JFHQ ME ARNG

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
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
HHRA	Human Health Risk Assessment
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
LTM	Long-Term Management
LUC	Land Use Control
MC	Munitions Constituent
MEARNG	Maine Army National Guard
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NDNODS	Non-DoD Owned, Non-Operational Defense Sites
PA	Preliminary Assessment
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision

Acronym	Definition
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
UST	Underground Storage Tank
UU/UE	Unlimited Use/Unrestricted Exposure
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
6895A.1023	CC_MEHQ-002-R-01_NDNODS_BANGOR RANGE	RRME000002
6895A.1025	CC_MEHQ-014-R-01_NDNODS_HERSEY HILL RANG	HERSEY HIL

JFHQ ME ARNG

COMPLIANCE CLEANUP SITES

CC_MEHQ-002-R-01_NDNODS_BANGOR RANGE

HQAES ID: 6895A.1023

Alias: RRME000002

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned

RIP Date: 1/15/2027 RC Date: 1/15/2027

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	9/15/2017	6/14/2021
RD	11/15/2024	12/15/2024
IRA		
RA(C)	1/15/2025	1/15/2027
RA(O)		
LTM		

Site Narrative

Bangor Range is located 1.5 miles west of the city of Bangor, north of Hammond Street (Route 2). The site is located south of the current Bangor International Airport (the former Dow Air Force Base). The site is located in the forest on private property. The site includes a concrete foundation which likely held the targets and two earthen berms. The direction of fire was to the north towards the airport.

A Site Inspection (SI) was conducted in 2012, which identified lead in soil above background and human health screening criteria. The SI reduced the Bangor Range Munitions Response Site (MRS) acreage to 6.7 acres, and recommended proceeding with a Remedial Investigation/Feasibility Study (RI/FS).

The RI was conducted in 2019. A human health risk assessment (HHRA) was conducted as part of the RI, and concluded that lead in soil and sediment posed an unacceptable risk to potential receptors. The MRS acreage was adjusted to 6.40 acres to include a 500-foot section of Shaw Brook.

An FS was conducted in 2020 to evaluate possible remedial alternatives. Alternative 4 – Soil Stabilization and Excavation with Off-Site Disposal and Additional Groundwater/Sediment Sampling was the selected remedy, and the Final Record of Decision (ROD) was signed on 14 June 2021.

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) moving forward with the RI/FS phase are reprogrammed into Compliance-related Cleanup.

Cleanup/Exit Strategy Remedial Alternative 4 - Soil Stabilization and Excavation with Off-Site Disposal and Additional Groundwater/Sediment Sampling will be implemented. If the confirmation groundwater and sediment samples are below health-based screening levels, then the site will meet the standard for Unlimited Use/Unrestricted Exposure (UU/UE).

CC_MEHQ-014-R-01_NDNODS_HERSEY HILL RANG

HQAES ID: 6895A.1025

Alias: HERSEY HIL

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	1/1/2028	10/15/2033
RD	10/16/2033	10/31/2033
IRA		
RA(C)	1/1/2033	12/31/2033
RA(O)		
LTM		

Site Narrative

The 2.6-acre Hersey Hill Range is located along Charleston Road, northwest of the town of Dexter on Hersey Hill. It is a heavily forested area. The site was used during the 1920s through the 1940s as a 500-yard rifle range with two targets. The site is first identified in 1924 Reservation of Funds documents and last described in a 1946 Adjutant General Report. Expected munitions include .22-cal and .30-cal ammunition.

According to Carol Furtado of the Dexter Historical Society, a large concrete wall is located at the site where the targets were placed for the Maine Army National Guard (MEARNG) unit in Dexter. She also said that six firing mounds still exist. A 1935 photograph from the Dexter Historical Society website shows troops firing in the direction of the hillside.

According to interviews with the Dexter Historical Society, Delmas Hodgkins was the property owner of the site. The owner knew of the former Hersey Hill Range, but stated he had never seen evidence of the former range on his property. He thought that the former range was actually located on the adjacent property. The current owner stated that the Hersey Hill Range had previously been located on his property; however, it had not been used in more than 50 years (1940s or 1950s). He stated the area was completely overgrown.

The SI was completed in July 2012. Impacts to human health via exposure to lead, copper and antimony in soil were reported in the SI, and the MRS, reduced to 2.6 acres, was recommended for a RI/FS. The revised MRS acreage was drawn to incorporate the suspected 600 yard range and a portion of the natural backstop behind the target embankment, and to exclude areas not suspected of munitions constituent (MC) contamination.

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

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

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
6895A.1001	MEHQ-001-R-01_NDNODS Alton Bog-Pea Cove	9/30/2012
6895A.1002	MEHQ-006-R-01_NDNODS Great Sidney Bog	9/30/2012
6895A.1003	MEA65-001-R-01_NDNODS Hollis Plains TS -	9/30/2012
6895A.1004	MEHQ-002-R-01_NDNODS Bangor Range	9/15/2012
6895A.1006	MEHQ-004-R-01_NDNODS Bethel Range	9/30/2012
6895A.1007	MEHQ-005-R-01_NDNODS Camden Range	9/15/2012
6895A.1008	MEHQ-007-R-01_NDNODS Hallowell Range	9/30/2012
6895A.1010	MEHQ-009-R-01_NDNODS North Augusta Range	9/30/2012
6895A.1011	MEHQ-010-R-01_NDNODS Oyster River Rifle	9/30/2012
6895A.1012	MEHQ-011-R-01_NDNODS Vinalhaven Range	5/30/2021
6895A.1014	MEB10-001-R-01_NDNODS Lewiston Range	9/30/2012
6895A.1015	MEHQ-013-R-01_Norway Range	9/30/2012
6895A.1016	MEHQ-014-R-01_NDNODS Hersey Hill Range	9/30/2012
6895A.1020	MEHQ-002-R-02_NDNODS MT PLEASANT SA RGE	10/15/2012
6895A.1021	MEHQ-005-R-02_NDNODS CAMDEN RANGE	9/15/2012
6895A.1022	MEHQ-014-R-02_HERSEY HILL RANGE	10/15/2012
6895A.1024	CC_MEHQ-005-R-01_NDNODS CAMDEN RANGE	10/29/2018
6895A.1026	CC_MEHQ-005-R-03_NDNODS CAMDEN RICOCHET	8/15/2018
6895A.1005	MEHQ-003-R-01_NDNODS Belfast Range	10/26/2021
6895A.1009	MEHQ-008-R-01_NDNODS Livermore Falls Rif	5/5/2021
6895A.1012	MEHQ-011-R-01_NDNODS Vinalhaven Range	5/30/2021
6895A.1013	MEHQ-012-R-01_NDNODS Woodstock Range	11/8/2021

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
	TDD
Community Involvement Plan (Date Published):	TBD
Restoration Advisory Board (RAB) Establishment Date:	No. Installation is in the process of determining interest in
Establishment Date:	establishing a RAB.
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	N/A
Administrative Record is located at:	Headquarters Maine Army National Guard
	194 Winthrop Street
	Building #7
	Camp Keyes
	Augusta, ME 04333-0033
Information Repository is located at:	Headquarters Maine Army National Guard
	194 Winthrop Street
	Building #7
	Camp Keyes
	Augusta, ME 04333-0033
Current Technical Assistance for	N/A
Public Participation (TAPP):	INA
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

None

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

None

Results, Actions & Plans

LAND USE CONTROLS (LUC) SUMMARY

CASWELL/LORING

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
СС	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CTC	Cost-to-Complete
DD	Decision Document
DMM	Discarded Military Munitions
ENV	Environmental
FS	Feasibility Study
FY	Fiscal Year
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
LTM	Long-Term Management
LUC	Land Use Control
MEARNG	Maine Army National Guard
MEC	Munitions and Explosives of Concern
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
PA	Preliminary Assessment
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision

Acronym	Definition
RRSE	Relative Risk Site Evaluation
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
3726A.1001	CC MEHQ-015-R-01_LORING RANGE	

CASWELL/LORING

COMPLIANCE CLEANUP SITES

CC LORING RANGE

HQAES ID: 3726A.1001

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned

RIP Date: 10/1/2030 RC Date: 10/1/2030

RC Reason: Not assigned

Program: Compliance Cleanup

Subprogram: CC

Phases	Start	End	
PA	10/12/1999	6/30/2020	
SI	7/14/2020	8/4/2020	
RI/FS	6/1/2020	11/15/2029	
RD	11/15/2027	1/15/2030	
IRA			
RA(C)	11/15/2027	10/1/2030	
RA(O)			
LTM			

Site Narrative

A 1.12 acre 25-meter small arms range is located at the northern portion of the Loring Range. The Munitions Response Site (MRS) is located outside of Limestone, Maine in Aroostook County, within the boundaries of the former Loring Air Force Base. The range consists of eight baffled lanes used for 9mm and 5.56 small arms rounds by the Maine Army National Guard (MEARNG) from 1999 until it became inactive in 2010. Evidence of small arms use exists on site in the form of spent rounds. Limited pyrotechnics may have also been used on the range. No munitions and explosives of concern (MEC) or discarded military munitions (DMM) are known to have been used. The range was originally constructed circa 1977. The parcel containing the MRS was transferred to the Department of the Army in 1999. Prior to transfer lead removal activities were performed between 1994 and 1996. Small arms projectiles were removed from the backstop by sifting then the excavated area was lined with a layer of lime and clay prior to backfilling with sand. The quantity of lead removed is not known. Potential direct contact exposure to surface soil is the primary potential exposure pathway at this MRS. The property is currently not being used which minimizes potential human exposure. The MRS is surrounded by the Aroostook National Wildlife Refuge, which allows public access. However, the small arms range is surrounded by a fence on three sides and a back berm that limits public access. It is unlikely that there are any current potential human receptors due to incomplete pathways.

A formal written Preliminary Assessment (PA) was not performed since contamination is known to exist at the site. A Site Inspection (SI) was completed in August 2020. The SI confirmed a release of lead to surface soil above background and recommended action levels for current and anticipated future land uses and exposure scenarios. Further investigation is warranted to determine the nature and extent of environmental impact.

During the Fiscal Year (FY) 23 Spring Data Call, the cost-to-complete (CTC) estimate was based on the assumption that the Remedial Investigation/Feasibility Study (RI/FS) would be funded in FY24. During the FY23 Roll-Forward period, a contract was awarded which includes the RI/FS for the subject site.

Cleanup/Exit Strategy An RI/FS will be performed. Once the RI/FS is completed, it is assumed a soil excavation will be required.
CASWELL /LORING Installation Action Plan

SITE CLOSEOUT SUMMARY

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:	N/A
Administrative Record is located at:	Headquarters Maine Army National Guard 194 Winthrop Street Building #7 Camp Keyes Augusta, ME 04333-0033
Information Repository is located at:	Headquarters Maine Army National Guard 194 Winthrop Street Building #7 Camp Keyes Augusta, ME 04333-0033
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Review Summary Table

None

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

None

Results, Actions & Plans

LAND USE CONTROLS (LUC) SUMMARY

BANGOR/OMS 3

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ACRONYMS

Acronym	Definition	
AEDB-R	Army Environmental Database - Restoration	
AOI	Area of Interest	
СС	Compliance-Related Cleanup	
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980	
DERP	Defense Environmental Restoration Program	
DD	Decision Document	
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	
MR	Munitions Response	
MRSPP	Munitions Response Site Prioritization Protocol	
PA	Preliminary Assessment	
PFAS	Per- and Poly-fluoroalkyl Substances	
PFHxS	Perfluorohexanesulfonic Acid	
PFNA	Perfluorononanoic Acid	
PFOA	Perfluorooctanoic Acid	
PFOS	Perfluorooctanesulfonic Acid	
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
SI	Site Inspection
TS	Training Site
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
3719A.1002	ME2020-01-P_BANGOR TS OMS3 PFAS CONTAMIN	

BANGOR/OMS 3

INSTALLATION RESTORATION PROGRAM SITES

ME2020-01-P_BANGOR TS OMS3 PFAS CONTAMIN

HQAES ID: 3719A.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned MRSPP: Not assigned RIP Date: 9/29/2031

RC Date: 9/29/2031

RC Reason: Not assigned

Program: ENV Restoration, Army

Subprogram: IR

Phases	Start	End	
PA	8/11/2017	1/30/2020	
SI	12/6/2019	7/30/2023	
RI/FS	9/30/2024	9/29/2031	
RD			
IRA			
RA(C)			
RA(O)			
LTM			

Site Narrative

A Preliminary Assessment (PA) was completed at Bangor Training Site (TS) 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 Bangor TS during the PA. Based on the preliminary Conceptual Site Model developed for the AOIs, there is potential for human receptors to be exposed to PFAS contamination in subsurface soil, surface water and sediment, and groundwater during construction activities.

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

- AOI 1 Building 260; and
- AOI 2 Building 254.

At AOI 1, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and perfluorononanoic acid (PFNA) were detected in groundwater at concentrations above their respective screening levels (SLs). At AOI 2, PFOA, PFOS and perfluorohexanesulfonic acid (PFHxS) were detected in groundwater at concentrations above the respective SLs.

The subject site was tracked as 3719A.1001 under the Compliance-related Cleanup (CC) program. In FY23, this site was determined to be eligible for the Defense Environmental Restoration Program (DERP).

Cleanup/Exit Strategy An RI/feasibility study (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	Program Code
3719A.1001	CCME2020-01-P_BANGOR TS OMS3 PFAS CONTAM	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

LAND USE CONTROLS (LUC) SUMMARY