JFHQ CO ARNG

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
AGC	Advanced Geophysical Classification
ARNG	Army National Guard
ASR	Archive Search Report
BLM	U. S. Bureau of Land Management
сс	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CDPHE	Colorado Department of Public Health and Environment
COARNG	Colorado Army National Guard
CNGTS	Craig National Guard Training Site
DD	Decision Document
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DoD	U. S. Department of Defense
ENV	Environmental
FS	Feasibility Study
FY	Fiscal year
HE	High Explosive
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
JA	Judge Advocate
LTM	Long-Term Management
LUC	Land Use Control
LUCIP	Land Use Control Implementation Plan
МС	Munitions Constituents
MD	Munitions Debris
MEC	Munitions and Explosives of Concern

Acronym	Definition
mg/kg	milligrams/kilogram
MMRP	Military Munitions Response Program
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NDNODS	Non-DoD Owned, Non-Operational Defense Sites
NFA	No Further Action
NGB	National Guard Bureau
ODASA	The Secretariat for Munitions, Office of the Assistant Secretary of the Army
PA	Preliminary Assessment
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
TAG	The Adjunct General
USACE	U. S. Army Corps of Engineers
UST	Underground Storage Tank
UXO	Unexploded Ordnance
WBS	Work Breakdown Structure

PHASE TRANSLATION TABLE

HQAES Phase ID	CERCLA Phase	RCRA Phase	RCRA UST Phase
.01	Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
.02	Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
.03	Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
.04	Remedial Design (RD)	Design (DES)	Design (DES)
.05	Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
.06	Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
.07	Remedial Action (Operation) (RA(O))	Corrective Measures Implementation (Operation) (CMI(O))	Implementation (Operation) (IMP(O))
.08	Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

SITE ALIAS LIST

WBS Element	AEDB-R Reference	Site Alias
6878A.1013	CC_COHQ-003-R-01_NDNODS DELTA MILITIA TA	RRC000003
6878A.1014	CC_COHQ-004-R-01_NDNODS IDLER RANGE	RRC000004
6878A.1015	CC_COA90-002-R-01_NDNODS CAMP GEORGE WES	RRCC000008
6878A.1016	CC_COHQ-001-R-01_Craig Sand Wash Artille	
6878A.1017	CC_COHQ-002-R-01_Craig Small Arms Range	CRAIG SAR
6878A.1018	CC_COHQ-001-R-02_Craig Sand Wash Practic	

JFHQ CO ARNG Installation Action Plan

JFHQ CO ARNG

COMPLIANCE CLEANUP SITES

CC_COHQ-003-R-01_NDNODS DELTA MILITIA TA

HQAES ID: 6878A.1013	Dhaaaa	Cápitá	Find
Alias: RRC0000003	Phases	Start	End
	PA	4/15/2007	9/15/2009
Regulatory Driver: CERCLA	SI	7/15/2010	9/15/2012
RRSE: Not assigned	RI/FS	1/1/2029	12/31/2034
MRSPP: Not assigned	RD	1/1/2035	1/31/2035
RIP Date: 12/31/2036	IRA		
RC Date: 12/31/2036	RA(C)	1/1/2035	12/31/2036
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM		
Subprogram: CC			

Site Narrative

The former target range was used for small arms training from 1930 through 1962. Maps and photographs of the area in use were not located during research so the exact layout of the target range is unknown. However, based on site topography direction of fire was either southwest to northeast or northeast to southwest. Documentation indicates that firing was completed at 100 meter intervals up to 500 meters. Additionally, the range included a 40-foot target pit made of rock and sheltered by a wood and soil covering. No berm was found.

Site Inspection (SI) field work was conducted and the report was made final in 2012. Lead contaminated soils were discovered. The SI screening level for lead in soil is 400 milligrams per kilogram (mg/kg). One soil sample exceeded the standard with a concentration of 910 mg/kg.

Acreage from the Preliminary Assessment (PA) decreased in the SI report from 79 acres to 1 acre. This one-acre area associated with the target pit was recommended for further investigation and is identified with COHQ-003-R-01. The 78 acres not associated with the target pit was recommended for no further action (NFA) and is identified as COHQ-003-R-02.

Defense Environmental Restoration Program (DERP) funding was used to complete work through the Site Inspection (SI) at this site. Non-DoD Owned, Non-Operational Defense Sites (NDNODS) moving forward with the Remedial Investigation/Feasibility Study (RI/FS) phase are reprogrammed into Compliance-related Cleanup.

Cleanup/Exit Strategy An RI/FS will be completed at this site. Once the RI/FS is completed it is assumed a soil excavation will be required.

CC_COA90-002-R-01_NDNODS FORMER CAMP GEORGE WEST ARTILLERY RANGE

HQAES ID: 6878A.1015 Alias: RRCC000008 Regulatory Driver: CERCLA RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/15/2030 RC Date: 9/2/2030 RC Reason: Not assigned Program: Compliance Cleanup Subprogram: CC

Phases	Start	End
PA	4/15/2007	9/15/2009
SI	7/15/2010	6/15/2012
RI/FS	1/15/2013	8/10/2020
RD		
IRA		
RA(C)	1/15/2024	1/15/2030
RA(O)		
LTM	10/15/2030	10/14/2060

Site Narrative

The 466-acre Green Mountain Artillery Impact Area is transferred and is located within William F. Hayden Park, Lakewood, Jefferson County, Colorado. The former artillery range was utilized by the Colorado Army National Guard (COARNG) in the early 1930s. While the exact dates of operation are unknown, information on use of the site is documented in "Historic Recourses of Camp George West" a 1992 National Register of Historic Places Multi Property Documentation Form, information in the form attributes information to an interview with COARNG's COL Mark Conway (ret.) and Colorado The Adjunct General (TAG) Reports of 1931-1932 and 1933-1934.

A letter sent to National Guard Bureau (NGB) from the Colorado Department of Public Health and Environment (CDPHE) in February 2010 indicated that munitions debris (MD) had been located on the north side of Green Mountain by residents living near Hayden Park. The MD was identified as being associated with high explosive (HE) 75mm artillery projectiles.

This site is a former artillery range with observed munitions debris and possible unexploded ordnance (UXO). 75mm artillery shells, including HE rounds, were fired into a hillside area of Green Mountain. As such, it is possible that concentrated areas of munitions constituents (MC) and munitions and explosives of concern (MEC) contamination from munitions use exist. SI fieldwork was conducted and the further action is recommended for MEC only. The RI/FS was funded at this site and is underway. The FINAL Feasibility Study Report, Military Munitions Response Program, Non-Department of Defense Non-Operational Defense Sites, Former Camp George West Artillery Range, Colorado was issued on July 2019. The Final Record of Decision (ROD) was signed in August 2020, which presents the selected remedy as Alternative 4, MEC Surface and Subsurface Removal using Advanced Geophysical Classification (AGC) and Land Use Controls (LUC). A contract was awarded at the end of fiscal year (FY) 22 which funded the remedial design (RD) including development of a land use controls implementation plan (LUCIP), and a portion of the RA-C phase consisting of the implementation of the LUCs. The

contract includes options to fund the MEC surface removal. The subsurface MEC removal action was not part of the contract award and will be addressed in a separate contract action.

Cleanup Exit Strategy The selected remedy, MEC surface and subsurface removal with AGC and LUCs, will be implemented.

CC_COHQ-001-R-01_Craig Sand Wash Artillery Range

HQAES ID: 6878A.1016				
Alias: None	Phases	Start	End	
	PA	4/15/2007	9/15/2009	
Regulatory Driver: CERCLA	SI	4/15/2007	9/15/2009	
RRSE: Not assigned	RI/FS	1/15/2011	10/18/2018	
MRSPP: Not assigned	RD	9/15/2017	10/15/2020	
RIP Date: 10/15/2033	IRA			
RC Date: 10/15/2033	RA(C)	1/15/2028	10/15/2033	
RC Reason: Not assigned	RA(O)			
Program: Compliance Cleanup	LTM	10/15/2033	10/14/2063	
Subprogram: CC				

Site Narrative

The 23,066-acre permitted area for the Sand Wash Artillery Range, which was established for the COARNG artillery and rocket training, is located about 45 miles west of Craig, Colorado. The Munitions Response Site (MRS) covered an estimated 16,726 acres within which the COARNG trained with 105mm HE artillery and 3.5-inch (in.) practice rockets from April 1964 through March 1972. Based on the U.S. Army Corps of Engineers (USACE) Archive Search Report (ASR) completed in 1996, Battery A, 3rd Howitzer Battalion, 157th Field Artillery Regiment used the MRS for live-fire artillery training, with the firing line and general target areas known. Training reportedly included both artillery maneuver training and live-fire exercises using the M1, 105-mm HE projectile on a set of fixed (rock formation known as "Bitch Kitty") or engineered (sand-filled drums) targets. COARNG training on the unimproved 3.5-in. practice rocket range, situated 1,000 to 1,500 yards west of the M1, 105-mm artillery firing line, used the M29, 3.5-in. practice rocket.

The Sand Wash Artillery Range has been subdivided into three separate MRSs based on the results of the RI; The Sand Wash Artillery Range M1, 105mm Target Area (COHQ-001-R-01) encompasses the 779-acre M1, 105mm Target Area; The Sand Wash Artillery Range M29, 3.5" Rocket Range (COHQ-001-R-02) (6878A.1010) encompasses the 186-acre M29, 3.5" Rocket Range; and the Sand Wash Artillery Range Non-Target Non-Rocket Range (COHQ-001-R-03) (6878A.1011) encompasses the remaining 15,761 acres of the range (including the 29-acre 105mm Firing Line).

The extent of contamination was fully defined in the M1, 105-mm Target Area AOI through the collection and analysis of geophysical data in accordance with the approved sampling design. Soil sampling for MC was also completed in accordance with the approved sampling design, the results of which showed no detectable MC (e.g., explosives) above the laboratory's reporting limit. No MEC have been reported and none were observed during the RI. The Final ROD was signed in October 2018. The selected remedy is advanced ICs with five-year reviews.

Cleanup/Exit Strategy The selected remedy from the final ROD, consisting of advanced ICs and fiveyear reviews will be implemented.

JFHQ CO ARNG Installation Action Plan

CC_COHQ-002-R-01_Craig Small Arms Range

HQAES ID: 6878A.1017			,
Alias: CRAIG SAR	Phases	Start	End
	PA	1/15/2008	10/15/2009
Regulatory Driver: CERCLA	SI	1/15/2008	10/15/2009
RRSE: Not assigned	RI/FS	1/15/2011	11/15/2019
MRSPP: Not assigned	RD	9/30/2015	6/15/2020
RIP Date: 9/15/2023	IRA		
RC Date: 9/15/2023	RA(C)	9/30/2018	9/15/2023
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	9/15/2027	9/14/2057
Subprogram: CC			

Site Narrative

Craig Small Arms Range is part of the Craig National Guard Training Site (NGTS) (COHQ-001-R-01) (6878A.1005) consisting of 40 acres, also located in Moffat County, Colorado. Like the Craig artillery range, this property was used for training by the COARNG between 1956-1980. The NGB validated this range as a requirement for COARNG's federal mission in 1964. The USACE, on behalf of the Secretary of the Army, assumed the permit for use of the range with U. S. Bureau of Land Management (BLM) and licensed the range to COARNG for their use. Range use included not only small caliber munitions, but also practice 40mm rifle grenades. HE rifle grenades were also reportedly fired on occasion. Although still BLM property, this site is now managed by a private organization as the Bears Ears Sportsmen Club.

The Secretariat for Munitions, Office of the Assistant Secretary of the Army (ODASA) concurred that despite being an active private range, the site is eligible for the Military Munitions Response Program (MMRP) to address the 40mm rifle grenades. NGB-Judge Advocate (JA) have provided a legal opinion that as a United States property documented as under the control of the Secretary of the Army per the permit with BLM, this property is Defense Environmental Restoration Account (DERA)-eligible.

The final ROD was signed in November 2019. The selected remedy consists of one-time military munitions removal and implementation of LUCs after the removal action. Under this alternative, once the removal action has been implemented, LUCs will be implemented including ARNG-directed annual educational awareness activities, warning signs explaining the U. S. Department of Defense (DoD) military munitions hazards, restrictions and IC requirements. The removal action has been completed.

Cleanup/Exit Strategy Implementation of LUCs will be completed followed by long-term management (LTM).

CC_COHQ-001-R-02_Craig Sand Wash Practice Rocket Range

HQAES ID: 6878A.1018 Alias: None Regulatory Driver: CERCLA RRSE: Not assigned MRSPP: Not assigned RIP Date: 1/14/2033 RC Date: 1/14/2033 RC Reason: Not assigned Program: Compliance Cleanup Subprogram: CC

Phases	Start	End
PA	4/15/2007	9/15/2009
SI	4/15/2007	9/15/2009
RI/FS	1/15/2011	9/15/2019
RD	9/15/2017	10/15/2020
IRA	7/15/2015	6/15/2016
RA(C)	1/15/2029	1/14/2033
RA(O)		
LTM	1/15/2033	1/14/2063

Site Narrative

The 23,066-acre permitted area for the Sand Wash Artillery Range, which was established for the COARNG artillery and rocket training, is located about 45 miles west of Craig, Colorado. The MRS covered an estimated 16,726 acres within which the COARNG trained with 105-mm HE artillery and 3.5-inch practice rockets from April 1964 through March 1972. Based on the USACE ASR completed in 1996, Battery A, 3rd Howitzer Battalion, 157th Field Artillery Regiment used the MRS for live-fire artillery training, with the firing line and general target areas known. Training reportedly included both artillery maneuver training and live-fire exercises using the M1, 105-mm HE projectile on a set of fixed (rock formation known as "Bitch Kitty") or engineered (sand-filled drums) targets. COARNG training on the unimproved 3.5-in. practice rocket range, situated 1,000 to 1,500 yards west of the M1, 105-mm artillery firing line, used the M29, 3.5-in. practice rocket.

The Sand Wash Artillery Range has been subdivided into three separate MRSs based on the results of the RI; The Sand Wash Artillery Range M1, 105mm Target Area (CC COHQ-001-R-01) encompasses the 779-acre M1, 105mm Target Area; The Sand Wash Artillery Range M29, 3.5" Rocket Range (CC COHQ-001-R-02) (6878A.1018) encompasses the 186-acre M29, 3.5" Rocket Range; and the Sand Wash Artillery Range Non-Target Non-Rocket Range (COHQ-001-R-03) (6878A.1011) encompasses the remaining 15,761 acres of the range (including the 29-acre 105mm Firing Line).

The extent of contamination was fully defined in the M1, 105-mm Target Area AOI through the collection and analysis of geophysical data in accordance with the approved sampling design. Soil sampling for MC was also completed in accordance with the approved sampling design, the results of which showed no detectable MC (e.g., explosives) above the laboratory's reporting limit. No MEC have been reported and none were observed during the RI. The Final Record of Decision ROD was signed in October 2018 and the selected remedy is Surface Removal of Military Munitions and Advanced ICs with Five-Year Reviews.

Cleanup/Exit Strategy The selected remedy will be implemented, consisting of a surface removal action and ICs with five-year reviews.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
6878A.1001	COHQ-003-R-01_NDNODS DELTA MILITIA TARGE	9/15/2012
6878A.1002	COHQ-006-R-01_NDNODS CACTUS PARK TRAININ	9/15/2012
6878A.1003	COHQ-007-R-01_NDNODS MONTROSE NATIONAL G	9/15/2012
6878A.1004	COHQ-004-R-01_NDNODS IDLER RANGE	9/15/2012
6878A.1005	COHQ-001-R-01_CRAIG SAND WASH ARTY TARGE	10/15/2019
6878A.1006	COHQ-005-R-01_NDNODS NORTH 12TH STREET R	9/15/2012
6878A.1007	COA90-001-R-01_NDNODS CAMP GEORGE WEST R	9/15/2012
6878A.1008	COA90-002-R-01_NDNODS CAMP GEORGE WEST A	1/15/2014
6878A.1009	COHQ-002-R-01_CRAIG SMALL ARMS RANGE	6/15/2019
6878A.1010	COHQ-001-R-02_CRAIG SAND WASH PRACTICE R	9/15/2019
6878A.1011 COHQ-001-R-03_CRAIG SAND WASH REMAINDER 10/18/2018		10/18/2018
6878A.1012	COHQ-003-R-02_NDNODS DELTA MILITIA TARGE	9/15/2012
7878A.1014	CC COHQ-004-R-01_NDNODS IDLER RANGE	8/10/2020

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
Community Involvement Plan (Date Published):	202006
Restoration Advisory Board (RAB) Establishment Date:	None. The community has not expressed interest in forming a RAB
RAB Adjournment Date:	NA
RAB Adjournment Reason:	NA
Additional Community Involvement:	A community involvement plan was prepared for Camp George West in 2020 and will be updated
Administrative Record is located at:	Colorado Army National Guard
	6848 S. Revere Parkway
	Centennial, CO 80112
	720-250-1391
Information Repository is located at:	Colorado Army National Guard
	6848 S. Revere Parkway
	Centennial, CO 80112
	720-250-1391
Current Technical Assistance for	N/A
Public Participation (TAPP):	
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

None

ROD/DDs associated with the last Five-Year/Periodic Review

None

Results, Actions & Plans

None

LAND USE CONTROLS (LUC) SUMMARY

None

FIRESTONE CSMS

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CC_DELT-001-R-04_Delta USAR Camp Mortar Range12
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ACRONYMS

Acronym	Definition
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AEDB-R	Army Environmental Database - Restoration
BLM	Bureau of Land Management
СС	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
DD	Decision Document
DGM	Digital Geophysical Mapping
DoD	U. S. Department of Defense
DRARCMA	Delta Range Army Reserve Camp Mortar Area
ENV	Environmental
FS	Feasibility Study
HQAES	Headquarters Army Environmental System
IC	Institutional Control
IR	Installation Restoration
IRA	Interim Remedial Action
LTM	Long-Term Management
LUC	Land Use Control
MD	Munitions Debris
MEC	Munitions and Explosives of Concern
mm	millimeter
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
PA	Preliminary Assessment
RA(C)	Remedial Action (Construction)
RA(0)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act

FIRESTONE CSMS Installation Action Plan

Acronym	Definition
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
UST	Underground Storage Tank
UXO	Unexploded Ordnance
WBS	Work Breakdown Structure

PHASE TRANSLATION TABLE

HQAES Phase ID	CERCLA Phase	RCRA Phase	RCRA UST Phase
.01	Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
.02	Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
.03	Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
.04	Remedial Design (RD)	Design (DES)	Design (DES)
.05	Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
.06	Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
.07	Remedial Action (Operation) (RA(O))	Corrective Measures Implementation (Operation) (CMI(O))	Implementation (Operation) (IMP(O))
.08	Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

SITE ALIAS LIST

WBS Element	AEDB-R Reference	Site Alias
6667A.1007	CC_DELT-001-R-01_Former Artillery Range	DELTA
6667A.1008	CC_DELT-001-R-02_Delta Practice Grenade	
6667A.1009	CC_DELT-001-R-03_Delta Practice Rocket R	
6667A.1010	CC_DELT-001-R-04_Delta USAR Camp Mortar	
6667A.1011	CC_DELT-001-R-05_Delta Southeast Debris	
6667A.1012	CC_DELT-001-R-06_Delta Range Remainder	

FIRESTONE CSMS Installation Action Plan

FIRESTONE CSMS

COMPLIANCE CLEANUP SITES

FIRESTONE CSMS Installation Action Plan

CC_DELT-001-R-01_Former Artillery Range

HQAES ID: 6667A.1007	Phases		
Alias: DELTA		Start	End
	PA	2/15/2009	3/15/2009
Regulatory Driver: Other	SI	2/15/2009	3/15/2009
RRSE: Not assigned	RI/FS	3/15/2010	10/18/2018
MRSPP: Not assigned	RD	9/15/2017	10/15/2019
RIP Date: 9/30/2029	IRA		
RC Date: 9/30/2029	RA(C)	10/1/2027	9/30/2029
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	10/1/2029	9/30/2059

Site Narrative

Subprogram: CC

The Delta Range is located on the western slope of the Rocky Mountains in Delta County, Colorado, approximately 7.5 miles northwest of the city of Delta, and 33 miles southeast of Grand Junction. The site is bounded on the south by US Highway 50, an east-west tending four-lane thoroughfare that links the city of Delta, in the east, with the city of Grand Junction, to the west. The site is physically bounded by slopes of gradually increasing grade that form the southern boundary of the Grand Mesa National Forest. To the west, the training area boundary extends over Wells Gulch, and in the east, near Point Creek and the Star Nelson Ranch. Delta Range is comprised of public lands managed by the US Department of the Interior, Bureau of Land Management (BLM) Uncompanye Basin Resource Area. The property is not fenced and has unrestricted access. BLM has erected three signs along access roads warning visitors of dangers of potential unexploded ordnance (UXO). The lands are currently used for recreational pursuits, oil and gas exploration, mineral extraction and livestock grazing.

The Delta Range site has been subdivided into six sites as a result of the remedial investigation (RI) in order to apply different remedies to specific areas.

According to the Final RI Report (May 2013) the Delta Range Impact Areas Munitions Response Site (MRS) (identified in HQAES as Former Artillery Range) consists of two non-contiguous parcels totaling 1,993 acres. The Northern Impact Area consists of approximately 1,792 acres, surrounded by a ¼-mile buffer. During the digital geophysical mapping (DGM) sweep, one partial 155 millimeter (mm) projectile and one M125 booster were discovered outside the DGM grid. During subsequent disposal of some of these munitions and explosives of concern (MEC) items, two additional MEC items, bulk explosives, and a partial 155 mm projectile were discovered by UXO technicians.

The Southern Impact Area within the Delta Range Impact Areas MRS is approximately 200 acres. Only munitions debris (MD) was found in the southern impact area during the RI. It is indicated that this area was probably a secondary impact area for the firing points located in the southern portion of Delta Range (Section 4.10.1 of the Draft Final Delta Range Remedial Investigation Report, Tetra Tech 2012).

The FS is complete and the report was finalized January 2014. The Final ROD was signed in October 2018, and the final selected remedy is Alternative 5, Surface Removal, DGM and Subsurface Removal to Full Depth aided by advanced classification technology (ACT), and Advanced institutional controls (ICs) with Five-Year Reviews. A contract was awarded in FY20 to implement the remedial actions, but was cancelled by the US Army Corps of Engineers (USACE) after delays due to issues with the property owner, the BLM.

Cleanup/Exit Strategy The selected remedy will be implemented, consisting of surface and subsurface removal actions and ICs with five-year reviews.

CC_DELT-001-R-02_Delta Practice Grenade Range

HQAES ID: 6667A.1008		1	1
Alias: None	Phases	Start	End
	PA	2/15/2009	3/15/2009
Regulatory Driver: CERCLA	SI	2/15/2009	3/15/2009
RRSE: Not assigned	RI/FS	3/15/2010	10/18/2018
MRSPP: Not assigned	RD	9/15/2017	10/15/2019
RIP Date: 1/15/2031	IRA		
RC Date: 1/15/2031	RA(C)	1/15/2028	1/15/2031
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	1/15/2031	1/14/2061
Subprogram: CC			

Site Narrative

The Delta Range is located on the western slope of the Rocky Mountains in Delta County, Colorado, approximately 7.5 miles northwest of the city of Delta, and 33 miles southeast of Grand Junction. The site is bounded on the south by US Highway 50, an east-west tending four-lane thoroughfare that links the city of Delta, in the east, with the city of Grand Junction, to the west. The site is physically bounded by slopes of gradually increasing grade that form the southern boundary of the Grand Mesa National Forest. To the west, the training area boundary extends over Wells Gulch, and in the east, near Point Creek and the Star Nelson Ranch. Delta Range is comprised of public lands managed by the US Department of the Interior, BLM Uncompahyre Basin Resource Area. The property is not fenced and has unrestricted access. BLM has erected three signs along access roads warning visitors of dangers of potential UXO. The lands are currently used for recreational pursuits, oil and gas exploration, mineral extraction and livestock grazing.

The Delta Range site has been subdivided into six sites as a result of the RI in order to apply different remedies to specific areas.

The Delta Range Practice Grenade Areas MRS (48.85 acres) consists of two separate investigation areas. The Delta Range Northwest 40 millimeter (mm) Practice Grenade impact area (Northwest Area) appears to be a target/impact area based on the distribution of spent practice grenades within the area. During the DGM transect data acquisition; the team identified two MEC items on the ground surface that included two 40mm M382 practice grenades (Final RI, May 2013). The firing point for the impact area may have been in the Practice Grenade Range Area, however a firing point(s) associated with the Delta Range Northwest 40mm Practice Grenade Impact Area was not located (Section 2.2, Action Memorandum, Time Critical Removal Action, Army National Guard, Delta National Guard Range Munitions Response Site, March 2012).

The Delta Range Southeast 40mm Practice Grenade area (Southeast Area) appears to have been used as a disposal area, based on the discovery of some practice grenades in clusters and other practice grenades/grenade fragments in a pattern typical of kickouts from a demolition operation (Section 2.2,

FIRESTONE CSMS Installation Action Plan

Action Memorandum, Time Critical Removal Action, Army National Guard, Delta National Guard Range Munitions Response Site, March 2012). Most of the items were found in the top 12 inches of soil, although there was one "frag pit" that extended 24 inches deep (Final RI, May 2013).

The FS has been completed and the report was finalized January 2014. The Final ROD was signed in October 2018, and the final selected remedy is Alternative 5, 100 percent DGM and surface and subsurface removal to full depth (expected to be 18 inches) of U.S. Department of Defense (DoD) military munitions, and implement ICs with Five-year Reviews.

Cleanup/Exit Strategy Alternative 5 will be implemented, consisting of surface and subsurface MEC removal action, implementation of ICs and five-year reviews.

CC_DELT-001-R-03_Delta Practice Rocket Range

HQAES ID: 6667A.1009		1	1
Alias: None	Phases	Start	End
	PA	2/15/2009	3/15/2009
Regulatory Driver: CERCLA	SI	2/15/2009	3/15/2009
RRSE: Not assigned	RI/FS	3/15/2010	9/20/2018
MRSPP: Not assigned	RD	9/15/2017	10/15/2019
RIP Date: 1/14/2031	IRA		
RC Date: 1/14/2031	RA(C)	1/15/2028	1/14/2031
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	1/15/2031	1/14/2061
Subprogram: CC			

Site Narrative

The Delta Range is located on the western slope of the Rocky Mountains in Delta County, Colorado, approximately 7.5 miles northwest of the city of Delta, and 33 miles southeast of Grand Junction. The site is bounded on the south by US Highway 50, an east-west tending four-lane thoroughfare that links the city of Delta, in the east, with the city of Grand Junction, to the west. The site is physically bounded by slopes of gradually increasing grade that form the southern boundary of the Grand Mesa National Forest. To the west, the training area boundary extends over Wells Gulch, and in the east, near Point Creek and the Star Nelson Ranch. Delta Range is comprised of public lands managed by the US Department of the Interior, BLM Uncompahyre Basin Resource Area. The property is not fenced and has unrestricted access. BLM has erected three signs along access roads warning visitors of dangers of potential UXO. The lands are currently used for recreational pursuits, oil and gas exploration, mineral extraction and livestock grazing.

The Delta Range site has been subdivided into six sites as a result of the RI in order to apply different remedies to specific areas.

The Delta Range 3.5-inch Practice Rocket Range MRS (141 acres) is a ridgeline located in the central portion of the Delta Range property and was used as the backstop for firing 3.5-inch practice rockets and small arms. Surficial munitions debris has been removed from the area. However, range-related debris consisting of old car parts used for targets remains (Section IV, Preliminary Assessment/Site Investigation, Delta Range, Delta CO, NGB, 24 February 2009).

The FS has been completed and the report was finalized January 2014. The Final ROD was signed in September 2018, and the Selected Remedy consists of a technology-aided (using magnetometers) surface removal of DoD military munitions and implementation of ICs with Five-Year Reviews.

Cleanup/Exit Strategy Alternative 3 will be implemented, consisting of a technology-aided (using magnetometers) surface removal of DoD military munitions and implementation of ICs with Five-Year Reviews.

CC_DELT-001-R-04_Delta USAR Camp Mortar Range

HQAES ID: 6667A.1010		1	1
Alias: None	Phases	Start	End
	PA	2/15/2009	3/15/2009
Regulatory Driver: CERCLA	SI	2/15/2009	3/15/2009
RRSE: Not assigned	RI/FS	3/15/2010	10/18/2018
MRSPP: Not assigned	RD	9/15/2017	10/15/2020
RIP Date: 9/27/2030	IRA		
RC Date: 12/15/2030	RA(C)	9/28/2028	9/27/2030
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	1/15/2031	1/14/2061
Subprogram: CC			

Site Narrative

The Delta Range is located on the western slope of the Rocky Mountains in Delta County, Colorado, approximately 7.5 miles northwest of the city of Delta, and 33 miles southeast of Grand Junction. The site is bounded on the south by US Highway 50, an east-west tending four-lane thoroughfare that links the city of Delta, in the east, with the city of Grand Junction, to the west. The site is physically bounded by slopes of gradually increasing grade that form the southern boundary of the Grand Mesa National Forest. To the west, the training area boundary extends over Wells Gulch, and in the east, near Point Creek and the Star Nelson Ranch. Delta Range is comprised of public lands managed by the US Department of the Interior, BLM Uncompahyre Basin Resource Area. The property is not fenced and has unrestricted access. BLM has erected three signs along access roads warning visitors of dangers of potential UXO. The lands are currently used for recreational pursuits, oil and gas exploration, mineral extraction and livestock grazing.

The Delta Range site has been subdivided into six sites as a result of the RI in order to apply different remedies to specific areas.

The Delta Range Army Reserve Camp Mortar Area (DRARCMA) MRS (67 acres) was identified during the RI field investigation within the original Practice Grenade Training/Army Reserve Camp investigation area (Section 4.9 of the Draft Final Delta Range Remedial Investigation Report, Tetra Tech 2012) as a result of one M74 81mm mortar being found within this area (Section 4.0 of the RI report). The 81mm mortar was found in close proximity to the arroyo (dry creek) that runs through this MRS.

The FS has been completed and the report was finalized January 2014. The Final ROD was signed in October 2018, and the final selected remedy is Alternative 4, consisting of 100 percent DGM and surface and subsurface removal to full depth (expected to be 18 inches), and implementation of ICs with Five-Year Reviews. A contract was awarded in FY20 to implement the remedial actions, but was cancelled by the USACE after delays due to issues with the property owner, the BLM.

Cleanup/Exit Strategy Alternative 4 will be implemented, consisting of 100 percent DGM and surface and subsurface removal to full depth (expected to be 18 inches), and implementation of ICs with Five-Year Reviews.

CC_DELT-001-R-05_Delta Southeast Debris

HQAES ID: 6667A.1011			
Alias: None	Phases	Start	End
	PA	2/15/2009	3/15/2009
Regulatory Driver: CERCLA	SI	2/15/2009	3/15/2009
RRSE: Not assigned	RI/FS	3/15/2010	10/12/2018
MRSPP: Not assigned	RD	9/15/2017	10/15/2020
RIP Date: 1/15/2027	IRA		
RC Date: 1/15/2027	RA(C)	1/15/2026	1/15/2027
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	1/15/2027	1/14/2057
Subprogram: CC			

Site Narrative

The Delta Range is located on the western slope of the Rocky Mountains in Delta County, Colorado, approximately 7.5 miles northwest of the city of Delta, and 33 miles southeast of Grand Junction. The site is bounded on the south by US Highway 50, an east-west tending four-lane thoroughfare that links the city of Delta, in the east, with the city of Grand Junction, to the west. The site is physically bounded by slopes of gradually increasing grade that form the southern boundary of the Grand Mesa National Forest. To the west, the training area boundary extends over Wells Gulch, and in the east, near Point Creek and the Star Nelson Ranch. Delta Range is comprised of public lands managed by the US Department of the Interior, BLM Uncompahyre Basin Resource Area. The property is not fenced and has unrestricted access. BLM has erected three signs along access roads warning visitors of dangers of potential UXO. The lands are currently used for recreational pursuits, oil and gas exploration, mineral extraction and livestock grazing.

The Delta Range site has been subdivided into six sites as a result of the RI in order to apply different remedies to specific areas.

The Delta Range Southeast Debris Area MRS was not documented as a potential munitions use area prior to the RI field investigation. The Delta Range Southeast Debris Area MRS (26.3 acres) is indicated to have been used as a disposal area for range-related debris. With the exception of three "hot rocks" and several "no finds," all of the targets resulted in fragmentation. Almost all of the items were found in the top 6 inches of soil, with the exception of two fragmentation pieces at depths of 8 and 12 inches. (Final RI Report May 2013). The Delta Range Southeast Debris Area MRS is located east of the Transmission Line/Pipeline Corridor investigation area in the southeastern portion of Delta Range (Section 4.1.1 of the Draft Final Delta Range Remedial Investigation Report, Tetra Tech 2012).

The feasibility study FS has been completed and the report was finalized January 2014. The Final ROD was signed in October 2018, and the final Selected Remedy 2B of Advanced ICs with Five-Year Reviews.

Cleanup/Exit Strategy Alternative 2B will be implemented, consisting of Advanced ICs with Five-year Reviews.

CC_DELT-001-R-06_Delta Range Remainder

HQAES ID: 6667A.1012		I	
Alias: None	Phases	Start	End
	PA	2/15/2009	3/15/2009
Regulatory Driver: CERCLA	SI	2/15/2009	3/15/2009
RRSE: Not assigned	RI/FS	3/15/2010	10/18/2018
MRSPP: Not assigned	RD	9/15/2017	10/15/2020
RIP Date: 12/15/2027	IRA		
RC Date: 12/15/2027	RA(C)	1/15/2026	12/15/2027
RC Reason: Not assigned	RA(O)		
Program: Compliance Cleanup	LTM	1/15/2028	1/14/2058
Subprogram: CC			

Site Narrative

The Delta Range is located on the western slope of the Rocky Mountains in Delta County, Colorado, approximately 7.5 miles northwest of the city of Delta, and 33 miles southeast of Grand Junction. The site is bounded on the south by US Highway 50, an east-west tending four-lane thoroughfare that links the city of Delta, in the east, with the city of Grand Junction, to the west. The site is physically bounded by slopes of gradually increasing grade that form the southern boundary of the Grand Mesa National Forest. To the west, the training area boundary extends over Wells Gulch, and in the east, near Point Creek and the Star Nelson Ranch. Delta Range is comprised of public lands managed by the US Department of the Interior, BLM Uncompahyre Basin Resource Area. The property is not fenced and has unrestricted access. BLM has erected three signs along access roads warning visitors of dangers of potential UXO. The lands are currently used for recreational pursuits, oil and gas exploration, mineral extraction and livestock grazing.

The Delta Range site has been subdivided into six sites as a result of the RI in order to apply different remedies to specific areas.

The following MRS boundaries exist within in the Delta Range Remainder (Southeast 40 mm Practice Grenade Impact Area, Northwest 40mm Practice Grenade Impact Area, Delta Range Impact Area, Southern Debris Area). The Delta Remainder exists because of the miscellaneous finds outside of the previously mentioned MRS Sites. The Delta Range MRS (12,237 acres) was used for maneuvers, firing points, bivouac areas, and training exercises via vehicles on existing roads.

There have been no MEC recovered from within this MRS although historical MEC are known to have existed. No known munition related activities are associated with this area as all munitions-related sites investigated during the RI are contained within other MRS (FS Report January 2014). MD Fragments from the following munitions have been found at this MRS (155mm, 106mm, 81mm, 40mm, and Fuzes). Figure 4-49 (Final RI Report May 2013).

The FS has been completed and the report was finalized January 2014. The Final ROD was completed in May 2018 (signed in October 2018), and the final Selected Remedy 2B of Advanced ICs with Five-year Reviews.

Cleanup/Exit Strategy Alternative 2B will be implemented, consisting of Advanced ICs with Five-year Reviews.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
6667A.1001	DELT-001-R-01_Former Artillery Range	10/18/2018
6667A.1002	DELT-001-R-02_Delta Practice Grenade Are	10/18/2018
6667A.1003	DELT-001-R-03_Delta Practice Rocket Rang	10/18/2018
6667A.1004	DELT-001-R-04_Delta USAR Camp Mortar Are	10/15/2019
6667A.1005	DELT-001-R-05_Delta Southeast Debris Are	10/12/2018
6667A.1006	DELT-001-R-06_Delta Range Remainder	10/18/2018

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
Community Involvement Plan (Date Published):	201603
Restoration Advisory Board (RAB) Establishment Date:	None. The community did not express interest in forming a RAB.
RAB Adjournment Date:	NA
RAB Adjournment Reason:	NA
Additional Community Involvement:	An advertisement for public interest in establishing a RAB was published in April 2016
Administrative Record is located at:	Colorado Army National Guard 6848 S. Revere Parkway Centennial, CO 80112 720-250-1391
Information Repository is located at:	Colorado Army National Guard 6848 S. Revere Parkway Centennial, CO 80112 720-250-1391
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

None

ROD/DDs associated with the last Five-Year/Periodic Review

None

Results, Actions & Plans

LAND USE CONTROLS (LUC) SUMMARY

BUCKLEY AFB AASF

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AASF	Army Aviation Support Facility
AEDB-R	Army Environmental Database - Restoration
AFB	Air Force Base
AFFF	Aqueous Film-Forming Foam
COARNG	Colorado Army National Guard
AOI	Area of Interest
СС	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
DD	Decision Document
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
ENV	Environmental
FS	Feasibility Study
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
LTM	Long-Term Management
LUC	Land Use Control
MRSPP	Munitions Response Site Prioritization Protocol
PA	Preliminary Assessment
PFAS	Per- and Polyfluoroalkyl Substances
PFHxS	Perfluorohexanesulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
RAB	Restoration Advisory Board
RA(C)	Remedial Action (Construction)
RA(0)	Remedial Action (Operations)
RC	Response Complete

Acronym	Definition
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SL	Screening Level
ТАРР	Technical Assistance for Public Participation
TRC	Technical Review Committee
UST	Underground Storage Tank
WBS	Work Breakdown Structure

PHASE TRANSLATION TABLE

HQAES Phase ID	CERCLA Phase	RCRA Phase	RCRA UST Phase
.01	Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
.02	Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
.03	Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
.04	Remedial Design (RD)	Design (DES)	Design (DES)
.05	Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
.06	Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
.07	Remedial Action (Operation) (RA(O))	Corrective Measures Implementation (Operation) (CMI(O))	Implementation (Operation) (IMP(O))
.08	Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

SITE ALIAS LIST

WBS Element	AEDB-R Reference	Site Alias
2960A.1002	CO2021-01-P_BUCKLEY AFB AASF	

BUCKLEY AFB AASF

INSTALLATION RESTORATION PROGRAM SITES

CO2021-01-P_BUCKLEY AFB AASF

HQAES ID: 2960A.1002	Phases		
Alias: None		Start	End
Allas. None	PA	7/11/2018	12/31/2020
Regulatory Driver: CERCLA	SI	12/16/2020	9/30/2023
RRSE: Not assigned	RI/FS	9/15/2029	9/15/2036
MRSPP: Not assigned	RD		
RIP Date: 9/15/2036	IRA		
RC Date: 9/15/2036	RA(C)		
RC Reason: Not assigned	RA(O)		
Program: ENV Restoration, Army	LTM		
Subprogram: IR			

Site Narrative

A Preliminary Assessment (PA) was completed at the Buckley Air Force Base (AFB) Army Aviation Support Facility (AASF) site to assess potential per- and poly-fluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. Two areas of interest (AOIs) related to potential PFAS release were identified at the Buckley AFB AASF site during the PA. Based on documented potential PFAS releases at these AOIs there is potential for exposure to PFAS in surface soil to site workers, construction workers, and trespassers/recreational users via ingestion and inhalation; subsurface soil to construction workers via ingestion and inhalation; surface water/sediment to site workers, construction workers, residents and trespassers/recreational users; and shallow groundwater to residents via ingestion.

A Site Inspection (SI) was completed in September 2023, which concludes that a remedial investigation (RI) is warranted at:

- AOI 1 Building 1510; and
- AOI 2 Former Tri-Max[™] Storage Area.

At AOI 1, perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexanesulfonic acid (PFHxS) were detected in groundwater in locations both upgradient and downgradient of AOI 1at concentrations above screening levels (SLs). At AOI 2, PFOS, PFOA, PFHxS, perfluorononanoic acid (PFNA) and perfluorobutanesulfonic acid (PFBS) were detected in groundwater at concentrations above their respective SLs.

The site has been approved for Defense Environmental Restoration Program (DERP) funding, and the RI will proceed under DERP.

Cleanup/Exit Strategy An RI will be conducted at AOI 1 and AOI 2. Future actions will be determined by the results of the RI.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
2960A.1001	CO2021-01-P_BUCKLEY AFB AASF	9/30/2023

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
Community Involvement Plan (Date Published):	TBD
Restoration Advisory Board (RAB) Establishment Date:	N/A
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	Community Involvement Plan, Administrative Record and Information Repository will all be developed as the project progresses.
Administrative Record is located at:	TBD
Information Repository is located at:	TBD
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

None

ROD/DDs associated with the last Five-Year/Periodic Review

None

Results, Actions & Plans

LAND USE CONTROLS (LUC) SUMMARY

GYPSUM (HAATS)

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
COARNG	Colorado Army National Guard
AOI	Area of Interest
СС	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
DD	Decision Document
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
ENV	Environmental
FS	Feasibility Study
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
LTM	Long-Term Management
LUC	Land Use Control
MRSPP	Munitions Response Site Prioritization Protocol
PA	Preliminary Assessment
PFAS	Per- and Polyfluoroalkyl Substances
PFHxS	Perfluorohexanesulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
RAB	Restoration Advisory Board
RA(C)	Remedial Action (Construction)
RA(0)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation

Acronym	Definition	
RIP	Remedy-In-Place	
ROD	Record of Decision	
RRSE	Relative Risk Site Evaluation	
SI	Site Inspection	
SL	Screening Level	
TAPP	Technical Assistance for Public Participation	
TRC	Technical Review Committee	
UST	Underground Storage Tank	
WBS	Work Breakdown Structure	

PHASE TRANSLATION TABLE

HQAES Phase ID	CERCLA Phase	RCRA Phase	RCRA UST Phase
.01	Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
.02	Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
.03	Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
.04	Remedial Design (RD)	Design (DES)	Design (DES)
.05	Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
.06	Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
.07	Remedial Action (Operation) (RA(O))	Corrective Measures Implementation (Operation) (CMI(O))	Implementation (Operation) (IMP(O))
.08	Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

SITE ALIAS LIST

WBS Element	AEDB-R Reference	Site Alias
08B07.1002	CO2020-01-P_HIGH ALT ARMY AV TS PFAS CON	

GYPSUM (HAATS)

INSTALLATION RESTORATION PROGRAM SITES

CO2020-01-P_HIGH ALT ARMY AV TS PFAS CON

HQAES ID: 08B07.1002	Dhaaaa	Otorrt	Find
Alias: None	Phases	Start	End
	PA	8/11/2017	5/15/2020
Regulatory Driver: CERCLA	SI	8/17/2020	9/30/2023
RRSE: Not assigned	RI/FS	9/15/2028	9/15/2035
MRSPP: Not assigned	RD		
RIP Date: 9/15/2035	IRA		
RC Date: 9/15/2035	RA(C)		
RC Reason: Not assigned	RA(O)		
Program: ENV Restoration, Army	LTM		
Subprogram: IR			

Site Narrative

A Preliminary Assessment (PA) was completed at High Altitude Army Aviation Training Site to assess potential per- and poly-fluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. The final PA report was issued in October 2020. Three Ares of Interest (AOIs) were identified, with potential for exposure to PFAS contamination in surface soil to site and construction workers, and trespassers via ingestion and inhalation; in subsurface soil to construction workers via ingestion and inhalation; and in surface water and sediment to off-facility residents and recreational users via ingestion. Additionally, commercial and domestic wells located cross- gradient and downgradient of HAATS create a potentially complete pathway for PFAS exposure to off-facility residents via ingestion of groundwater.

A Site Inspection (SI) was completed in August 2023, which concluded that a remedial investigation (RI) is warranted at:

- AOI 1 Parking Apron/Taxiway; and
- AOI 2 HAZMAT Storage Area.

At AOI 1, perfluorooctanesulfonic acid (PFOS) was detected in surface soil samples at several locations above screening levels (SLs) and perfluorooctanoic acid (PFOA), was detected at one of three locations in groundwater above SLs. PFOS and PFOA were detected at concentrations above SLs in temporary monitoring wells located upgradient of AOI 1. At AOI 2, PFOS was detected in surface soil samples above SLs. PFOA and perfluorohexanesulfonic acid (PFHxS) were detected in groundwater at concentrations above SLs.

The site has been approved for Defense Environmental Restoration Program (DERP) funding, and the RI will proceed under DERP.

Cleanup/Exit Strategy An RI will be conducted at AOI 1 and AOI 2. Future actions will be determined by the results of the RI.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
08B07.1001	CCCO2020-01-P_HIGH ALT ARMY AV TS PFAS C	9/30/2023

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC)	N/A
Establishment Date:	
Community Involvement Plan (Date	TBD
Published):	
Restoration Advisory Board (RAB)	N/A
Establishment Date:	
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	Community Involvement Plan, Administrative Record and Information Repository will all be developed as the project progresses.
Administrative Record is located at:	TBD
Information Repository is located at:	TBD
Current Technical Assistance for	N/A
Public Participation (TAPP):	
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

None

ROD/DDs associated with the last Five-Year/Periodic Review

None

Results, Actions & Plans

LAND USE CONTROLS (LUC) SUMMARY