

FORT LEONARD WOOD

Army Cleanup Program

Installation Action Plan Final

June 2024

TABLE OF CONTENTS

STATEMENT OF PURPOSE	4
INSTALLATION OVERVIEW	5
ACRONYMS	6
PHASE TRANSLATION TABLE	9
PROGRAM SUMMARY	10
SITE-LEVEL INFORMATION	11
29995.1002_FLW-002_LANDFILL 2	12
29995.1003_FLW-003_LANDFILL 3	13
29995.1006_FLW-006_LANDFILL 4 Ballfield/Running Tra	14
29995.1007_FLW-007_LANDFILL 5	15
29995.1008_FLW-008_LANDFILL 6 - Rose Bowl.....	16
29995.1009_FLW-009_LANDFILL 7	17
29995.1010_FLW-010_LANDFILL 8 - Horse Stables I	18
29995.1012_FLW-012_LANDFILL 10A	19
29995.1017_FLW-017_LANDFILL 12	20
29995.1019_FLW-019_LANDFILL 14	21
29995.1028_FLW-028_DPW OLD FIRE TRAINING AREA	22
29995.1044_FLW-035_DEH USED TRANSFORMER AREA 2222,2	23
29995.1046_FLW-037_DEH OLD PESTICIDE STORAGE AREA B.....	24
29995.1064_FLW-056_FLW DRY CLEANING SHOP	25
29995.1067_FLW-059_MUNICIPAL LANDFILL SO OF ROUBIDO	26
29995.1068_FLW-060_LANDFILL ON A BRANCH TO BIG PINE	27
29995.1084_CCFLW-003_Building 2350 - Former Print S.....	28
29995.1086_CCFLW-001_Post Laundry - Building 2352.....	29
29995.1087_CCFLW-007_AST & OWS North of Bldng 2230	30
29995.1089_CCFLW-006_UST - Building 745	31
29995.1090_CCFLW-008_UST at LORA Bldng 560.....	32
29995.1092_CCFLW-011_LANDFILL E. OF SPORTSMAN CTR	33
29995.1093_FLW-061_PFAS	34
29995.1095_FLW-062_TA256 Landfill Pond	35
29995.1101_CCFLW-010_USTs at Building 5265.....	36
29995.1069_FTLWD-001-R-01_50-ACRE SITE - PARCEL 8	37
29995.1070_FTLWD-006-R-01_Northeast SAR Complex-TD	38
29995.1071_FTLWD-005-R-01_Northeast Small Arms Rang	39
29995.1072_FTLWD-004-R-01_NORTH GRENADE RANGE	40
29995.1073_FTLWD-003-R-01_Machine Gun Range.....	41
29995.1079_FTLWD-010-R-01_Range 66-Live Mine Demo a	42
29995.1082_FTLWD-013-R-01_Mock Village Range (Vietn	43
29995.1102_FTLWD-003-R-02_MRS 2 MEC	44
29995.1103_FTLWD-003-R-03_NFA_NORTH.....	45
29995.1104_FTLWD-003-R-04_NFA-WEST.....	46
29995.1105_FTLWD-003-R-05_NFA-EAST.....	47

29995.1106_FTLWD-003-R-06_MRS 1 MC..... 48

SITE SUMMARY49

SITE CLOSEOUT SUMMARY 50

COMMUNITY INVOLVEMENT 52

FIVE-YEAR / PERIODIC REVIEW SUMMARY 53

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: FORT LEONARD WOOD

Installation City: FORT LEONARD WOOD

Installation County: PULASKI

Installation State: MISSOURI

Regulatory Participation - Federal: N/A

Regulatory Participation - State: Missouri Department of Natural Resources, Federal Facilities

ACRONYMS

Acronym	Definition
AUL	Area Use Limitations
C&D	Construction and Demolition
CAP	Corrective Action Plan
CC	Compliance-Related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operations)
CMS	Corrective Measures Study
CMUA	Concentrated Munitions Use Area
COC	Contaminant of Concern
CPMR	Completion and Performance Monitoring Report
CRL	Cleanup Restoration & Liabilities
cy	cubic yard
DCS	Deputy Chief of Staff
DD	Decision Document
DES	Design
DPW	Directorate of Public Works
DRMO	Defense Reutilization Marketing Office
DRO	Diesel Range Organics
DTL	Default Target Level
ENV	Environment
ESI	Expanded Site Inspection
FS	Feasibility Study
FY	Fiscal Year
FYR	Five-Year Review
IAP	Installation Action Plan
IC	Institutional Control
ID	Identification
IM	Interim Measures
IMP(C)	Implementation (Construction)
IMP(O)	Implementation (Operations)
INV	Investigation
IR	Installation Restoration
IRA	Interim Remedial Action
ISC	Initial Site Characterization
LORA	Lake of the Ozarks Recreational Area
LTM	Long-Term Management

Acronym	Definition
LUC	Land Use Control
MC	Munitions Constituent
MCL	Maximum Contaminant Level
MD	Munitions Debris
MDNR	Missouri Department of Natural Resources
MEC	Munitions and Explosives of Concern
mm	millimeter
MR	Munitions Response
MRBCA	Missouri Risk Based Corrective Action
MRS	Munitions Response Site
MRSP	Munitions Response Site Prioritization Protocol
NFA	No Further Action
NPL	National Priorities List
OSD	Office of the Secretary of Defense
OWS	Oil/Water Separator
PA	Preliminary Assessment
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethylene (also Perchloroethylene)
PFAS	Per- and Polyfluoroalkyl Substances
PP	Proposed Plan
PR	Periodic Review
RAB	Restoration Advisory Board
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAC	Risk Assessment Code
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy-In-Place
RRSE	Relative Risk Site Evaluation
SC	Site Closeout
SI	Site Inspection
SL	Screening Level
STP	Sewage Treatment Plant
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit

Acronym	Definition
TAPP	Technical Assistance for Public Participation
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
UST	Underground Storage Tank
VOC	Volatile Organic Compound

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: 6/25

Number of Open Sites with Response Complete/Total Open MR Sites: 0/12

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

SITE-LEVEL INFORMATION

29995.1002_FLW-002_LANDFILL 2

Env Site ID: FLW-002

Cleanup Site: LANDFILL 2

Alias: FLW-002

Regulatory Driver: CERCLA

RIP Date: 2/28/2010

RC Date: 2/28/2010

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	10/31/1994	11/30/1995
RI/FS:	1/31/1997	4/30/2009
RD:	9/30/2007	6/30/2009
IRA:	--	--
RA(C):	9/30/2007	2/28/2010
RA(O):	--	--
LTM:	3/31/2010	9/30/2054

Site Narrative: Site FLW-002 referred to as Landfill No. 2 Solid Waste Management Unit (SWMU) 32 is a 34.3-acre inactive soil-covered sanitary landfill that operated between 1981 and 1985. In 1978 Missouri Department of Natural Resources (MDNR) permitted disposal of sanitary wastes sludge from the print shop and dry-cleaning wastes at the site. The landfill is currently closed and exposed waste has not been identified. Contaminants of concern (COC) at FLW-002 are volatile organic compounds (VOC) in groundwater soil and surface water. A preliminary assessment (PA)/site investigation (SI) was conducted between 1987 and 1995; results from groundwater samples sampled in 1988 from two shallow wells and one seep identified inorganic constituents that exceeded background concentrations. Additional groundwater results from three bedrock-monitoring well samples collected in 1990 did not identify exceedances. During the 1997 remedial investigation (RI) concentrations of vinyl chloride were identified in groundwater above maximum contaminant level (MCL). No significant COCs were detected in results from soil and sediment samples collected. Soil gas samples from the southeastern surface of the landfill identified the presence of chlorinated solvents. In August 2000 the landfill surface was repaired to comply with the two-foot thick soil cover required in the MDNR permit closure. The Monitoring Well Sampling Program ended in the fall of 2003. Additional field work was required to complete the 2004 RI/feasibility study (FS) including an evaluation of cover material. A 2006 comprehensive RI included groundwater sampling from new and existing wells; seep, sediment, soil, soil gas, and surface water sampling; and an evaluation of the landfill cover. A human health risk assessment found that estimated current and future cancer and non-cancer risks associated with COCs at FLW-002 were within acceptable levels; the COCs also do not pose a significant risk to ecological receptors. The decision document (DD) was signed in 2009. Cleanup / Exit Strategy - The long-term management (LTM) phase for the site includes groundwater monitoring, landfill cover maintenance, five-year reviews (FYR), and land use control (LUC) inspections and will continue indefinitely. 2020 Per- and Polyfluoroalkyl Substances (PFAS) SI sampling at this site that is covered by FLW-061 had non detect results in soils and groundwater.

29995.1003_FLW-003_LANDFILL 3

Env Site ID: FLW-003

Cleanup Site: LANDFILL 3

Alias: FLW-003

Regulatory Driver: CERCLA

RIP Date: 2/28/2010

RC Date: 2/28/2010

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	11/15/1994	9/15/1995
RI/FS:	3/15/1998	3/15/2009
RD:	9/30/2007	6/30/2009
IRA:	--	--
RA(C):	9/30/2007	2/28/2010
RA(O):	--	--
LTM:	3/31/2010	9/30/2054

Site Narrative: Site FLW-003 referred to as Landfill 3 is an 82-acre inactive trench and fill sanitary landfill for municipal waste that operated between 1965 and 1978. The site incorporates FLW-004 and FLW-005 which were combined in 2000. The surface of the landfill is vegetated with grass and sludge from the sewage treatment plant (STP) is applied to promote vegetation growth. COCs at FLW-003 are VOCs in groundwater, soil, and surface water. A PA/SI was completed in 1995. No significant COCs were detected in soil streambed and seep samples but vinyl chloride and benzene were identified above the MCL in leachate samples collected. During the 1998 RI additional wells were installed; results from samples identified inorganic constituents exceeding background levels and VOCs exceeding MCLs. During monitoring well drilling activities large voids were encountered; a dye trace study was conducted in fiscal year (FY) 04 to investigate the void. A 2006 comprehensive RI included groundwater sampling; seep, sediment, soil, soil gas, and surface water sampling; and an evaluation of the landfill cover. A human health risk assessment found that nearly all estimated current and future cancer and non-cancer risks associated with COCs at FLW-003 were within acceptable levels; exceedance of the acceptable level was associated with the cumulative non-cancer risk for base personnel due to elevated iron levels in soil. COCs do not pose a significant risk to ecological receptors. The DD for the FLW-003 was signed in 2009. Cleanup / Exit Strategy - The LTM phase for the site includes groundwater monitoring, landfill cover maintenance, FYRs, and LUC inspections will continue indefinitely. PFAS was detected in soil and groundwater samples during the 2020 SI at this site and is covered by FLW-061.

29995.1006_FLW-006_LANDFILL 4 Ballfield/Running Tra

Env Site ID: FLW-006

Cleanup Site: LANDFILL 4 Ballfield/Running Tra

Alias: FLW-006

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1997	9/30/2003
RI/FS:	9/30/2006	3/15/2016
RD:	9/30/2018	5/31/2021
IRA:	1/1/2013	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: Site FLW-006 Landfill 4 (Ballfield/Running Trail) is a closed sanitary landfill that operated from an unknown initial date until 1950. It is located northeast of the intersection of Constitution and Kansas Roads in the Cantonment. The landfill occupied 9.3 acres. Presently the landfill is completely covered with vegetation and no exposed trash is evident. The installation conducted sampling of three leachate seeps stream sediments and surface water up and down gradient of the landfill during FY02. Vinyl chloride was detected (1.2 parts per billion) in only one of the leachate samples from a wet weather seep. A data summary report that summarized investigation results was submitted in FY05. An RI including a groundwater investigation and FS are complete. Trichloroethylene (TCE) above risk-based threshold level and MCLs in groundwater is a driver for remediation. The DD was signed in FY16 and specified a remedy of LTM, LUCs, groundwater and surface water monitoring, FYRs, and landfill cover improvements. Cleanup / Exit Strategy - FLW-006 is currently in the remedial action (construction) (RA(C)) phase for landfill cover improvements and interim remedial action phase (IRA) for annual groundwater monitoring, annual cover, LUC inspections, mowing, and erosion control. The IRA phase will end at the completion of RA(C) and LTM will start. LTM will consist of annual groundwater monitoring, annual cover inspections, mowing, erosion control, FYRs, and will continue indefinitely.

29995.1007_FLW-007_LANDFILL 5

Env Site ID: FLW-007

Cleanup Site: LANDFILL 5

Alias: FLW-007

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	3/15/2012	11/18/2019
RD:	11/1/2019	5/31/2021
IRA:	1/1/2018	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: Landfill 5 is a former construction and demolition (C&D) debris landfill that operated between 1942 and 1950. It is located south of First Street in the east central cantonment. The landfill occupied 6.9 acres. Presently the landfill is partially covered with asphalt and served as a storage lot for Conex containers before they were moved in preparation of RA-(C) (lot empty as of Oct. 1, 2020). The unpaved portions are completely vegetated. An RI was completed in 2015 and a FS was completed in 2016. A proposed plan (PP) was created in 2016 outlining three alternatives. A DD was signed in Nov. 18, 2019 and the selected remedy was LUCs, landfill cover improvements, FYRs, and long-term monitoring. Cleanup / Exit Strategy - IRA will conclude upon completion of the RA(C) and LTM will start. Cap to be emplaced due to ecological risk to terrestrial biota. LTM will consist of annual groundwater monitoring, annual cover inspections, mowing, erosion control, FYRs, and will continue indefinitely.

29995.1008_FLW-008_LANDFILL 6 - Rose Bowl

Env Site ID: FLW-008

Cleanup Site: LANDFILL 6 - Rose Bowl

Alias: FLW-008

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	9/15/2006	3/15/2016
RD:	9/30/2018	5/30/2021
IRA:	1/31/1988	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: FLW-008 or Landfill 6 (SWMU 38) is a closed sanitary landfill that operated between 1942 and 1950. The landfill is southeast of the veterinary office and southeast of the intersection of Minnesota Avenue and Gas Street. It occupies 7.5 acres. The area is now completely covered with vegetation. A RI/FS was completed in 2007. Lead in Groundwater exceeded MCLs, tetrachloroethylene (PCE) exceeded default target level (DTL) but not screening level (SL) in soils, carbon tetrachloride exceeded DTL but not SL in groundwater. A DD was signed in 2016 the selected remedy consisting of LUCs, landfill cover improvements, FYRs, and long-term monitoring. Cleanup / Exit Strategy - FLW-008 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring, annual cover, and LUC inspections, mowing, and erosion control. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover inspections, mowing, erosion control, FYRs, and will continue indefinitely.

29995.1009_FLW-009_LANDFILL 7

Env Site ID: FLW-009

Cleanup Site: LANDFILL 7

Alias: FLW-009

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	9/15/2012	11/18/2019
RD:	10/1/2019	5/31/2021
IRA:	1/1/2018	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: FLW-009 (Landfill 7) is a closed C&D debris landfill that operated between 1942 and 1950. FLW-009 is located in the northeast part of Fort Leonard Wood south of First Street/FLW-010. The footprint of the disturbed area occupies 2.4 acres. Construction debris and household garbage but no hazardous waste were reportedly deposited in the landfill. An RI was completed in 2008 and a supplemental RI was completed in 2013. One VOC (methyl chloride), metals, and pesticides exceeded surface soil SLs. A DD was signed on Nov. 18, 2019. Cleanup / Exit Strategy - FLW-009 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring, annual cover and LUC inspections, mowing, and erosion control. The IRA phase will conclude at the completion of RA(C) and LTM will start. LTM will consist of annual groundwater monitoring, annual cover and LUC inspections, mowing, erosion control, FYRs, and will continue indefinitely.

29995.1010_FLW-010_LANDFILL 8 - Horse Stables I

Env Site ID: FLW-010

Cleanup Site: LANDFILL 8 - Horse Stables I

Alias: FLW-010

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	12/15/2011	12/15/2015
RD:	9/30/2018	5/31/2021
IRA:	1/31/1988	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: FLW-010 or Landfill 8 is a closed C&D landfill that was operated between 1942 and 1980. Construction debris and open burning residues were deposited in the landfill. It is southeast of the intersection of roads FLW-008 and FLW EE and occupies 10.5 acres. This site is completely vegetated. A RI was completed in 2008. Manganese exceeded the DTL in groundwater and metals exceeded the SL in soil. A DD was signed in 2015 using the presumptive remedy approach for military landfills; the selected remedy consists of LUCs, landfill cover improvements, FYRs, and long-term monitoring. Cleanup / Exit Strategy - FLW-010 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring annual cover and LUC inspections mowing and erosion control. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover inspections, mowing, erosion control, FYRs, and will continue indefinitely. PFAS was detected in soils during the 2020 SI; groundwater will be sampled during the planned RI at this site and is covered by FLW-061.

29995.1012_FLW-012_LANDFILL 10A

Env Site ID: FLW-012

Cleanup Site: LANDFILL 10A

Alias: FLW-012

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1997	12/31/1998
RI/FS:	9/30/2006	4/15/2015
RD:	9/30/2018	5/31/2021
IRA:	7/31/2008	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: FLW-012 comprises five STP landfills that were formerly administered as five separate restoration sites - Landfill 10A (formerly FLW-012) Landfill 10B (formerly FLW-013) Landfill 11A (formerly FLW-014) Landfill 11B (formerly FLW-015) and Landfill 11C (formerly FLW-016). The landfills are now managed as a single site (FLW-012) because of their proximity and similarities. The landfills are located within an ephemeral stream valley. The ground surface of each landfill is fairly flat; however, the ground surface along the edge of the filled areas slopes steeply along the ephemeral stream channels. The RI/FS was completed in 2009 and semi-volatile organic compounds (SVOC), metals, and pesticides were found to be the primary COCs in soils; aluminum, lead, and dieldrin in surface waters; and 11 metals and chloroform in groundwater. A DD was signed on 15 April 2015. Cleanup / Exit Strategy - FLW-012 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring, annual cover and LUC inspections, mowing, and erosion control. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover and LUCs inspections, mowing, erosion control, FYRs, and will continue indefinitely. PFAS was detected in soil and groundwater sampling during the 2020 SI at this site and is covered by FLW-061.

29995.1017_FLW-017_LANDFILL 12

Env Site ID: FLW-017

Cleanup Site: LANDFILL 12

Alias: FLW-017

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	9/30/2011	9/30/2012
RD:	9/30/2018	5/31/2021
IRA:	1/1/2013	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: FLW-017 or Landfill No. 12 is a closed sanitary landfill located in the northwest part of Fort Leonard Wood that reportedly operated between 1958 and 1961; however, in a letter to MDNR dated March 14 2003 it was reported that FLW-017 was operational from 1965 until approximately 1971. Household garbage was disposed in the landfill which occupies roughly seven acres. An RI/FS was completed in 2008 and a DD was signed on Sept. 29, 2015 which specifies a remedy of long-term monitoring, LUCs, FYRs, and landfill cover improvements. Arsenic exceeded the human health risk in groundwater and metals pesticide and 2,4 dinitrophenol exceeded the ecological risk in soils. Cleanup / Exit Strategy - FLW-017 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring, annual cover, and LUC inspections mowing and erosion control. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover and LUCs inspections, mowing, erosion control, FYRs, and will continue indefinitely. PFAS was detected in the groundwater during the 2020 SI at this site and is covered by FLW-061.

29995.1019_FLW-019_LANDFILL 14

Env Site ID: FLW-019

Cleanup Site: LANDFILL 14

Alias: FLW-019

Regulatory Driver: CERCLA

RIP Date: 7/1/2026

RC Date: 7/1/2026

RC Reason: Not assigned

SC Date: 9/30/2055

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	1/1/2016	11/4/2020
RD:	11/5/2020	3/30/2025
IRA:	7/31/2008	7/1/2026
RA(C):	3/31/2025	7/1/2026
RA(O):	--	--
LTM:	7/2/2026	9/30/2055

Site Narrative: FLW-019 Landfill 14 is a former C&D landfill operated from an unknown initial date to the late-1950s. The site is located east of Gas Street on the northeast part of the installation. Site CCLFW-002 and the active Defense Reutilization Marketing Office (DRMO) yard are located immediately west of the site. The area was previously used as a salvage yard and storage area. An RI was completed in 2018 and the DD was completed on Nov. 4, 2020. The remedy chosen was LUCs with landfill cover enhancement, spot debris removal, monitoring of both surface water and groundwater, and FYRs. Ecological risk for polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons, and metals in soils; lead in sediment. Cleanup / Exit Strategy - An IRA is also under contract; and the active ongoing components include annual landfill cover inspections, semiannual cover mowing events, and cover repairs as needed. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover and LUCs inspections, mowing, erosion control, FYRs, and will continue indefinitely.

29995.1028_FLW-028_DPW OLD FIRE TRAINING AREA

Env Site ID: FLW-028

Cleanup Site: DPW OLD FIRE TRAINING AREA

Alias: FLW-028

Regulatory Driver: CERCLA

RIP Date: 9/30/2029

RC Date: 9/30/2029

RC Reason: Not assigned

SC Date: 9/30/2029

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	10/31/1994	9/30/1995
RI/FS:	8/1/2018	9/30/2029
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: This fire training area was used to train Fort Leonard Wood firefighters between 1972 and 1988. The area is located in the central part of the facility south of Forney Airfield and is roughly 100 feet by 400 feet. Training occurred twice a year and involved the ignition of approximately 150 gallons of aviation fuel for each exercise. A concrete pad with containment berms was used to contain the burning fuel and the pad has since been removed leaving a flat vegetated area. The area was partially paved in the late-1990s and is currently used as a vehicle skid pad for military police training. It is located within the boundaries of an active training area, TA 210. Sampling has indicated that there are low levels of benzene, toluene, ethylbenzene, and xylene contamination present. An RI was completed and DD drafted in 2011; however the DD was never signed and finalized. A supplemental RI was completed in 2021 a PP through DD is currently underway. Cleanup / Exit Strategy - The results of the RI indicate that no further action (NFA) will be warranted. 2020 PFAS SI preliminary results for soils indicate NFA will also be warranted, groundwater sampling will be conducted during the PFAS RI at this site and is covered by FLW-061.

29995.1044_FLW-035_DEH USED TRANSFORMER AREA 2222,2

Env Site ID: FLW-035

Cleanup Site: DEH USED TRANSFORMER AREA 2222,2

Alias: FLW-035

Regulatory Driver: TSCA

RIP Date: 6/30/2025

RC Date: 6/30/2025

RC Reason: Not assigned

SC Date: 7/1/2025

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	12/31/1987	7/31/1988
RI/FS:	6/30/2018	6/30/2025
RD:	--	--
IRA:	5/31/1993	6/30/2025
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: FLW-035 Directorate of Engineering and Housing Used Transformer Area 2222; 2221 is located in the east central part of the cantonment area at Fort Leonard Wood. FLW-035 consists of two separate locations. One area is a loading dock located between Buildings 2221 and 2222 and the second area is behind Building 2224. Both areas are inside the Directorate of Public Works (DPW) yard in the northeastern part of the post. An IRA was conducted to address PCB spills and included cleaning the area; remediation of contaminated soil and removal of concrete blocks was completed in 1983. Cleanup / Exit Strategy - Interim land use controls were established to ensure protectiveness during the RI phase. A supplemental RI to DD is underway and no further action is the anticipated outcome due to the successful interim removal action.

29995.1046_FLW-037_DEH OLD PESTICIDE STORAGE AREA B

Env Site ID: FLW-037

Cleanup Site: DEH OLD PESTICIDE STORAGE AREA B

Alias: FLW-037

Regulatory Driver: CERCLA

RIP Date: 8/24/2025

RC Date: 8/24/2025

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	12/31/1987	7/31/1988
SI:	10/31/1994	9/30/1995
RI/FS:	10/31/1996	8/22/2025
RD:	--	--
IRA:	--	--
RA(C):	8/23/2025	8/24/2025
RA(O):	--	--
LTM:	8/25/2025	9/30/2054

Site Narrative: FLW-037 the Old Pesticide Storage Area is located in the east central part of the cantonment area at Fort Leonard Wood. FLW-037 was formerly used for pesticide storage and mixing. The footprint of Building 2206 was roughly 73 by 21 feet. The building consisted of a storage room a mixing room and two loading docks located along the eastern side of the building. Floor drains were connected to a sanitary sewer that outfalls to an ephemeral drainage. The building has been demolished and the concrete floor slab and floor drains have been removed. The site is paved and is used as a parking lot. The RI is underway. Cleanup / Exit Strategy - Updated 2022 USEPA regional SLs for pesticides; dichlorodiphenyldichloroethylene, dichlorodiphenyldichloroethane, and dichlorodiphenyltrichloroethane all were now exceeding thresholds for NFA and site will potentially require LTM which include LUCs and 5 year-reviews and will continue indefinitely.

29995.1064_FLW-056_FLW DRY CLEANING SHOP

Env Site ID: FLW-056

Cleanup Site: FLW DRY CLEANING SHOP

Alias: FLW-056

Regulatory Driver: CERCLA

RIP Date: 9/30/2007

RC Date: 9/30/2007

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	2/29/1992	9/30/1992
SI:	4/30/1998	8/31/1999
RI/FS:	8/31/1999	9/30/2006
RD:	9/30/2006	2/28/2007
IRA:	9/30/2001	6/30/2005
RA(C):	9/30/2006	9/30/2007
RA(O):	--	--
LTM:	9/30/2007	9/30/2054

Site Narrative: Site FLW-056 is the site of a former dry-cleaning and laundry facility (Building 2300) that was in operation from the mid-1940s until 1981. The site is approximately one acre and is located at the southeast corner of the intersection of First Street and Louisiana Avenue. The building was demolished in 1987. The site is covered with grass and slopes slightly to the north. The soil and underlying groundwater is contaminated with chlorinated solvents. The former facility was used only as a dry-cleaning facility using first TCE and then PCE. An RI/FS was completed in 2004. The DD was approved in September 2006. The site has achieved remedy-in-place (RIP). A separate investigation of the adjacent post laundry facility Building 2352, CCFLW-001, conducted in January 2005 indicated that site may have been a contributory source. Cleanup / Exit Strategy - The selected remedy for FLW-056 per the 2006 DD is LUCs and long-term monitoring with soil removal. The active ongoing components of the remedy include semi-annual groundwater monitoring, and LUC inspections. FLW-056 is currently under the LTM phase and FYRs, semi-annual groundwater monitoring, and LUC inspections are being conducted and will continue indefinitely.

29995.1067_FLW-059_MUNICIPAL LANDFILL SO OF ROUBIDO

Env Site ID: FLW-059

Cleanup Site: MUNICIPAL LANDFILL SO OF ROUBIDO

Alias: FLW-059

Regulatory Driver: CERCLA

RIP Date: 9/30/2025

RC Date: 9/30/2025

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Medium

MRSPP: N/A

Phase	Start	End
PA:	10/31/1994	9/30/1995
SI:	12/31/1997	3/31/2004
RI/FS:	4/30/2004	4/30/2012
RD:	9/30/2018	4/15/2022
IRA:	3/31/2011	9/30/2025
RA(C):	4/22/2022	9/30/2025
RA(O):	--	--
LTM:	10/1/2025	9/30/2054

Site Narrative: FLW-059 comprises a group of solid waste trench and fill landfills east of Roubidoux Creek in the northwestern part of Fort Leonard Wood that operated from the 1950s to the early 1960s. Based on historical aerial photographs and previous investigations three landfills have been identified within the restoration site boundary totaling 12.5 acres. A RI was completed in 2007 and the DD was signed on 09 March 2016. Ten metals and one SVOC (2,4-dinitrophenol) exceeded DTLs for ecological risk. Cleanup / Exit Strategy - FLW-059 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring, annual cover and LUC inspections, mowing, and erosion control. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover and LUCs inspections, mowing, erosion control, FYRs, and will continue indefinitely. PFAS did not exceed Office of the Secretary of Defense (OSD) risk levels in soils or groundwater during the SI sampling at this site and is covered by FLW-061.

29995.1068_FLW-060_LANDFILL ON A BRANCH TO BIG PINE

Env Site ID: FLW-060

Cleanup Site: LANDFILL ON A BRANCH TO BIG PINE

Alias: FLW-060

Regulatory Driver: CERCLA

RIP Date: 9/29/2024

RC Date: 9/29/2024

RC Reason: Not assigned

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	10/31/1994	9/30/1995
SI:	10/31/1995	3/31/2004
RI/FS:	9/30/2006	4/30/2012
RD:	9/30/2018	5/31/2021
IRA:	3/31/2011	9/29/2024
RA(C):	6/1/2021	9/29/2024
RA(O):	--	--
LTM:	9/30/2024	9/30/2054

Site Narrative: FLW-060 also known as the Landfill on a Branch to Big Piney is a closed sanitary landfill at Fort Leonard Wood. The six-acre site is located in the northeastern part of the post south of road FLW KA. The landfill was in operation starting approximately in 1955 to 1971 as shown in historical aerial photography. The landfill is suspected of containing household waste but there are no written documents to confirm. Also suspected, that waste was placed in an area-fill manner. The RI was complete in 2007 and the DD was signed on 09 March 2016. Benzene in soils and lead in sediments exceeded DTLs. Cleanup / Exit Strategy - FLW-060 is currently in the RA(C) phase for landfill cover improvements and the IRA phase for annual groundwater monitoring, annual cover and LUC inspections, mowing, and erosion control. IRA will complete at the end of the RA(C) phase and LTM will start. LTM will consist of annual groundwater monitoring, annual cover and LUCs inspections, mowing, erosion control, FYRs, and will continue indefinitely. PFAS did not exceed OSD risk levels in soils or groundwater during the 2020 SI sampling at this site and is covered by FLW-061.

29995.1084_CCFLW-003_Building 2350 - Former Print S

Env Site ID: CCFLW-003

Cleanup Site: Building 2350 - Former Print S

Alias: CC-FLW-003

Regulatory Driver: CERCLA

RIP Date: 11/4/2020

RC Date: 11/4/2020

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	3/31/1990	9/30/1992
SI:	2/28/2009	12/31/2011
RI/FS:	1/1/2015	11/4/2020
RD:	--	--
IRA:	--	--
RA(C):	11/4/2020	11/4/2020
RA(O):	--	--
LTM:	11/5/2020	9/30/2054

Site Narrative: CCFLW-003 Building 2350 was used as a print shop from before 1952 until at least 1982 but no later than 2004. Waste products from the photographic process were sent to the hospital at Fort Leonard Wood for silver extraction. Two solvents, PCE and methylene chloride, were reportedly used in the print shop to deglaze the printing equipment. In 2010 soil samples collected from the area around the building footprint contained VOCs polycyclic aromatic hydrocarbons and metals that exceeded screening criteria. After Building 2350 was demolished in early 2014 the building footprint has remained vacant and covered by grass. Cleanup / Exit Strategy - An RI was completed in 2018 and the DD was signed in 2020. The selected remedy includes institutional controls (IC) for soil vapor mitigation and FYRs. LTM will consist of soil vapor mitigation (when applicable), LUCs, and FYRs, and will continue indefinitely.

29995.1086_CCFLW-001_Post Laundry - Building 2352

Env Site ID: CCFLW-001

MRSPP: N/A

Cleanup Site: Post Laundry - Building 2352

Alias: CC-FLW-001

Regulatory Driver: CERCLA

RIP Date: 3/30/2032

RC Date: 3/30/2032

RC Reason: Not assigned

SC Date: 9/30/2061

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

Phase	Start	End
PA:	10/31/2004	3/31/2005
SI:	2/28/2005	3/31/2005
RI/FS:	11/1/2015	10/30/2026
RD:	11/1/2026	3/30/2029
IRA:	--	--
RA(C):	3/31/2029	3/30/2032
RA(O):	--	--
LTM:	4/1/2032	9/30/2061

Site Narrative: CCFLW-001 includes Building 2352 the former post laundry facility along Louisiana Avenue in the northeastern part of Fort Leonard Wood. It is north of CCLFW-003 the former print shop and south of FLW-056 the former dry-cleaning facility. CCFLW-001 began operation in 1981 and discontinued operation in 2013. Building 2352 was demolished in the summer of 2015 but the concrete building slab remains in place. The use of PCE in the dry-cleaning process at CCFLW-001 began in 1982 and is believed to be the only dry-cleaning solvent used inside Building 2352. An RI was performed in 2005 consisting of dye tracing smoke testing camera surveys and surface water and sediment sampling. A Final RI was completed in 2021 and a Final FS was completed in 2022. The FS evaluated soil remediation alternatives to address impacts to soil. It is expected that removal of contaminated soil will be conducted as part of RA(C). Groundwater beneath CCFLW-001 is monitored as part of LTM activities associated with FLW-056 (tetrachloroethene being the only COC in the groundwater). Therefore, groundwater was not directly investigated as part of the RI but used the investigation and long-term monitoring results of FLW-056. A PP and DD is currently underway. The PP is expected to be finalized during calendar year 2023 and the Final DD completed during calendar year 2024. Cleanup / Exit Strategy - Expected remedy will include LUCs and five-year reviews indefinitely.

29995.1087_CCFLW-007_AST & OWS North of Bldng 2230

Env Site ID: CCFLW-007

Cleanup Site: AST & OWS North of Bldng 2230

Alias: CCFLW007

Regulatory Driver: CERCLA

RIP Date: 11/4/2020

RC Date: 11/4/2020

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	7/31/2007	8/31/2007
SI:	3/31/2010	8/31/2012
RI/FS:	1/1/2015	11/4/2020
RD:	--	--
IRA:	--	--
RA(C):	11/4/2020	11/4/2020
RA(O):	--	--
LTM:	11/4/2020	9/30/2054

Site Narrative: CCLFW-007 is in the northeastern part of the post east of Ordnance Drive and Derek Ridge Road 320 feet north of Building 2330. The site is currently occupied by an equipment storage yard and is surrounded by a locked fence. CCFLW-007 includes a former oil/water separator (OWS), a former washrack, and a drain line connecting the washrack to the OWS. The washrack and OWS were constructed between 1986 and 1994 and were removed sometime between 2005 and 2008. An RI was completed in 2018 and DD signed in 2020. Cleanup / Exit Strategy - The selected remedy includes residential and groundwater LUCs for LTM phase. Total petroleum hydrocarbons (TPH) and diesel range organics (DRO) exceeded hazard index for human health in soils, TCE exceeded health index for human health in soil vapor. FYRs will also be required. LTM will continue indefinitely.

29995.1089_CCFLW-006_UST - Building 745

Env Site ID: CCFLW-006

Cleanup Site: UST - Building 745

Alias: CCFLW006

Regulatory Driver: CERCLA

RIP Date: 9/30/2030

RC Date: 9/30/2030

RC Reason: Not assigned

SC Date: 9/30/2059

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	3/31/2006	8/31/2006
SI:	4/30/2010	8/31/2012
RI/FS:	1/1/2016	8/13/2029
RD:	--	--
IRA:	10/1/2006	10/31/2006
RA(C):	8/14/2029	9/30/2030
RA(O):	--	--
LTM:	10/1/2030	9/30/2059

Site Narrative: CCFLW-006 is located in the north-central part of the post within the cantonment area north of West 12th Street between Colorado Avenue and Buckeye Avenue. The site is 48 feet wide and 60 feet long. Records indicate that the site once contained three 40000-gallon heating oil underground storage tanks (UST) that originally stored No. 6 fuel oil then No. 2 fuel oil. The USTs and associated piping were constructed of steel. The USTs were located to the west of Building 745 which was formerly a boiler plant. The steel pipes entered Building 745 through a concrete pipe chase. The USTs were removed in 2006. The Installation Restoration Plan site boundary extends 48 feet from east to west and 60 feet from north to southwest of Building 745 and represents the area disturbed as a result of the UST removal. Investigations were performed in 2010 and 2013 showing several exceedances of SLs for petroleum-related contaminants and PCBs. Due to the lack of petroleum products, it was decided that the site would best be regulated under CERCLA. The previously developed Corrective Action Plan (CAP) is undergoing transition to an RI/FS document. That will be followed by a PP and DD. Anticipated remedy includes concrete cover and monitoring. Cleanup / Exit Strategy - Site is anticipated to include LUCs and FYRs and will continue indefinitely.

29995.1090_CCFLW-008_UST at LORA Bldng 560

Env Site ID: CCFLW-008

Cleanup Site: UST at LORA Bldng 560

Alias: CCFLW008

Regulatory Driver: RCRA-I

RIP Date: 7/2/2020

RC Date: 6/30/2060

RC Reason: Not assigned

SC Date: 7/1/2060

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
ISC:	7/31/2009	8/31/2009
INV:	11/30/2011	8/31/2012
CAP:	8/31/2012	6/30/2020
DES:	--	--
IRA:	--	--
IMP(C):	6/30/2020	7/1/2020
IMP(O):	7/2/2020	6/30/2060
LTM:	--	--

Site Narrative: CCFLW-008 is located about 30 miles northwest of Fort Leonard Wood in Camden County Missouri. It is located within the approximately 17500-acre Lake of the Ozarks State Park on the western side of a peninsula on the lake. The area is used for recreational purposes and is lightly developed with forestland lots for tent camping and cabins. The site is located in an active-grounds and watercraft maintenance facility for the Army-owned Lake of the Ozarks Recreational Area (LORA). Two aboveground storage tanks and a gasoline storage locker are currently in operation at the site. A 1000-gallon heating oil UST and associated piping were removed in 2007. The UST was only partially buried (approximately 50%) into the slope of a hillside bordering the site. In 2016 investigation activities were completed consisting of the removal of 370 cubic yards (cy) of soil installation of a groundwater monitoring well and confirmations sampling under MRBCA guidance (the regulatory driver for this site). A corrective action completion report was drafted and after review it was determined that additional monitoring of residual groundwater contamination would be needed. Four additional rounds of sampling have been completed and the CPMR has been submitted to MDNR. The CPMR established area use limitations (AUL) that include a) monitor for land use changes b) prevent unauthorized access to groundwater c) prevent unauthorized intrusive activities and d) limit dermal contact via personal protective equipment if an authorized excavation or other potential exposure. Cleanup / Exit Strategy - The site will maintain the AULs until naphthalene concentrations attenuate, anticipated to be before the lease expires in 2060; therefore, the site will be sampled annually to monitor the (expected) continual attenuation of naphthalene.

29995.1092_CCFLW-011_LANDFILL E. OF SPORTSMAN CTR

Env Site ID: CCFLW-011

Cleanup Site: LANDFILL E. OF SPORTSMAN CTR

Alias: CCFLW-011

Regulatory Driver: CERCLA

RIP Date: 12/31/2027

RC Date: 12/31/2027

RC Reason: Not assigned

SC Date: 9/30/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	1/1/2012	12/15/2012
SI:	3/15/2013	6/15/2015
RI/FS:	10/1/2017	3/1/2025
RD:	3/1/2025	12/31/2026
IRA:	--	--
RA(C):	1/1/2027	12/31/2027
RA(O):	--	--
LTM:	1/1/2028	9/30/2057

Site Narrative: During installation of sewer/water lines between the Sportsmen's Center and TA74A a previously unknown landfill was discovered. Buried waste was discovered in a trench approximately two feet below ground surface. It is believed that this landfill received waste in the late-1960s to early-1970s. The RI was completed in 2022 and the lateral extent of the buried waste mass was delineated. The FS Report was finalized. A Proposed Plan is underway. A presumptive remedy for military landfills and RA(C) is anticipated as a future phase. Cleanup / Exit Strategy - LTM is expected to include inspections and/or LUCs and will continue indefinitely.

29995.1093_FLW-061_PFAS

Env Site ID: FLW-061

Cleanup Site: PFAS

Alias: FLW-061

Regulatory Driver: CERCLA

RIP Date: 9/30/2027

RC Date: 9/30/2027

RC Reason: Not assigned

SC Date: 9/30/2027

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/21/2018	9/15/2019
SI:	3/15/2020	9/15/2023
RI/FS:	9/16/2023	9/30/2027
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: Per direction from Deputy Chief of Staff Installations (DCS G-9) site created to account for all PFAS costs at the installation. A PA was completed and an SI is ongoing. Previous investigations in 2013, 2016, and 2019 indicated that there were PFAS detections detected at the Golf Course Well and the TA 61 Well. The SI included collection of 173 soil samples, 20 groundwater samples, five surface water samples, and two sediment samples. Samples were collected across 32 areas of potential interest that include FLW-002, -003, -010, -011, -012, -017, -020, -024, -026, -028, -029, -053, -054, -059, and -060. Nine sites will be moving forward to the RI study phase to include additional groundwater samples not included within the SI. Cleanup / Exit Strategy - The RI will determine the nature and extent of the PFAS contamination at all sites, upon which the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) process will continue through completion.

29995.1095_FLW-062_TA256 Landfill Pond

Env Site ID: FLW-062

Cleanup Site: TA256 Landfill Pond

Alias: FLW-062

Regulatory Driver: CERCLA

RIP Date: 6/30/2028

RC Date: 6/30/2028

RC Reason: Not assigned

SC Date: 7/1/2028

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	6/15/2017	12/31/2017
SI:	1/15/2020	6/30/2024
RI/FS:	7/1/2024	6/30/2028
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: Training Area 256 (TA 256) sediment pond is located in Fort Leonard Wood Missouri. The site is entirely located within the installation boundary of Fort Leonard Wood adjacent to Training Area 256 – Rock Quarry within Maneuver Area 7. The site is an excavated basin and is situated within the Big Piney River floodplain. It is suspected the area was excavated approximately 50 years ago and a potential release occurred in the circa late-1960s to 1970s in the Vietnam Era timeframe. In December 2017 the site was under construction for stormwater improvements which included the removal of accumulated sediments at the site. During this time, C&D debris, crushed and buried drums, and other military operations related debris were discovered at the site. An expanded site inspection (ESI) was completed in June 2022 (field work) and the Final ESI Report is underway Cleanup / Exit Strategy - The ESI documented that although there are elevated concentrations of some compounds, they are what is expected for a Quarry pond. An RI will be done once the installation finishes using the pond. In the meantime, it will be recommended that the Stormwater permit add the compounds with elevated concentrations to the sampling list for the near-by outfall.

29995.1101_CCFLW-010_USTs at Building 5265

Env Site ID: CCFLW-010

Cleanup Site: USTs at Building 5265

Alias: CCFLW-010

Regulatory Driver: CERCLA

RIP Date: 11/4/2020

RC Date: 11/4/2020

RC Reason: Study Completed, No Cleanup Required

SC Date: 9/30/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
PA:	1/31/2011	8/31/2011
SI:	3/31/2012	4/30/2013
RI/FS:	1/1/2015	11/4/2020
RD:	--	--
IRA:	--	--
RA(C):	11/4/2020	11/4/2020
RA(O):	--	--
LTM:	11/5/2020	9/30/2054

Site Narrative: CCFLW-010 consists of a former used oil UST, an active oil UST, two OWSs, and associated conveyance lines at Building 5265, a wheeled vehicle maintenance facility. The used oil USTs were installed in January 1985. In October 2011, during excavation activities to install leak detection equipment on the USTs, contamination was discovered in both tank pits. Based on the results of tightness testing on both tanks, the northern UST was removed. The second UST and associated OWS remain in place and active. In May 2013, an SI was completed to define nature and extent of contamination. The DD was signed Nov. 4, 2020. Cleanup / Exit Strategy - The selected remedy includes existing soil containment (Building 5265, concrete floor, and the adjacent concrete/asphalt parking lot); LUCs for soil, soil gas, and groundwater; LTM of groundwater and indoor air; and contingency vapor intrusion mitigation should future indoor air monitoring results indicate that COC concentrations are not protective of human health. Groundwater exceedances of chloroform and benzo(a)pyrene, soil exceedances of TPH and DRO, and soil-gas exceedances of chloroform, PCE and TCE. LTM consists of groundwater and indoor air monitoring, annual inspections, LUCs, and FYRs and will continue indefinitely.

29995.1069_FTLWD-001-R-01_50-ACRE SITE - PARCEL 8

Env Site ID: FTLWD-001-R-01

Cleanup Site: 50-ACRE SITE - PARCEL 8

Alias: #

Regulatory Driver: CERCLA

RIP Date: 6/1/2029

RC Date: 6/1/2029

RC Reason: Not assigned

SC Date: 9/30/2058

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	2/28/2006	11/30/2008
RI/FS:	1/1/2015	5/31/2025
RD:	6/1/2025	5/31/2026
IRA:	--	--
RA(C):	6/1/2026	6/1/2029
RA(O):	--	--
LTM:	6/2/2029	9/30/2058

Site Narrative: This original 50-acre site is located on the southwest property boundary of Parcel 8 of Fort Leonard Wood and is owned by Fort Leonard Wood. The site is located in the Mark Twain National Forest and is undeveloped. A November 2000 document titled Survey and Remediation Plan for 50-acre portion of Parcel Number 8 indicates that fragments associated with 37-millimeter (mm) subcaliber projectiles a possible target and a large fragment from a 105mm high explosive munitions were discovered during a surface inspection conducted by the Rock Island US Army Corps of Engineers. The period of use for the range could not be determined. The November 2000 survey is the last document the inventory team located regarding the property. A review committee for proposed transferred property met on Feb. 24, 2000. The meeting was intended to discuss past and present training activities on the properties proposed for transfer and a risk assessment code (RAC) worksheet for the 50-acre site was completed by the committee. The RAC sheet completed by the committee identified the following munitions pyrotechnics explosives and riot control agents as being used at the 50-acre site - medium/large caliber ordnance (20mm or larger); bombs practice (with spotting charges); practice grenades (with spotting charges); complete and expended small arms (.22 caliber - .50 caliber) munitions containing a flame or incendiary material flares signals simulators screening smoke; primary and secondary explosives practice landmines with spotting charges dynamite and less sensitive explosives and riot control agents. An SI was completed in 2008 and RI was performed between 2015 and 2020. The RI identified three munitions and explosives of concern (MEC) items (MK II US projectile 37mm) in the subsurface. The RI was finalized in June 2021. Risk to ecological receptors from exposure to munitions constituent (MC) contamination was also identified for plants; however, it was recognized in the RI that the estimated risk could be an overestimation. Cleanup / Exit Strategy - An FS to evaluate responses to address potential explosive hazards and MC risk is in progress. Preparation of a PP and DD will follow. Remedial design (RD) and remedial action are future phases. Expected remedy selection is surface clearance followed by land use controls and five-year reviews.

29995.1070_FTLWD-006-R-01_Northeast SAR Complex-TD

Env Site ID: FTLWD-006-R-01

Cleanup Site: Northeast SAR Complex-TD

Alias: #

Regulatory Driver: CERCLA

RIP Date: 6/30/2030

RC Date: 6/30/2030

RC Reason: Not assigned

SC Date: 7/1/2030

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	2/28/2006	9/30/2012
RI/FS:	8/1/2018	6/30/2030
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: This 3561-acre site is the target area and the majority of the safety danger zone for the qualifying rifle range that was transferred to the US Forest Service. The area is located off the northeast edge of the cantonment area. Firing points were located on current Fort Leonard Wood property and firing occurred in a south to north direction. Installation personnel could not provide specific times of use; however, they speculate that the range was active during the first use of the post from 1941 to 1946. The land was Army-owned until 1975 when it was transferred in fee title to the US Forest Service. Installation personnel state that trees in the area still contain bullets. This site is currently undeveloped. ASI was completed in 2008 and an RI was performed in 2020. Four areas within the munitions response site (MRS) were identified as small arms ranges with MC results (primarily lead above screening criteria and munitions debris (MD)) was identified outside of the small arms range boundaries but within the MRS boundary. A supplemental RI is needed for additional subsurface investigation to delineate potential MEC. Cleanup / Exit Strategy - The RI will determine the nature and extent of the potential MEC at the site, upon which CERCLA process will continue through completion.

29995.1071_FTLWD-005-R-01_Northeast Small Arms Rang

Env Site ID: FTLWD-005-R-01

Cleanup Site: Northeast Small Arms Rang

Alias: #

Regulatory Driver: CERCLA

RIP Date: 7/30/2029

RC Date: 7/30/2029

RC Reason: Not assigned

SC Date: 8/1/2029

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	2/28/2006	11/30/2008
RI/FS:	1/1/2015	7/30/2025
RD:	8/1/2025	7/30/2026
IRA:	--	--
RA(C):	8/1/2026	7/30/2029
RA(O):	--	--
LTM:	--	--

Site Narrative: This 68.85 acre-range is located on the northeast edge of the cantonment area. This site contains only the small on-post portion of the range where the firing points were located. The target area of the range is off-post. Installation personnel could not provide specific times of use; however, they speculate that the range was active during the first use of the post from 1941 to 1946. This site is currently undeveloped. A SI was completed in 2008 and the RI was completed March 25, 2021. The RI identified an unacceptable ecological risk for three species. No explosive hazard was identified during the RI. The final FS was completed on December 5, 2022 to address potential MC risk. Preparation of a PP is in progress and a DD will follow. Future phases anticipated are RD and RA(C) including a soil removal action of the berm. Cleanup / Exit Strategy - Site is expected to achieve closure after the soil removal.

29995.1072_FTLWD-004-R-01_NORTH GRENADE RANGE

Env Site ID: FTLWD-004-R-01

Cleanup Site: NORTH GRENADE RANGE

Alias: #

Regulatory Driver: CERCLA

RIP Date: 5/31/2029

RC Date: 5/31/2029

RC Reason: Not assigned

SC Date: 9/30/2059

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 2

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	1/31/2006	11/30/2008
RI/FS:	1/1/2015	7/30/2025
RD:	7/31/2025	7/30/2026
IRA:	--	--
RA(C):	7/31/2026	5/31/2029
RA(O):	--	--
LTM:	6/1/2029	9/30/2059

Site Narrative: This site is located east of the cantonment area and was used for live grenade practice and is approximately 34 acres. The range was not in existence based on a 1955 aerial photograph of the site; however, it is present in a 1967 aerial photograph. Installation personnel speculate that the range was constructed during the late-1950s and are not sure when the range was taken out of use. The site is currently undeveloped. An SI was completed in 2008. The RI was completed April 25, 2022. The RI identified the presence of a rifle grenade range adjacent to the hand grenade court. An explosive hazard and MC risk to ecological receptors were identified during the RI. NFA related to MC risk was recommended. A recommendation to split the North Grenade MRS into two separate MRSs is proposed (into the North Hand Grenade Range and the North Rifle Grenade Range). Cleanup / Exit Strategy - The FS, which is in progress, will evaluate responses to potential explosive hazards and risk at the North Hand Grenade MRS. A PP and DD will follow the FS. Future phases include an RD and RA(C) for MEC removal. Depending on the alternative chosen, the site may require LUCs and five-year reviews indefinitely.

29995.1073_FTLWD-003-R-01_Machine Gun Range

Env Site ID: FTLWD-003-R-01

Cleanup Site: Machine Gun Range

Alias: #

Regulatory Driver: CERCLA

RIP Date: 5/31/2025

RC Date: 5/31/2025

RC Reason: Not assigned

SC Date: 6/1/2025

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 8

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	11/30/2010	9/30/2012
RI/FS:	1/1/2015	6/30/2030
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: The Machine Gun Range MRS originally encompassed approximately 780 acres before the SI located off of the eastern boundary of the post east of the central section of the cantonment area. The firing points appear to be located on the southern portion of the range with the firing direction towards the northwest based on a 1970s map identifying the former range; however, this could not be confirmed. This property was Army-owned until 1975 and was transferred in fee title to the US Forest Service and excluded from the post property boundary. The area is currently undeveloped. The site consists of a former firing range skeet area and former Vietnam Era drop zone. A site inspection was completed in 2014 and the site acreage was changed (via additions and subtractions) to 490 acres to be investigated during the RI. The RI/FS is currently underway. Note during the RI the site has been broken into five sub-MRSs that correlate to the historical uses and characterization from the 2020 RI. These include a 75.6-acre former Vietnam Era drop zone for MEC, a 172 acre MC area encompassing the former ranges, and three areas totaling 243 acres that are recommended for NFA. This original site (FTLWD-003-F-01) contains the remaining acreage of 290 acres identified before the SI. Assumptions made initially at the SI phase for not including the acreage in the RI was that only small arms training/no training was done on the acreage. Since then, adjacent areas have proven that is not an accurate assumption to make without doing an RI. An RI is needed. Cleanup / Exit Strategy - The RI will determine the nature and extent of potential contamination at the site, upon which CERCLA process will continue through completion.

29995.1079_FTLWD-010-R-01_Range 66-Live Mine Demo a

Env Site ID: FTLWD-010-R-01

Cleanup Site: Range 66-Live Mine Demo a

Alias: #

Regulatory Driver: CERCLA

RIP Date: 6/1/2029

RC Date: 6/1/2029

RC Reason: Not assigned

SC Date: 6/2/2029

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 2

Phase	Start	End
PA:	6/30/2003	12/31/2003
SI:	2/28/2006	11/30/2008
RI/FS:	1/1/2015	9/30/2025
RD:	9/30/2025	7/30/2026
IRA:	12/31/2010	12/31/2011
RA(C):	7/30/2026	6/1/2029
RA(O):	--	--
LTM:	--	--

Site Narrative: The Range 66-Live Mine Demo and Grenade MRS is 46.6 acres. The exact time of use is unknown; however, based on the 1954 and 1956 historical maps the MRS was likely used during the Korean War. The only information regarding this MRS was based upon the name of the range as identified on the 1954 and 1956 historical maps. While no documentation was discovered indicating what types of munitions were used at the MRS, rifle grenades and hand grenades used after World War II and during the 1950s include the following- M9A M11 M19 M22 M29 M31 Practice MK II high explosive anti-tank. Practice land mines used may have included M-14 M-15 M-16 M2A4 British Dingbat and Mark VII. A SI was completed in 2008 and a RI and FS is currently underway. The RI completed delineation of a concentrated munitions use area (CMUA). The RI was finalized 29 October 2021 and recommended that the site proceed to FS to evaluate responses to address potential MEC hazards and MC risk. An IRA was complete in 2011 for interim LUCs at all MRSs. The FS is under development and an RD and remedial action is anticipated as future phases for MEC removal. Cleanup / Exit Strategy - Remedy selection will determine the next steps for the site to achieve SC.

29995.1082_FTLWD-013-R-01_Mock Village Range (Vietn

Env Site ID: FTLWD-013-R-01

Cleanup Site: Mock Village Range (Vietn

Alias: #

Regulatory Driver: CERCLA

RIP Date: 7/31/2029

RC Date: 7/31/2029

RC Reason: Not assigned

SC Date: 8/1/2029

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 3

Phase	Start	End
PA:	11/30/2008	11/30/2008
SI:	4/30/2009	9/30/2010
RI/FS:	1/1/2015	9/30/2025
RD:	9/30/2025	7/30/2026
IRA:	--	--
RA(C):	7/31/2026	7/31/2029
RA(O):	--	--
LTM:	--	--

Site Narrative: This site is located to the east of FLW Road 20 and to the west of the northern section of Forney Field (active airfield). The site is within a restricted area controlled by the Chemical Biological Radiological and Nuclear School. This site is listed as a Mock Village Range (Vietnam era) on a 1964 facility map and contains possible demolition pits. It does not appear to be within a range or Training Area and is not listed within the January 2008 Army draft SI report. Numerous practice munitions were found during the SI. A second SI was completed in 2008 and the RI recommendations include updating the MRS boundary to include the CMUA defined in the RI and conducting an FS to evaluate responses to address potential MEC hazards. The RI was completed March 15, 2022 and recommended NFA for MC. A PP and DD will be prepared following the FS. Future planned phases include a RD and remedial action for removal of MEC. Cleanup / Exit Strategy - Remedy selection will determine the next steps for the site to achieve SC.

29995.1102_FTLWD-003-R-02_MRS 2 MEC

Env Site ID: FTLWD-003-R-02

Cleanup Site: MRS 2 MEC

Alias: #

Regulatory Driver: CERCLA

RIP Date: 6/15/2029

RC Date: 6/15/2029

RC Reason: Not assigned

SC Date: 9/30/2058

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	11/30/2010	9/30/2012
RI/FS:	1/1/2015	6/15/2025
RD:	6/15/2025	6/15/2026
IRA:	--	--
RA(C):	6/15/2026	6/15/2029
RA(O):	--	--
LTM:	6/16/2029	9/30/2058

Site Narrative: The Machine Gun Range MRS 2 MEC encompasses approximately 75.6 acres of the original MRS. It is an open field area south of the Big Piney River and east that reportedly served as a drop zone during the Vietnam War Era. This property was Army-owned until 1975 and was transferred in fee title to the US Forest Service and excluded from the post property boundary. The area is currently undeveloped. An SI was completed in 2014. Based on the findings of the 2019 RI and regulatory review adjustments to the boundary of the original MRS were made to correlate to the discovery of MEC items and MD. This portion the former Vietnam Era Drop Zone is categorized as having an unacceptable risk from explosive hazard based on the results of the RI. The RI recommended that the site proceed to FS to address explosive hazards. The FS phase is underway. Anticipated future phases include an RD and RA(C) for MEC removal. Cleanup / Exit Strategy - Expected remedy selection is surface clearance followed by land use controls and five-year reviews.

29995.1103_FTLWD-003-R-03_NFA_NORTH

Env Site ID: FTLWD-003-R-03

Cleanup Site: NFA_NORTH

Alias: FTLWD-003-

Regulatory Driver: CERCLA

RIP Date: 6/30/2025

RC Date: 6/30/2025

RC Reason: Not assigned

SC Date: 7/1/2025

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	11/30/2010	9/30/2012
RI/FS:	1/1/2015	6/30/2025
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: The Machine Gun Range MRS (MRS 3-NFA North) encompasses one of three new sub-MRSs totaling approximately 243 acres. The further expanded areas include an area west of the original MRS which encompasses 27.6 acres; an area located north of the Big Piney River encompassing 150.9 acres; and an area south of the Big Piney River and east of the original MRS encompassing 64.2 acres. MRS-3 is identified as the 150.9-acre area north of the Big Piney River. A site-wide SI was completed in 2014. Based on the findings of the 2019 RI and regulatory comments adjustments to the boundary of the site were recommended to classify the sites based on the historical training and range uses. The RI site characterization in 2019 did not find any evidence of historical military munitions or range uses in these three areas therefore these sites have been broken out of the original MRS and classified as sub-MRSs for NFA consideration. Cleanup / Exit Strategy – An NFA PP and DD are in progress.

29995.1104_FTLWD-003-R-04_NFA-WEST

Env Site ID: FTLWD-003-R-04

Cleanup Site: NFA-WEST

Alias: #

Regulatory Driver: CERCLA

RIP Date: 6/30/2025

RC Date: 6/30/2025

RC Reason: Not assigned

SC Date: 7/1/2025

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	11/30/2010	9/30/2012
RI/FS:	1/1/2015	6/30/2025
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: The Machine Gun Range MRS (MRS 3-NFA West) encompasses one of three new sub-MRSs totaling approximately 27.6 acres. It was previously part of FTLWD-003-R-01 before it was delineated. A site-wide SI was completed in 2014. Based on the findings of the 2019 RI and regulatory comments adjustments to the boundary of the site were recommended to classify the sites based on the historical training and range uses. The RI site characterization in 2019 did not find any evidence of historical military munitions or range uses in these three areas therefore these sites have been broken out of the original MRS and classified as sub-MRSs for NFA consideration. Cleanup / Exit Strategy – An NFA PP and DD are in progress.

29995.1105_FTLWD-003-R-05_NFA-EAST

Env Site ID: FTLWD-003-R-05

Cleanup Site: NFA-EAST

Alias: #

Regulatory Driver: CERCLA

RIP Date: 6/30/2025

RC Date: 6/30/2025

RC Reason: Not assigned

SC Date: 7/1/2025

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	11/30/2010	9/30/2012
RI/FS:	1/1/2015	6/30/2025
RD:	--	--
IRA:	--	--
RA(C):	--	--
RA(O):	--	--
LTM:	--	--

Site Narrative: The Machine Gun Range MRS (MRS 5 NFA-East) encompasses one of three new sub-MRSs totaling approximately 243 acres. The further expanded areas include an area west of the original MRS which encompasses 27.6 acres; an area located north of the Big Piney River encompassing 150.9 acres; and an area south of the Big Piney River and east of the original MRS encompassing 64.2 acres. MRS 5 is the 64.2-acre area south of the Big Piney River and east of the original MRS. A site-wide SI was completed in 2014. Based on the findings of the 2019 RI and regulatory comments adjustments to the boundary of the site were recommended to classify the sites based on the historical training and range uses. The RI site characterization in 2019 did not find any evidence of historical military munitions or range uses in these three areas therefore these sites have been broken out of the original MRS and classified as sub-MRSs for NFA consideration. Cleanup / Exit Strategy – An NFA PP and DD are in progress.

29995.1106_FTLWD-003-R-06_MRS 1 MC

Env Site ID: FTLWD-003-R-06

Cleanup Site: MRS 1 MC

Alias: #

Regulatory Driver: CERCLA

RIP Date: 7/22/2026

RC Date: 7/22/2026

RC Reason: Not assigned

SC Date: 9/30/2055

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	6/24/2003	12/12/2003
SI:	11/30/2010	9/30/2012
RI/FS:	1/1/2015	7/20/2025
RD:	7/21/2025	7/20/2026
IRA:	--	--
RA(C):	7/21/2026	7/22/2026
RA(O):	--	--
LTM:	7/23/2026	9/30/2055

Site Narrative: The Machine Gun Range MRS (MRS-1 MC) encompasses approximately 172 acres south of the Big Piney River and is a sub-MRS of the original 370-acre site. During the 2019 RI this portion of the original MRS was characterized with elevated lead hot spots indicating historical small caliber and skeet range use with limited MEC risks and no MEC findings. The firing points appear to be located on the southern portion of the range with the firing direction towards the northwest based on a 1970s map identifying the former range. Fort Leonard Wood personnel believe the site was active during the first use of the post from 1941 to 1946 and only small arms ammunition was used. This property was Army-owned until 1975 and was transferred in fee title to the US Forest Service and excluded from the post property boundary. An RI was finalized October 2020. The RI recommended that the MRS proceed to FS to evaluate responses for MC. RD and RA(C) phases are future phases for MC removal. Cleanup / Exit Strategy - Expected remedy selection is land use controls and five-year reviews.

SITE SUMMARY

SITE CLOSEOUT SUMMARY

CRL ID	Site Name	Site Closeout Date
29995.1001	FLW-001_LANDFILL 1	8/31/2007
29995.1004	FLW-004_LANDFILL 3B	10/31/1995
29995.1005	FLW-005_LANDFILL 3C	9/30/1995
29995.1011	FLW-011_LANDFILL 9	7/31/1988
29995.1013	FLW-013_LANDFILL 10B	12/31/1998
29995.1014	FLW-014_LANDFILL 11A	12/31/1998
29995.1015	FLW-015_LANDFILL 11B	12/31/1998
29995.1016	FLW-016_LANDFILL 11C	12/31/1998
29995.1018	FLW-018_LANDFILL 13	7/31/1988
29995.1020	FLW-020_LANDFILL 15	7/31/1988
29995.1021	FLW-021_MEDICAL WASTE INCINERATOR	7/31/1988
29995.1022	FLW-022_VET LAB INCINERATOR	7/31/1988
29995.1023	FLW-023_BOILER PLANT BUILDING 663	6/30/1992
29995.1024	FLW-024_SEWAGE TREATMENT PLANT	7/31/1988
29995.1025	FLW-025_WATER TREATMENT PLANT LAGOON	7/31/1988
29995.1026	FLW-026_SEWAGE TREATMENT PLANT LAGOON SI	7/31/1988
29995.1027	FLW-027_TRAINING AREA 244 SEWAGE LAGOONS	12/31/1994
29995.1029	FLW-029_NEW FIRE TRAINING AREA	7/31/1988
29995.1030	FLW-030_OLD EOD OD/OB AREA RANGE 24	9/30/1995
29995.1031	FLW-031_CURRENT EOD OD/OB AREA RANGE 36	7/31/1988
29995.1032	FLW-032_CANNON ANG OB AND BURIAL SITE	9/30/1995
29995.1033	FLW-033A_UST BLDG 663,601,2502,2550 WAST	10/31/1993
29995.1034	FLW-033B_AST BLDG 777,170,1390 WASTE OIL	3/31/1992
29995.1035	FLW-033C_AST BLDG 875, WASTE OIL	3/31/1992
29995.1036	FLW-033D_AST BLDG 1383,2581,2250,2212 WA	4/30/1993
29995.1037	FLW-033F_UST BLDG 2502,5069,5053,950 WAS	12/31/1988
29995.1038	FLW-033G_UST BUILD 2553 WASTE OIL TANK 5	11/30/1989
29995.1039	FLW-033H_UST BLDG 4050,4060 WASTE OIL	9/30/1993
29995.1040	FLW-033I_UST BUILD 5071 WASTE OIL TANK 1	12/31/1989
29995.1041	FLW-033J_UST BUILD 5071 WASTE OIL TANK 5	6/30/1993
29995.1042	FLW-033K_UST BUILDING 5074 (4 TANKS)	6/30/1993
29995.1043	FLW-034_ASTS@ 600MP,900MP,1390	7/31/1988
29995.1045	FLW-036_DEH HAZERDOUS WASTE STGE AREA BL	7/31/1988
29995.1047	FLW-038_DOL WASTE BATTERY ELECTROLYTE ST	4/30/1993
29995.1048	FLW-039_DRMO SCRAP YARD	7/31/1988
29995.1049	FLW-040_AMMUNITION CONTAINER STORAGE ARE	9/30/1995
29995.1050	FLW-042_60 ABANDONED UST'S	10/31/1993
29995.1051	FLW-043_WWII BUILDINGS (152)	9/30/1993
29995.1052	FLW-044_Old Battery Shop, Bldg 2563	11/30/1993
29995.1053	FLW-045_6 UST NEAR BUILDING 810	11/30/1992
29995.1054	FLW-046_BLDG 2291 - SOIL ASPHALT STORAGE	7/31/1995
29995.1055	FLW-047_FLW Device Shop - Bldng 1448	4/30/1994

CRL ID	Site Name	Site Closeout Date
29995.1056	FLW-048_BOILER UST @ 311, 745, 1021, 675	1/31/1995
29995.1057	FLW-049_DOL MAINTENANCE SHOP	9/30/1992
29995.1058	FLW-050_ROLL DENTAL CLINIC	9/30/1992
29995.1059	FLW-051_FLW COMMUNITY HOSPITAL	9/30/1992
29995.1060	FLW-052_WATER TREATMENT PLANT	9/30/1992
29995.1061	FLW-053_OLD FIRE TRAINING AREA AT LANDFI	4/30/1993
29995.1062	FLW-054_OLD FIRE TRAINING AREA RUNWAY EN	4/30/1993
29995.1063	FLW-055_OLD FIRE TRAINING AREA BALL FIEL	4/30/1993
29995.1065	FLW-057_Entymology Laboratory	9/30/1992
29995.1066	FLW-058_USTs 990 Motor Pool	9/30/1992
29995.1075	PBC at FLW_Performance Based Contract at	3/31/2011
29995.1083	CCFLW-002_DRMO Scrap Yard	12/31/2012
29995.1085	CCFLW-004_UST Building 772	4/27/2016
29995.1088	CCFLW-005_ASTs at Building 2250	10/31/2011
29995.1091	CCFLW-009_UST at Bldng 5074	2/28/2011
29995.1074	FTLWD-002-R-01_CENTRAL GRENADE RANGE	11/30/2008
29995.1076	FTLWD-007-R-01_Range 3 - Rifle Grenade	11/30/2008
29995.1077	FTLWD-008-R-01_Ranges 20 and 21 - Close	9/30/2012
29995.1078	FTLWD-009-R-01_Range 34 - Carbine Transi	11/30/2008
29995.1080	FTLWD-011-R-01_Range 68A - Squad Tactics	9/30/2012
29995.1081	FTLWD-012-R-01_West Range Fan Complex	11/30/2008

COMMUNITY INVOLVEMENT

Community Involvement Plan (Date Last Reviewed):	6/1/2023
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:	9/13/2023
RAB Results of Solicitation:	No interest
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A
Administrative Record Location:	Waynesville Public Library, 306 US Route 66, Waynesville, MO
Information Repository Location:	Waynesville Public Library, 306 US Route 66, Waynesville, MO

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Status	Review Type	Start Date	End Date	Plans Narrative	Actions Narrative	Results Narrative
Completed	FYR	9/23/2020	11/28/2022	N/A	N/A	Remedies are protective of human health and the environment on a short term.
Planned	FYR	9/12/2025	1/12/2027	N/A	N/A	N/A