JOINT BASE MYER-HENDERSON HALL

Army Cleanup Program

Installation Action Plan Final

June 2024

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STATEMENT OF PURPOSE

The Installation Action Plan (IAP) provides evidence that the Army is firmly committed to expeditious identification and cleanup of environmental contamination, and that the installation has a credible, organized program to carry out that commitment. The IAP provides an outline of the total multi-year environmental cleanup program for each site with ongoing or future planned restoration activity and includes the (1) environmental restoration requirements, (2) the rationale for the selected technical approach, and (3) foundation to develop corresponding financial needs for each cleanup site.

INSTALLATION OVERVIEW

Installation Name: JOINT BASE MYER-HENDERSON HALL

Installation City: ARLINGTON

Installation County: ARLINGTON

Installation State: VA

Regulatory Participation - Federal: US Environmental Protection Agency (USEPA) Region III

Regulatory Participation - State: Virginia Department of Environmental Quality (VDEQ)

ACRONYMS

Acronym	Definition
CC	Compliance-related Cleanup
CDC	Child Development Center
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CRL	Cleanup Restoration & Liabilities
DD	Decision Document
ENV	Environmental
FS	Feasibility Study
FYR	Five-Year Review
HRS	Hazard Ranking System
IAP	Installation Action Plan
ID	Identification
IR	Installation Restoration
IRA	Interim Remedial Action
LTM	Long-Term Management
MR	Munitions Response
MRSPP	Munitions Response Site Prioritization Protocol
NPL	National Priorities List
PA	Preliminary Assessment
PFAS	Per- and Polyfluoroalkyl Substances
PX	Post Exchange
RAB	Restoration Advisory Board
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SC	Site Closeout
SI	Site Inspection
SVE	Soil Vapor Extraction
TAPP	Technical Assistance for Public Participation
VA	Virginia
VDEQ	Virginia Department of Environmental Quality

Acronym	Definition
VI	Vapor Intrusion

PHASE TRANSLATION TABLE

CERCLA Phase	RCRA Phase	RCRA UST Phase
Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
Remedial Design (RD)	Design (DES)	Design (DES)
Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
Remedial Action (Operations) (RA(O))	Corrective Measures Implementation (Operations) (CMI(O))	Implementation (Operations) (IMP(O))
Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

PROGRAM SUMMARY

Number of Open Sites with Response Complete/Total Open IR Sites: 0/3

Number of Open Sites with Response Complete/Total Open MR Sites: 0/0

Number of Open Sites with Response Complete/Total Open CC Sites: 0/0

SITE-LEVEL INFORMATION

51375.1001_FMY-01_OLD DRY CLEANING PLANT-SVE & GW R

Env Site ID: FMY-01

Cleanup Site: OLD DRY CLEANING PLANT-SVE & GW R

Alias: FMY-01

Regulatory Driver: CERCLA

RIP Date: 9/2/2026

RC Date: 9/30/2055

RC Reason: Not assigned

SC Date: 9/30/2055

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: High

MRSPP: N/A

Phase	Start	End
PA:	11/15/1990	1/15/1992
SI:	11/15/1990	1/15/1992
RI/FS:	1/15/1992	2/1/2025
RD:	9/26/2025	2/1/2026
IRA:	1/15/1994	1/15/1996
RA(C):	3/1/2025	9/1/2026
RA(O):	9/2/2026	9/30/2055
LTM:	- -	- -

Site Narrative: FMY-01 site is a combination of releases associated with former post exchange (PX) Dry Cleaner (chlorinated solvents) and former PX Gas Station (petroleum hydrocarbons). These releases had impacted soil and created a commingled groundwater plume. Soil investigations were initiated in the 1990s and groundwater investigations have been performed since 1991. A soil vapor extraction (SVE) system was operated from 1993 to 1997 to remediate soil. Contaminated soils were excavated and disposed of in 1996 and 2001, prior to construction activities. From 2010 through 2013, a groundwater remediation pilot study was conducted to investigate the effectiveness of bio-stimulation and bioaugmentation. Vapor intrusion (VI) investigations were conducted on Buildings 447 and 468 in 2013 and 2015. Soil and VI data were collected in 2015, and the results indicated that the data quality objectives for soil and VI were achieved. An assessment of the SVE system was conducted in 2015 and the SVE system was abandoned in 2016. Supplemental data was still needed to define the extent of groundwater contamination. Between 2015 and 2016, five new groundwater monitoring wells were installed, and semiannual monitoring was conducted. The groundwater data do not indicate off-site migration. Two rounds of sub-slab sampling were conducted at the Cody Child Development Center (CDC) to assess if there was any unacceptable risk due to VI. No compounds were reported above the project action limits, with the exception of acrolein, which was observed at levels similar to what is observed in typical indoor air and ambient air. It was decided (with concurrence from stakeholders) that indoor air sampling was not warranted. Four shallow wells were installed and sampled in 2016 to determine if a nearby former landfill was an additional source. The results from this sampling event did not indicate that the landfill is contributing contaminants to the shallow groundwater. VDEQ provided concurrence to the remedial investigation report in March 2018, and the feasibility study (FS) is in progress. Cleanup and Exit Strategy- With the FS in draft form, it is assumed that the preferred remedy will be fractured enhanced soil vapor extraction, fractured enhanced air sparging, fractured enhanced in situ chemical reduction, monitored natural attenuation, land use controls, and five-year reviews.

51375.1002_FMY-02_CARPENTER ROAD LANDFILL

Env Site ID: FMY-02

Cleanup Site: CARPENTER ROAD LANDFILL

Alias: FMY-02

Regulatory Driver: CERCLA

RIP Date: 02/1/2025

RC Date: 02/1/2025

RC Reason: Not assigned

SC Date: 02/2/2025

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	3/15/1990	9/15/1990
SI:	12/15/1991	7/15/1992
RI/FS:	9/15/2016	2/1/2025
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: FMY-02 Site is the former Carpenter Road Landfill, located to the northwest of Building 483. An initial Installation Restoration Program study was completed in 1992 on the former Carpenter Road Landfill which determined that no cleanup was required. Analytical sampling data from 2015 and 2016 sampling events for site FMY-01 indicated unusual results for well D-10, which is near the Cody CDC. Well D-10 was installed in 2015 in an attempt to establish the downgradient extent of the FMY-01 plume. These unusual results could potentially be attributed to a different source than FMY-01. Historical document review indicated the presence of the former Carpenter Road Landfill near the CDC. A sampling program was designed to assess if there was any unacceptable risk to the occupants of the CDC due to vapor intrusion, as well as to assess if there was any contribution from the landfill to the groundwater well where the unusual results were observed. FMY-02 was reopened to conduct the sampling in an expedited manner. Two rounds of sub-slab sampling were conducted at the CDC to assess if there was any unacceptable risk due to VI. These samples were analyzed for a suite of volatile organic compounds and the results were screened against very conservative Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) screening levels. All constituents that were analyzed came back at concentrations below the CERCLA screening levels, with the exception of acrolein. The levels of acrolein that were observed in the sub-slab samples are similar to what is commonly observed in ambient air. It was decided (with concurrence from stakeholders) that indoor air sampling was not warranted. Four shallow wells were also installed in 2016 to determine if the former Carpenter Road Landfill was contributing to the contamination. The shallow groundwater wells were sampled in November 2016. The results from this sampling event did not indicate that the landfill is contributing trichloroethylene, benzene, or other contaminants to the shallow groundwater. Cleanup and Exit Strategy- It is expected that this site will be closed with a no further action record of decision (ROD). The remedy for this site will be included in a joint ROD with 51375.1001.

51375.1009_FMY-08_PFAS

Env Site ID: FMY-08
Cleanup Site: PFAS
Alias: #
Regulatory Driver: CERCLA
RIP Date: 9/20/2030
RC Date: 9/20/2030
RC Reason: Not assigned
SC Date: 9/20/2030
Program: ENV Restoration, Army
Subprogram: IR
NPL Status: No
Hazardous Ranking Score: 0
RRSE:
MRSPP: N/A

Phase	Start	End
PA:	5/21/2018	6/15/2020
SI:	6/16/2020	8/1/2022
RI/FS:	10/1/2022	9/20/2030
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: Per direction from Deputy Chief of Staff G-9, site created to account for all per- and polyfluoroalkyl substances (PFAS) costs at the installation. Since then, the JBMHH CERCLA PFAS PA/SI was finalized in September 2022. The PA identified 4 areas of potential interest (AOPI) that were sampled in the SI. Samples were collected and results were compared to risk-based screening levels calculated by the Office of the Secretary of Defense (OSD) for PFOS and PFOA (Memo dated 24 Aug 2023, Subject: Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program). PFOS and/or PFOA were present at all 4 AOPIs at concentrations greater than the risk-based screening levels. In accordance with DoD policy, these 4 sites were identified as warranting further study in a CERCLA remedial investigation (RI). This site (FMY-08_PFAS) is being converted to an AOPI specific site (Current Fire Station) but will still be used to account for all PFAS costs at the installation. The Current Fire Station is one of the 4 AOPIs that exceeded OSD RSLs. Empty 5-gallon pails were stored at the end of the fire station and were used inside the fire station and along the fire station driveways to transfer AFFF concentrate into and out of the fire trucks. Occasional testing of AFFF apparatuses was reportedly conducted on the fire station driveways. PFOS (530 ng/l) and PFOA (120 ng/l) were detected in groundwater at this AOPI in excess of OSD screening levels. The 4 AOPIs have been included in the PFAS RI/FS that is currently underway.

SITE SUMMARY

SITE CLOSEOUT SUMMARY

CRL ID	Site Name	Site Closeout Date
51375.1003	FMY-03_OLD DEBRIS LANDFILLS (3)	9/30/1990
51375.1004	FMY-04_OLD AFES SERVICE STATION - VAPOR	8/31/2001
51375.1005	FMY-05_BOILER PLANT AREA	8/31/1992
51375.1006	FMY-06_MOTOR POOL (BLDG 209)	5/31/1995
51375.1007	FMY-07_NIKE SITE 93, OLNEY, MD	7/31/1998
51375.1008	FMY-001-R-01_Ammo in Sewer	12/31/2009

COMMUNITY INVOLVEMENT

Community Involvement Plan (Date Last Reviewed):	8/15/2016
Technical Review Committee Establishment Date:	N/A
Restoration Advisory Board (RAB) Establishment Date:	N/A
RAB Adjournment Date:	N/A
RAB Adjournment Reason:	N/A
Reasons for Not Establishing RAB:	No sufficient, sustained community interest in a RAB has been expressed by the community
RAB Date of Solicitation from Community:	02/28/2023
RAB Results of Solicitation:	N/A
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A
Administrative Record Location:	Joint Base Myer Henderson-Hall - 106 Stewart Road Building 106; 111 Stewart Road Building 321, Fort Myer, VA 22211
Information Repository Location:	Arlington Public Library (Central Branch) - 1015 N Quincy St, Arlington, VA 22201

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Status	Review Type	Start Date	End Date	Plans Narrative	Actions Narrative	Results Narrative
Future	FYR	9/25/2029	9/25/2030	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A