

LOUISIANA ARMY AMMUNITION PLANT

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
AP	Anti-personnel
ARNG	Army National Guard
CC	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CMCAG	Camp Minden Community Advisory Group
COC	Contaminants of Concern
CPG	Central Proving Ground
CSM	Conceptual Site Model
DD	Decision Document
ENV	Environmental
FS	Feasibility Study
FYR	Five-year Review
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
ISEB	In-Situ Enhanced Bioremediation
KOA	Kick Out Area
LAARNG	Louisiana Army National Guard
LAAP	Louisiana Army Ammunition Plant
LDEC	Louisiana Department of Environmental Quality
LTM	Long-Term Management
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
Mm	millimeter
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MPPEH	Munitions Potentially Posing an Explosive Hazard

Acronym	Definition
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
OB/OD	Open Burning/Open Detonation
OU	Operable Unit
PA	Preliminary Assessment
PBC	Performance-based Contract
PP	Proposed Plan
QA/QC	Quality Assurance/Quality Control
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAO	Remedial Action Objective
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
UFP-QAPP	A Uniform Federal Policy - Quality Assurance Project Plan
USACE	U. S. Army Corps of Engineers
USAEC	U. S. Army Environmental Command
USEPA	U. S. Environmental Protection Agency
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
22505.1010	LAAP 10_GROUND WATER TOTAL INSTALLATION	GRN. WATER
22505.1014	LAAP-004-R-01_Test Area 7 (T-7)	BG-7
22505.1015	LAAP-005-R-01_CPG Kick Out Area	
22505.1016	CCLA2019-01-P CAMP MINDEN PFAS CONTAMINA	

LOUISIANA ARMY AMMUNITION PLANT

INSTALLATION RESTORATION PROGRAM SITES

LAAP 10_GROUND WATER TOTAL INSTALLATION

HQAES ID: 22505.1010

Alias: GRN. WATER

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 9/15/2012

RC Date: 8/15/2053

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	1/31/1978	5/31/1978
SI	1/31/1978	5/31/1978
RI/FS	11/30/1985	4/30/2004
RD	--	--
IRA	--	--
RA(C)	5/31/2004	9/15/2012
RA(O)	7/15/2012	8/15/2053
LTM	--	--

Site Narrative

The former Louisiana Army Ammunition Plant, now Camp Minden, is located approximately 22 miles east of Shreveport, Louisiana on US Highway 80, and consists of 15,268 acres of land, measuring approximately nine miles east to west and three miles north to south. Past operations at approximately a dozen manufacturing, loading, and support facilities, has resulted in the generation of explosive and metal contaminated waste, which was disposed of at several locations on the installation. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a preliminary assessment (PA), site inspection (SI) and feasibility study (FS) have all been completed. The Army, in consultation with the U.S Environmental Protection Agency (USEPA) and the Louisiana Department of Environmental Quality (LDEQ), placed the shallow groundwater at the seven study areas into a separate and single operable unit (OU). Therefore, an OU for groundwater was established for the total facility. The PA was completed in 1997. A groundwater study (completed 1998) was done to determine if natural attenuation would be effective and acceptable. The results indicate that contaminants of concern (explosives and volatile organics) are not leaving the installation at concentrations, which create a risk to human health or the environment. An Interim Response Action (IRA) was completed in 1990 whereby Area P (pink water lagoons) were drained and excavated; sediments incinerated; and, ash residue landfilled and covered with an engineered clay cap. As noted below, further evaluation of the groundwater OU (Remedial Investigation/Feasibility Study [RI/FS]) was completed in 2007.

The 2007 FS anticipated natural attenuation (MNA) and long-term monitoring (LTM) for the next 30 years for cost comparison purposes. The RI/FS was conducted under a May 2004 performance-based contract (PBC) with Shaw/CB&I. Follow-on PBCs were awarded through April 2014 to Shaw/CB&I for the purpose of achieving Remedy in Place (RIP) or Response Complete (RC) for the LAAP (Soil Sites) and LAAP 10 (Installation-Wide Groundwater). As specified in the contract, the contractor was required to perform LTM and long-term operations at all sites identified in the performance work statement as required after achievement of RIP for the duration of the contract. The 2004 contract was managed by the US Army Environmental Command (USAEC). Contract management transitioned to the Army National Guard

Environmental Programs Division in 2011, as detailed below. The transfer of the LAAP to the State of Louisiana occurred in 2005, with US Army retaining financial liability for CERCLA work and the state held responsible for groundwater monitoring. Due to the federal funding, contract management was through the USAEC through FY10. Beginning in 2011 the execution of activities for CERCLA work at Camp Minden was transitioned to ARNG ILE (now ARNG G-9), still using DERP funds in coordination with the Louisiana Army National Guard (LAARNG). This management structure will be the case from 2011 until 2036, with ARNG G-9 in coordination with LAARNG, responsible for managing the LTM.

In FY14 and FY15, many old unused wells were properly closed and abandoned. Over two hundred wells remain. In September 2014, a PBC was awarded to URS/AECOM to assist with managing CERCLA activities, including the groundwater OU. That PBC ended at the end of FY19. A new PBC was awarded in FY20 to MMG-TLI to conduct LTM, any potential new well installation and damaged well abandonment, and on-going groundwater monitoring, with a five year period of performance.

The five-year reviews (FYRs) completed in FY10 and FY15 indicated that MNA is still protective of human health and the environment. The Sixth FYR is being managed and contracted centrally by the USAEC with support from the U. S. Army Corps of Engineers (USACE) – Omaha District and continues to be underway. The Camp Minden Draft Sixth FYR was submitted initially in Dec 2021, comments were responded to in a Revised Draft Final Report May 2022, followed by a series of additional rounds of comments and meetings with USEPA, ultimately resulting all contract funds being expended. Work was halted on the FYR for several months and a new contract with USAEC and USACE Omaha is in process. A Finding of Deferred Protectiveness evaluation resulted from USEPA's reviews and additional work is required to address data gaps which will be addressed by a Five Year Addendum contract, awarded at the end of FY23.

Environmental support PBCs (awarded in FY 2014 and 2019) include support for all CERCLA related activities except those related to the Explo Systems, Inc., for which work is executed by USEPA and Louisiana Military Department. An amendment to the 2014 PBC was implemented FY16 and included additional off-installation groundwater monitoring to re-validate old off-installation sampling data (specifically private and public drinking water well sampling). This off-installation drinking water well monitoring has been repeated for a total of three rounds of sampling, with a fourth future round included in the current PBC. Military Munitions Response Program (MMRP) RI/FS for Central Proving Ground (CPG) Kick Out Area (KOA) Munitions Response Site (MRS) and Test Area 7 MRS were also included in the 2014 PBC. Test Area 7 MRS work progressed to the final ROD in May, 2020.

Follow-on CERCLA RI work at CPG KOA is included in the five-year contract awarded on 29 September 2019, this contract was modified to conduct surface water and sediment sampling in 2023 based on USEPA Region 6 identifying data gaps in the original RI sampling phase. This PBC includes continued installation-wide groundwater monitoring (FY22 and FY24), with a five-year period of performance which expires in Sep 2024. Vapor Intrusion studies were initiated in 2022 at Area B and Y-Line, the first phase of this work was completed in 2023.

A Groundwater Contamination Remedy Enhancement Study is being conducted at Camp Minden under the current 5-year PBC contract which expires in FY2024. The study was initiated to evaluate approaches to accelerate the timeline to cleanup key contaminants of concern (COCs) primarily, RDX. Field work was performed in phases which included, an installation-scale evaluation of geology and hydrogeology to update the Conceptual Site Model (CSM), and measurement of detection levels of COCs across the facility with a focus on Area P. Area P is closest to the installation boundary, near potential drinking water receptors and has the highest concentrations of COCs. Screening of technologies were considered to

enhance and accelerate in situ degradation of COCs. Alternatives retained for consideration were evaluated using specific criteria. The alternative treatment remedies evaluated include MNA/LTM, In-Situ Enhanced Bioremediation (ISEB) and MNA, and Permeable Reactive Barrier and MNA/LTM. Estimated costs for these alternatives applied to Area P range from \$8MM-\$18MM. Estimated costs when these alternatives are applied to all areas with contaminant plumes range from \$20MM-\$42MM.

It is recommended that Alternative 2, ISEB and MNA/LTM, is selected for the groundwater remedy for Area P. ISEB may also be recommended in other plume areas if risk criteria change [i.e., off-site migration or flattening degradation trends that lead to longer projected timeframes to reach Remedial Action Objectives (RAOs)].

Before implementing the recommended approach, the following steps are recommended. An ISEB pilot test is recommended at Area P to further assess the injection zone configuration including number of injection wells, injection footprint, distance between injection wells, and distance between curtain rows. Additional objectives include determining the optimal volume and frequency of injection substrate. Direct injection will be assessed during the pilot test along with injection into some wells and extraction from adjacent or downgradient wells to create a recirculation cell with increased injection radius of influence. It is anticipated that sufficient data would be collected from a pilot test in Area P to apply the remedy to other areas at the Site. The pilot test will include the design of the ISEB remedy at Area P. The information from the pilot test will be used to support full scale design. Designs for other AOCs may be implemented if changes to criteria warrant them. The Area P pilot test data would be used to support other AOC designs, if prepared and depending on similarities of hydrogeology.

The Camp Minden Sixth FYR is underway. Due to funding issues, project work is stalled while a new contract is being completed. USEPA issued an Independent Finding to Congress August 25, 2021, deferring the protectiveness determination for the Camp Minden 2021 FYR because finalization of the FYR is late due to unanticipated extensive rounds of comments from USEPA, resulting in a lack of funding in the contract to support the level of effort. The Independent Finding is not a violation but notification of a late FYR, for Superfund sites is required by law to be reported to Congress. USAEC, the lead on the FYRs for the Army, is working with USACE to issue a new contract to complete the FYR. To date, USEPA has identified data gap recommendations which have been contracted separately in a FYR Addendum, funded at the end of FY23.

Cleanup/Exit Strategy Because current MNA data indicate the remedy is not anticipated to reach RC for over 300 years in one instance, the current contract includes evaluation of technologies including pilot testing for the purpose of expediting the groundwater remedy. Biennial MNA and five-year reviews will be conducted until RC.

LOUISIANA ARMY AMMUNITION PLANT

MILITARY MUNITIONS RESPONSE PROGRAM SITES

LAAP-004-R-01_Test Area 7 (T-7)

HQAES ID: 22505.1014

Alias: BG-7

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 5/15/2020

RC Date: 5/14/2020

RC Reason: All required cleanups completed

Program: ENV Restoration, Army

Subprogram: MR

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	6/15/2010	7/15/2010
SI	8/15/2010	10/15/2014
RI/FS	8/15/2014	5/14/2020
RD	--	--
IRA	--	--
RA(C)	--	--
RA(O)	--	--
LTM	5/15/2020	6/30/2053

Site Narrative

Test Area 7 was constructed in the 1950s within the northeastern portion of the LAAP and occupies approximately seven acres. The test area was actively used from the 1950s until the 1990s for testing, detonation, and burning of munitions. Examples of material destroyed/tested include: - Sectioned M107, high-explosive projectiles (1953 to 1958) - BLU-4 A/B Bombs, Grenades for M449 Projectiles, Grenades for M444 Projectiles, M158 Bomb Fuzes, and M159 Bomb Fuzes (1961 to 1978) In 2008, operations being conducted to train heavy equipment operators uncovered a 2.5 inch rocket. The rocket was determined to be a training round with no explosive filler. Training operations were suspended following discovery of the munitions and explosives of concern (MEC). The LAARNG withdrew the area of Test Area 7 from the operational range in May 2010. The RI/FS was completed, and the final ROD signed in May 2020.

Cleanup/Exit Strategy The selected remedy is No Action with institutional and land use controls (LUCs) and FYRs. LUCs are tracked under 22505.1015 and FYRs are tracked under 22505.1010.

LAAP-005-R-01_CPG Kick Out Area

HQAES ID: 22505.1015

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSPP: Not assigned

RIP Date: 10/1/2024

RC Date: 10/15/2024

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: MR

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	10/15/2011	2/15/2012
SI	3/15/2012	10/15/2014
R/FS	3/15/2014	9/29/2024
RD	10/1/2023	9/29/2024
IRA	--	--
RA(C)	10/1/2023	10/1/2024
RA(O)	--	--
LTM	10/16/2024	10/15/2054

Site Narrative

In its entirety, the CPG covers approximately 17.5 acres of non-operational land, of which only 1.42 acres located in the northern-most section constitutes the CPG MRS. The CPG MRS served as a buffer zone for an area to the north, which was used for a limited time to demilitarize munitions through open burning on raised berms. This former open burning/open detonation (OB/OD) area was located on operational range, which excluded it from consideration under the MMRP; however, the area of the CPG MRS has since been withdrawn from the operational area. There are no visible remnants from past burning activities at the MRS.

The CPG, including the MRS, is completely surrounded by a six-foot high chain link fence; access is gained through a locked gate. A portion of the MRS is separated from the larger CPG by a fence. The Army National Guard (ARNG) is addressing the former OB/OD area, including the CPG KOA (initially estimated to be approximately 4.25 acres). The CPG KOA MRS was identified to be eligible for the MMRP during the US Army Closed, Transferring or Transferred Range/Site Inventory and was later determined during the Historical Records Review to: have been used as an OB/OD area for 12 years, have munitions and MEC present on site, and be MMRP eligible.

In 1997, five semi-armor piercing rounds were discovered at the burning area and found to contain a yellow substance believed to be N-methyl-N-2 ,4,6-tetranitroaniline (tetryl). As a result of these findings, a fence was constructed by the installation around the 0.52 acre site to prevent accidental encounters. Examples of potential material destroyed/tested at the CPG KOA include: - M16 Mines, Anti-personnel (AP) M14 Mines, AP Activators, M2 Boosters, M120 Primers, F/57 millimeter (mm) Detonators, and F/M14 Mines (1953 to 1958) - BLU-3 A/B Bombs, M16 (AP) Mines, M14 (AP) Mines, Adapter T45 Boosters, M904 Bomb Fuzes, M905 Bombs Fuzes, Primers for 57mm Projectiles, Detonators for fuzes, M427 F/2.75 Warheads, and M423 F/2.75 Warheads (1961 to 1978).

In FY 10, several pieces of munitions debris (MD) and Munitions Potentially Posing an Explosive Hazard (MPPEH) were discovered in an area adjacent to the CPG. This area, called the CPG KOA MRS is approximately two acres in size. It has been removed from the active range by the installation. During a 2011 site visit conducted by the LAARNG, shrapnel and detonated ordnance was observed scattered over the surface area within the KOA. While Camp Minden, in general, has controlled access, the site is periodically open to hunters and subject to trespassers. The potential presence of unexploded ordnance (UXO) extending beyond the fenced boundary of the CPG MRS is a concern. As a result, a MMRP site inspection (SI) was conducted to determine the presence or absence of munitions in the surface or subsurface at the CPG KOA MRS and a Final Revised SI report was submitted in June 2014. The SI report confirmed the presence of MEC and MPPEH within and extending beyond the previously estimated boundary of the CPG KOA MRS. The maximum depth of the anomaly survey reported in the SI was approximately five feet. Therefore, the ARNG determined that an RI must be conducted and the area of interest was expanded by 2.45 acres to the north. RI activities were initiated in 2017. However, work was halted due to the detection of additional anomalies extending beyond the estimated CPG KOA boundary and contractual limitations. The RI field effort could not be completed and a report was not submitted. Based on preliminary RI results, the area of investigation was increased to approximately 56.0 acres.

In September 2019, a contract to complete the RI/FS/Proposed Plan (PP)/Record of Decision (ROD) and install new fencing, gates and signage at the CPG KOA MRS was issued. That work is funded and is currently underway. As a result of the findings from the 2017 RI intrusive investigation and analog geophysics (i.e. hand held magnetometer) data collected, the extent of investigation for the 2020 CPG KOA MRS was expanded during fieldwork conducted from June to August 2020. The new area increased from the original 9 acres to approximately 278.8 acres. The expanded 2020 RI Report was completed and Finalized in September 2021 with USEPA Region 6 providing approval contingent upon the ARNG adequately addressing data gaps for the media: soil, sediment, and surface water, as part of the future CPG KOA MRS RI Addendum Report and FS.

Follow-on RI Addendum work at CPG KOA was added to the five-year contract via Modification P00006 awarded on 24 February 2022 to address data gaps in surface water and sediment as required by USEPA Region 6 as a condition of approval of the 2020 RI Report. A Uniform Federal Policy - Quality Assurance Project Plan (UFP-QAPP) Addendum was finalized and approved by USEPA and LDEQ in September 2022 to serve as the planning document for this follow-on RI Addendum field work. Field work was completed in March 2023, during the wet season, to collect ten (10) surface water and ten (10) sediment samples, as well as applicable quality control/quality assurance (QA/QC) samples, in the CPG KOA to support a risk evaluation for munitions constituents. RI Addendum Reporting, including risk evaluation, is currently underway and expected to be complete by September 2023. Upon USEPA and LDEQ approval of the RI Addendum Report, the FS/PP/ROD track for CPG KOA will resume.

Cleanup Exit Strategy Complete the RI/FS/PP/ROD, implement and maintain LUCs and security fencing, and conduct FYRs. Cost requirements for installation-wide FYRs are tracked under site LAAP-010, 22505.1010.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
22505.1001	LAAAP-01_AREA P PINK WATER LAGOONS	7/31/1993
22505.1002	LAAAP-02_BURNING GROUND NO. 5	7/31/1993
22505.1003	LAAAP-03_M-4 WASTE WATER LAGOON	7/31/1993
22505.1004	LAAAP-04_BURNING GROUND NO. 8 LANDFILL	7/31/1993
22505.1005	LAAAP-05_BURNING GROUND NO. 3 LANDFILL	7/31/1993
22505.1006	LAAAP-06_OILY WASTE LANDFARM (AREA Y)	7/31/1993
22505.1007	LAAAP-07_BURNING GROUND NO. 8 PINK WATER	7/31/1993
22505.1008	LAAAP-08_AREA Y CHROMIC ACID ETCHING FAC	6/30/1999
22505.1009	LAAP 09_LOAD/ASSEMBLE/PACK AND TEST AREA	8/31/2003
22505.1011	LAAP-001-R-01_BURNING GROUND 5	9/30/2010
22505.1012	LAAP-002-R-01_CENTRAL PROVING GROUND	9/30/2010
22505.1013	LAAP-003-R-01_PISTOL RANGE	9/30/2010

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	None
Community Involvement Plan (Date Published):	202006
Restoration Advisory Board (RAB) Establishment Date:	The community has chosen to establish the Camp Minden Community Advisory Group (CMCAG) instead of a RAB. In August 2022 advertisements were placed in local newspapers soliciting public input on the establishment of a RAB.
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	Public has been notified of ongoing five-year review and was solicited for a RAB in the papers in August 2020 and August 2022.
Administrative Record is located at:	Camp Minden 100 Louisiana Blvd. Minden, LA 71055
Information Repository is located at:	Webster Parish Public Library 521 E & West Street Minden, LA 71055
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	7/15/2012	9/19/2016	2016
PLANNED	12/15/2017	9/30/2024	2024

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

Associated ROD/DD Name	Sites
INSTALLATION WIDE GR	22505.1010

Results, Actions & Plans

Results	Actions	Plans
<p>Remedy is protective of human health and environment. Institutional Controls including the implementation and monitoring of groundwater use restrictions ensure that the remedy remains protective. In addition, follow-up actions of the FOSET's Land Use Restriction Management Plan for Louisiana Army Ammunition Plant ensure compliance with the land use restrictions so that the remedy remains protective.</p> <p>Exposure pathways that could result in unacceptable risks are being controlled. The property use is consistent with the industrial exposure scenario and access restrictions are functioning as intended.</p>	<p>The FYR report summarizes MNA/LTM activities, treatment effectiveness, changes going forward, LUC and their effectiveness, and evaluates whether the remedy remains protective of human health and the environment.</p>	<p>A contract was awarded at the end of FY23 to address data gaps identified by USEPA in the five-year review.</p>

LAND USE CONTROLS (LUC) SUMMARY

ROD/DD	LUC Title	HQAES ID
INSTALLATION WIDE GR	LAAP-10 GROUNDWATER	22505.1010

ESLER FIELD AASF #2

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
AFFF	Aqueous Film-Forming Foam
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
µg/kg	micrograms/kilogram
MRSPP	Munitions Response Site Prioritization Protocol
ng/L	Nanograms/Liter
OSD	Office of the Secretary of Defense
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
RSL	Regional Screening Level
SI	Site Inspection
SL	Screening Level
TAPP	Technical Assistance for Public Participation
TRC	Technical Review Committee
USEPA	U. S. Environmental Protection Agency
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
5907A.1001	CCLA2020-04-P_ESLER FIELD AASF2 PFAS CONTAM	- -

ESLER FIELD AASF #2

COMPLIANCE CLEANUP SITES

CCLA2020-04-P_ESLER FIELD AASF2 PFAS CONTAM

HQAES ID: 5907A.1001

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 9/15/2032

RC Date: 9/15/2032

RC Reason: Not assigned

Program: Compliance Cleanup

Subprogram: CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	8/11/2017	5/15/2020
SI	12/6/2019	6/1/2022
RI/FS	9/15/2025	9/15/2032
RD	--	--
IRA	--	--
RA(C)	--	--
RA(O)	--	--
LTM	--	--

Site Narrative

A Preliminary Assessment (PA) was completed at Esler Field Army Aviation Support Facility (AASF) #2 to assess potential per- and polyfluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. Four areas of interest (AOI) related to potential PFAS releases were identified at the Esler Field AASF #2 during the PA. Based on the preliminary conceptual site models developed for these AOIs, there is potential for receptors to be exposed to PFAS contamination in soil, sediment, surface water, and groundwater.

A Site Inspection (SI) is complete at the site. The final SI dated June 2022 recommended no further action for all four AOIs. However, the U.S. Environmental Protection Agency (USEPA) revised the Regional Screening Levels (RSL) for PFAS in July 2022, and the Office of the Secretary of Defense (OSD) issued updated guidance in July 2022 that would align the OSD Screening Levels (SLs) with the EPA RSLs. When compared to the updated SLs, AOI 3 South Ramp and AOI 4 Firehouse Building 6004 and Storage Building 6067/6068 have relevant compound exceedances. AOI 3 exceeded the groundwater SL for perfluorohexane sulfonate (PFHxS) at 126 nanograms/Liter (ng/L) and is recommended for a remedial investigation (RI). Though AOI 4 exceeded the surface soil SL for perfluorooctane sulfonic acid (PFOS) at 15 micrograms/kilogram (µg/kg), AOI 4 is no further action due to no known release, use, storage or disposal by the Department of Defense (DoD).

This site has yet to receive Defense Environmental Restoration Program (DERP) eligibility.

Cleanup/Exit Strategy A Remedial Investigation (RI)/Feasibility Study (FS) will be required at this site. Once the RI/FS is completed, future actions will be evaluated.

SITE CLOSEOUT SUMMARY

None

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

HAMMOND AIRPORT

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
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
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
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
22B17.1002	LA2020-05-P_HAMMOND AASF1 PFAS CONTAMIN	--

HAMMOND AIRPORT

INSTALLATION RESTORATION PROGRAM SITES

LA2020-05-P_HAMMOND AASF1 PFAS CONTAMIN

HQAES ID: 22B17.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 9/15/2033

RC Date: 9/15/2033

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	8/11/2017	5/15/2020
SI	8/17/2020	7/1/2023
RI/FS	9/15/2026	9/15/2033
RD	--	--
IRA	--	--
RA(C)	--	--
RA(O)	--	--
LTM	--	--

Site Narrative

A Preliminary Assessment (PA) was completed at Hammond Army Aviation Support Facility (AASF) #1 to assess potential per- and polyfluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. Two areas of interest (AOI) related to potential PFAS releases were identified at the Hammond AASF #1 during the PA. Based on the preliminary conceptual site models developed for these AOIs, there is potential for receptors to be exposed to PFAS contamination in soil, groundwater, surface water, and sediment.

A Site Inspection (SI) was completed and the Final SI report was issued in June 2023. The SI concludes that a remedial investigation (RI) is warranted at AOI 1 – C12 Hangar. At AOI 1, perfluorooctanesulfonic acid (PFOS) was detected in groundwater at concentrations above the screening level (SL).

The subject site was tracked as 22B17.1001 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. Future actions will be determined by the results of the RI.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date	Program Code
22B17.1001	CCLA2020-05-P_HAMMOND AASF1 PFAS CONTAM	6/30/2023	Compliance Cleanup

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

SMR CAMP BEAUREGARD

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

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MRSPP	Munitions Response Site Prioritization Protocol
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PFAS	Per- and Polyfluoroalkyl Substances
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.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

HQAES ID	AEDB-R Reference	Site Alias
3580A.1002	LA2020-01-P_CAMP BEAUREGARD PFAS CONTAMI	--

SMR CAMP BEAUREGARD

INSTALLATION RESTORATION PROGRAM SITES

LA2020-01-P_CAMP BEAUREGARD PFAS CONTAMI

HQAES ID: 3580A.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 9/29/2032

RC Date: 9/29/2032

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	8/11/2017	5/15/2020
SI	12/6/2019	2/15/2023
RI/FS	9/30/2025	9/29/2032
RD	--	--
IRA	--	--
RA(C)	--	--
RA(O)	--	--
LTM	--	--

Site Narrative

A Preliminary Assessment (PA) was completed at Camp Beauregard to assess potential per- and polyfluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. Three areas of interest (AOI) related to potential PFAS releases were identified at Camp Beauregard during the PA. Based on the preliminary conceptual site model developed for the Site, there is a potential for receptors to be exposed to PFAS contamination in soil, groundwater, surface water, and sediment at these AOIs.

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

- AOI 1 – Retention Pond; and
- AOI 2 – Wash Rack.

At AOI 1, perfluorooctanoic acid (PFOA) was detected in groundwater above screening levels (SLs). At AOI 2 perfluorohexanesulfonic acid (PFHxS) was detected in groundwater samples at concentrations above SLs.

The site has been approved for Defense Environmental Restoration (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	Program Code
3580A.1001	CCLA2020-01-P_CAMP BEAUREGARD PFAS CONTA	4/25/2023	Compliance Cleanup

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