE 1, FTHU-013-R-01 - EAA RANGE 2, FTHU-014-R-01 - EAA RANGE 3, FTHU-015-R-01 - OPEN FIELD ARTILLERY RANGE, FTHU-016-R-01 - 1977 TRAINING AREA C)

## **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:** 2020

**Estimated Completion Date of MMRP at Installation (including LTM phase):** 201707

## FORT HUACHUCA MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTHU-007-R-01	MINE FIELD NEAR AIRPORT	RI/FS						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTHU-013-R-01	EAA RANGE 2	RI/FS						

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



# CR Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count:** 2/1

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

1 Contaminated Sediments  
(CCFTH-91)

**Most Widespread Contaminants of Concern**

Petroleum, Oil and Lubricants (POL), Polycyclic Aromatic Hydrocarbons (PAH), Semi-volatiles (SVOC), Volatiles (VOC)

**Media of Concern**

Soil

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

Site ID	Site Name	Action	Remedy	FY
N/A				

**Duration of CR**

**Date of CR Inception:** 200908

**Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC):** 201712/201712

**Date of CR completion including Long Term Management (LTM):** 201712

## CR Contamination Assessment

### Contamination Assessment Overview

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

### Cleanup Exit Strategy

Future actions will depend on the results of the RI.

## CR Previous Studies

**Title**

**Author**

**Date**

There are no Previous Studies

**FORT HUACHUCA**  
**Compliance Restoration**  
**Site Descriptions**

**Site ID: CCFTH-91**

**Site Name: Abandoned Asphalt Batch Plant**

**STATUS**

**Regulatory Driver:** CERCLA

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

Media of Concern: Soil

<b>Phases</b>	<b>Start</b>	<b>End</b>
PA.....	201001.....	201001
SI.....	201004.....	201101
RI/FS.....	201201.....	201712

**RIP Date:** N/A

**RC Date:** 201712

**SITE DESCRIPTION**

In 2010, a tar-like substance was observed on the ground in an area that is currently not associated with known historic industrial activity. Excavation by the installation operations and maintenance (O&M) contractor revealed infrastructure that may have been used for an asphalt batch plant. A buried concrete cistern was observed to contain a tar-like substance and sediment in the surrounding area was contaminated with this same substance.

Potholes and trenches were excavated to determine the immediate extent of hydrocarbon impacted soils. An exposed concrete tank base, possibly the remains of a former oil/water separator was located in the central portion of the AOC. The total area measured was approximately 44 ft by 94 ft (about 4,000 square ft) and consisted of isolated patches of visible contamination both on the surface and at shallow depths. The depth of visible contamination was limited to the first 18 inches of depth where visible in trenches, except in the vicinity of the tank where excavations reach approximately 3 to 5 ft deep.

Awarded a contract on July 24, 2015 to perform RI. RI is anticipated to be completed by late summer of 2016.

**CLEANUP/EXIT STRATEGY**

The RI was initiated in FY15. It is anticipated the RA will include a soil removal followed by a remedial action completion report.

## Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CCFTH-92	Used POL Disposal Sites	201201	

## CR Schedule

**Date of CR Inception:** 200908

### **Past Phase Completion Milestones**

#### **2010**

PA (CCFTH-91 - Abandoned Asphalt Batch Plant, CCFTH-92 - Used POL Disposal Sites)

#### **2011**

SI (CCFTH-91 - Abandoned Asphalt Batch Plant, CCFTH-92 - Used POL Disposal Sites)

#### **2012**

RI/FS (CCFTH-92 - Used POL Disposal Sites)

### **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:** 2020

**Estimated Completion Date of CR at Installation (including LTM phase):** 201712

# FORT HUACHUCA CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
CCFTH-91	Abandoned Asphalt Batch Plant	RI/FS						



## Community Involvement

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

**Community Involvement Plan (Date Published):** 201206

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

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

**Community Interest Solicited on:** 201503

**Efforts Taken to Determine Interest**

An advertisement was placed in the Sierra Vista Herald newspaper.

**Results**

TBD

**Follow-up Procedures**

TBD

**Additional Community Involvement Information**

Community Involvement is conducted as required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

**Administrative Record is located at**

US Army Garrison, Fort Huachuca  
Environmental and Natural Resources Division  
3040 Butler Road, Building 22526  
Fort Huachuca, AZ 85613

**Information Repository is located at**

US Army Garrison, Fort Huachuca  
Environmental and Natural Resources Division  
3040 Butler Road, Building 22526  
Fort Huachuca, AZ 85613

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

**TAPP Title:** N/A

**Potential TAPP:** N/A

