JFHQ AL ARNG

Army Cleanup Program

Installation Action Plan

2023

CONTENTS

ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
ALARNG	Alabama Army National Guard
CC	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
DD	Decision Document
DERP	Defense Environmental Restoration Program
ENV	Environmental
FS	Feasibility Study
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
KD	Known Distance
LTM	Long-Term Management
LUC	Land Use Control
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NDNODS	Non-DoD-owned, Non-operational Defense Sites
PRIDE	Planning Resource for Infrastructure Development and Evaluation
PA	Preliminary Assessment
RAB	Restoration Advisory Board
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

Acronym	Definition
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SDZ	Surface Danger Zone
SI	Site Inspection
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
6874A.1006	CC_ALHQ-004-R-01_NDNODS_Tuscaloosa Rifle	- -
6874A.1007	CC_ALHQ-005-R-01_NDNODS_ Hamilton Small	- -

JFHQ AL ARNG

COMPLIANCE CLEANUP SITES

CC_ALHQ-004-R-01_NDNODS_Tuscaloosa Rifle Range

HQAES ID: 6874A.1006

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 12/31/2033

RC Date: 12/31/2033

RC Reason: Not assigned

Program: Compliance Cleanup

Subprogram: CC

Phases	Start	End
PA	4/15/2007	9/15/2009
SI	7/15/2010	9/15/2012
RI/FS	1/15/2029	12/31/2033
RD	- -	- -
IRA	- -	- -
RA(C)	- -	- -
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

The Tuscaloosa Rifle Range is a 107.8-acre munitions response site (MRS) located in undeveloped forestland in Tuscaloosa County, Alabama, just east of State Route 69. Direction of fire was from southwest to northeast. The former range was used for small arms training. Based on the time period in which the range was used, munitions usage likely included .30-caliber small arms ammunition. The estimated period of usage was from 1930 to 1934.

Site Inspection (SI) fieldwork was conducted in 2011 and the report was final in 2012. Preliminary Assessment (PA) acreage increased in the SI report from 106 to 107.8 to include a potential target berm identified outside of original MRS boundary. Lead contaminated soils were discovered. The SI screening level for soil is 400 milligrams/kilogram (mg/kg) for total lead. One soil sample exceeded the standard with results of 35,000 mg/kg.

DERP funding was used to complete work through the SI at this site. Non-DoD-Owned, Non-Operational Defense Sites (NDNODS) moving forward with the RI/FS phase are reprogrammed into Compliance-related Cleanup (CC).

Cleanup/Exit Strategy A Remedial Investigation (RI) and Feasibility Study (FS) will be completed at this site. Once the RI/FS is completed future actions will be evaluated. At this time there isn't sufficient documentation to plan for future actions

CC_ALHQ-005-R-01_NDNODS_ Hamilton Small Arms Range

HQAES ID: 6874A.1007

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 2/1/2036

RC Date: 2/1/2036

RC Reason: Not assigned

Program: Compliance Cleanup

Subprogram: CC

Phases	Start	End
PA	12/15/2010	2/15/2011
SI	2/15/2011	9/15/2012
RI/FS	1/15/2029	12/31/2033
RD	1/1/2034	1/31/2034
IRA	- -	- -
RA(C)	2/1/2034	2/1/2036
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

The Hamilton Small Arms Range was leased by the Armory Commission of the State of Alabama for small arms training starting in September 1960. On the 11.9 acre parcel, a known distance (KD) range was established. Use of the range ceased in the 1995 because encroachment impacted the surface danger zone (SDZ) and munitions were no longer safe to fire.

The range was last inspected by Alabama Army National Guard (ALARNG) Safety office around 1988. At that time the Safety Officer cleared the range for continued use for the next five (5) years. There were only a few houses near the SDZ at that time. After the five year period was up, a request was sent to the safety office asking for an inspection, but was never approved. During those five years, the city of Hamilton placed a water tower in the SDZ and several more houses were constructed in and around the SDZ. The SDZ possibly may have crossed Hwy 278. In 1995 ALARNG tried again to have the range cleared for use and the Army would not allow it because of where the SDZ fell.

As weapons qualifications were allowed only on regulation ranges and this range failed to meet those regulations, use of the KD Range would have been discontinued sometime between 1993 and 1995.

The KD Range was not included in the AL ARNG Planning Resource for Infrastructure Development and Evaluation (PRIDE) data until a few years ago. Under the direction of (then) CFMO COL Doug Reeves, a 911 address was assigned to the Range and it was included in the PRIDE/real property lists. At that time, the KD Range was photographed, and there were no structures or other features associated with the site.

Defense Environmental Restoration Program (DERP) funding was used to complete work through the SI at this site. Non-DoD Owned, Non-Operational Defense Sites (NDNODS) sites moving forward with the RI/FS phase are reprogrammed into CC.

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

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
6874A.1001	ALHQ-001-R-01_NDNODS Greensboro Rifle Ra	9/30/2012
6874A.1002	ALHQ-003-R-01_NDNODS Selma Rifle Range	9/30/2012
6874A.1003	ALHQ-004-R-01_NDNODS Tuscaloosa Rifle Ra	9/30/2012
6874A.1004	ALHQ-002-R-01_NDNODS Lewisburg Rifle Ran	9/30/2012
6874A.1005	ALHQ-005-R-01_NDNODS Hamilton Small Arms	9/30/2012

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:	Once sites make it to the RI/FS phase a RAB solicitation will be posted in local papers and a Community Involvement Plan will be prepared.
Administrative Record is located at:	ALARNG JFHQ CFMO ENV ATTN: Greg Hayes 1720 Congressman W L Dickinson Drive Montgomery AL 36109
Information Repository is located at:	ALARNG JFHQ CFMO ENV ATTN: Greg Hayes 1720 Congressman W L Dickinson Drive Montgomery AL 36109
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

None

LAND USE CONTROLS (LUC) SUMMARY

None

FORT MCCLELLAN TRAINING CENTER

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
ADEM	Alabama Department of Environmental Management
AEDB-R	Army Environmental Database - Restoration
ARNG	Army National Guard
bgs	Below Ground Surface
CC	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CWM	Chemical Warfare Material
DD	Decision Document
DGM	Digital Geophysical Mapping
DoD	U. S. Department of Defense
DTA	Decontamination Training Area
ENV	Environmental
EPA	U. S. Environmental Protection Agency
FS	Feasibility Study
GPO	Geophysical Prove Out
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
JSU	Jacksonville State University
LTM	Long-Term Management
LUC	Land Use Control
mg/kg	milligrams per kilogram
MNA	Monitored Natural Attenuation
MC	Munitions Constituents
MD	Munitions Debris
MEC	Munitions and Explosives of Concern
MR	Munitions Response
MRS	Munitions Response Site

Acronym	Definition
MRSPP	Munitions Response Site Prioritization Protocol
NFA	No Further Action
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
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
SVOCs	Semi-volatile Organic Compounds
SOTS	Security Operational Training Site
SI	Site Inspection
TGA	Toxic Gas Area
USACE	U. S. Army Corps of Engineers
USAR	U. S. Army Reserve
UST	Underground Storage Tank
UU/UE	Unlimited Use/Unlimited Exposure
UXO	Unexploded Ordnance
VOCs	Volatile Organic Compounds
WBS	Work Breakdown Structure

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.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

HQAES ID	AEDB-R Reference	Site Alias
01910.1001	FTMCN-001-R-01_600 AREA MOTOR POOL SITE	- -
01910.1003	FTMCN-003_FORMER TRAP AND SKEET RANGE	- -
01910.1008	FTMCN-008_RANGE J	FTMC-036
01910.1009	FTMCN-009_RANGE K	FTMC-035
01910.1011	FTMCN-011_FORMER TOXIC GAS/DECON TRNG AR	- -
01910.1014	FTMCN-110_SECURITY OPERATIONAL TEST SITE	- -

FORT MCCLELLAN TRAINING CENTER

INSTALLATION RESTORATION PROGRAM SITES

FTMCN-003_Former Trap and Skeet Range

HQAES ID: 01910.1003

Alias: FTMCN-003

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 10/1/2025

RC Date: 10/1/2025

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	*Start*	*End*
PA	1/31/1997	1/31/1998
SI	3/31/2000	9/30/2002
RI/FS	10/31/2004	10/1/2024
RD	- -	- -
IRA	12/15/2015	12/15/2015
RA(C)	10/1/2019	10/1/2025
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

This Former Trap and Skeet Range, Parcel 127Q, is an approximately 6.4-acre area located at the east end of Signal Street (formally 5th Street) in the northern portion of the enclave. The range and associated structures were visible on aerial photographs taken from 1973 to 1994. The area is currently used as a jump training area.

The Site Inspection (SI) report was finalized in March 2002. The nature and extent of contamination found during the SI was not fully delineated but lead (up to 434 milligrams per kilogram (mg/kg)) and polycyclic aromatic hydrocarbons (PAH) (up to 74 mg/kg) were detected in the soil to 1 foot (ft) below ground surface (bgs). The contamination poses a human health risk for the residential scenario. Four groundwater monitoring wells were installed and sampled. No contamination was detected above regulatory limits. Wells have been closed.

Because of the lead in soil, the Army recommended limiting use to military training activities. In a letter dated 27 Jan 2004, the Alabama Department of Environmental Management (ADEM) concurred with this recommendation. A decision document (DD) has been completed to limit the future use of the land to Army National Guard (ARNG) military training.

ADEM sent a letter of concurrence for military training at site FTMCN-003 (Former Trap and Skeet Range) on 6 December 2007.

A contract to conduct a Remedial Investigation (RI) and Baseline Risk Assessment was awarded in FY15 to delineate the nature and extent of contamination found during the SI. The RI/feasibility study (FS) phase is currently underway. The final RI report was completed in November 2019, with ADEM concurrence issued on February 10, 2020. The RI results do not support unlimited use/unrestricted exposure (UU/UE) for residential land use. Therefore, an FS, proposed plan and record of decision (ROD) are being prepared in the RI/FS phase, which is currently under contract. The FS was submitted to ADEM in November 2021 and approved by ADEM in March 2022. The Proposed Plan for the Former Trap and Skeet Range (AECOM, 2022) was made available to the public in November 2022. It can be

found in the Administrative Record file maintained at the Jacksonville State University (JSU) McClellan Center in Anniston, Alabama. The notice of the availability of this document was published in The Anniston Star, The Daily Home, and the Calhoun Journal on November 23, 2022. A public comment period was held from November 23 to December 23, 2022. No public comments were received during this period. The ROD was issued for ADEM review in April 2023.

Cleanup/Exit Strategy Alternative 2, Land Use Controls (LUCs) is the preferred alternative. Five-year reviews will be required indefinitely. Costs for five-year reviews are captured under site FTMCN-009, HQAES ID 1910.1009. Inspections of LUCs will be performed by government employees concurrent with the five-year reviews, with no future cost liabilities.

FTMCN-008_Range J

HQAES ID: 01910.1008

Alias: FTMC-036

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 9/30/2009

RC Date: 10/15/2053

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	*Start*	*End*
PA	6/30/1990	12/31/1990
SI	6/30/1991	8/31/1993
RI/FS	12/31/1993	7/31/2009
RD	11/30/2006	8/31/2009
IRA	- -	- -
RA(C)	11/30/2006	9/30/2009
RA(O)	11/30/2006	10/15/2053
LTM	- -	- -

Site Narrative

The Fort McClellan Army National Guard Training Center provides year round training facilities, ranges, and maneuver areas for the ARNG, U.S. Army Reserve (USAR), U. S. Department of Defense (DOD), Federal and State agencies to support the integrated training strategy. The fenced 150' x 60' (0.2 acre) Range J is located in the north-central portion of Pelham Range and was used as a chemical agent training area from 1954-1963 and as a disposal area for soil from a chemical agent spill that occurred in 1955 on the main post. Decontamination agents, which often included inorganic materials (bleach in various forms, calcium hypochlorite, and chlorine gas) and organic solvents such as carbon tetrachloride, benzene, chloroform, or 1,1,2,2-tetrachloroethane were used after training exercises to reduce or eliminate hazards associated with the chemical agents used in training.

The Army completed the RI Report Revision 1 for this site in 2004; the ADEM concurred. The RI identified chlorinated volatile organic compounds (VOCs) and benzene as chemicals of concern in groundwater. The plume (total chlorinated VOC concentration > 0.005 mg/L) ranged from 300 ft wide by 425 ft long and 50-150 ft bgs. An FS in March 2008, PP in September 2008, Remedial Design/Remedial Action Work Plan in July 2009, and DD signed in September 2009 have been completed; and ADEM has concurred or approved those documents. The remedy selected was in-situ bioremediation for the groundwater plume hot spot containing chlorinated VOCs above 0.1 mg/L, monitored natuaral attenuation (MNA) for the remainder of the plume, and LUCs. Lactose was injected in September 2009 and there have been no additional injections.

The available data indicates that the lactose injections had some limited effect on reducing the chlorinated VOC mass in the plume. Because of the limited monitoring conducted, it is not possible to evaluate the performance of the remedy throughout the entire plume. An optimization study was conducted in FY21, which recommends the reduction of the monitoring frequency to every five years. The last sampling round was conducted in September 2021. The next sampling round is scheduled for 2026. A LUC implementation plan (LUCIP) was submitted to ADEM in 2014 and currently is being revised.

Cleanup Exit Strategy Groundwater monitoring will continue at this site on a five-year basis, with the next round scheduled for 2026. An installation-wide five year review and monitoring costs are tracked under FTMCN-009 (HQAES ID: 01910.1009).

FTMCN-009_Range K

HQAES ID: 01910.1009

Alias: FTMC-035

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 9/30/2009

RC Date: 10/15/2053

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	*Start*	*End*
PA	6/30/1990	12/31/1990
SI	6/30/1991	8/31/1993
RI/FS	12/31/1993	7/31/2009
RD	11/30/2006	8/31/2009
IRA	- -	- -
RA(C)	11/30/2006	9/30/2009
RA(O)	11/30/2006	12/15/2053
LTM	- -	- -

Site Narrative

The Fort McClellan Army National Guard Training Center provides year round training facilities, ranges, and maneuver areas for the ARNG, USAR, DOD, Federal and State agencies to support the integrated training strategy. Range K, a 2-acre former chemical training area located in the northwestern portion of Pelham Range, reportedly was used as a shell tapping area from before 1961 until 1963. Rounds containing chemical agent were opened and decontaminated with decontaminants likely including decontamination agent non-corrosive, Super Tropical Bleach, and Decontamination Solution Number 2.

The Army completed the RI report in 2004 and the ADEM concurred. The RI identified chlorinated VOCs as chemicals of concern in groundwater. The plume (total chlorinated VOC concentration > 0.005 mg/L) ranged from 90-150 ft wide, 700 ft long, and 10->100 ft bgs. An FS in January 2008, PP in August 2008, Remedial Design/Remedial Action Work Plan in July 2009, and DD signed in September 2009 have been completed; and ADEM has concurred or approved those documents.

The remedy selected was in-situ bioremediation, MNA, and LUCs. Lactose initially was injected in September 2009, and additional injections were conducted in 2011, 2012, and 2013. MNA was conducted from 2012 to 2021. On 03/20/2023 Revision 1 Optimization Evaluation (Groundwater Monitoring Program Optimization and Remedy Evaluation for Ranges J and K Revision 1 dated March 2023) issued for ADEM review. Based on the recommendations in the Groundwater Monitoring Program Optimization and Remedy Evaluation report and in keeping with the DD requirements, MNA monitoring will be performed every five years until remediation goals are achieved and will include sampling additional monitoring wells within the existing monitoring well network for each five-year sampling event. The next MNA event is due 2026.

The first five-year review was completed in 2015. Completion of the second five-year review was delayed and the finalized second five-year review report was signed on 19 November 2021.

The next five-year review is scheduled for FY24.

Cleanup Exit Strategy It is assumed groundwater monitoring will continue for the next 30 years. An installation-wide five year review is being tracked here. Groundwater monitoring costs for FTMCN-008 (HQAES ID: 01910.1008) are tracked at this site.

FTMCN-011_Former Toxic Gas/Decon Trng Ar

HQAES ID: 01910.1011

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 12/15/2025

RC Date: 12/15/2055

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	*Start*	*End*
PA	1/31/1997	1/31/1998
SI	6/30/2000	6/30/2003
RI/FS	10/31/2006	1/15/2024
RD	1/15/2024	12/15/2024
IRA	11/30/2006	12/15/2006
RA(C)	1/15/2025	12/15/2025
RA(O)	12/15/2025	12/15/2055
LTM	- -	- -

Site Narrative

The Fort McClellan Army National Guard Training Center provides year round training facilities, ranges, and maneuver areas for the ARNG, USAR, DoD, Federal and State agencies to support the integrated training strategy. The Former Toxic Gas/Former Decontamination Training Area (DTA) South of the Toxic Gas Area (TGA), FTMCN-011, is located in the northwest portion of Pelham Range and consists of two sites – the Former Toxic Gas Area, approximately 300 acres, and the Former Decontamination Training Area, approximately one acre. Range K (FTMCN-009) is located within the Former Toxic Gas Area.

The Former Toxic Gas Area is delineated on a 1958 maneuver area map and was used from 1952 until approximately 1963 for various chemical training involving tear gas, smoke, and chemical agents. A training course was constructed and used for chemical, biological, and radiological training from approximately 1955-1963. In the southern portion of the Former Toxic Gas Area, detection, identification, and decontamination training was conducted where chemical agent H (mustard) or HD (distilled mustard) was placed on World War II-era motorized tanks followed by decontamination with Decontamination Agent Non-Corrosive. The tanks were located on either side of a ridge line in the southern area, and there were two tanks at each location.

During training at the Former Decontamination Training Area, H or HD was placed on discarded vehicles or on the ground followed by decontamination using a Super Tropical Bleach slurry. Chemical Warfare Material (CWM) was not detected at this site during the CWM SI (Recovered CWM SI Report, Sep 2002).

The Army completed an SI Report Revision 1 in September 2004 that identified metals in soil at both sites and metals and chlorinated VOCs in groundwater at the Toxic Gas Area as chemicals of potential concern and recommended an RI to determine the extent of soil and groundwater contamination; the ADEM concurred with the report. CWM breakdown products and explosives were not detected in groundwater or soil in either area. Analysis of groundwater samples collected in Aug-Sep 2005 showed the VOC concentrations generally were equivalent to those in 2002 except that VOCs were detected in fewer wells.

The ADEM concurred with the RI work plan, additional fieldwork was conducted in 2007-2008, and a draft-final RI report and draft-final FS were submitted to ADEM in Feb and April 2010. Revised RI reports have been issued based on ADEM comments. An RI Rev 2 report was submitted to ADEM in June 2014, ADEM comments led to additional groundwater sampling conducted in 2016, updated risk assessments have been conducted, and a revised draft RI Rev 3 report was submitted to ADEM in August 2018. The RI Rev 3 determined the chemicals that pose an unacceptable risk in the TGA are chlorinated VOCs (1,1,2,2-Tetrachloroethane and Trichloroethene) in groundwater at the southern portion of the site and cobalt in several subsurface soil locations. The chemicals that pose an unacceptable risk in the DTA are cobalt and beryllium in subsurface soil. Contamination remains in the soil and groundwater at the sites at concentrations that will require remedial action. Current status is: pending ADEM review of ARNG responses to ADEM comments on the RI Rev 3 submitted on 6/13/22. The Draft Feasibility Study for the Former Toxic Gas Area and Former Decontamination Training Area was issued in May 2019 but must be revised and updated once the RI is approved. Future funding is required to complete the updated FS, PP, and ROD for this site.

The RI/FS, RA(C), and RA(O) costs through FY14 for this site were tracked in AEDB-R under site PBC@FM-ARNG. After close-out of the performance based acquisition (PBA) task order in 2014, cleanup actions for this site are tracked under FTMCN-011.

Cleanup Exit Strategy Following completion of the RI/FS, it is assumed that LUCs will be required for TGA soils, DTA soils and TGA groundwater, with groundwater monitoring and five year reviews for a 30 year duration.

FTMCN-110_Security Operational Test Site

HQAES ID: 01910.1014

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 10/1/2027

RC Date: 10/1/2027

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	*Start*	*End*
PA	11/30/1995	9/30/1997
SI	9/30/1997	2/28/2005
RI/FS	10/1/20202	10/1/2027
RD	- -	- -
IRA	10/1/2023	9/30/2024
RA(C)	- -	- -
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

Former Security Operational Test Site (SOTS), Parcel 102(7), is located in the central portion of Pelham Range and it occupies approximately 7.3 acres. The SOTS consists of two separate facilities: an administration center and a building test site [Parcel 102(7)]. The building test site was constructed to replicate a nuclear weapons storage facility for the purpose of testing and evaluating various security systems. Testing reportedly began in 1982 and ended in 1994 and was conducted on a material called “sticky foam”, which was developed for the purpose of immobilizing intruders. Tests sometimes included the use of high explosives. Data collected by sensors at the building test site were transmitted to the administration center, where they were recorded for later analysis. Materials used during tests/intrusions included torches, high explosives, methyl ethyl-keytone, sticky foam, proprietary organic solvent, and Thermolaog (a proprietary substance to protect contents from torches), high explosives, and caustic chemicals used to make smoke. An above ground storage tank was used at the site to service diesel generators.

The SI report was finalized in May 2002. The analytical results indicate and concluded that metals, VOCs, and semivolatile organic compounds (SVOCs) were detected in the various site media. The report concluded that the metals and chemical compounds detected in site media did not pose an unacceptable risk to human health and the environment. No further action (NFA) and unrestricted land reuse were recommended. The SI report did note that explosives were used at both igloos and at the headwall.

The U.S. Environmental Protection Agency (EPA) concurred with the recommendation in a letter dated January 29, 2003. In a letter dated June 30, 2004, the ADEM requested a LUCIP because five of the six soil samples had arsenic levels ranging from 21.5 – 45.5 mg/kg, which was greater than the 20 mg/kg screening level established by EPA Region 4 in August 2002. Sample numbers RN0001, RN0002, RN0006, RN0007, and RN0008 had arsenic levels of 25.4, 21.5, 45.5, 32.9, and 26.3 mg/kg, respectively. A DD was not prepared for the site. Property accountability transferred to the ARNG through a Transfer and Acceptance of Military Real Property, DD Form 1354 on February 28, 2005. The ARNG concluded that an RI/FS would be conducted due to arsenic concentrations above the background level for arsenic

in soil of 15.15 mg/kg in surface soil and 18.30 mg.kg in subsurface soil, and the 2021 USEPA residential screening level for arsenic, which is 0.68 mg/kg.

Referencing the limited historical maps, the SOTS site, appears to be either adjacent to/or could be included within the boundaries of the artillery range impact area(s) and/or other undesignated ranges dating back to the 1940's that have been used by both Fort McClellan and Anniston Army Depot. None of the historical documents available for this review makes any references for munitions and explosives of concern (MEC) or range clearance efforts on the Pelham Ranges.

A MEC Probability Assessment was conducted in 2023, which concluded that there is a moderate to high probability of MEC, with the presence of unexploded ordnance (UXO) being possible at the site. This conclusion is based on documented use of high explosives and the manufacturing of explosive devices used in testing at the site. In addition, documents reported discarded materials in the fire pond following training exercises.

Cleanup Exit Strategy An interim ROD and a MEC removal will be performed as an interim remedial action (IRA), followed by an RI/FS. Once the RI/FS is completed future actions will be evaluated.

FORT MCCLELLAN TRAINING CENTER

MILITARY MUNITIONS RESPONSE PROGRAM SITES

FTMCN-001-R-01_600 Area Motor Pool Site

HQAES ID: 01910.1001

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 10/2/2023

RC Date: 12/15/2025

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: MR

Phases	*Start*	*End*
PA	3/11/2002	5/1/2003
SI	2/28/2006	10/31/2007
RI/FS	6/30/2009	10/1/2023
RD	6/30/2022	10/2/2023
IRA	3/15/2016	3/15/2016
RA(C)	- -	- -
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

From 1993 to 2006, the 11-acre 600 Area Motor Pool munitions response site (MRS) was used to park and store National Guard vehicles. Prior to 1993, the location was historically used as a golf driving range and light maneuver area. The site had no known history of munitions use. During construction in 1993 of the motor pool slated for use as a parking and storage area for military vehicles, several MEC/munitions debris (MD) items were found (type and depth not specified). During the construction, top soil was scraped to form a berm. When the soil berm was remediated in 2000, MEC and MD including target practice (TP) 60 millimeter (mm) mortars, M15 series practice anti-tank landmine, TP 81mm mortars, 75mm shrapnel projectile, and an M39A1 practice anti-tank landmine were removed and a report was produced for this clearance action (Foster Wheeler, 2001).

To support construction of a new readiness center, a geophysical prove out (GPO) and digital geophysical mapping (DGM) survey were conducted in August 2006. No MEC or MD were visible on the surface. The DGM identified 1,079 target anomalies warranting intrusive investigation. Ten soil samples were collected randomly and analyzed for explosives and metals. Aluminum and arsenic were detected above Fort McClellan background screening criteria and the Alabama Risk-Based Corrective Action Preliminary Screening Values for residential soil; however, maximum concentrations of both metals were within the range of the background data set. Metals contamination is not an issue at this site.

Construction support was conducted from January to March 2007 to investigate the subsurface anomalies identified in the DGM. The Department of Defense Explosives Safety Board (DDESB) approved an explosives safety submission for a removal action to depth of detection and for follow-on construction support to build a readiness center. The after action report on the construction support findings identifies the removal of 101 munitions potentially presenting an explosive hazard (four UXO and 97 MD), pre- and post-detonation surface soil samples from the UXO disposal locations (explosives detected below laboratory quantification limits), and results of the post-dig DGM survey. A readiness center was constructed on this site.

Recommendations of the September 2007 SI report were an RI/FS to address remaining MEC issues, MEC construction support for intrusive activities,and no additional sampling for munitions constituents (MC). The ADEM concurred with the SI in March 2008. The RI Work Plan was submitted to ADEM in January 2011, finalized in February 2012, and ADEM concurred in March 2012. A draft RI/FS report dated September 2012 was revised in December 2015 and ADEM approved it in March 2016. The RI/FS recommended land use controls be implemented to reduce or eliminate potential for human exposure to any residual MEC that may be present. The RI performed no investigation or delineation of MEC in the 600 area but incorporated the SI data without evaluating it to see if it was sufficient quality to be used in the RI without more data collection to augment it. The RI was determined to be inadequate. A MEC probability assessment was completed in FY22. The US Army Corps of Engineers (USACE) - Huntsville District prepared a ROD which was submitted for ADEM review March 2023 and LUCIP once the ROD is approved.

Cleanup Exit Strategy The decision document will be prepared and signed. The LUCIP will be prepared. LUC maintenance will be conducted by government employees. Five- year reviews are tracked under site FTMCN-009 HQAES ID: 01910.1009.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
01910.1002	FTMCN-002-R-01_Hanna Avenue and Patriot	5/16/2017
01910.1004	FTMCN-004_Former Decontamination Complex	6/12/2008
01910.1005	FTMCN-005_Former Waste Chemical Storage	3/10/2006
01910.1006	FTMCN-006_Blue Hole Training Area 6C	12/17/2007
01910.1007	FTMCN-007_Range I	5/13/2007
01910.1010	FTMCN-010_Range L	12/20/2005
01910.1012	FTMCN-012_Sinkholes	12/6/2007
01910.1013	PBC @ FM-ARNG_PBC	12/1/2014

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
Community Involvement Plan (Date Published):	10/1/2016
Restoration Advisory Board (RAB) Establishment Date:	05/09/1996
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	N/A
Administrative Record is located at:	JSU McClellan Center Library, 100A Gamecock Dr, Anniston, AL 36205
Information Repository is located at:	JSU McClellan Center Library, 100A Gamecock Dr, Anniston, AL 36205
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

Status	Start Date	End Date	End FY
COMPLETE	8/1/2013	4/28/2016	2016
COMPLETE	1/15/2019	11/19/2021	2022
PLANNED	12/15/2022	09/30/2024	2024

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

Associated ROD/DD Name	Sites
DD FOR RANGE K FT MCCLELLAN-ARNGDD FOR R	--

Results, Actions & Plans

Results	Actions	Plans
Remedy is protective of human health and environment. Potential risk to human receptors due to ingestion of groundwater containing contaminants of concern is being minimized by treating groundwater via injection of lactose and management of residual groundwater risk through monitoring and LUCs.	Five-year Review report summarizes investigation activities, treatment effectiveness, changes going forward, LUC and their effectiveness, and evaluates whether the remedy remains protective of human health and the environment.	Plan to conduct the next five-year review in five years.

LAND USE CONTROLS (LUC) SUMMARY

LUC Title	Site
DD FOR FTMCN-004, FORMER DECONT. COMPLEX	1910.1004
DD FOR RANGE J FT MCCLELLAN-ARNG	1910.1008
DD FOR RANGE K FT MCCLELLAN-ARNGDD FOR R	1910.1009
DD MMRP 600 MOTOR POOL	1910.1001
FTMCN-003 TRAP & SKEET RANGE	1910.1003
FTMCN-006, BLUE HOLE, TRAINING AREA 6C	1910.1006

FMS 28 MOBILE

Army Cleanup Program

Installation Action Plan

2023

CONTENTS

ACRONYMS

Acronym	Definition
ADEM	Alabama Department of Environmental Management
AEDB-R	Army Environmental Database - Restoration
ALARNG	Alabama Army National Guard
ARBCA	Alabama Risk-based Corrective Action
ARNG	Army National Guard
CC	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
DERP	Defense Environmental Restoration Program
DD	Decision Document
ENV	Environmental
ERD	Enhanced Reductive Dechlorination
FMS	Field Maintenance Shop
FS	Feasibility Study
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
ISCR	In-situ Chemical Reduction
LTM	Long-Term Management
LUC	Land Use Control
MCL	Maximum Contaminant Level
MNA	Monitored Natural Attenuation
MR	Munitions Response
MRSPP	Munitions Response Site Prioritization Protocol
MW	Monitoring Well
OMS	Organizational Maintenance Shop
PA	Preliminary Assessment
PCE	Tetrachloroethene
PP	Proposed Plan

Acronym	Definition
PRP	Potentially Responsible Party
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RG	Remediation Goal
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
TCE	Trichloroethene
ug/L	Micrograms per liter
USACE	U. S. Army Corps of Engineers
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)
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.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
2710A.1001	CCALTCE28_FMS 28 TCE Site	- -

FMS 28 MOBILE

INSTALLATION RESTORATION PROGRAM SITES

CCALTCE28_FMS 28 TCE Site

HQAES ID: 2710A.1001

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 10/1/2029

RC Date: 10/15/2034

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	Start	End
PA	10/31/2004	2/28/2005
SI	- -	- -
RI/FS	1/31/2011	10/1/2026
RD	10/16/2024	10/15/2027
IRA	- -	- -
RA(C)	10/15/2025	10/1/2029
RA(O)	10/16/2027	10/15/2034
LTM	- -	- -

Site Narrative

This site was previously used for maintenance activities dating from the mid-1930s. The original OMS 29 is located upgradient to the East. The area is suspected to have been used by units for equipment maintenance.

This site is located at Alabama Army National Guard (ALARNG) Field Maintenance Shop (FMS) 28 in Mobile. The site is north of what was once Brookley Field, a former Air Force base. While conducting semi-annual sampling at the FMS 28 underground storage tank (UST) site, trichloroethene (TCE) was found in one of the monitoring wells at 450 micrograms per liter (ug/L) (maximum contaminant level (MCL) 5 ug/L). The groundwater table is approximately ten feet below ground surface.

Based on the results of the Secondary Investigation, Bechtel-S submitted a Secondary Investigation Addendum in August 2005 to the Alabama Department of Environmental Management (ADEM). During the Secondary Investigation Addendum field activities, monitoring well (MW-8), a downgradient well, was installed. Benzene, toluene, ethylbenzene, and total xylenes, methyl tertiary butyl ether, naphthalene and lead were not detected above the ADEM Initial Screening Levels in MW-8; however, the reporting limits for MW-8 were higher than the other groundwater samples due to the dilution (by the laboratory) of this sample by a factor of 20. Dilution was required due to the interference by TCE in the sample. The TCE is not related to the gasoline/diesel fuel tank being investigated and is believed to be the result of a localized solvent spill. No other groundwater samples collected during this event were diluted by the laboratory. Based on the soil analytical results collected between April 19, 2006 and March 19, 2007, TCE, in soil, has been horizontally and vertically delineated on the ALARNG property.

In June 2007, ADEM recommended additional shallow and deep wells be installed to define the horizontal and vertical extent of groundwater contamination and to obtain soil samples between the upper saturated zone and the deeper saturated zone. Monitoring well installation and soil sampling was performed January 2008. The new wells were surveyed and water table gauging was performed February 4, 2008. Additional groundwater samples were collected in July 2008. The first round of quarterly samples were taken in October 2008. The Supplemental Comprehensive Investigation Report was completed in November 2008.

The first of three groundwater gauging and sampling events was conducted during December 2008 and as Supplemental Comprehensive Investigation Report was completed in April 2009. The second groundwater gauging and sampling event was conducted during May 2009 and a Supplemental Comprehensive Investigation Report was completed in July 2009. In July 2009, ADEM concurred with recommendations to conduct remaining sampling events as needed for the Alabama Risk-Based Corrective Action (ARBCA) . The third groundwater gauging and sampling event was conducted during the September and November 2009. A Supplemental Comprehensive Investigation Report was completed in December 2009.

In 2010 and 2011 sampling events occurred in March and September with Supplemental Comprehensive Investigation Reports completed for all of the sampling events. The results of the TCE-related investigations were compiled into a Remedial Investigation (RI) Report for OMS-28 which was submitted to the state regulator in December 2012. Comments were received March 22, 2013.

The Feasibility Study (FS) for the Alabama Army National Guard (ALARNG) Organizational Maintenance Shop 28 (OMS #28), dated February 2014, was approved by state regulators in May 2014. In 2015 Army National Guard (ARNG) determined that the conceptual site model for the site required further refinement. To complete this task, AECOM was contracted by US Army Corps of Engineers (USACE), Mobile District, to conduct a data gap investigation to identify whether other soil source areas were contributing to site groundwater contamination and to improve the delineation of the known groundwater contaminant plume. In addition, AECOM was contracted to update the risk assessment and the remedies presented in the 2014 FS with the results of the data gap investigation.

Following preparation of the Supplemental Data Gap Investigation and Groundwater Monitoring Report and the Risk Assessment Report, AECOM submitted the draft version of their evaluation of the 2014 FS. The evaluation provided a reassessment of the remedial alternatives presented in the 2014 FS in light of the data collected during the data gap investigation and the revised risk assessment. During review and subsequent discussion of the draft evaluation of the FS, the ARNG decided that evaluation of the FS must be paused so that ARNG can determine if there are other parties that are potentially responsible for a source of tetrachloroethene (PCE) contamination in soil and groundwater at OMS #28 unknown when the 2014 FS was approved.

The ARNG decision came as result of observations during field activities conducted between April 2017 and March 2018, which identified the ruins of a small shack within fifteen feet of the highest concentration of PCE in the surface and subsurface soil at the site. The ruins and the PCE in soil and groundwater are on privately owned but undeveloped property and are located over 250 feet from the fenced ARNG property that is OMS #28. The presence of the ruins near the obvious PCE surface spill is suggestive of offsite activity that was not a result of ARNG activities at OMS #28 and indicates that other parties may be responsible for the PCE release. Remediation of the risk to receptors due to a PCE release by others offsite of OMS #28 would be considered an improper use of restoration funds, which are very limited and the use of which are closely scrutinized at the programmatic level. After consulting with ARNG attorneys, ARNG directed the USACE to issue the FS evaluation as an internal draft document for ARNG use during Potentially Responsible Party (PRP) determination and potential cost recovery in accordance with the Defense Environmental Restoration Program (DERP) Management Manual 4715.20, Section 13.c, Cost-Recovery and Reprogramming. The Risk Assessment was issued March 2019, followed by Risk Assessment Report Revision 1, dated May 2022, and Risk Assessment Report Revision 2 dated March 2023, both issued to address ADEM comments.

A contract for the FS update, preparation of the Proposed Plan (PP) and Record of Decision (ROD) was awarded in FY21. The Draft FS was completed in June 2022, but had to be revised based on the revisions to the Risk Assessment Report. The revised draft FS will be submitted for internal review by ARNG Legal in April 2023. Following approval of the internal draft FS, it will be issued to ADEM for review.

Cleanup/Exit Strategy The restoration strategy for the site is to prepare the final FS, a PP, and a ROD. The expected remedy is Alternative 3 from the FS: Enhanced Reductive Dechlorination (ERD), In-situ Chemical Reduction (ISCR) and Enhanced Monitored Natural Attenuation (MNA). Implementation of Alternative 3 will eliminate unacceptable risk of human exposure to groundwater contaminants with the current and assumed future land use. Modeling predicts reaching remediation goals (RGs) for groundwater in seven years.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
2710A.1002	CCALNO2805_FMS 28 UST Site	3/31/2007

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:	A solicitation for interest in establishment of a RAB was published in October 2021. The community expressed no interest in a RAB.
Administrative Record is located at:	FMS-28 (formerly OMS) 1622 South Broad Street Mobile, Alabama, 36605 www.mobileOMS28.net
Information Repository is located at:	FMS-28 (formerly OMS) 1622 South Broad Street Mobile, Alabama, 36605 www.mobileOMS28.net
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

None

LAND USE CONTROLS (LUC) SUMMARY

None

AASF 1

Army Cleanup Program

Installation Action Plan

2023

CONTENTS

ACRONYMS

Acronym	Definition
AASF	Army Aviation Support Facility
AEDB-R	Army Environmental Database - Restoration
AFB	Air Force Base
AFFF	Aqueous Film-Forming Foam
ALARNG	Alabama Army National Guard
AOI	Area of Interest
CC	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
ng/L	nanograms/liter
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(O)	Remedial Action (Operations)

Acronym	Definition
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
SL	Screening Level
TAPP	Technical Assistance for Public Participation
TRC	Technical Review Committee
µg/kg	micrograms/kilogram
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)
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.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
2725A.1002	AL2020-01-P_AASF1 RW SHEPH PFAS CONTAMIN	- -

AASF 1

INSTALLATION RESTORATION PROGRAM SITES

AL2020-01-P_AASF1 RW SHEPH PFAS CONTAMIN

HQAES ID: 2725A.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 9/15/2030

RC Date: 9/15/2030

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	Start	End
PA	8/11/2017	5/15/2020
SI	5/10/2020	9/15/2023
RI/FS	9/15/2023	9/15/2030
RD	- -	- -
IRA	- -	- -
RA(C)	- -	- -
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

A Preliminary Assessment (PA) was completed at Army Aviation Support Facility (AASF) #1 R.W. Shepherd 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 releases were identified at the AASF #1 during the PA. Interviews with personnel whose knowledge of the facility date back to 2000 indicate that Alabama Army National Guard activity may have resulted in potential PFAS releases at the AASF #1. Based on the preliminary Conceptual Site Models developed for the AOIs, there is potential for receptors to be exposed to PFAS contamination in soil and groundwater at these AOIs.

A Site Inspection (SI) was conducted and the Final SI report was issued in August 2023. The SI concludes that a remedial investigation (RI) is warranted at:

- AOI1 - Hangar Fire Suppression System, Mechanical Room, and Hazardous Waste Storage Room; and
- AOI2 – Flight Ramp and Wash Rack.

AOI 1:

- In soil, PFOA (perfluorooctanoic acid), perfluorooctanesulfonic acid (PFOS), and PFHxS (perfluorohexanesulfonic acid) exceeded their screening levels (SLs).
- PFOA exceeded the SL of 19 microgram/kilogram (µg/kg) in surface soil at AOI01-01 (148 µg/kg) and AOI01-04 (165 µg/kg).
- PFOS exceeded the SL of 13 µg/kg in surface soil at AOI01-01 (10,900 J µg/kg), AOI01-03 (486 µg/kg), AOI01-04 (8,330 µg/kg), and MGM-01 (358 µg/kg). PFOS also exceeded the SL of 160 µg/kg in subsurface soil at AOI01-01 from 5 to 7 feet below ground surface (bgs) (499 µg/kg).
- PFHxS exceeded the SL of 130 µg/kg in surface 1281 soil at AOI01-01 (1,890 µg/kg) and AOI01-04 (3,840 µg/kg).

AOI 2:

- In soil, PFOS exceeded the SL of 13 µg/kg in surface soil at AOI02-01 (16.8 J µg/kg). PFOA exceeded the SL of 19 µg/kg in surface soil at AOI01-01 (148 µg/kg) and AOI01-04 (165 µg/kg).
- In groundwater, PFOA exceeded the SL of 6 nanograms/liter (ng/L) at AOI02-01 (55.9 ng/L) and AOI02-03 (19.4 ng/L), PFOS exceeded the SL of 4 ng/L at AOI02-01 (499 ng/L), AOI02-03 (8.97 ng/L), and AOI02-04 (129 ng/L), PFHxS exceeded the SL of 39 ng/L at AOI02-01 (974 ng/L) and AOI02-03 (177 J- ng/L), and PFNA exceeded the SL of 6 ng/L at AOI02-01 (13.3 ng/L).

The subject site was tracked as 2725A.1001 under the Compliance-related Cleanup (CC) program. In FY23, this site was determined to be eligible under the Defense Environmental Restoration Program (DERP) and the RI/Feasibility Study (FS) will proceed under DERP. The RI will be funded under DERP during the current FY, and the FS will be awarded in the future.

Cleanup/Exit Strategy An RI will be conducted at AOI1 and AOI2. Future actions will be determined by the results of the RI.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
2725A.1001	CCAL2020-01-P_AASF1 RW SHEPH PFAS CONTAM	4/25/2023

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

None

LAND USE CONTROLS (LUC) SUMMARY

None

AASF 2 BIRMINGHAM

Army Cleanup Program

Installation Action Plan

2023

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.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
2683A.1002	AL2020-02-P_AASF2 BIRMINGHAM PFAS CONTAM	- -

AASF 2 BIRMINGHAM

INSTALLATION RESTORATION PROGRAM SITES

AL2020-02-P_AASF2 BIRMINGHAM PFAS CONTAM

HQAES ID: 2683A.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 9/15/2033

RC Date: 9/15/2033

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	*Start*	*End*
PA	8/11/2017	5/15/2020
SI	12/6/2019	9/15/2023
RI/FS	9/15/2026	9/15/2033
RD	- -	- -
IRA	- -	- -
RA(C)	- -	- -
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

A Preliminary Assessment (PA) was completed at Army Aviation Support Facility (AASF) #2 Birmingham 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 releases were identified at the AASF #2 during the PA. Based on the preliminary Conceptual Site Model developed for the AOI, there is potential for receptors to be exposed to PFAS contamination in in soil, groundwater, surface water, and sediment at two AOIs. A Site Inspection (SI) was conducted and the final SI report was issued in August 2023, which concluded that a remedial investigation (RI) is warranted at AOI 1 – Hangar and AOI 2 – Flight Ramp.

For groundwater at AOI1, PFOA was detected above the screening level (SL) of 6 nanograms per liter (ng/L) at a maximum concentration of 98.4 ng/L, PFOS was detected above the SL of 4 ng/L at a maximum concentration of 10.6 ng/L, and PFHxS was detected above the SL of 39 ng/L at a maximum concentration of 65.7 ng/L.

For surface soil at AOI2, PFOS exceeded the SL of 13 micrograms/kilogram (µg/kg) at a maximum concentration of 64.5 µg/kg. For groundwater at AOI2, PFOA was detected above the SL of 6 ng/L at a maximum concentration of 73.8 ng/L, PFOS was detected above the SL of 4 ng/L at a maximum concentration of 697 ng/L, PFHxS was detected above the SL of 39 ng/L at a maximum concentration of 782 ng/L, and PFNA was detected above the SL of 6 ng/L at a maximum concentration of 14.6 ng/L.

The subject site was tracked as 2683A.1001 under the Compliance-related Cleanup (CC) program. In FY23, this site was determined to be eligible under the Defense Environmental Restoration Program (DERP) and the RI/Feasibility Study (FS) will proceed under DERP.

Cleanup/Exit Strategy An RI/FS 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
2683A.1001	CCAL2020-02-P_AASF2 BIRMINGHAM PFAS CONT	9/15/2023

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

None

LAND USE CONTROLS (LUC) SUMMARY

None

AASF 3 BATES FIELD MOBILE

Army Cleanup Program

Installation Action Plan

2023

CONTENTS

ACRONYMS

Acronym	Definition
AASF	Army Aviation Support Facility
AEDB-R	Army Environmental Database - Restoration
AFFF	Aqueous Film-Forming Foam
ALARNG	Alabama Army National Guard
AOI	Area of Interest
CC	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(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act

Acronym	Definition
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
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
6086A.1002	AL2020-03-P_AASF3 BATES FIELD MOBILE PFAS CONTAM	- -

AASF #3 Bates Field Mobile

INSTALLATION RESTORATION PROGRAM SITES

AL2020-03-P_AASF3 BATES FIELD MOBILE PFAS CONTAM

HQAES ID: 6086A.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 9/15/2031

RC Date: 9/15/2031

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	Start	End
PA	8/11/2017	5/15/2020
SI	5/10/2020	9/15/2023
RI/FS	9/15/2024	9/15/2031
RD	- -	- -
IRA	- -	- -
RA(C)	- -	- -
RA(O)	- -	- -
LTM	- -	- -

Site Narrative

A Preliminary Assessment (PA) was completed at Army Aviation Support Facility (AASF) #3 Bates Field Mobile 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 releases were identified at the AASF #3 during the PA. Interviews with personnel whose knowledge of the facility date back to 2000 indicate that Alabama Army National Guard (ALARNG) activity may have resulted in potential PFAS releases at the AASF #3. Based on the preliminary Conceptual Site Model developed for the AOI, there is potential for receptors to be exposed to PFAS contamination in soil, intermittent surface water and sediment, and groundwater at this AOI.

A Site Inspection (SI) was conducted and the final SI report was issued in August 2023, which concluded that a remedial investigation (RI) is warranted at:

- AOI 1 – Flight Ramp; and
- AOI 2 – Hangar Fire Suppression System, Wash Rack, and AFFF Storage Area.

At AOI 1, perfluorooctanesulfonic acid (PFOS) was detected in groundwater at several locations above screening levels (SLs). At AOI 2, perfluorooctanoic acid (PFOA), was detected at several locations in groundwater above SLs.

The subject site was tracked as 6086A.1001 under the Compliance-related Cleanup (CC) program. In FY23, this site was determined to be eligible under the Defense Environmental Restoration Program (DERP) and the RI/Feasibility Study (FS) will proceed under DERP.

Cleanup/Exit Strategy An RI/FS 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
6086A.1001	CCAL2020-03-P_AASF3 BATES FIELD MOBILE PFAS CONTA	9/15/2023

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

None

LAND USE CONTROLS (LUC) SUMMARY

None