

JFHQ HI ARNG

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
AEDB-R	Army Environmental Database - Restoration
bgs	Below ground surface
CC	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
COC	Contaminant of Concern
DD	Decision Document
DERP	Defense Environmental Restoration Program
ENV	Environmental
FS	Feasibility Study
HIARNG	Hawaii Army National Guard
HQAES	Headquarters Army Environmental System
IR	Installation Restoration
IRA	Interim Remedial Action
LTA	Local Training Area
LTM	Long-Term Management
LUC	Land Use Control
MC	Munitions Constituents
MEC	Munitions and Explosives of Concern
mg/kg	milligram/kilogram
MMRP	Military Munitions Response Program
MR	Munitions Response
MRS	Munitions Response Site
MRSP	Munitions Response Site Prioritization Protocol
NDNODS	Non-DoD Owned, Non-Operational Defense Sites
ORR	Olowalu Rifle Range
PA	Preliminary Assessment
PP	Proposed Plan
RA(C)	Remedial Action (Construction)

Acronym	Definition
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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
6885A.1005	CC_HIHQ-002-R-01_NDNODS OLOWALU RIFLE RA	RRHI000002
6885A.1006	CC_HIHQ-006-R-01_KANAIO LTA	--

JFHQ HI ARNG

COMPLIANCE CLEANUP SITES

CC_HIHQ-002-R-01_NDNODS OLOWALU RIFLE RA

HQAES ID: 6885A.1005

Alias: RRHI000002

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 11/1/2027

RC Date: 11/1/2027

RC Reason: Not assigned

Program: Compliance Cleanup

Subprogram: CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	4/15/2007	9/15/2009
SI	7/15/2010	9/15/2013
RI/FS	9/21/2018	10/15/2024
RD	11/1/2024	1/1/2025
IRA	--	--
RA(C)	11/1/2024	11/1/2027
RA(O)	--	--
LTM	--	--

Site Narrative

The Olowalu Rifle Range (ORR) was used by the Hawaii Army National Guard (HIARNG) for small arms training from approximately 1931 until approximately 1961. The munitions response site (MRS) was owned by the Pioneer Sugar Company and leased to the HIARNG. No lease documentation was identified. The target wall and metal target holders are still visible at the MRS. The Site Inspection (SI) field work was conducted and the report was made final in 2012. Analytical results indicate that samples for antimony and lead exceeded the Hawaii Department of Health environmental action levels for Antimony (6.3 milligrams per kilogram (mg/kg)) and Lead (400 mg/kg). The maximum detected site concentration was 9.8 mg/kg for antimony and 4,600 mg/kg for lead. Based on the analytical results, metals contamination is present in the surface soil of the MRS. The Preliminary Assessment (PA) acreage increased in the SI report from three to 4.35. During the Technical Project Planning process the MRS boundaries were extended from three acres to 4.35 acres. The additional acreage included land areas beyond a parapet on the site and included the impact area. 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 Remedial Investigation/Feasibility Study (RI/FS) phase are reprogrammed into Compliance-related Cleanup.

The RI/FS phase is underway. The RI field work was conducted in 2019 to determine the nature and extent of munitions constituents (MC) in soil. Supplemental RI field work was performed in 2020, and the final RI report was issued in August 2021. Lead and antimony were identified as contaminants of concern (COC) in soil at the ORR MRS, with concentrations exceeding preliminary action levels at 12-inches below ground surface (bgs), and detections through at least 36 inches bgl. A draft FS was completed in March 2023, which developed remedial alternatives to address MC contamination in soil.

Cleanup/Exit Strategy A final FS, proposed plan (PP) and record of decision (ROD) will be completed, and the agreed-upon remedy will be implemented.

CC_HIHQ-006-R-01_KANAIO LTA

HQAES ID: 6885A.1006

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: Compliance Cleanup

Subprogram: CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
PA	4/15/2016	6/15/2016
SI	6/15/2016	9/1/2018
RI/FS	9/15/2019	7/31/2023
RD	10/1/2024	9/30/2025
IRA	--	--
RA(C)	10/1/2024	10/1/2027
RA(O)	--	--
LTM	12/2/2027	12/1/2057

Site Narrative

The Kanaio Local Training Area (LTA) MRS is located near the town of Ulupalakua on the southeast coast of the island county of Maui, Hawaii and encompasses approximately 4,771 acres, situated on the upper slopes of Haleakala volcano. Ulupalakua Ranch uses the property surrounding much of the Kanaio LTA. Prior to 1965, the area was reportedly used as a training area by the U. S. Army and U. S. Marine Corps (HIARNG, 1996). In March 1965, HIARNG was granted access to Kanaio for military training purposes. Previous site surveys and clearance actions have identified surface munitions and explosives of concern (MEC) in impact areas and firing ranges and indicate that MEC may remain on-site. The Kanaio LTA was operational until 2003 and subsequently closed in 2016, at which time the site became Military Munitions Response Program (MMRP) eligible. Based on the historical data and SI findings, it is recommended that Kanaio LTA be managed as two distinct areas. Area 1 is approximately 1,946 acres. This area contains the highest density of potential explosive hazards based on the SI and historical findings.

The final RI/FS report was completed in May 2022. The RI identified MEC contamination that potentially poses an unacceptable risk from explosive hazards to current and future human receptors and no unacceptable risks to human health or the environment from MC. As such, remedial actions evaluated in the FS were restricted to MEC hazards only. A proposed plan (PP) was released for public comment in August 2022, which presents the preferred remedial alternative, which is Alternative 4: Focused Surface and Subsurface MEC Removal and Land Use Controls (LUCs). The final Record of Decision (ROD) was signed in July 2023.

Cleanup/Exit Strategy Remedial Alternative 4 will be implemented, which is Focused Surface and Subsurface MEC Removal and LUCs.

SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date
6885A.1001	HIHQ-001-R-01_NDNODS KULIOUOU TARGET RAN	9/15/2012
6885A.1002	HIHQ-003-R-01_NDNODS PAUKUKALO RANGE COM	9/15/2012
6885A.1003	HIHQ-002-R-01_NDNODS Olowalu Rifle Range	9/15/2013
6885A.1004	HIHQ-004-R-01_NDNODS PU'U KAPELE LTA	9/15/2012
6885A.1007	CC_HIHQ-006-R-02_KANAIO LTA	8/15/2018

COMMUNITY INVOLVEMENT

Technical Review Committee (TRC) Establishment Date:	N/A
Community Involvement Plan (Date Published):	3/31/2021
Restoration Advisory Board (RAB) Establishment Date:	An ad soliciting public interest in establishing a RAB was published in February 2021.
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Additional Community Involvement:	N/A
Administrative Record is located at:	Hawaii Army National Guard (HIARNG) Environmental Office (NGHI-ENV) 91-1211 Enterprise Avenue, Bldg. 1903 Kapolei, Hawaii 96707 Leslie Chau, Installation Restoration Program Manager
Information Repository is located at:	Hawaii Army National Guard (HIARNG) Environmental Office (NGHI-ENV) 91-1211 Enterprise Avenue, Bldg. 1903 Kapolei, Hawaii 96707 Leslie Chau, Installation Restoration Program Manager
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

KALAELOA (BARBERS POINT)

Army Cleanup Program

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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
NFA	No Further Action
PA	Preliminary Assessment
PFAS	Per- and Polyfluoroalkyl Substances
PFH _x S	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

Acronym	Definition
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)
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.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
3205A.1002	HI2020-01-P_KALAELOA FAC BRBRS PT PFAS	

KALAELOA (BARBERS POINT)

INSTALLATION RESTORATION PROGRAM SITES

HI2020-01-P_KALAELOA FAC BRBRS PT PFAS

HQAES ID: 3205A.1002

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 9/15/2030

RC Date: 9/15/2030

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	12/15/2020	9/30/2023
RI/FS	9/15/2023	9/15/2030
RD	--	--
IRA	--	--
RA(C)	--	--
RA(O)	--	--
LTM	--	--

Site Narrative

A Preliminary Assessment (PA) was completed at Kalaeloa Army Aviation Support Facility (AASF) #3 to assess potential per- and polyfluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. Two areas of interest (AOIs) related to potential PFAS releases were identified at the site during the PA:

- AOI 1 – Former Fuel Farm Area; and
- AOI 2 – Hangar Suppression and Storage.

Based on potential PFAS releases at the AOIs, there is a potential for exposure to PFAS contamination in media at or near the facility.

A Site Inspection (SI) was conducted, which concluded that a remedial investigation (RI) is warranted at AOI 2. No further actions (NFA) are required at AOI 1 due to non-Department of Defense (DoD) releases. At AOI 2, perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorohexanesulfonic acid (PFHxS) and at upgradient boundary samples, PFOS and PFOA exceeded groundwater screening levels.

The subject site was tracked as 3205A.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 was funded in FY23, and the FS will be awarded in the future.

Cleanup/Exit Strategy An RI will be conducted at 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
3205A.1001	CCHI2020-01-P_KALAELOA FAC BRBRS PT PFAS	4/25/2023	CC

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

WAIAWA GULCH

Army Cleanup Program

Installation Action Plan

2023

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ACRONYMS

Acronym	Definition
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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
NFA	No Further Action
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
TS	Training Site
UST	Underground Storage Tank
UTES	Unit Training and Equipment Site
WBS	Work Breakdown Structure

PHASE TRANSLATION TABLE

HQAES Phase ID	CERCLA Phase	RCRA Phase	RCRA UST Phase
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.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
1083A.1005	CCHI2020-02-P_UTES WAIAWA GULCH PFAS CONTA	- -

WAIAWA GULCH

INSTALLATION RESTORATION PROGRAM SITES

HI2020-02-P_UTES WAIAWA GULCH PFAS CONTA

HQAES ID: 1083A.1005

Alias: None

Regulatory Driver: CERCLA

RRSE: Not assigned

MRSP: Not assigned

RIP Date: 9/15/2030

RC Date: 9/15/2030

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	5/15/2023
RI/FS	9/15/2023	9/15/2030
RD	--	--
IRA	--	--
RA(C)	--	--
RA(O)	--	--
LTM	--	--

Site Narrative

A Preliminary Assessment (PA) was completed at the Waiawa Gulch Training Site (TS) and Unit Training and Equipment Site (UTES) to assess potential per- and polyfluoroalkyl substances (PFAS) release areas and exposure pathways to receptors. Two areas of interest (AOIs) related to potential PFAS releases were identified at Waiawa Gulch TS and UTES during the PA. Based on the potential PFAS release at the AOIs, there is potential for exposure to PFAS contamination in surface soil and subsurface soil at the facility to site workers, construction workers, and trespassers.

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

- AOI 1 – Fire Truck Pump Test Area; and
- AOI 2 – Firetruck Parking Area, Vehicle Maintenance Area, and Storage Buildings.

At both AOI 1 and AOI 2, perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) and perfluorohexanesulfonic acid (PFHxS) exceeded their respective screening levels (SLs) in groundwater.

The subject site was tracked as 1083A.1004 under the Compliance-related Cleanup (CC) program. In Fiscal Year (FY) 23, 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 was funded in FY23, and the FS will be awarded in the future.

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
1083A.1001	WG-01_POL/HAZMAT STORAGE AREAS	8/31/1993
1083A.1002	WG-02_DRAINAGE AREAS	9/15/2005
1083A.1003	CC-WG-001_WAIAWA GULCH UTES	9/30/2020
1083A.1004	CCHI2020-02-P_UTES WAIAWA GULCH PFAS CON	4/24/2023

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 will be developed as the project progresses.
Administrative Record is located at:	Hawaii Army National Guard (HIARNG) Environmental Office (NGHI-ENV) 91-1211 Enterprise Avenue, Bldg. 1903 Kapolei, Hawaii 96707 Leslie Chau, Installation Restoration Program Manager
Information Repository is located at:	Hawaii Army National Guard (HIARNG) Environmental Office (NGHI-ENV) 91-1211 Enterprise Avenue, Bldg. 1903 Kapolei, Hawaii 96707 Leslie Chau, Installation Restoration Program Manager
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