

# **JFHQ CT ARNG**

## **Army Cleanup Program**

### **Installation Action Plan**

2023

# CONTENTS

Acronyms.....	1
Phase Translation Table.....	3
Site Alias List.....	4
Compliance Cleanup Sites.....	5
CC_CTHQ-001-R-01_NDNODS FORMER WILLIMANTIC RIFLE RANGE.....	6
Site Closeout Summary.....	7
Community Involvement.....	8
Five-Year / Periodic Review Summary.....	9
Review Summary Table.....	9
ROD/DDs associated with the last Five-Year/Periodic Review.....	9
Results, Actions & Plans.....	9
Land Use Controls (LUC) Summary.....	10

## 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
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
N/A	Not Applicable
NDNODS	Non-Department of Defense Non-Operational Defense Sites
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
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TRC	Technical Review Committee

Acronym	Definition
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

HQAES ID	AEDB-R Reference	Site Alias
6879A.1006	CC_CTHQ-001-R-01_NDNODS FORMER WILLIMANTIC RIFLE RANGE	RRCT000001

# JFHQ CT ARNG

## COMPLIANCE CLEANUP SITES

# CC\_CTHQ-001-R-01\_NDNODS FORMER WILLIMANTIC RIFLE RANGE

**HQAES ID:** 6879A.1006

**Alias:** RRCT000001

**Regulatory Driver:** CERCLA

**RRSE:** Not assigned

**MRSP:** Not assigned

**RIP Date:** 2/15/2028

**RC Date:** 2/15/2030

**RC Reason:** Not assigned

**Program:** Compliance Cleanup

**Subprogram:** CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>PA</b>	4/30/2007	9/30/2009
<b>SI</b>	7/31/2010	9/30/2012
<b>RI/FS</b>	1/15/2018	9/30/2020
<b>RD</b>	1/15/2026	2/15/2026
<b>IRA</b>	--	--
<b>RA(C)</b>	2/15/2026	2/15/2028
<b>RA(O)</b>	2/15/2028	2/15/2030
<b>LTM</b>	--	--

## Site Narrative

The former Willimantic Rifle Range is located in the City of Willimantic, which is part of the Town of Windham, in Windham County, Connecticut. The only Non-Department of Defense Non-Operational Defense Sites (NDNODS) eligible Munitions Response Site identified at this site is a former small arms range, which consists of 4.3 acres. The former range is surrounded by the Natchaug River to the west and south, mountains to the east, and forest to the north. This was a former small arms range used by the Connecticut Army National Guard from at least 1945 to 1977; the exact dates of operation are unknown. A concrete butt, with 10 targets on pulleys, was found. The butt was located in front of a hill that likely served as the backstop. Currently, the former range location is heavily vegetated with mature forest at the target area and tall grass and shrubs at the firing point and firing lines. Site Inspection (SI) field work was conducted in 2011. Antimony and lead exceeded Connecticut Department of Energy and Environmental Protection's Remediation Standard Regulations for Direct Exposure for Soil. A Remedial Investigation (RI)/Feasibility Study (FS) was completed at this site. Defense Environmental Restoration Program funding was used to complete work through the SI at this site. NDNODS sites moving forward with the RI/FS phase, like this one, are reprogrammed into Compliance-related Cleanup.

**Restoration/Cleanup Strategy:** RI/FS was completed at this site. A soil excavation will be required at the site.



## SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date	Program Code
6879A.1001	CTB00-001-R-01_NDNODS Camp Rell Artillery	9/30/2012	ENV Restoration, Army
6879A.1002	CT0B0-002-R-01_NDNODS Camp Rell Artillery	9/30/2012	ENV Restoration, Army
6879A.1003	CTHQ-001-R-01_NDNODS Former Willimantic Rifle RNG	9/30/2012	ENV Restoration, Army
6879A.1004	CT0B0-002-R-02_Camp Rell Art. Firing RNG	9/15/2012	ENV Restoration, Army
6879A.1005	CTHQ-001-R-02_Former Willimantic Rifle RNG	9/15/2012	ENV Restoration, Army

## COMMUNITY INVOLVEMENT

<b>Technical Review Committee (TRC) Establishment Date:</b>	N/A
<b>Community Involvement Plan (Date Published):</b>	TBD
<b>Restoration Advisory Board (RAB) Establishment Date:</b>	N/A
<b>RAB Adjournment Date:</b>	N/A
<b>RAB Adjournment Reason:</b>	N/A
<b>Additional Community Involvement:</b>	N/A
<b>Administrative Record is located at:</b>	CTARNG Environmental Management Branch 360 Broad Street Hartford, CT 06105
<b>Information Repository is located at:</b>	CTARNG Environmental Management Branch 360 Broad Street Hartford, CT 06105
<b>Current Technical Assistance for Public Participation (TAPP):</b>	N/A
<b>TAPP Title:</b>	N/A
<b>Potential TAPP:</b>	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

# **BRANFORD ARMORY FMS**

# **11**

## **Army Cleanup Program**

## **Installation Action Plan**

2023

# CONTENTS

Acronyms.....	1
Phase Translation Table.....	2
Site Alias List.....	3
Compliance Cleanup Sites.....	4
CC OMS8_BRANFORD FMS#11.....	5
Site Closeout Summary.....	7
Community Involvement.....	8
Five-Year / Periodic Review Summary.....	9
Review Summary Table.....	9
ROD/DDs associated with the last Five-Year/Periodic Review.....	9
Results, Actions & Plans.....	9
Land Use Controls (LUC) Summary.....	10

## 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
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
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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

HQAES ID	AEDB-R Reference	Site Alias
2988A.1001	CC OMS8_BRANFORD FMS#11	BRANFORD

# BRANFORD ARMORY FMS

## 11

### COMPLIANCE CLEANUP SITES

## CC OMS8\_BRANFORD FMS#11

**HQAES ID:** 2988A.1001

**Alias:** BRANFORD

**Regulatory Driver:** CERCLA

**RRSE:** Not assigned

**MRSP:** Not assigned

**RIP Date:** 9/15/2026

**RC Date:** 9/15/2026

**RC Reason:** Not assigned

**Program:** Compliance Cleanup

**Subprogram:** CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>PA</b>	1/31/2000	5/31/2000
<b>SI</b>	5/31/2001	8/31/2002
<b>RI/FS</b>	8/15/2013	8/15/2024
<b>RD</b>	8/15/2024	9/15/2024
<b>IRA</b>	--	--
<b>RA(C)</b>	3/15/2013	9/15/2026
<b>RA(O)</b>	--	--
<b>LTM</b>	--	--

### Site Narrative

The Branford Armory has been in existence since at least the mid to late 1880s, when the site was originally located on Bradley Avenue. The current location of the Site was developed in approximately 1666 with a residential dwelling (historically known as the Averill homestead), a farm, and a barn. The State of Connecticut purchased this parcel of land in 1915 and the site has since been developed with the Connecticut Army National Guard (CTARNG) facilities.

The Armory building was constructed in approximately 1915. Field Maintenance Shop (FMS) #11 was originally a barn which was converted into an FMS building at the time of the Armory construction. The Armory, a brick and masonry structure, includes a 16,550 square foot building and the FMS #11 building includes a 10,492 square foot building. The overall function of the Armory is to provide training capabilities for the various CTARNG units. This also includes dedicated storage areas of equipment necessary to perform such activities. The basement portion of the Armory had included a rifle range which is currently used as an exercise/workout room. Likewise, a portion of the basement level formerly contained two bowling alley lanes which are currently used as locker room area. FMS #11 functions primarily as a maintenance shop for general servicing of Army National Guard vehicles and machinery. Typical activities present at the FMS include maintenance services such as inspecting, servicing, lubricating, adjusting, replacing parts, and minor assemblies and subassemblies for ground vehicles. Another responsibility of the FMS is to provide training to the maintenance personnel to ensure that the equipment is fully mission-capable and able to perform all combat missions.

Previous investigations include a March 2000 Phase I Preliminary Assessment (PA) and August 2002 Phase II Site Inspection (SI). Based on the results of the December 2006 Remedial Investigation (RI), the impact to soil is evident at one Area of Concern (AOC) at the Branford FMS. A Phase III RI was conducted in 2005 and 2006, while a Feasibility Study (FS) was performed in 2007 and finalized on Apr. 13, 2007. The Final RI discovered that remediation was necessary at the outfall area located behind the FMS. The outfall area has been determined to be a historic dumping area behind the FMS. Approximately 100 oil filters were discovered in this

area along with debris and oil stained soil. Polychlorinated Biphenyl (PCBs) associated with pre-1984 used oil were discovered in the outfall area likely a result of the historic dumping of used oil.

The results of the RI and previous investigations indicated that soil samples collected near the terminus of the site storm water pipe outfall at the rear (alongside the Branford River) of the FMS building exceeded the Residential Direct Exposure Criteria (RDEC) and industrial direct exposure criteria for PCBs of 1 milligram/kilogram (mg/kg) and 10 mg/kg, respectively. PCB (Aroclor 1260) was detected in boring C-19 at concentrations of 2.2 mg/kg, 1.1 mg/kg, and 0.73 mg/kg from depth intervals of 0-2', 2-4', and 4-6', respectively. The samples from the 0-2' and 2-4' interval exceeded the RDEC of 1 mg/kg. All samples collected from the C-19 location had petroleum odors. Boring C-20 contained PCB at concentrations of 1 mg/kg and 1.8 mg/kg from intervals of 0-2' and 4-6', respectively.

In 2008, remediation of other areas of concern at the Branford FMS was conducted. The 2008 remediation at AOC-2, the Former Cistern, included excavation and off-site disposal of 841 cubic yards (cy) of contaminated soil. At AOC-4, the Former Hazardous Waste Storage Sheds and 250-Gallon Used Oil Aboveground Storage Tank, 77 cy of contaminated soil was excavated and disposed off-site. Additionally, 154 cy of contaminated sediment from within the catch basin and at the associated outfall was excavated and disposed off-site. A total of 474 cy of asphalt floor was removed and replaced with a concrete floor slab within the FMS #11. The Final RI recommended removal of the asphalt within the interior of the FMS #11 and replacement with a concrete slab to minimize potential environmental risks to personnel and surrounding environment, given the elevated concentrations of Extractable Total Petroleum Hydrocarbons and Semi-Volatile Organic Compound, and more specifically Polycyclic Aromatic Hydrocarbons, in the asphalt floor of FMS #11.

A Polluted Ash Fill Assessment was completed in 2012. A Phase III RI was completed in Fiscal Year (FY) 17.

**Restoration/Cleanup Strategy:** The CTC estimate for this site assumes RI/FS through Remedial Action (Construction) (RAC)) phases.

## SITE CLOSEOUT SUMMARY

None

## COMMUNITY INVOLVEMENT

<b>Technical Review Committee (TRC) Establishment Date:</b>	N/A
<b>Community Involvement Plan (Date Published):</b>	N/A
<b>Restoration Advisory Board (RAB) Establishment Date:</b>	N/A
<b>RAB Adjournment Date:</b>	N/A
<b>RAB Adjournment Reason:</b>	N/A
<b>Additional Community Involvement:</b>	N/A
<b>Administrative Record is located at:</b>	CTARNG Environmental Management Branch 360 Broad Street Hartford, CT 06105
<b>Information Repository is located at:</b>	CTARNG Environmental Management Branch 360 Broad Street Hartford, CT 06105
<b>Current Technical Assistance for Public Participation (TAPP):</b>	N/A
<b>TAPP Title:</b>	N/A
<b>Potential TAPP:</b>	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



# **CAMP HARTELL**

## **Army Cleanup Program**

### **Installation Action Plan**

2023

# CONTENTS

Acronyms.....	1
Phase Translation Table.....	2
Site Alias List.....	3
Compliance Cleanup Sites.....	4
CC AOC1_CAMP HARTELL UST GRAVE AT T-1030 .....	5
Site Closeout Summary.....	7
Community Involvement .....	8
Five-Year / Periodic Review Summary.....	9
Review Summary Table .....	9
ROD/DDs associated with the last Five-Year/Periodic Review.....	9
Results, Actions & Plans .....	9
Land Use Controls (LUC) Summary.....	10

## 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
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
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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

HQAES ID	AEDB-R Reference	Site Alias
3011A.1001	CC AOC1_CAMP HARTELL UST GRAVE AT T-1030	AOC 1

# CAMP HARTELL

## COMPLIANCE CLEANUP SITES

## CC AOC1\_CAMP HARTELL UST GRAVE AT T-1030

**HQAES ID:** 3011A.1001

**Alias:** AOC 1

**Regulatory Driver:** RCRA UST

**RRSE:** Not assigned

**MRSP:** Not assigned

**RIP Date:** 10/31/2011

**RC Date:** 1/14/2016

**RC Reason:** All Required Cleanup(s) Completed

**Program:** Compliance Cleanup

**Subprogram:** CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>ISC</b>	1/31/1996	1/31/1998
<b>INV</b>	1/31/1998	10/31/2001
<b>CAP</b>	3/31/2006	8/31/2007
<b>DES</b>	--	--
<b>IRA</b>	--	--
<b>IMP(C)</b>	1/31/2011	10/31/2011
<b>IMP(O)</b>	3/31/2011	1/14/2016
<b>LTM</b>	1/15/2016	9/15/2054

### Site Narrative

T-1030, built in 1942, is a 6,000 square foot two story wood frame barracks constructed on concrete piers. In past, the building was used as a hospital and later was used by Company D, 169th Aviation Regiment as an administrative building. Company D vacated the building in the early 1990's. The building is currently unheated but has been fully winterized and prepared for long term storage. If necessary, the building can be made fully functional in the event of an emergency.

According to the 1998 tank registration, a 500-gallon Number Two (#2) fuel oil Underground Storage Tank (UST), known as Tank 29, was installed in 1955. This tank was located adjacent to T-1030 at Camp Hartell. According to the 1996 tank removal report, seven soil samples were collected and analyzed for volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH), which were below regulatory criteria. During the June 1999 Site Inspection (SI)/Investigation (INV), boring B-46 was advanced approximately in the area of Tank 29's grave. No semi volatile organic compounds (SVOCs) were detected; however, TPH concentrations of 2,500 milligrams/kilogram (mg/kg) were detected which exceeds the 500 mg/kg Pollutant Mobility Criteria (PMC) and Residential Direct Exposure Criteria (RES DEC) thresholds standard as established by Connecticut Department of Energy and Environmental Protection (CTDEEP). This area was further investigated by the 2001 Supplemental SI/INV where the extractable total petroleum hydrocarbons (ETPH) concentration in one of the six soil samples exceeded the PMC and RES DEC.

During the Supplemental Phase II INV, a groundwater monitoring well, (MW)-11, was installed in this Area of Concern (AOC). ETPH was detected at a concentration of 2,900 micrograms/liter (ug/l), which exceeds the Surface Water Protection Criteria (SWPC) of 100 ug/l. This indicates that degraded soil conditions may be impacting groundwater.

The results of the 2007 Phase III INV indicated the presence of elevated concentrations of VOCs and SVOCs at Camp Hartell AOC 1. The VOCs, 4-Isopropylbenzene (2.52 parts per million (ppm)) and 1, 2, 4-Trimethylbenzene (7.37 ppm) were detected at concentrations exceeding the PMC of 0.6 ppm and 7 ppm, respectively. The VOCs, n-Butylbenzene and sec-Butylbenzene, were detected in the soil sample at concentrations of 2.72 ppm and 2.18 ppm, respectively, which exceed the 1.4 ppm GA PMC standard. ETPH was discovered at concentrations of ranging from 703 to 1,470 ppm which exceed the GA PMC and RES DEC) of 500 ppm. ETPH was also detected in the groundwater sample at a concentration of 0.7 ppm which exceeds the Groundwater Protection Criteria (GPC) of 0.1 ppm. The Phase III INV determined that water quality in AOC 1 has also been impacted with petroleum hydrocarbons associated with the former #2 fuel oil tank.

A subsequent, limited subsurface investigation performed in 2010 has revealed that the release of fuel oil is determined to be much larger and deeper than what was outlined in the previous environmental investigative reports. Contaminants of concern have been detected in soil and groundwater in the vicinity of AOC 1 at concentrations exceeding the CTDEEP Remediation Standard Regulation (RSRs). ETPH concentrations ranging from 2,310 to 19,100 mg/kg exceed the 500 mg/kg RSR limit. Additionally, several VOCs exceed the RSRs; these include a n-Butylbenzene concentration of 120 mg/kg which exceeds the PMC of 1.4 mg/kg, a concentration of 110.3 mg/kg of total xylenes which exceeds the 19.5 mg/kg PMC limit, and a 25.3 mg/kg concentration of ethylbenzene which exceeds the 10.1 mg/kg PMC standard. The AOC 1 contaminants are due to a release of an undetermined volume of # 2) heating oil resulting from a former compromised 500-gallon capacity UST system.

**Restoration/Cleanup Strategy:** The CTC estimate for this site assumes quarterly groundwater monitoring under the Long Term Management (LTM) phase.



## SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date	Program Code
3011A.1002	CC AOC2_Camp Hartell Former Hazardous Waste	8/31/2007	Compliance Cleanup
3011A.1003	CC AOC3_Camp Hartell Former Oil Storage	8/31/2007	Compliance Cleanup
3011A.1004	CC AOC4-6_Camp Hartell Parking Areas 1&2	8/31/2007	Compliance Cleanup
3011A.1005	CC AOC7-12_Camp Hartell Stormwater Outlet	12/31/2011	Compliance Cleanup
3011A.1006	CCCTAOC9_Camp Hartell AOC 9 Groundwater	12/15/2019	Compliance Cleanup
3011A.1007	CCCTAOC13_Camp Hartell AOC 13 UST Graves	12/15/2018	Compliance Cleanup
3011A.1008	CCCTAOC15_Camp Hartell AOC 15 Haz Waste	12/31/2010	Compliance Cleanup

## COMMUNITY INVOLVEMENT

<b>Technical Review Committee (TRC) Establishment Date:</b>	N/A
<b>Community Involvement Plan (Date Published):</b>	N/A
<b>Restoration Advisory Board (RAB) Establishment Date:</b>	N/A
<b>RAB Adjournment Date:</b>	N/A
<b>RAB Adjournment Reason:</b>	N/A
<b>Additional Community Involvement:</b>	N/A
<b>Administrative Record is located at:</b>	CTARNG Environmental Management Branch 360 Broad Street Hartford, CT 06105
<b>Information Repository is located at:</b>	CTARNG Environmental Management Branch 360 Broad Street Hartford, CT 06105
<b>Current Technical Assistance for Public Participation (TAPP):</b>	N/A
<b>TAPP Title:</b>	N/A
<b>Potential TAPP:</b>	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

# **STONES RANCH MILITARY RESERVATION**

**Army Cleanup Program**

**Installation Action Plan**

2023

# CONTENTS

Acronyms.....	1
Phase Translation Table.....	2
Site Alias List.....	3
Compliance Cleanup Sites.....	4
CC OMS6_SRMR FMS 6.....	5
Site Closeout Summary.....	7
Community Involvement.....	8
Five-Year / Periodic Review Summary.....	9
Review Summary Table.....	9
ROD/DDs associated with the last Five-Year/Periodic Review.....	9
Results, Actions & Plans.....	9
Land Use Controls (LUC) Summary.....	10

## 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
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
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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

HQAES ID	AEDB-R Reference	Site Alias
2991A.1001	CC OMS6_SRMR FMS 6	SRMR

# STONES RANCH MILITARY RESERVATION

## COMPLIANCE CLEANUP SITES

## CC OMS6\_SRMR FMS 6

**HQAES ID:** 2991A.1001

**Alias:** SRMR

**Regulatory Driver:** RCRA UST

**RRSE:** Not assigned

**MRSP:** Not assigned

**RIP Date:** 5/31/2020

**RC Date:** 7/15/2025

**RC Reason:** Not assigned

**Program:** Compliance Cleanup

**Subprogram:** CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>RFA</b>	1/31/1998	1/31/1999
<b>CS</b>	1/31/2000	7/31/2001
<b>RFI/CMS</b>	1/31/2008	12/31/2008
<b>DES</b>	--	--
<b>IRA</b>	--	--
<b>CMI(C)</b>	8/15/2013	5/31/2020
<b>CMI(O)</b>	9/27/2014	7/15/2025
<b>LTM</b>	--	--

### Site Narrative

SRMR was acquired in May 1931 by Connecticut Army National Guard (CTARNG); since the purchase it has been continuously used for tactical training by infantry, artillery, engineer, medical, signal, and aviation units. In 1962, SRMR was used extensively for weekend training assemblies as well as annual training for certain troop units. During this same era the CTARNG constructed several Engineer Training Sites, including a quarry, asphalt plant, bridge site, and demolition site. Engineer units also constructed a 2700 foot fixed-wing airstrip at SRMR. The Unit Training Equipment Site (UTES), staffed by CTARNG employees, includes large buildings such as a farmhouse and a large stuccoed barn, likely erected circa 1900. UTES also contains training equipment such as bulldozers, cranes, tractors, bucket loaders, heavy trucks, some tracked vehicles, and a bridge. Field Maintenance Shop (FMS) 6 was built in 1942 and is no longer in use by CTARNG on a full-time basis. It is used for weekend drills and annual training, as well as UTES storage. The Site is currently occupied and operated by CTARNG and used as a tactical training and maintenance complex.

The 10-acre site is part of the larger approximately 2000-acre SRMR. The site houses the SRMR UTES and FMS 6 training and maintenance complexes. To the northeast of the 10 acre site are an Airstrip and a former Asphalt Plant. Current Site activities include training and maneuver activities and associated maintenance of military vehicles and equipment. Vehicles and equipment are stored on-site. Developed areas include the UTES office and garage areas, the FMS 6 office and garage areas, Building 5 storage area, a large barn and milkhouse complex (used for farming prior to CTARNG use), the former farmhouse, a wash rack, the lower garage area storage and equipment yard, a fuel point, and a bunker. Wastes currently and historically generated on-site during vehicle and equipment maintenance include waste petroleum products, batteries, antifreeze and solvent degreasers. An Initial Site Characterization (ISC) conducted in 1999 resulted in the recommendation of an Investigation (INV) to characterize the potential source and nature of contamination on-site. Potential areas of concern (AOCs) include floor drain discharge points, wash rack areas, battery storage areas, hazardous materials/waste storage areas, historic and current Underground Storage Tank (UST) and Above-ground Storage Tank (AST) locations,

and site spills. A Phase II INV indicated that a release occurred at the UTES and FMS 6 area. Soil contamination at 570 milligrams/kilogram (mg/kg), in the form of extractable total petroleum hydrocarbons (ETPH) exceeding the GA Pollutant Mobility Criteria (GA PMC) and Residential Direct Exposure Criteria (RDEC) limit of 500 mg/kg, was detected in the area of the former waste oil tank and oil/water separator, southwest of the FMS 6 building. Polycyclic aromatic hydrocarbons (PAHs) were also detected at three locations on site at concentrations exceeding regulatory limits. Groundwater samples indicate ETPH at concentrations of 730 milligrams/liter (mg/l) and 280 mg/l exceeding the regulatory standard Groundwater Pollutant Criteria (GPC) of 100 mg/l in the area of the former 3,000 gallon No. 2 heating oil UST, which was removed in 1996, and existing 2,000 gallon No. 2 heating oil AST. Groundwater contamination was also detected in the area around the historical dry well location and existing temporary AST. The concentrations of Lead (0.017 mg/l, 0.027 mg/l, and 0.023 mg/l) exceeded the GPC of 0.015 mg/l. Chromium was detected at a concentration of 0.16 mg/l, which exceeds the GPC of 0.05 mg/l. In April 2006, CTARNG received a letter from the United States Environmental Protection Agency (USEPA) indicating that a review of the Phase I Preliminary Assessment (PA), which was submitted to USEPA for review in 1997, had been completed and it was determined that the PA was lacking information. USEPA has requested that a Phase III INV be performed to address the data gaps and limitations in the Phase I and II INV. In December 2006, approximately 100 buried storage drums were discovered during a construction project adjacent to the lower garages. Total petroleum hydrocarbons (TPH) was discovered in soil at concentrations of 7,531 parts per million (ppm), 4,142 ppm, and 3,719 ppm which all exceed the Connecticut Department of Energy and Environmental Protection (CTDEEP) Industrial/Commercial Criteria (I/C) Direct Exposure Criteria (DEC) standard of 2,500 ppm and GPC standard of 500 ppm. Lead was detected at concentrations of 0.565 ppm and 0.023 ppm which exceed the GPC standard of 0.015 ppm. Approximately 500 cubic yards of contaminated soil (TPH, lead, and chromium), resultant of the leaking storage drums, was excavated and disposed of off-site. A Phase III INV/Corrective Action Plan (CAP) was conducted in 2008. ETPH was detected in groundwater at UTES AOC-06 at 600 ppm exceeding the GPC of 100 ppm. The Phase III INV determined that remedial action is required to address the portion of the release area at UTES AOC-06 Former 1,000-gallon Waste Oil UST #8. Cleanup Strategy The cleanup strategy (Implementation (IMP)) involves five years of natural attenuation of groundwater. The Corrective Measures Implementation (Operations) (CMI (O)) for groundwater will consist of 2 years of quarterly groundwater monitoring.

**Restoration/Cleanup Strategy:** The CTC estimate for this site assumes quarterly groundwater monitoring under the Implementation (Operation) (IMP (O)) phase.

## SITE CLOSEOUT SUMMARY

None

## COMMUNITY INVOLVEMENT

<b>Technical Review Committee (TRC) Establishment Date:</b>	N/A
<b>Community Involvement Plan (Date Published):</b>	N/A
<b>Restoration Advisory Board (RAB) Establishment Date:</b>	N/A
<b>RAB Adjournment Date:</b>	N/A
<b>RAB Adjournment Reason:</b>	N/A
<b>Additional Community Involvement:</b>	N/A
<b>Administrative Record is located at:</b>	N/A
<b>Information Repository is located at:</b>	N/A
<b>Current Technical Assistance for Public Participation (TAPP):</b>	N/A
<b>TAPP Title:</b>	N/A
<b>Potential TAPP:</b>	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



# **STRATFORD ARMORY**

## **FMS 9**

**Army Cleanup Program**

**Installation Action Plan**

2023

# CONTENTS

Acronyms.....	1
Phase Translation Table.....	2
Site Alias List.....	3
Compliance Cleanup Sites.....	4
CC OMS9_STRATFORD FMS.....	5
Site Closeout Summary.....	7
Community Involvement.....	8
Five-Year / Periodic Review Summary.....	9
Review Summary Table.....	9
ROD/DDs associated with the last Five-Year/Periodic Review.....	9
Results, Actions & Plans.....	9
Land Use Controls (LUC) Summary.....	10

## 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
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
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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

HQAES ID	AEDB-R Reference	Site Alias
3008A.1001	CC OMS9_STRATFORD FMS	STRATFORD

# **STRATFORD ARMORY**

## **FMS 9**

**COMPLIANCE CLEANUP SITES**

## CC OMS9\_STRATFORD FMS

**HQAES ID:** 3008A.1001

**Alias:** STRATFORD

**Regulatory Driver:** CERCLA

**RRSE:** Not assigned

**MRSP:** Not assigned

**RIP Date:** 9/15/2025

**RC Date:** 9/15/2025

**RC Reason:** Not assigned

**Program:** Compliance Cleanup

**Subprogram:** CC

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>PA</b>	1/31/1997	6/30/1997
<b>SI</b>	1/31/2000	2/29/2000
<b>RI/FS</b>	1/31/2005	12/31/2013
<b>RD</b>	12/15/2018	1/15/2020
<b>IRA</b>	--	--
<b>RA(C)</b>	10/1/2019	9/15/2025
<b>RA(O)</b>	--	--
<b>LTM</b>	--	--

### Site Narrative

Field Maintenance Shop (FMS) # 9 was built in the post-Cold War Era, dating back to 1962. The Stratford Complex occupies a rectangular ten acre parcel located east of Nichols Road in the northwestern corner of Stratford. The facility is comprised of two attached buildings, the armory and FMS building, comprising 45,000 square feet of the floor space, along with ancillary exterior storage sheds and open storage areas. FMS #9 is currently an active FMS.

A Phase I Preliminary Assessment (PA) was performed in October 1996 and identified three areas of concern (AOCs) including asbestos-containing materials inside the main Armory building, and former discharges to the storm sewer from the battery room and washrack area.

During the February 2000 Phase II Site Investigation (SI) of the Stratford FMS #9, Total Petroleum Hydrocarbons (TPH) concentrations at 6,527 milligrams/kilograms (mg/kg) and lead concentrations at 0.02 mg/kg were detected in the surficial soil in the Vehicle Parking Area above Connecticut Remediation Standard Regulations (RSRs) criteria of 500 mg/kg and 0.015 mg/kg respectively. The SI concluded that surficial soils contained TPH and lead in the Vehicle Parking area which exceed RSRs. Based on the sampling performed during the 2000 SI, it has been determined that surface soils in the Vehicle Storage Area have been impacted by the designated uses of the area. In addition, TPH was detected in samples from two groundwater monitoring wells at 2.0 milligrams/liter (mg/L) which exceeds the 0.5 mg/L RSR criteria. The TPH is higher in the upgradient well indicating a potential off-site source. Although the upgradient well is in proximity to the former location of the waste oil Above-ground Storage Tank (AST), it is not considered likely (due to the absence of any contamination in soil samples from this location) that the AST is the source of these impacts. It is possible that TPH contamination of site groundwater was caused by a release on the western side of the building; it is also possible that the impact has its source in the adjacent cemetery property. The Phase II report suggested a resampling of groundwater to confirm the initial results, and further testing of the surficial soils to verify the detected contamination.

A limited Phase III Remedial Investigation (RI) was performed in 2005 and 2006. However, the Phase III RI proved to be invalid and the results of the investigation are inconclusive. A new Phase III RI/Feasibility Study (FS) was completed in Fiscal Year (FY) 16 for the site. Results of the RI/FS indicated a localized area of polycyclic aromatic hydrocarbons (PAH) contamination located in the Vehicle Storage Area. Contamination exceedances were not found at other locations at the site. A contract was awarded in late FY20 to remove approximately 270 cubic yards of PAH contaminated material and restore the site with clean backfill. Additional groundwater monitoring is also required.

**Restoration/Cleanup Strategy:** The CTC estimate for this site assumes quarterly groundwater monitoring under the Remedial Action (Construction) (RAC) phase.



## SITE CLOSEOUT SUMMARY

None

## COMMUNITY INVOLVEMENT

<b>Technical Review Committee (TRC) Establishment Date:</b>	N/A
<b>Community Involvement Plan (Date Published):</b>	N/A
<b>Restoration Advisory Board (RAB) Establishment Date:</b>	N/A
<b>RAB Adjournment Date:</b>	N/A
<b>RAB Adjournment Reason:</b>	N/A
<b>Additional Community Involvement:</b>	N/A
<b>Administrative Record is located at:</b>	N/A
<b>Information Repository is located at:</b>	N/A
<b>Current Technical Assistance for Public Participation (TAPP):</b>	N/A
<b>TAPP Title:</b>	N/A
<b>Potential TAPP:</b>	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

# **WINDSOR LOCKS**

## **Army Cleanup Program**

### **Installation Action Plan**

2023

# CONTENTS

Acronyms.....	1
Phase Translation Table.....	2
Site Alias List.....	3
Installation Restoration Program Sites.....	4
CT2020-02-P_WINDSOR LOCKS AASF PFAS CONTAMINATION.....	5
Site Closeout Summary.....	6
Community Involvement .....	7
Five-Year / Periodic Review Summary.....	8
Review Summary Table .....	8
ROD/DDs associated with the last Five-Year/Periodic Review.....	8
Results, Actions & Plans .....	8
Land Use Controls (LUC) Summary.....	9

## 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
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
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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

HQAES ID	AEDB-R Reference	Site Alias
3012A.1002	CT2020-02-P_WINDSOR LOCKS AASF PFAS CONTAMINATION	

# WINDSOR LOCKS

## INSTALLATION RESTORATION PROGRAM SITES

# CT2020-02-P\_WINDSOR LOCKS AASF PFAS CONTAMINATION

**HQAES ID:** 3012A.1002

**Alias:** None

**Regulatory Driver:** CERCLA

**RRSE:** Not assigned

**MRSP:** Not assigned

**RIP Date:** 9/30/2029

**RC Date:** 9/30/2029

**RC Reason:** Not assigned

**Program:** ENV Restoration, Army

**Subprogram:** IR

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>PA</b>	8/11/2017	2/4/2020
<b>SI</b>	12/6/2019	1/31/2022
<b>RI/FS</b>	9/30/2022	9/30/2029
<b>RD</b>	--	--
<b>IRA</b>	--	--
<b>RA(C)</b>	--	--
<b>RA(O)</b>	--	--
<b>LTM</b>	--	--

## Site Narrative

A Preliminary Assessment (PA) was completed for per- and polyfluoroalkyl substances (PFAS) at Windsor Locks Army Aviation Support Facility (AASF) in Hartford County, Connecticut, to assess potential PFAS release areas and exposure pathways to receptors. Two areas of interest (AOIs) related to PFAS release were identified at Windsor Locks AASF based on PA data. PFAS-containing aqueous film-forming foam (AFFF) may have been released during fire training activities at the Wash Rack or from the discharge of mobile fire extinguishers to floor drains in Building 152. The potential PFAS release areas were grouped into one AOI, AOI 1. A Site Inspection (SI) was completed at the site. Based on the results at the SI, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in groundwater exceeded the individual screening levels (SLs) of 40 nanograms/liter (ng/L) at both potential PFAS release areas. Due to the exceedances of the SLs for PFOA and PFOS in groundwater, further evaluation of AOI 1 is warranted. The subject site was tracked as 3012A.1001 under the Compliance-related Cleanup (CC) program. This site was determined to be eligible for the Defense Environmental Restoration Program (DERP) and has moved to this site number.

**Restoration/Cleanup Strategy:** A RI/Feasibility Study (FS) will be completed at this site. The RI was funded in Fiscal Year 2022 (FY22). FS costs will require future funding. Further actions cannot be determined until after the RI/FS is complete.

## SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date	Program Code
3012A.1001	CT2020-02-P_WINDSOR LOCKS AASF PFAS CONTAMINATION	2/2/2022	Compliance Cleanup

## COMMUNITY INVOLVEMENT

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

# **AVCRAD GROTON**

## **Army Cleanup Program**

### **Installation Action Plan**

2023



# CONTENTS

Acronyms.....	1
Phase Translation Table.....	2
Site Alias List.....	3
INSTALLATION RESTORATION PROGRAM Sites.....	4
CT2020-01-P_AVCRAD GROTON & TASMG HANGAR PFAS CONTAMINATION.....	5
Site Closeout Summary.....	7
CCCT2020-01-P_AVCRAD GROTON & TASMG HANGAR PFAS CONTAMINATION .....	7
Community Involvement .....	8
Five-Year / Periodic Review Summary.....	9
Review Summary Table .....	9
ROD/DDs associated with the last Five-Year/Periodic Review.....	9
Results, Actions & Plans .....	9
Land Use Controls (LUC) Summary.....	10

## 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
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
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-In-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
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

HQAES ID	AEDB-R Reference	Site Alias
2993A.1002	CT2020-01-P_AVCRAD GROTON & TASMG HANGAR PFAS CONTAMINATION	

# AVCRAD GROTON

## INSTALLATION RESTORATION PROGRAM SITES

# CT2020-01-P\_AVCRAD GROTON & TASMG HANGAR PFAS CONTAMINATION

**HQAES ID:** 2993A.1002

**Alias:** None

**Regulatory Driver:** CERCLA

**RRSE:** Not assigned

**MRSPP:** Not assigned

**RIP Date:** 9/15/2036

**RC Date:** 9/15/2036

**RC Reason:** Not assigned

**Program:** ENV Restoration, Army

**Subprogram:** IR

<i>Phases</i>	<i>Start</i>	<i>End</i>
<b>PA</b>	8/11/2017	6/24/2020
<b>SI</b>	5/10/2020	9/15/2023
<b>RI/FS</b>	9/15/2029	9/15/2036
<b>RD</b>	--	--
<b>IRA</b>	--	--
<b>RA(C)</b>	--	--
<b>RA(O)</b>	--	--
<b>LTM</b>	--	--

## Site Narrative

A Preliminary Assessment (PA) was completed for per-and polyfluoroalkyl substances (PFAS) at Aviation Classification and Repair Activity Depot (AVCRAD) Groton & Theater Aviation Sustainment Maintenance Group (TASMG) Hangar 2 to assess potential PFAS release areas and exposure pathways to receptors. Three areas of interest (AOIs) related to potential PFAS releases were identified at AVCRAD Groton during the PA. Based on information obtained during the PA at these AOIs, there is potential for exposure to PFAS contamination in environmental media at the facility to site workers, construction workers, trespassers and off-facility recreational users of the surrounding water bodies.

A Draft Site Inspection (SI) has been completed at the site. Based on the results of this SI, further evaluation is warranted in a Remedial Investigation (RI) for AOI 1, AOI 2, and AOI 3. At AOI 1: perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and perfluorononanoic acid (PFNA) in groundwater exceeded their screening levels (SLs). PFOA exceeded the SL of 6 nanograms/Liter (ng/L), with a maximum concentration of 8.20 ng/L. PFOS exceeded the SL of 4 ng/L, with a maximum concentration of 53.8 ng/L. PFNA exceeded the SL of 6 ng/L, with a maximum concentration of 6.89 ng/L. Additionally, PFOS exceeded its SL at side-gradient location TMG-03, with a concentration of 9.91 ng/L. At AOI 2: PFOA, PFOS, and PFNA in groundwater exceeded their SLs. PFOA exceeded the SL of 6 ng/L, with a maximum concentration of 143 ng/L. PFOS exceeded the SL of 4 ng/L, with a maximum concentration of 11.8 ng/L. PFNA exceeded the SL of 6 ng/L, with a maximum concentration of 18.5 ng/L. Additionally, PFOA and PFOS exceeded their SLs at downgradient location TMG-02, with concentrations of 10.58 ng/L and 15.0 ng/L, respectively. At AOI 3: PFOS in groundwater exceeded the SL of 4 ng/L, with a concentration of 9.89 ng/L.

The subject site was tracked as 2993A.1001 under the Compliance Cleanup (CC) program. In Fiscal Year (FY) 23, this site was determined to be eligible under the Defense Environmental Restoration Program (DERP).

**Restoration/Cleanup strategy:** An RI/Feasibility Study (FS) will be completed at this site. Further actions cannot be determined until after the RI/FS is complete.

## SITE CLOSEOUT SUMMARY

HQAES ID	Site Name	Site Closeout Date	Program Code
2993A.1001	CCCT2020-01-P_ AVCRAD GROTON & TASMG HANGAR PFAS CONTAMINATION	4/24/2023	Compliance Cleanup



## COMMUNITY INVOLVEMENT

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