JOINT BASE LEWIS-MCCHORD

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 LEWIS-MCCHORD

Installation City: FORT LEWIS

Installation County: PIERCE, THURSTON

Installation State: WA

Regulatory Participation - Federal: USEPA, REGION 10

Regulatory Participation - State: WASHINGTON STATE DEPT OF ECOLOGY, HAZARDOUS WASTE AND TOXICS REDUCTION PROGRAM, SOUTHWEST REGIONAL OFFICE

ACRONYMS

Acronym	Definition
ALGT	American Lake Garden Tract
AST	Aboveground Storage Tank
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CRL	Cleanup Restoration & Liabilities
DD	Decision Document
ENV	Environmental
ESD	Explanation of Significant Differences
FFA	Federal Facilities Agreement
FLAO	Fort Lewis Agreed Order
FS	Feasibility Study
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
IWTP	Industrial Wastewater Treatment Plant
JBLM	Joint Base Lewis-McChord
JP	Jet Propellant
LTM	Long-Term Management
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
mg/kg	milligram per kilogram
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MTCA	Model Toxics Control Act
NFA	No Further Action
NPL	National Priorities List
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PCOR	Preliminary Close Out Report
PFAS	Per- and Polyfluoroalkyl Substances
P&T	Pump-and-Treat

Acronym	Definition
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	Resource Conservation and Recovery Act Facility Assessment
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SRCPP	Solvent Refined Coal Pilot Plant
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compounds
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
UE	Unrestricted Exposure
ug/L	micrograms per liter
USACE	US Army Corps of Engineers
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
UU/UE	Unlimited Use
VOC	Volatile Organic Compounds
WSDOE	Washington State Department of Ecology
WSDOT	Washington State Department of Transportation
WTA	Washrack Treatment Area

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: 15/30

Number of Open Sites with Response Complete/Total Open MR Sites: 0/2

Number of Open Sites with Response Complete/Total Open CC Sites: 1/1

SITE-LEVEL INFORMATION

53465.1009_FTLE-16_BATTERY ACID PIT

Env Site ID: FTLE-16

Cleanup Site: BATTERY ACID PIT

Alias: FTLE-16

Regulatory Driver: CERCLA

RIP Date: 9/15/1999

RC Date: 9/15/1999

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	5/31/1982	9/30/1999
RI/FS:	1/31/1986	9/30/1999
RD:	- -	- -
IRA:	- -	- -
RA(C):	5/1/1999	9/15/1999
RA(O):	- -	- -
LTM:	4/15/2006	3/15/2054

Site Narrative: The Battery Acid Pit is located in the North Uses Area of the Logistics Center and was used from 1971 to 1976 for discarding electrolyte solutions from vehicle batteries. The pit contained crushed limestone which was used to neutralize battery acid. While it is not known how many varieties of batteries were drained at the Battery Acid Pit it is known that the majority were vehicle batteries containing lead-acid electrolyte. Remediation of the site included construction of an asphalt cap. A 2006 decision document (DD) determined no further action (NFA) was required. Land use controls (LUC) were implemented to maintain the asphalt cap and prevent residential use. A 2010 Explanation of Significant Differences (ESD) memorializing the DD in relation to the Logistics Center record of decision (ROD) was never approved by US Environmental Protection Agency (USEPA) Region 10. Instead, the USEPA wrote a Preliminary Close Out Report (PCOR) in September 2015 for all sites captured under the logistics Center National Priorities List (NPL) and 14 other sites covered under the federal facilities agreement (FFA) between USEPA and Joint Base Lewis-McChord (JBLM). The 2022 five-year review concluded there were no issues found affecting the protectiveness of the remedy. Cleanup/Exit Strategy - Because contaminants will remain at the site at concentrations exceeding levels that allow for unlimited use (UU)/unrestricted exposure (UE) five-year remedy reviews will be completed every five years until unlimited use/unrestricted exposure UU/UE is achieved. LUC management and five-year reviews will continue.

53465.1010_FTLE-17_PFAS OLD FIRE FIGHTING TRAINING

Env Site ID: FTLE-17

Cleanup Site: PFAS OLD FIRE FIGHTING TRAINING

Alias: FTLE-17

Regulatory Driver: CERCLA

RIP Date: 9/30/2035

RC Date: 9/30/2035

RC Reason: Not assigned

SC Date: 9/30/2035

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
PA:	1/31/1989	1/31/1997
SI:	1/31/1989	9/30/2020
RI/FS:	6/1/2020	9/30/2035
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: Former Fort Lewis Fire Training Pit known as FTLE-17 is located adjacent to the north side of Taxiway No. 2 at Gray Army Airfield. The FTLE-17 is in a large shallow swale approximately six feet below the elevation of the adjacent taxiway. A few yellow tires and remnants of a low berm (approx. 1.5 feet high) delineate the perimeter of the approximately 100-foot diameter pit. Between 1962 and 1982 the FTLE17 was used for air-crash rescue operation training. Waste materials including duplicating fluid alcohol paint thinner and jet propellant (JP)-4 were pumped into the pit and ignited as a fuel source. Records do not indicate whether or not all fluids pumped into the pit were consumed by burning (1993 US Army Corps of Engineers (USACE) Multi-Site Limited Field Investigation Management Plan). In September of 1987 three borings were advanced to a depth of 10 feet. Eight soil samples were collected and analyzed for semi-volatile organic compounds (SVOC) volatile organic compounds (VOC) pesticides and polychlorinated biphenyls dioxins and dioxin homologs. Trace amounts of dioxins, xylenes, methylene chloride, and some SVOCs were detected in some of the samples (US Army 1990). In 1993 three monitoring wells were installed to the depth of 40 feet below ground surface and groundwater samples were analyzed for SVOCs, VOCs, pesticides, polychlorinated biphenyls, dioxins, dioxin homologs, and metals. All sample results were below their respective screening criteria and no evidence of groundwater contamination was observed. The location of FTLE-17 is currently covered by a concrete surface and is part of a multi-acre aircraft ramp. Based on their use as fire training areas these sites are potential per- and polyfluoroalkyl substances (PFAS) source areas. From 2017-2020 Army conducted a preliminary assessment (PA) and site inspection (SI) and the PA/SI report categorized FTLE-17 as a potential source area for polyfluoroalkyl substances and recommended further evaluation. Army started a remedial investigation (RI)and feasibility study (FS) in 2020.

53465.1016_FTLE-28_PESTICIDE RINSE AREA - BUILDING

Env Site ID: FTLE-28

Cleanup Site: PESTICIDE RINSE AREA - BUILDING

Alias: FTLE-28

Regulatory Driver: CERCLA

RIP Date: 9/30/1999

RC Date: 1/31/2001

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	2/28/1993	9/30/1999
RI/FS:	- -	- -
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	9/15/2007	3/15/2054

Site Narrative: The Pesticide Rinse Area is an unbermed 34-feet by 34-feet concrete pad outside a pesticide storage area. It is located between North 3rd and North 5th Streets on Crary Avenue on the south side of Building No. 2054. The pad was used for at least 24 years as a rinse site for applicator equipment and empty chemical containers. The pad is dissected by many cracks some of which extend to the base of the concrete. In 1993/1994 exploratory borings demonstrated that this site did not pose a threat to human health or the environment. Chlordane was the only analyte detected that exceeded industrial screening criteria at the time of analysis. Natural degradation of chlordane prior to reaching groundwater would occur. In a letter dated Jan. 7, 2000, USEPA concurred that no further action would be needed after LUCs to prevent residential land use for the Pesticide Rinse Area were in place. In September 2007 LUCs were implemented to restrict residential housing at the site. LUCs are managed through the JBLM Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) LUC program. A 2010 ESD memorializing the DD in relation to the Logistics Center ROD was never approved by USEPA Region 10. Instead, the USEPA wrote a PCOR in September 2015 for all sites captured under the logistics center NPL and 14 other sites covered under the FFA between the USEPA and JBLM. The 2022 five-year review concluded that the remedy is protective of human health and the environment. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed until UU/UE is achieved. LUC management and five-year reviews will continue.

53465.1019_FTLE-31_DRMO YARD

Env Site ID: FTLE-31

Cleanup Site: DRMO YARD

Alias: FTLE-31

Regulatory Driver: CERCLA

RIP Date: 1/15/2005

RC Date: 4/15/2006

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	5/31/1982	9/30/1983
RI/FS:	2/28/1987	10/31/1996
RD:	- -	- -
IRA:	- -	- -
RA(C):	9/15/1999	1/15/2005
RA(O):	- -	- -
LTM:	10/15/2007	3/15/2054

Site Narrative: The approximately 33-acre Defense Reutilization and Marketing Office Yard site is located within a secured area in the southeast portion of the Logistics Center immediately northwest of the East Gate Disposal Yard (also known as Landfill 2). The site is currently used as an active industrial laydown yard for storage of surplus materials to be recycled. Future land use and future site operations are expected to remain the same. In 2000 a removal action was initiated to remove soil with polychlorinated biphenyls (PCB). However, sampling of excavated material during the removal indicated that PCB levels were below industrial cleanup levels. No material was removed from the site. In April 2006 a DD selecting LUCs as the remedy for the site received concurrence from the USEPA. A 2010 ESD memorializing the DD in relation to the Logistics Center ROD was never approved by USEPA Region 10. Instead, the USEPA wrote a PCOR in September 2015 for all sites captured under the logistics center NPL and 14 other sites covered under the FFA between USEPA and JBLM. The 2022 five-year review concluded that the remedy is protective of human health and the environment. LUCs are managed through the JBLM CERCLA LUC program. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1020_FTLE-32_SOLVENT REFINED COAL PILOT PLANT

Env Site ID: FTLE-32

Cleanup Site: SOLVENT REFINED COAL PILOT PLANT

Alias: FTLE-32

Regulatory Driver: CERCLA

RIP Date: 3/15/1999

RC Date: 3/15/1999

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	9/30/1991	10/31/1992
RI/FS:	11/30/1991	10/15/1993
RD:	11/30/1993	6/30/1995
IRA:	- -	- -
RA(C):	6/1/1995	3/15/1999
RA(O):	- -	- -
LTM:	3/31/1999	3/15/2054

Site Narrative: The Solvent Refined Coal Pilot Plant (SRCPP) was a Department of Energy production and research facility designed to develop a solvent extraction technology for deriving petroleum hydrocarbon-like products from coal. The project was a pilot study funded by the Department of Energy. The land was never owned by Department of Energy only Department of Defense. The SRCPP was initially designed to convert coal into a low-sulfur low-ash solid product. The process was later modified to distill the volatile fractions and produce fuel products. It was in operation from 1974-1981. Studies conducted in the 1980s indicated a number of sites where releases to the environment had occurred. A ROD was issued in September 1993. Cleanup methodology was determined from a treatability study conducted in 1994. Low-temperature thermal desorption was selected and approximately 44,600 cubic yards of material were treated and returned to the excavations from 1996 through 1997. The cleanup level was one milligram per kilogram (mg/kg) of chlorinated polycyclic aromatic hydrocarbons. Groundwater monitoring was conducted for two years following the cleanup. No further action for soil remediation is required. In September 2007 in accordance with the ROD a LUC was implemented to prevent new drinking water wells without USEPA approval. The USEPA wrote a PCOR in September 2015 for all sites captured under the logistics center NPL and 14 other sites which includes this site covered under the FFA between the USEPA and JBLM. LUCs are managed through the JBLM CERCLA LUC program. The 2022 five-year review concluded that the remedy is currently protective of human health and the environment. However, LUCs should be implemented to prevent residential land use of the site and unauthorized excavation of contaminated soil. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews be completed every five years until UU/UE is achieved.

53465.1021_FTLE-33_LOGISTICS CENTER

Env Site ID: FTLE-33

Cleanup Site: LOGISTICS CENTER

Alias: FTLE-33

Regulatory Driver: CERCLA

RIP Date: 9/30/2007

RC Date: 3/15/2054

RC Reason: Not assigned

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 35

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	5/31/1982	9/30/1983
RI/FS:	2/28/1987	9/30/2004
RD:	1/31/1992	8/31/2006
IRA:	10/31/2000	9/30/2004
RA(C):	5/31/1995	9/30/2007
RA(O):	8/31/1995	3/15/2054
LTM:	- -	- -

Site Narrative: FTLE-33 has groundwater contamination resulting from the disposal of solvents from the 1940s to the 1970s at Landfill 2 formerly known as East Gate Disposal Yard. The primary contaminant of concern is trichloroethylene (TCE). It is present in both the Vashon and Sea Level Aquifers. In the late-1980s impacted domestic water wells in the community of Tillicum were shut down. In 1990 a ROD was signed. The selected remedy was groundwater extraction and treatment of water in the Vashon aquifer. In 1995 in accordance with the 1990 ROD two groundwater pump-and-treat (P&T) systems in the Vashon Aquifer one at the Landfill 2 source area and one downgradient system near the installation boundary began operation. Significant events conducted between 1998 and 2015 are 1) ESD to the 1990 ROD signed in 1998- The ESD focused on accelerated cleanup of the source area and completion of additional contaminant transport studies; 2) Removal of over 400 waste drums containing 29,000 pounds of TCE from Landfill 2 subsurface in 2001; 3) Treating three nonaqueous phase liquid sources areas approximately one acre each with electrical resistivity heating between 2003 and 2007; 4) Completing reconfiguration of the Landfill 2 P&T System with eight new extraction wells and new infiltration gallery locations. In November 2004 the USAEC granted remedy-in-place status. 5) Implementing LUCs in 2007. The controls include fencing restrictions on training access residential land use and new water wells without USEPA approval. 6) Installing the Sea Level Aquifers P&T system near Madigan Army Medical Center in 2009. Following groundwater treatment, the system pumps water to Madigan Hospital where it is re-used as cooling water for their heating ventilation and air conditioning system. In 2010 JBLM submitted draft ESDs and technical memoranda to the USEPA. The documents will close out 11 NFA sites that were listed in the original 1990 ROD and/or FFA but do not have specific closure documents. NFA beyond the long- term maintenance is proposed. Instead of approving individual ESDs the USEPA wrote a PCOR in September 2015 for all sites captured under the logistics center NPL and 14 other sites covered under the FFA between the USEPA and JBLM. In 2010 a pilot bioremediation test was conducted at Landfill 2. The purpose was to determine the viability of reducing contaminant concentrations biologically in areas that were not thermally treated. Objective- reduce time required for P&T

operations. The pilot test was effective in treating TCE. However, the high permeability of the Vashon Aquifer in the landfill area limits the effectiveness of bioremediation. A five-year review was conducted in FY12. Issues and recommendations addressed were 1) In 2013 a vapor intrusion study was conducted. Results of the study indicate that there may be a potential risk to human health from the TCE plume. Another study was conducted in March 2016. Six buildings were sampled for TCE vapors. TCE vapors were detected in one building at 1.6 micrograms per meter squared. The USEPA screening level for TCE vapor is three micrograms per meter squared. A draft report is currently being written. 2) Interstate-5 system capture zone in the Lower Vashon Aquifer was evaluated. Computer modeling shows that the Lower Aquifer is contained by the P&T system. 3) Cleanup goals and other risk-based comparison values for groundwater were evaluated. Groundwater monitoring program was optimized. The third installation wide five-year review was completed in 2022. The review concluded that the implemented remedy is protective of human health and the environment. However, some additional remediation needs to be conducted including 1) Install additional well or wells in the lower Vashon aquifer to better define the extent of the aquifer plume. 2) Complete a plume capture assessment to provide a comprehensive understanding of hydrogeologic conditions beneath Landfill 2 and, based on that understanding, optimize the Landfill 2 P&T system and associated monitoring network so that the contaminant plume beneath the P&T system is completely contained. Additionally, extraction well LX-13 has failed and requires replacement. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will continue until UU/UE is achieved. Operation and maintenance groundwater monitoring LUC management, five-year reviews, and periodic reviews will continue. Wells will be abandoned at the end of remedial action (operations) (RA(O)).

53465.1029_FTLE-46_ILLICIT PCB DUMP SITE

Env Site ID: FTLE-46

Cleanup Site: ILLICIT PCB DUMP SITE

Alias: FTLE-46

Regulatory Driver: CERCLA

RIP Date: 9/15/1999

RC Date: 9/15/1999

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	11/30/1983	11/30/1984
SI:	2/28/1993	9/30/1999
RI/FS:	- -	- -
RD:	- -	- -
IRA:	11/30/1983	10/31/1984
RA(C):	3/31/1999	9/15/1999
RA(O):	- -	- -
LTM:	9/30/1999	3/15/2054

Site Narrative: As a result of an illicit dump of PCBs and trichlorobenzene in November 1983 the Illicit PCB Dump Site SWMU 43 was included in the 1990 FFA as a non-NPL 1980 CERCLA site. The approximately 1.4-acre site is located within an active training area in the eastern portion of JBLM-Lewis. In 1983 an emergency response action included removal and off-site disposal of 1869 tons of contaminated soil. In 1984 a low-permeability clay cap and a perimeter fence were installed. The November 1994 limited field investigation report concluded that there are no complete exposure pathways now or in the future because of the soil removal clay cap and perimeter fence. Despite the fact that the November 1994 Limited Field Investigation Report concluded that there are no complete pathways at the site (including the potential for leaching to groundwater) the December 2000 draft DD prescribed four additional groundwater monitoring events to provide further confirmation that the potential leaching to groundwater pathway is incomplete. As a result, groundwater monitoring events were conducted by the USACE in March 1999, July 1999, January 2000, and June 2000. However, the December 2000 draft DD did not consider additional groundwater monitoring data collected after the April 1994 groundwater monitoring event described in the Limited Field Investigation Report. It should be noted that analytical results from the USACE groundwater monitoring event in June 2000 could not be found to include in the April 2006 DD. In an April 2006 DD the selected remedy for the site was long-term management (LTM) of the cap fence and LUC. A 2010 ESD memorializing the DD in relation to the Logistics Center ROD was never approved by USEPA Region 10. Instead, the USEPA wrote a PCOR in September 2015 for all sites captured under the logistics center NPL and 14 other sites which includes this site covered under the FFA between the USEPA and JBLM. Inspection of the cap in 2022 indicates that some overgrowth that includes some small to medium sized trees whose roots may impact the cap's effectiveness. Consequently, more extensive maintenance than normal is required. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE, five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1032_FTLE-51_OUTFALL #7/SETTLING BASIN (BLDG.

Env Site ID: FTLE-51

Cleanup Site: OUTFALL #7/SETTLING BASIN (BLDG.

Alias: FTLE-51

Regulatory Driver: CERCLA

RIP Date: 9/15/2008

RC Date: 9/15/2008

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	5/31/1982	9/30/1983
RI/FS:	2/15/1987	9/15/2008
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	10/15/2008	3/15/2054

Site Narrative: The Industrial Wastewater Treatment Plant (IWTP) (SWMU 55) is Building 9586 in the north uses area of the Logistics Center. From 1954 until the early 1990s the IWTP treated both wastewater and storm water from the northern portion of the Logistics Center. The IWTP was included in the 1990 FFA (as a non-NPL CERCLA site) based on potential releases to the no-outlet evaporation/percolation lagoon (i.e. blind ditch). The recommended Resource Conservation and Recovery Act (RCRA) corrective action in the 1986 Resource Conservation and Recovery Act Facility Assessment (RFA) was to sample soil from the surface of the blind ditch at the point where effluent from the IWTP flows over the ground. In October 1986 four soil samples from the blind ditch an effluent sample and a sludge sample from the IWTP were collected and analyzed for priority pollutants and extraction procedure-toxicity. As described in the July 1990 hazardous waste evaluation report detected concentrations of potential contaminants of concern were relatively insignificant. [NOTE- In the 1988 RI the entire north uses area (including the area around the no-outlet evaporation/percolation lagoon) was also investigated for sources of TCE groundwater contamination.] No further investigations of the site were conducted between 1988 and 2002 because 1) there was no data or evidence to potentially contradict the 1986 analytical results and suggest that additional corrective action might be necessary; 2) the site is within the larger logistics center NPL site; 3) the original Outfall 7 location was active until 2002; and 4) the 1988 Logistics Center RI confirmed that the entire north uses area was not a significant contributor to the Logistics Center TCE plume. In FY02 a more robust storm water treatment system was installed for Outfall 7 (to include a sedimentation basin and an infiltration basin in addition to an oil/water separator). This project was general base construction not part of the restoration work. As part of this FY02 project Outfall 7 was moved from its original location southwest of the IWTP to a new location southeast of the IWTP. Approximately 80 cubic yards of contaminated soil was removed from the original location of Outfall 7 as part of this Military Construction Army funded project. In FY07 additional confirmation sampling was conducted. Results indicate that total petroleum hydrocarbons (TPH)-G, TPH-D, TPH-HO, benzene, chlorobenzene, tetrachloroethene, trichloroethene, total naphthalenes, bis(2-ethylhexyl)phthalate, antimony, arsenic, barium, cadmium, total chromium, lead,

and thallium were detected in at least one sample from the 1986 investigation or 2002 investigation at concentrations above the Model Toxics Control Act (MTCA) Standard Method B and Standard Method C soil cleanup levels for the potential leaching to groundwater pathway. Concentrations of TPH-D, TPH-HO, arsenic, cadmium, total chromium, and lead were detected at concentrations exceeding the MTCA Standard Method B soil cleanup level for the potential direct contact pathway. Additionally, TPH-D, TPH-HO, and lead were detected at concentrations above the MTCA Standard Method C soil cleanup level for the potential direct contact pathway. A 2010 ESD memorializing the DD in relation to the Logistics Center ROD was never approved by USEPA Region 10. Instead, the USEPA wrote a PCOR in September 2015 for all sites captured under the logistics center NPL and 14 other sites covered under the FFA between the USEPA and JBLM. Cleanup/Exit Strategy - LTM is ongoing at the site in the form of LUCs. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1034_FTLE-54_LANDFILL 1

Env Site ID: FTLE-54

Cleanup Site: LANDFILL 1

Alias: FTLE-54

Regulatory Driver: CERCLA

RIP Date: 4/30/2004

RC Date: 2/27/2019

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	9/30/1983	9/30/1999
RI/FS:	- -	- -
RD:	- -	- -
IRA:	- -	- -
RA(C):	4/1/2004	4/30/2004
RA(O):	4/30/2004	2/27/2019
LTM:	2/27/2019	3/15/2054

Site Narrative: Landfill 1 (SWMU 32) consisting of approximately 15 acres was reportedly used for disposal of solid waste between 1946 and the early-1970s. The site which is included in the 1990 FFA (as a non-NPL CERCLA site) is located in the southern portion of the cantonment area approximately one-half mile southwest of Gray Army Airfield. The site is a concern because of the presence of a former solid waste landfill and the elevated concentrations of VOCs particularly TCE in shallow groundwater around the site. The cleanup level for TCE is five micrograms per liter (ug/L). Investigation activities at the site include the installation of four monitoring wells in 1984 a limited site investigation in 1988 (which included installation of four monitoring wells) another limited site investigation in 1994 installation of seven monitoring wells in 1995 and various groundwater monitoring events between 1997 and 2003. Additional site background information is included in the April 2004 Landfill 1 groundwater monitoring plan. In April 2004 JBLM-Lewis Installation Restoration Program (IRP) began conducting annual groundwater monitoring at Landfill 1 in accordance with the April 2004 groundwater monitoring plan. The highest concentration of TCE detected in samples collected during the June 2014 sampling event was 11 ug/L. An April 2006 DD selected LUCs and long-term groundwater monitoring as the remedy for the site. In September 2015 JBLM received a PCOR for site FTLE-33 and 14 other sites (FTLE-54 included) from USEPA Region 10 memorializing the DD in relation to the FFA. In 2019 JBLM recommended and USEPA concurred to discontinue annual groundwater monitoring at Landfill 1 since the requirements for cessation of groundwater monitoring specified in the DD had been met at all wells. The 2022 five-year review concluded there were no issues found affecting the protectiveness of the remedy. Cleanup/Exit Strategy - Groundwater monitoring has ceased but LUC will continue. Well abandonment is planned. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1036_FTLE-57_LANDFILL 4

Env Site ID: FTLE-57

Cleanup Site: LANDFILL 4

Alias: FTLE-57

Regulatory Driver: CERCLA

RIP Date: 10/31/1996

RC Date: 3/15/2054

RC Reason: Not assigned

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	9/30/1983
SI:	5/31/1988	8/31/1990
RI/FS:	9/30/1990	10/31/1993
RD:	11/30/1993	5/31/1996
IRA:	- -	- -
RA(C):	2/28/1994	9/30/1996
RA(O):	10/31/1996	3/15/2054
LTM:	- -	- -

Site Narrative: Landfill 4 (SWMU 35) consisting of approximately 52 acres was reportedly used for the disposal of municipal solid waste between 1951 and 1967. The landfill consists of three cells all located north of Sequalitchew Lake on JBLM-North. The site (along with an SRCPP) was added as an operable unit to the logistics center NPL site and is therefore a CERCLA site on the NPL. The site is a concern because of the presence of a former solid waste landfill and elevated concentrations of TCE and vinyl chloride in the Vashon Aquifer. Investigation and assessment activities prior to the October 1993 ROD include installation of five monitoring wells in 1981, an SI in 1990, an RI, a risk assessment, and a FS in 1993. The pre-ROD investigations concluded that the source of groundwater contamination does not appear to be the landfill itself but rather a discrete hot spot adjacent to the landfill where other activities such as vehicle maintenance likely occurred. Additional site background information is included in the 1993 RI report the 1993 ROD and a September 2004 groundwater monitoring plan. The selected remedy specified in the October 1993 ROD was to complete three years of air sparging and soil vapor extraction (SVE) in the discrete hot spot implement and maintain LUCs and conduct long-term groundwater monitoring. Between October 1996 and October 1999 in accordance with the ROD an air sparging and SVE system was operated in the hot spot. The JBLM IRP has implemented LUCs for the site that were memorialized in the 2007 Fort Lewis LUC plan. Post-ROD RA(O) groundwater monitoring has included events conducted between 1994 and the present. The 2022 five-year review indicated that while the remedy is protective of human health and the environment, landfill debris has migrated through the cap due to erosion and off-road vehicle maneuvering training. A focused FS is proposed to address this issue. In the short-term, general maintenance will be conducted on the landfill cap to address the landfill debris that has already migrated to the surface. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews be completed every five years until UU/UE is achieved. The site was evaluated in the 2017 five-year review and the 2022 five-year review. Groundwater monitoring and LUCs will be conducted until cleanup levels are achieved.

53465.1041_FTLE-62_LANDFILL 9

Env Site ID: FTLE-62

Cleanup Site: LANDFILL 9

Alias: FTLE-62

Regulatory Driver: RCRA-C

RIP Date: 10/15/2016

RC Date: 10/15/2016

RC Reason: All Required Cleanup(s) Completed

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Low

MRSPP: N/A

Phase	Start	End
RFA:	9/30/1986	9/30/1986
CS:	1/31/1995	10/31/1996
RFI/CMS:	4/30/2000	3/31/2012
DES:	9/15/2011	10/15/2012
IRA:	- -	- -
CMI(C):	10/31/2011	10/15/2016
CMI(O):	- -	- -
LTM:	10/15/2016	9/15/2054

Site Narrative: Landfill 9 (SWMU 40) consisting of approximately 15 acres was apparently used for disposal of vegetation municipal waste and medical waste from about 1932 to the 1950s. Approximately five acres in the northwest portion of the landfill is located within an Interstate 5 easement and has already been remediated. Approximately 10 acres in the southeast portion of the landfill is located in active Fort Lewis Training Area 4 immediately southeast of the Interstate 5 Exit 118 interchange. The southeast portion of the landfill is a Fort Lewis Agreed Order (FLAO) site as a result of RCRA corrective action recommended in a 1997 RFA. Although no further RCRA corrective action was recommended for the landfill following the 1986 RFA some municipal and medical waste was discovered by the Washington State Department of Transportation (WSDOT) in the mid-1990s in the northwest portion of the landfill during construction of an interchange. Between 1995 and 1996 the WSDOT conducted an SI of the landfill. The SI included collection and analysis of soil samples from test pits and within the landfill boundary. The monitoring wells were also installed and sampled. Low concentrations of landfill constituents were detected in soils and low concentrations of manganese were found in the groundwater. The remedy selected by the WSDOT and approved by the Washington State Department of Ecology (WSDOE) for the northwest portion of the landfill included a two-foot gravel cover in locations where interchange construction had already occurred or was to occur planting grasses and/or shrubs in locations where the cover was applied implementing LUCs on groundwater use and decommissioning the four monitoring wells installed during the WSDOT SI. Additional RI was conducted in 2002 for the remaining portion of the site. Soil samples were collected and analyzed from six test pits excavated within the landfill boundary. RI/FS was completed in March 2012. The maximum detected concentrations of lead and total carcinogenic polycyclic aromatic hydrocarbons are above the state cleanup levels. Remedial action capping was initiated in 2011 and completed in October 2016. The five-year review conducted in 2022 concluded that the remedy is protective of human health and the environment. Cleanup/Exit Strategy - LUCs for the site are managed under the JBLM LUC program. Because hazardous substances pollutants or contaminants will remain at the site at concentrations

exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1049_FTLE-73_MILLER HILL

Env Site ID: FTLE-73

Cleanup Site: MILLER HILL

Alias: FTLE-73

Regulatory Driver: RCRA-C

RIP Date: 6/15/2014

RC Date: 6/15/2014

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	1/31/1996	6/30/1997
CS:	1/31/2000	6/30/2000
RFI/CMS:	10/31/2000	11/30/2010
DES:	- -	- -
IRA:	1/1/2004	5/1/2012
CMI(C):	3/31/2008	6/15/2014
CMI(O):	- -	- -
LTM:	6/15/2014	3/15/2054

Site Narrative: The Miller Hill Site (AOC 4-2) is a former small arms range complex located on the south side of Miller Hill and a FLAO site. The site was used for range activity from about 1917 until the 1960s. Former ranges identified at the site are Pistol Range 62, Pistol Range 67, Subcaliber Tank Range 54, Machine Gun Range 42, and another unnumbered pistol range. At each former range small arms were fired from firing lines on flat ground at targets placed in front of the undisturbed hillside (which served as the backstop). The impact area (i.e. south-facing hillside) is approximately 0.5 miles long. Miller Hill is located within the cantonment area in an area currently zoned for mixed use/open space in the JBLM master plan. In addition, a residential housing area is located west of the site. The 1997 RFA recommended further investigation and investigation activities include a June 2000 preliminary investigation, an SI in June 2001, a draft April 2002 risk assessment, a draft November 2002 limited FS, a February 2004 treatability study, additional soil sampling for delineation purposes between 2005 and 2007, a 2008 RI, and a 2010 FS. The investigation activities detected a maximum lead concentration over 100,000 mg/kg in surface soil along the hillside. In accordance with an April 2005 DD a four-strand wire perimeter fence was installed as an interim remedial action (IRA) in FY04 to limit potential human direct contact with surface soil. In October 2008 another interim action was conducted at the Hillside Housing area just west of the Miller Hill ranges. Soil with lead in residential yards was removed to state residential cleanup levels. Lead remediation of the rest of the site was conducted under a state corrective action plan in 2012. Soil was cleaned up to commercial levels on the flatlands and shallow slopes of the site. Cleanup/Exit Strategy - The plan includes LUCs to restrict access to steep slopes of the site. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1068_CC FL10_Bldg A0111 Leaking Tank Site (AO

Env Site ID: CC FL10

Cleanup Site: Bldg A0111 Leaking Tank Site (AO

Alias: #

Regulatory Driver: RCRA-C

RIP Date: 2/15/2015

RC Date: 5/4/2017

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
RFA:	1/31/1996	6/30/1997
CS:	- -	- -
RFI/CMS:	3/31/2001	6/15/2013
DES:	- -	- -
IRA:	- -	- -
CMI(C):	1/15/2001	1/15/2015
CMI(O):	2/15/2015	5/4/2017
LTM:	5/5/2017	9/30/2054

Site Narrative: A 300-gallon heating oil underground storage tank (UST) (AOC 8-4 of the FLAO) was removed from this site in May 1996. Clean closure was not obtained with first excavation (TPH-D at a concentration of 3,700 mg/kg in bottom sample at 11 feet). The second excavation was stopped because groundwater was encountered at 20 feet. Clean closure was not obtained with the second excavation (TPH-D at concentrations of 4,638 mg/kg and 8,403 mg/kg in 15-foot-deep north and southeast sidewall samples respectively). No groundwater samples were collected. The third excavation was conducted in August 1996 after groundwater elevation decreased but was stopped because of groundwater (depth not given). There were no potential MTCA Standard Method B exceedances in samples collected following the third excavation; however, the north sidewall (where a 4,638 mg/kg sample was collected following the second excavation) was not fully excavated and additional north sidewall confirmation samples were not collected because of the presence of a water main. The only potentially complete pathway is future drinking water use. The five existing monitoring wells have delineated the extent of the limited TPH-D impact in shallow groundwater. Semiannual groundwater monitoring is ongoing. In 2010 a battalion headquarters was constructed on the site. Three existing monitoring wells in the building footprint were abandoned and replaced at locations adjacent to the new building. Only one of the monitoring wells has concentration of TPH-D above the state cleanup level of 500 ug/L. The highest concentration of TPH-D detected in samples collected during the September 2014 sampling event was 1,100 ug/L. In 2010 an FS was submitted to the WSDOE. In 2013 an amendment was resubmitted with the recommendation of monitored natural attenuation (MNA) as the remedy. The WSDOE accepted MNA as the remedy in a letter dated June 4, 2013. TPH-D concentrations in groundwater samples from wells at AOC 8-4 have been below the Method A cleanup level for four consecutive semiannual events conducted after April 2015. In the 2016 annual report JBLM recommended that groundwater monitoring at the site be discontinued because contaminant concentrations had not exceeded cleanup levels during this two-year period. On May 4, 2017 JBLM received approval from WSDOE to discontinue sampling at the Site (Sealaska 2017a). Cleanup/Exit Strategy - JBLM continues to maintain the function and integrity

of the monitoring wells through annual inspections. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved. LUCs are in effect at the site. Monitoring wells will be abandoned.

53465.1069_CC FL22_Non-FLAO Leaking Tank Sites

Env Site ID: CC FL22

Cleanup Site: Non-FLAO Leaking Tank Sites

Alias: #

Regulatory Driver: RCRA-I

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: Not Evaluated

MRSPP: N/A

Phase	Start	End
ISC:	1/31/1996	6/30/1997
INV:	- -	- -
CAP:	10/15/2011	9/30/2027
DES:	- -	- -
IRA:	9/16/2016	9/30/2027
IMP(C):	- -	- -
IMP(O):	- -	- -
LTM:	- -	- -

Site Narrative: This site consists of former UST sites at which the tanks have been removed but soil and/or groundwater contamination remains. Sites with residual soil contamination were not completely remediated due to presence of structures that prevented soil excavation (e.g., utilities or buildings with foundations that would be structurally compromised by further excavation) or which encountered groundwater and prevented additional excavation. These sites are being addressed under the Washington State's Voluntary Cleanup Program. In FY11-12 an SI investigated 40 of these former tank and spill sites. In November 2013 46 additional USTs and spill sites were identified as needing further site investigation. Currently a total of 67 former UST and spill sites include Buildings 1017, 2071, 2609, 2610, 3152, 3252, 3292, 3463, 6071, 9583, 12435, 14109, 6031, J1120, 7990, 3138, 2202, 4043, 4170, 841, 9645, 6071, 6195, 6228, D0219, D0303, D0305, D0312, D0334, D0403, D0406, D409, D0410, D0412, D0432, D0434, D0534, D0605, D0622, D0630, D0634, D627, D0703, D0727, D073, D0803, D0810, D0822, D0827, D0830, D0833, D0834, D0914, D0920, D0932, D0933, D0951, D1002, D1006, D1102, D1107, D1108, D1132, D1135, D1142(2), D1152, and D1156. Sites have similar geology size and spill characteristics. Cleanup/Exit Strategy - The investigation is underway. Further investigation, FS, remediation, and subsequent tank closure activities are assumed at this site.

53465.1070_CC FL08_BLDG 4131 LEAKING TANK SITE (AOC

Env Site ID: CC FL08

Cleanup Site: BLDG 4131 LEAKING TANK SITE (AOC

Alias: #

Regulatory Driver: RCRA-C

RIP Date: 1/15/2015

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	1/31/1996	6/30/1997
CS:	- -	- -
RFI/CMS:	3/15/2001	10/15/2014
DES:	- -	- -
IRA:	- -	- -
CMI(C):	10/15/2014	1/15/2015
CMI(O):	1/15/2015	9/15/2054
LTM:	- -	- -

Site Narrative: A 500-gallon heating oil UST (AOC 8-2) was removed in August 1996. Clean closure of this FLAO site was not obtained with the first excavation (TPH-D at 9,285 mg/kg in bottom sample at eight feet). Clean closure was not obtained with the second excavation (TPH-D at 7,866 mg/kg in bottom sample underneath water main at 22 feet). Additional excavation was not conducted because of the proximity of the water main. No groundwater was encountered. This is a former UST site. The only potentially complete pathway is future drinking water use. The six existing monitoring wells have delineated the extent of the limited TPH-D impact in shallow groundwater. Cleanup/Exit Strategy - Semiannual groundwater monitoring is ongoing. Groundwater monitoring indicates biodegradation of the fuel is sufficient to clean up the site. Groundwater monitoring and LUCs are in effect at the site. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1071_CC FL04_Former Gas Station A1033 (AOC 9-

Env Site ID: CC FL04

Cleanup Site: Former Gas Station A1033 (AOC 9-

Alias: #

Regulatory Driver: RCRA-C

RIP Date: 10/15/2017

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: Not Evaluated

MRSPP: N/A

Phase	Start	End
RFA:	1/31/1996	6/30/1997
CS:	- -	- -
RFI/CMS:	3/31/2001	5/15/2014
DES:	- -	- -
IRA:	1/15/2010	5/15/2014
CMI(C):	5/15/2014	9/15/2016
CMI(O):	10/15/2017	9/15/2054
LTM:	- -	- -

Site Narrative: The site is a former gasoline station. Two 4,000-gallon gasoline USTs were removed in 1990, two in 1994, one 10,000-gallon UST in 1998, and two 1,000-gallon heating oil tanks in 2009 from Building A1033 a former gas station (AOC 9-2). Approximately 1,138 cubic yards of soil was removed from an excavation that extended to a depth of 35 feet during the 1994 UST removal. The 1998 tank pull was clean closed. In 2010 a credit union was constructed over the former gas station site and a soil vapor extraction system was installed. Operation began in February 2011. This is a FLAO site as a result of RCRA corrective action recommended in a 1997 RFA. Previous investigations included the 1994 tank pull activities installation of six monitoring wells between 1995 and 1996 a direct -push groundwater investigation in 2001 and semiannual groundwater monitoring between 1995 and present. Benzene, toluene, ethylbenzene, and xylenes (BTEX) and TPH concentrations in groundwater immediately downgradient of the former USTs are the only contaminants of concern at the site. Potentially complete and significant pathways include future drinking water use and vapor intrusion. Concentrations of benzene and TPH in the gasoline range in the most impacted monitoring well during the March 2014 groundwater monitoring event were 36 ug/L and 14,000 ug/L respectively. JBLM conducted a pilot study consisting of SVE and air sparging in 2011-2012. Startup of the air sparge system occurred in the spring of 2014. Cleanup/Exit Strategy - It is unknown how long the combined SVE/ air sparging systems need to run so they will continue indefinitely. Groundwater will be monitored concurrently until concentrations of gasoline achieve state cleanup levels. LUCs have been implemented at the site to restrict residential land use and future excavations. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved. The SVE/ air sparging system and monitoring wells will be abandoned after state clean up levels are achieved.

53465.1072_CC FL05_GAAF Fuel Facility (AOC 10-8)

Env Site ID: CC FL05

Cleanup Site: GAAF Fuel Facility (AOC 10-8)

Alias: #

Regulatory Driver: RCRA-C

RIP Date: 1/15/2015

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	1/31/1996	6/30/1997
CS:	- -	- -
RFI/CMS:	3/31/2001	9/15/2014
DES:	- -	- -
IRA:	- -	- -
CMI(C):	10/15/2013	9/15/2014
CMI(O):	1/15/2015	9/15/2054
LTM:	- -	- -

Site Narrative: Releases from the four former JP-4 USTs at the GAAF Fuel Facility (AOC 10-8) include a reported spill in 1990 and a suspected spill in 1991. The contaminants of concern at this former UST site are petroleum-related compounds. Investigation activities at the site have included a 1990 SI, a 1991 soil gas survey, installation of four monitoring wells in 1993, quarterly groundwater monitoring between 1993 and 1995, removal of the four USTs in 1998, removal of a heating oil UST in 2002, an FLAO SI (which included installation and sampling of a fifth monitoring well) in 2004, and ongoing semiannual groundwater monitoring. The only potential state cleanup level exceedances were the detections of TPH in the tank, pull excavations, and TPH concentrations in the fifth monitoring well installed immediately adjacent to the UST excavation. Potentially complete and significant pathways include human direct contact and future drinking water use. In 2008 the entire former tank area was paved. Diesel range TPH were detected at 1,700 ug/L in groundwater. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved. Annual groundwater monitoring is ongoing.

53465.1074_MF-SS-34_Spill Site Beside POL Storage A

Env Site ID: MF-SS-34

Cleanup Site: Spill Site Beside POL Storage A

Alias: SS034

Regulatory Driver: OTHER

RIP Date: 9/15/1995

RC Date: 9/15/2054

RC Reason: Not assigned

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/31/1980	8/31/1982
SI:	1/31/1993	1/15/1994
RI/FS:	1/15/1993	1/30/1994
RD:	- -	- -
IRA:	- -	- -
RA(C):	6/30/1994	9/15/1995
RA(O):	9/15/1995	9/15/2054
LTM:	- -	- -

Site Narrative: MF-SS-34 is a one-acre bulk fuel storage area located on the northwest side of McChord Field near the western base boundary. This McChord Field Consent Decree site was reportedly used from 1956 to 1982 for disposal of fuel tank sludge JP-4 and leaded fuel. Spills (approximately 300 to 500 gallons each) were reported to have occurred in the past. It was first identified in 1992 and has been monitored continuously since that time. Contaminants include TPH gasoline and diesel range (TPH-G and TPH-D) and BTEX in groundwater. Evaluation of MNA parameters in 1995 indicated that fuel in groundwater at the site is actively being degraded by biological processes. The site was being monitored on an annual basis as part of the base-wide long-term monitoring program. Historically BTEX compounds have been detected below their respective MTCA Method A cleanup levels of five ug/L, 1,000 ug/L, 700 ug/L, and 1,000 ug/L in samples collected from resource protection wells at site MF-SS-34. In January 2016 Ecology concurred with the Army's recommendation to discontinue analyzing samples for BTEX constituents. Historically TPH-G, TPH-D, and TPH-O have been detected above their respective MTCA Method A cleanup levels of 1,000 ug/L (TPH-G) and 500 ug/L (TPH-D and TPH-O) in samples collected from resource protection well AZ-06. TPH-G has been detected ranging from 180 ug/L (March 1999) to 20,000 ug/L (September 1995) and TPH-D has been detected in samples collected from AZ-06 ranging from 820 ug/L (March 2006) to 160,000 ug/L (September 2004). TPH was not detected above MTCA Method A cleanup levels in any wells sampled at MF-SS-34 in calendar year 2016. WSDOE recommended one more year of quarterly groundwater sampling before they would grant approval for closure. Sampling was conducted in the fall of 2019 and results indicate TPH concentrations from AZ-06 have rebounded to 2,200 ug/L. Under this program annual monitoring for BTEX, TPH-G, and TPH-D was conducted at wells AZ-06 and DM-04. Construction activities associated with expansion of the bulk fuel storage that began in late calendar year 2004 (after September 2004 sampling event) required the decommissioning of monitoring well DM-04. Well DM-06 and UA-02 were utilized for sampling the site after March 2005 since they were the two monitoring wells nearest to the former location of well DM-04. In 2015 groundwater sampling was discontinued at monitoring wells DM-06 and UA-02 based on

Army recommendations and WSDOE concurrence. Contaminant concentrations at these locations were below the associated MTCA Method A cleanup levels. Additionally monitoring for BTEX was also discontinued at well AZ-06 based on Army recommendations and WSDOE concurrence. Based on this reduction in the monitoring program monitoring in 2016 consisted of sampling AZ-06 for TPH-G and TPH-D. Concentrations of TPH-G and TPH-D in samples collected from monitoring well AZ-06 were found to be below MTCA Method A levels. In 2016 the Army recommended that groundwater monitoring be discontinued at Site SS-34. In a letter dated Jan. 30, 2018, WSDOE reviewed this recommendation and did not concur; instead WSDOE noted that site closure may be requested after all monitoring wells at point of compliance have met compliance for four consecutive quarters. Cleanup/Exit Strategy - Groundwater monitoring and LUCs maintenance continue under RA(O). Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1075_MF-WP-44_Vehicle Maintanence Leach Pit

Env Site ID: MF-WP-44

Cleanup Site: Vehicle Maintanence Leach Pit

Alias: WP044

Regulatory Driver: OTHER

RIP Date: 12/31/2002

RC Date: 3/15/2054

RC Reason: Not assigned

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/31/1980	8/31/1982
SI:	1/31/1993	1/31/1994
RI/FS:	1/31/1994	5/31/1994
RD:	- -	- -
IRA:	2/29/2000	12/31/2002
RA(C):	12/31/2002	12/31/2002
RA(O):	12/15/2002	3/15/2054
LTM:	- -	- -

Site Narrative: MF-WP-44 site occupies approximately 11 acres and is used as the vehicle maintenance and repair facility for Air Force vehicles. This McChord Field Consent Decree site is bounded on the north by Battery Drive, on the south by 5th Street, on the west by A Street, and on the east by 4th Street. It consists of 13 buildings used for vehicle maintenance/repair and washing. The site is almost entirely paved. In February 2000 McChord Air Force Base excavated and recycled 427 tons of petroleum-contaminated soils associated with an inactive dry well near Building 779. Excavation dry well removal and soil sampling were completed on Dec. 18, 2002. Examination of historic information and inspection of the site indicates no further remediation is necessary except for groundwater monitoring. The site is included in the base wide long-term monitoring program (RA(O)). An Air Force DD recommending NFA was issued in February 1996. The WSDOE is the regulating agency for MF-WP-44. The site is listed on the WSDOE Hazardous Sites List. The site contaminants of concern are TPH-G, TPH-D, and BTEX. During the March 2015 sampling event the highest concentrations of these compounds detected in samples were-TPH-G at 110 ug/L, TPH-D at 2,700 ug/L, benzene at 0.1 ug/L, and toluene at 0.01 ug/L. Ethylbenzene and xylenes weren't detected. Cleanup/Exit Strategy - Groundwater monitoring and LUC maintenance are ongoing under RA(O). Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1076_MF-DP-60_Floating Fuel at Washrack/Treat

Env Site ID: MF-DP-60

Cleanup Site: Floating Fuel at Washrack/Treat

Alias: DP060

Regulatory Driver: CERCLA

RIP Date: 9/30/1994

RC Date: 3/15/2054

RC Reason: Not assigned

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Delisted

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/31/1980	8/31/1982
SI:	5/31/1985	8/31/1987
RI/FS:	6/30/1992	7/31/1992
RD:	- -	- -
IRA:	- -	- -
RA(C):	9/15/1994	9/30/1994
RA(O):	9/15/1994	3/15/2054
LTM:	- -	- -

Site Narrative: Site MF-DP-60 is part of the Washrack Treatment Area (WTA) NPL site which is located in the northern industrial and operational portion of McChord Field along the western edge of the runway. Site MF-DP-60 includes the storm drainage infiltration ditches (now backfilled) and fuel floating on the shallow groundwater just north of Building 1197 the jet engine test facility. Floating fuel underlying about 300,000 square feet of the WTA was identified in the RI and previous studies. However, the FS indicated the fuel was not migrating off-site and was prevented from impacting drinking water sources by the Vashon Till aquitard. Results from the RI and the baseline risk assessment indicated that no CERCLA remedial action was necessary for soil surface water or sediments. A remedial design pilot study was completed in 1994 to evaluate the selected alternative in the ROD which was passive skimming of the floating fuel. The pilot study concluded that passive removal of the floating fuel was not feasible because of the limited amount of fuel present. The original investigations had overestimated the volume of fuel present. The pilot study also concluded that the site would biodegrade without additional remedial action. An ESD was issued on Sept. 9, 1994, that implemented changes to the ROD remedy. The ESD indicated that natural bioremediation of the floating fuel was occurring and would be allowed to continue i.e., natural attenuation was the selected remedy. Long-term monitoring [RA(O)] was implemented in 1994. On Sept. 26, 1996, the WTA (including MF-DP-060) was deleted from the NPL; however, it was included in the Washington State Hazardous Site List. Under the terms of the ESD MF-DP-060 site continues to be monitored. Monitoring costs for nearby MF-SD-054 are also included with DP-60. The highest concentration of TPH-D detected in samples collected during the June 2015 sampling event was 1,900 ug/L. The TPH-D cleanup level at the site is 1,000 ug/L. Monitoring at DP-60 was discontinued in 2020 after two consecutive sampling events with concentrations below the cleanup levels with concurrence from WSDOE. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved. LUCs are in effect at this site and include residential and groundwater use restrictions.

53465.1077_MF-ALGT-LF-05_American Lake Garden Tract

Env Site ID: MF-ALGT-LF-05

Cleanup Site: American Lake Garden Tract

Alias: LF005

Regulatory Driver: CERCLA

RIP Date: 2/28/1994

RC Date: 3/15/2054

RC Reason: Not assigned

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 72

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/31/1982	8/31/1982
SI:	5/31/1987	8/31/1987
RI/FS:	3/31/1990	3/31/1991
RD:	9/30/1991	12/31/1992
IRA:	- -	- -
RA(C):	2/28/1993	2/28/1994
RA(O):	2/28/1994	3/15/2054
LTM:	- -	- -

Site Narrative: MF-ALGT-LF-05 was placed on the USEPA NPL in 1984. The Air Force, the USEPA, and the WSDOE entered into an FFA effective Oct. 23, 1989, and a ROD effective Sept. 19, 1991. The NPL included Army Environmental Database - Restoration sites- MF-LF-004, MF-LF-005, MF- LF-006, MF-LF-007, MF-OT-026, MF-RW-035, and MF-OT-039. During the subsequent RI site MF-LF-005 was determined to be the principal contributor to groundwater contamination with MF-LF-007 and MF-OT-039 being potential contributors. Contaminants included TCE and cis-12-dichloroethene (cis- dichloroethene) concentrations in the groundwater that were found to exceed allowable limits. A groundwater P&T system was installed and has been under continuous operation since February 1994. It was estimated that the system will run for 50 years per the ROD. The system utilizes granular activated carbon to remove the organic contaminants from the groundwater emanating from sites MF-LF-005 and MF-OT-039 which are now located under the base golf course. Landfill 5 (MF-LF-005) was a major base landfill from 1951 until 1961. A waste oil burn pit was operated at the site from 1952 to 1964. The landfill also had a concrete trench used for burning liquid wastes reportedly including petroleum oils lubricants solvents and fuels. Open burning was conducted until the landfill was closed. A TCE plume extended approximately 1,500 feet downgradient and was approximately 400 feet wide as of September 2002. The plume has been steadily shrinking as a result of groundwater treatment. In 2010 a pilot project was conducted during RA(O) to determine if bioremediation is a viable alternative to reduce remaining TCE concentrations to cleanup levels. Results were favorable. In 2011 a LUC plan was implemented that restricts excavation in site landfills and construction of water wells without state or USEPA approval. In 2013 an Army funded research pilot test was initiated that will evaluate the feasibility of using reactive barrier technology at the site. Results of the bioenhancement studies show that adding amendments to groundwater associated with the American Lake Garden Tract (ALGT) site improves degradation of TCE. In 2016 a site management improvement study evaluated system performance data from 1994 to 2016 and determined that the groundwater P&T system functioned as designed and was effective in providing containment of the dissolved TCE plume while removing a nominal quantity (approximately four to five pounds per year on average) of TCE from the aquifer each year. Over time the removal efficiency has

declined over the operational timeframe and has reached a steady state where treated influent concentrations of TCE are just slightly above the site remediation goal of five ug/L. Operation of the groundwater P&T has reduced the size of the dissolved TCE plume. The 2022 five-year review concluded that while the current remedy is protective of human health and the environment, the current P&T system will not be effective in the future, and that monitored natural attenuation should be implemented instead. Cleanup/Exit Strategy - A ROD amendment will be signed which replaces the former remedy with monitored natural attenuation. Groundwater monitoring for monitored natural attenuation will continue until the cleanup objectives are met. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1078_MF-SS-34N_TCE Cantonment Area Spill Site

Env Site ID: MF-SS-34N

Cleanup Site: TCE Cantonment Area Spill Site

Alias: SS034

Regulatory Driver: OTHER

RIP Date: 4/30/2004

RC Date: 4/30/2054

RC Reason: Not assigned

SC Date: 5/2/2057

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/31/1980	8/31/1982
SI:	1/31/1993	1/31/2001
RI/FS:	10/31/2000	9/30/2003
RD:	9/30/2003	3/31/2004
IRA:	6/15/2002	6/15/2003
RA(C):	4/30/2004	4/30/2004
RA(O):	4/30/2004	4/30/2054
LTM:	5/1/2054	5/1/2057

Site Narrative: Site 34N is a three-acre TCE spill site located on the northwestern boundary of JBLM-McChord Field near Building 1104. The site is a non-NPL CERCLA site discovered in 1999 after investigations at adjacent site SS-34 detected TCE in groundwater north of SS-34. Currently the WSDOE is the regulatory agency for the site and has included it on the state's Hazardous Sites List. Historic maps show more than 20 dormitories/dining facilities were located in the area. TCE was first detected in 1993 but a discrete source of TCE contamination was not identified. Presumably the contamination resulted from multiple small volume surface spills. The plume extends approximately 1,500 feet in length with an average width of 350 to 400 feet. Full-scale potassium permanganate treatment began in 2004 with injection into the shallow aquifer via a network of 32 injection wells. Five injections at the base boundary have reduced TCE concentrations to the cleanup levels in most of the wells. Two injections have been completed for the Springbrook area. The final ROD/cleanup action plan dated October 2005 that identified in situ chemical oxidation as the selected cleanup remedy as an innovative technology for Site MF-SS-34N along with groundwater monitoring and institutional controls. Cleanup/Exit Strategy - A ROD amendment will be signed in which will replace the remedy with MNA. A second round of a vapor intrusion investigation will be completed. LUCs are in effect for this site and include restrictions on groundwater use. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1096_MF-FT-032_PFAS FUEL SPILL FTA, SITE 32

Env Site ID: MF-FT-032

Cleanup Site: PFAS FUEL SPILL FTA, SITE 32

Alias: #

Regulatory Driver: OTHER

RIP Date: 9/30/2035

RC Date: 9/30/2035

RC Reason: Not assigned

SC Date: 9/30/2035

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: No

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/15/1980	8/15/1982
SI:	1/15/1993	9/30/2020
RI/FS:	6/1/2020	9/30/2035
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: Site FT-32 was located 500 feet south of Morey Creek and 500 feet inside the base eastern boundary. The fire training area was built in 1975 and use of the site discontinued in April 1990. According to an IRP DD (US Air Force Environmental Management Flight 1993) the site was used for simulated crash fire training beginning in 1976 and approximately ten exercises were carried out each year by floating 300 to 400 gallons JP-4 fuel on water and then igniting the fuel. The fire training area consisted of a 130-foot diameter diked pit lined area with a one-foot-thick impermeable clay lift. The pit drained through an oil/water separator into a holding tank and discharged to the sanitary sewer connected to the Publicly Owned Treatment Works at Fort Lewis. A site hazard assessment was conducted in 1993 (WSDOE 1993) that included three test pits and soil sampling. Petroleum contaminated soil (6,000 cubic yards) was removed and treated at an on-base landfarming facility located at LF-013. During the soil excavation a UST was discovered and removed. A fuel release occurred during the removal and the spill was cleaned up. Soils excavated during the cleanup area were reportedly relocated to LF 13 approximately 0.2 miles south of FT 032. A DD was written in August 1990 which indicated that the site should be removed from further IRP consideration. The current fire training area was constructed over the former FT-32 area and propane is used instead of jet fuel or other flammables/combustibles. The training area pit now drains into an adjacent holding pond and after inspection of the discharge and confirmation aqueous film forming foam was not used discharges to the sanitary sewer connected to the Fort Lewis Publicly Owned Treatment Works. The site has been closed but was reopened in FY17 in the SI phase to track the perfluorooctanesulfonic acid and perfluorooctanoic acid investigations. These are emerging contaminants that the USEPA has indicated are not protective per the June 16, 2017 letter received. Army responded by conducting a PA and SI starting in 2017. The PA/SI report categorized MF-FT-032 as a potential source area for PFAS with 28,000 ppt perfluorooctanesulfonic acid concentration from FTA-4b and recommended further evaluation. Army started an RI/FS in 2020.

53465.1100_MF-LF-004_LANDFILL D-4

Env Site ID: MF-LF-004

Cleanup Site: LANDFILL D-4

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/15/1991

RC Date: 9/15/1991

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/2/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 31.9

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/15/1980	8/15/1982
SI:	5/15/1987	8/15/1987
RI/FS:	1/15/1988	9/15/1991
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	9/15/1991	3/1/2054

Site Narrative: MF-LF-004 is a former landfill that was used as a burial site for domestic and industrial or construction wastes from 1958 to 1978. The site is situated west of Porter Hills near base housing. The site was reported to have been the location of a gravel pit used sporadically from 1941 to 1958. Site MF-LF-004 is one of seven sites included in the ALGT/Area D NPL. A ROD for the ALGT/Area D sites was issued in September 1991. The ROD states that the levels of contamination in the soil surface water and sediment will not result in unacceptable exposure to hazardous substances. The WSDOE maintains this site on the Hazardous Sites List. Because this site is a former landfill LUCs restricting use have been implemented. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1101_MF-LF-006_BASE LANDFILL, D6

Env Site ID: MF-LF-006

Cleanup Site: BASE LANDFILL, D6

Alias: #

Regulatory Driver: OTHER

RIP Date: 3/15/2000

RC Date: 3/15/2000

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 31.9

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/15/1982	8/15/1982
SI:	5/15/1987	8/15/1987
RI/FS:	12/15/1990	9/15/1991
RD:	12/15/1991	6/15/1992
IRA:	- -	- -
RA(C):	3/15/1993	3/15/2000
RA(O):	- -	- -
LTM:	3/15/2000	3/15/2054

Site Narrative: Base Landfill D6 (ALGT) MF-LF-006 53465.1101 in operation from the early 1960s until closure in March 2000 by the Tacoma-Pierce County Health Department was a borrow pit that had been converted to a demolition debris landfill. Between 1986 and 2009 the landfill operated under a solid waste permit issued by the Tacoma-Pierce County Department of Public Health. The site is one of seven sites included in the ALGT/Area D NPL site. At the time of closure, the landfill was graded and capped. The Health Department continued to perform periodic inspections after the closure until 2007. No contamination above regulatory limits were found during the RI and subsequent groundwater monitoring events completed between 1995 and 2002. The ROD states that the levels of contamination in the soil surface water and sediment will not result in unacceptable exposure to hazardous substances. No further action is required by the Health Department. The current land use of site MF-LF-006 is undeveloped land. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1102_MF-LF-007_BASE LANDFILL, D7

Env Site ID: MF-LF-007

Cleanup Site: BASE LANDFILL, D7

Alias: #

Regulatory Driver: CERCLA

RIP Date: 3/15/1994

RC Date: 1/15/2018

RC Reason: All Required Cleanup(s) Completed

SC Date: 1/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 31.9

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	5/15/1982	8/15/1982
SI:	5/15/1987	8/15/1987
RI/FS:	12/15/1990	12/15/1991
RD:	12/15/1991	6/15/1992
IRA:	- -	- -
RA(C):	3/15/1993	3/15/1994
RA(O):	3/15/1994	1/15/2018
LTM:	1/16/2018	1/15/2054

Site Narrative: MF-LF-007 is one of seven sites included in the ALGT NPL. The site is located under the 17th fairway of the Base Whispering Firs Golf Course at the eastern end of the ALGT/Area D NPL site. Landfill activities were reported to have occurred from 1967 until 1972. Numerous types of wastes were reported to have been disposed of at the site including industrial domestic and construction wastes. Open burning occurred at this site until 1972. Sample results indicate some concentrations of vinyl chloride, methylene chloride, and 11- dichloroethene analytes exceeded state MTCA Method B cleanup standards. Because of its proximity to Landfill 5 the site may be a contributor to the ALGT plume emanating from MF-ALGT-LF-005. In addition to the NPL the WSDOE maintains this site on the Hazardous Sites List and includes it in the Area D/ALGT NPL. One groundwater sample was reported to contain TCE at a concentration of 5.5 ug/L; however, the average concentration over five sampling events was 1.91 ug/L below the USEPA's MCL of five ug/L. No contamination above regulatory limits was found during subsequent MNA groundwater monitoring. Because this site is a former landfill LUCs restricting use have been formally implemented through the ALGT LUC plan. LUC maintenance will continue. A technical memorandum for remedy complete was signed on January 15, 2018, and indicated that LUCs for solid waste management are in place. This site was adjacent to another landfill that was the source of a TCE plume (ALGT). The ROD signed on Sept. 19, 1991, for ALGT. It stated that the selected remedy for the contaminated groundwater is alternative three - installation of three groundwater extraction systems, two carbon adsorption treatment facilities, and irrigation/recharge of treated groundwater. This remedy addresses the risk posed by the contaminated groundwater through treatment which permanently and significantly reduces the volume toxicity and mobility of the hazardous substances. JBLM had a tech memo for remedy complete in 2018 since this site is not the TCE source. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1119_MF-OT-039_CONCRETE BURN TRENCH

Env Site ID: MF-OT-039

Cleanup Site: CONCRETE BURN TRENCH

Alias: #

Regulatory Driver: CERCLA

RIP Date: 3/15/1991

RC Date: 3/15/1991

RC Reason: All Required Cleanup(s) Completed

SC Date: 3/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Yes

Hazardous Ranking Score: 31.9

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/15/1980	8/15/1982
SI:	5/15/1987	8/15/1987
RI/FS:	3/15/1989	3/15/1991
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	3/15/1991	3/15/2054

Site Narrative: MF-OT-039 Old Burn Trench is one of seven sites listed on the ALGT NPL. The site is located beneath the 10th fairway of the base golf course in the center of Area D. The site is immediately southeast of the golf course driving range which covers the adjacent site MF-LF-005 Landfill with its waste oil burn pit. Reports indicated that this site was a concrete trench where waste fuels, solvents, and petroleum oils and lubricants were burned for four years during the 10-year period site MF-LF-005 operated. Waste oil burn pit activities occurred from the mid-1950s until 1960. Approximately 50 to 100 gallons per week of potentially hazardous materials were burned during this period. RI activities began in February 1989. The final round of groundwater sampling occurred in August 1990. Quarterly groundwater sampling rounds were conducted at the site wells over a one-year period. No organic analytes were detected which exceeded MCLs. An exceedance of MTCA Method B cleanup standards was reported for methylene chloride but the result was not verified in other sampling rounds for that well. MF-OT-039 is also listed on the WSDOE Hazardous Sites List as a component of the Area D/ALGT NPL. A technical memorandum for remedy complete was signed on January 15, 2018, and indicated that LUCs for solid waste management are in place. LUCs have been implemented at this site to restrict residential use. The LUCs are administered through the McChord Field LUC plan. Cleanup/Exit Strategy - Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1123_MF-SD-054_LEACH PITS AT WTA NPL SITE

Env Site ID: MF-SD-054

Cleanup Site: LEACH PITS AT WTA NPL SITE

Alias: #

Regulatory Driver: CERCLA

RIP Date: 9/15/1993

RC Date: 9/15/1993

RC Reason: Other

SC Date: 9/16/2054

Program: ENV Restoration, Army

Subprogram: IR

NPL Status: Delisted

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
PA:	8/15/1980	8/15/1982
SI:	8/15/1985	8/15/1987
RI/FS:	7/15/1991	7/15/1992
RD:	7/15/1992	7/15/1993
IRA:	- -	- -
RA(C):	9/15/1992	9/15/1993
RA(O):	- -	- -
LTM:	9/15/1993	9/15/2054

Site Narrative: MF-SD-054 WTA is located within the north industrial portion of the base along the western portion of the instrument runway. The site includes a former washrack (now inactive), two leach pits (now backfilled), oil/water separator (skimmer), and storm drainage infiltration ditches (now backfilled). The WTA was listed on the NPL in 1987 under CERCLA as amended by the Superfund Amendments and Reauthorization Act of 1986. The USEPA, WSDOE, and the Air Force have executed an FFA under Section 120 of CERCLA. A ROD was signed on Sept. 30, 1992. Contaminants in the leach pit soil were not found to present a risk to human health and the environment according to CERCLA guidance but are at levels of concern according to the state MTCA. At the time the ROD was written an agreement was reached between USEPA, the WSDOE, and the Air Force that site MF-SD-054 would be included in LTM and no further active remedial action would be required. This decision is detailed in the McChord Field WTA ROD. An ESD to the ROD was issued by the USEPA on Sept. 9, 1994, which identified natural attenuation as the selected remedy. Cleanup/Exit Strategy - The site is currently being sampled on an annual basis as part of the base-wide groundwater monitoring program. The site is on the WSDOE hazardous sites list. Because hazardous substances pollutants or contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE periodic remedy reviews will be completed every five years until UU/UE is achieved.

53465.1172_53465.1172_Rubberized Material Disposal

Env Site ID: 53465.1172

Cleanup Site: Rubberized Material Disposal

Alias: #

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:	1/1/2021	1/1/2021
SI:	1/1/2021	9/30/2027
RI/FS:	- -	- -
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: The Rubberized Material Disposal Site was discovered during road building activities related to construction of the Madigan Ave bypass. Waste at the site is believed to be related to Army activities in the 1940s where rubber products were collected and reused in a variety of ways. Several 35-gallon metal drums were found to contain pulverized rubber, rubber boots, gas masks, and hoses. The barrels were completely rusted and also in differing states of disrepair. Soil samples were collected on Aug. 8, 2013. Laboratory results indicate the presence of semi-volatile N-nitrosodiphenylamine (sample 8613-01 inside a barrel) and the presence of benzo(a)pyrene in the same sample with benzo(a)pyrene exceeding the WDOE MTCA limits. Cleanup/Exit Strategy - Site characterization of the rubber disposal site to determine nature and extent of semi volatile organic compounds in soil and groundwater.

53465.1173_53465.1173_MCCHORD AUTO HOBBY SHOP WSTE

Env Site ID: 53465.1173

Cleanup Site: MCCHORD AUTO HOBBY SHOP WSTE

Alias: #

Regulatory Driver: RCRA-C

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: Not assigned

Hazardous Ranking Score: 0

RRSE:

MRSPP: N/A

Phase	Start	End
RFA:	1/1/2021	1/1/2021
CS:	1/1/2021	9/30/2027
RFI/CMS:	- -	- -
DES:	- -	- -
IRA:	- -	- -
CMI(C):	- -	- -
CMI(O):	- -	- -
LTM:	- -	- -

Site Narrative: Building J01120 is located off Barnes Blvd west of McChord Field on JBLM. Building J01120 is an auto shop operated by MWR. The auto shop has an exterior underground concrete vault containing a single wall horizontal steel 2,000-gallon aboveground storage tank. This storage tank was used for storing collected motor waste oil from the auto shop. The storage tank system includes other associated ancillary components for dumping of waste oil from within the auto shop work area leak detection system and double wall piping between the storage tank and the building, and between the storage tank and the oil waste separator. An existing aboveground storage tank (AST) is located above the underground pipe route between the UST and the building. A site assessment report was completed Jan. 7, 2019. The AST was located inside a below-ground concrete vault that had partially filled with groundwater to a depth of 10.5 feet below ground surface. The AST was found to be floating off its base inside the concrete vault due to flooding. The cause of water intrusion appears to be related to failed seams between the four-foot tall concrete vault sections and unsealed penetrations through the concrete allowing groundwater to infiltrate. Site assessment samples collected adjacent to the concrete vault sidewalls indicated the presence of carcinogenic polynuclear aromatic hydrocarbons, heavy oil, and diesel range petroleum hydrocarbons exceeding MTCA A levels in soil and groundwater. Cleanup/Exit Strategy - Site characterization of the AST site to determine the nature and extent of petroleum hydrocarbon impacted soil and groundwater. A minimum of four groundwater monitoring wells will be installed to check for groundwater impact and determine groundwater flow direction and gradient.

53465.1066_FTLEW-015-R-01_B Range

Env Site ID: FTLEW-015-R-01

Cleanup Site: B Range

Alias: MRS-1

Regulatory Driver: CERCLA

RIP Date: 4/22/2025

RC Date: 4/22/2025

RC Reason: Not assigned

SC Date: 4/24/2055

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 5

Phase	Start	End
PA:	12/31/2002	12/31/2003
SI:	6/30/2005	4/30/2007
RI/FS:	2/28/2010	4/20/2025
RD:	- -	- -
IRA:	9/30/2010	1/15/2011
RA(C):	4/21/2025	4/22/2025
RA(O):	- -	- -
LTM:	4/23/2025	4/23/2055

Site Narrative: In 2006 during Military Munitions Response Program (MMRP) SI activities the B Range was designated as a munitions response site (MRS). The boundary of the approximately 2,208-acre site encompasses all of Lewis North (former North Fort Lewis) excluding the land within the operational range area. The site boundary was conservatively estimated based on a pamphlet from about 1925 containing a rudimentary sketch of the area. Current and anticipated future land use within Lewis North is a mix of residential commercial and industrial. The southern portion (about 1,000 acres) of Lewis North was heavily developed during World War II and is in the process of being completely redeveloped. According to the April 2007 MMRP SI report for Fort Lewis 37mm projectiles, machine guns, and light mortars may have been used at the B Range. The SI report also documents the discovery of six sand-filled three-inch Stokes mortars during construction activities on North Fort Lewis between February 2006 and June 2006. Subsequent to the April 2007 MMRP SI report additional munitions and explosives of concern (MEC) was encountered during construction activities on Lewis-North. Munitions included three-inch Stokes mortars and other inert MEC items such as fragments from rifle grenades as well as training items not associated with the B Range (e.g., practice land mines). A few unfused Stokes containing high explosives were excavated and removed by the installation's explosive ordnance detachment. In 2011 regulatory authority changed from RCRA to CERCLA. An RI was conducted in 2010-2011 to characterize B Range. During the RI the site was divided into two MRSs. The northern undeveloped portion of B Range was designated MRS-1, and the southern cantonment area of Lewis North was designated as MRS-2. This site MRS-1 consists of a housing and forested training area and is designated FTLEW-015-R-01. Due to the low probability of encountering MEC informational LUCs have been approved for this site and will be codified in the ROD which is underway. LUCs are currently enforced as an interim response action. LUCs for the site are managed under the JBLM CERCLA LUC program. Cleanup/Exit Strategy - Revised LUCs are proposed in the draft ROD and are being implemented as part of the JBLM CERCLA LUC program. Because hazardous substances pollutants or

contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved.

53465.1147_FTLEW-015-R-02_B Range

Env Site ID: FTLEW-015-R-02

Cleanup Site: B Range

Alias: MRS-2

Regulatory Driver: CERCLA

RIP Date: 4/22/2025

RC Date: 4/22/2025

RC Reason: Not assigned

SC Date: 4/24/2055

Program: ENV Restoration, Army

Subprogram: MR

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: 9

Phase	Start	End
PA:	12/31/2002	12/31/2003
SI:	6/30/2005	4/30/2007
RI/FS:	2/28/2010	4/20/2025
RD:	- -	- -
IRA:	9/30/2010	1/15/2011
RA(C):	4/21/2025	4/22/2025
RA(O):	- -	- -
LTM:	4/23/2025	4/23/2055

Site Narrative: In 2006 during MMRP SI activities the B Range was designated as an MRS. The boundary of the approximately 2,208-acre site encompasses all of Lewis North (former North Fort Lewis) excluding the land within the operational range area. The site boundary was conservatively estimated based on a pamphlet from about 1925 containing a rudimentary sketch of the area. Current and anticipated future land use within Lewis North is a mix of residential commercial and industrial. The southern portion (about 1,000 acres) of Lewis North was heavily developed during World War II and is in the process of being completely redeveloped. According to the April 2007 MMRP SI Report for Fort Lewis 37mm projectiles, machine guns, and light mortars may have been used at the B Range. The SI report also documents the discovery of six sand-filled three-inch Stokes mortars during construction activities on North Fort Lewis between February 2006 and June 2006. Subsequent to the April 2007 MMRP SI report additional MEC was encountered during construction activities on Lewis-North. Munitions included three-inch Stokes mortars and other inert MEC items such as fragments from rifle grenades as well as training items not associated with the B Range (e.g., practice land mines). A few unfused Stokes containing high explosives were excavated and removed by the installation's explosive ordnance detachment. In 2011 regulatory authority changed from RCRA to CERCLA. An RI was conducted in 2010-2011 to characterize B Range. During the RI the site was divided into two MRSs. The northern undeveloped portion of B Range (now partially residential housing) was designated MRS-1, and the southern cantonment area of Lewis North was designated as MRS-2. This site MRS-2 encompasses most of the cantonment area and is designated FTLEW-015-R-02. Due to the low probability of encountering MEC and development of this area prohibiting 100% clearance informational LUCs, and unexploded ordinance construction support have been approved for this site and will be codified in the ROD which is underway. These LUCs are currently enforced as an interim response action. Cleanup/Exit Strategy - Revised LUCs are proposed in the draft ROD and are being implemented as part of the JBLM CERCLA LUC program. Because hazardous substances pollutants or contaminants will remain at the site at

concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until UU/UE is achieved after the ROD is issued.

53465.1170_CC FL23_LANDFILL 5

Env Site ID: CC FL23

Cleanup Site: LANDFILL 5

Alias: #

Regulatory Driver: RCRA-D

RIP Date: 12/31/1992

RC Date: 12/31/1992

RC Reason: Other

SC Date: 7/16/2054

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: Delisted

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP:

Phase	Start	End
RFA:	1/31/1985	12/31/1986
CS:	- -	- -
RFI/CMS:	- -	- -
DES:	- -	- -
IRA:	- -	- -
CMI(C):	1/31/1992	12/31/1992
CMI(O):	- -	- -
LTM:	1/15/2006	7/15/2054

Site Narrative: Landfill 5 was formerly a NPL CERCLA site and was listed on the NPL in 1988. NFA was the selected remedy in the 1992 ROD. The site was delisted from the NPL in 1995. Although the site was delisted it is still subject to state landfill regulations (Washington Administrative Code 173-351). State requirements include 30 years of post-closure monitoring. Landfill 5 site is approximately 220 acres. The site consists of seven cells. Five of the cells contain a cover only. Two other cells contain both a liner and a cover per the requirements of RCRA subtitle D. Primary contaminants of concern are iron and manganese. However, in accordance with Chapter 173-351 of the Washington Administrative Code analytes that need to be monitored for post-closure include metals, VOCs, and other inorganic compounds. Potential for off-site migration would be a gravel quarry then the Puget Sound which are down-gradient from Landfill 5. In October 2010 Fort Lewis and McChord Air Force Base were combined to become JBLM. The Army is the lead agency and assumed jurisdiction of JBLM property. State requirements for closed landfills require 30 years of post-closure groundwater monitoring. Post-closure began in 2006. Cleanup/Exit Strategy - The landfills will continue to be monitored. LUCs restricting residential use and water well drilling are being implemented for this site. Well abandonment will be performed at the end of post-closure groundwater monitoring. Because contaminants will remain at the site at concentrations exceeding levels that allow for UU/UE five-year remedy reviews will be completed every five years until unlimited use/unrestricted exposure UU/UE is achieved.

SITE SUMMARY

SITE CLOSEOUT SUMMARY

CRL ID	Site Name	Site Closeout Date
53465.1001	FTLE-01_BUILDING 9580 (MAINTENANCE)	9/30/1983
53465.1002	FTLE-02_HANGAR 3039 (MAINTENANCE)	9/30/1983
53465.1003	FTLE-03_PHOTO SECT (BLDG. 5208)	6/30/1997
53465.1004	FTLE-10_STORM WATER OUTFALLS	9/30/1999
53465.1005	FTLE-11_MAMC HEALTH PHYSICS OFFICE (BLDG	9/30/1983
53465.1006	FTLE-12_MAMC INCINERATOR (BLDG. 3152)	3/31/1997
53465.1007	FTLE-13_HOBBY PHOTO LAB (BLDG. 5308)	9/30/1983
53465.1008	FTLE-15_BUILDING 9500	9/30/1983
53465.1011	FTLE-18_PARK MARSH LANDFILL	1/31/2005
53465.1012	FTLE-19_SMALL ARMS FIRING RANGES	9/30/1983
53465.1013	FTLE-20_ARTILLERY IMPACT AREA	9/30/1983
53465.1014	FTLE-21_MORTAR RANGES	9/30/1983
53465.1015	FTLE-26_OLD RECYCLING SEPARATION BUILDIN	6/30/1996
53465.1017	FTLE-29_BLDG 9570 (WEAPONS REPAIR/ INDOO	6/30/1997
53465.1018	FTLE-30_BUILDING 9507 (TRANSFORMER STORA	12/31/2001
53465.1022	FTLE-34_BUILDING 9556 (HAZ MAT STORAGE)	9/30/1995
53465.1023	FTLE-35_BUILDING 9557 (HAZ MAT STORAGE)	9/30/1995
53465.1024	FTLE-36_BUILDING 9558 (HAZ MAT STORAGE)	9/30/1995
53465.1025	FTLE-38_MOBILITY FUEL TANKS - (BLDG. 41	9/30/1983
53465.1026	FTLE-40_MIXED WASTE STORAGE (BLDG. S9749	12/31/1998
53465.1027	FTLE-41_WASTEWATER TREATMENT PLANT (BLD	9/30/1983
53465.1028	FTLE-44_BUILDING 9513 (RAD STORAGE)	9/30/1983
53465.1030	FTLE-47_BUILDING 3034 (UST)	9/30/1983
53465.1031	FTLE-49_BUILDING 9589 (BATTERY SHOP)	9/30/1983
53465.1033	FTLE-53_OLD VEHICLE WASHRACK(S)	9/30/1983
53465.1035	FTLE-56_LANDFILL 3	9/30/1983
53465.1037	FTLE-58_LANDFILL 5	8/31/2003
53465.1038	FTLE-59_LANDFILL 6	9/30/2005
53465.1039	FTLE-60_LANDFILL 7 (CONSTRUCTION RUBBLE)	9/30/1983
53465.1040	FTLE-61_LANDFILL 8 (CONSTRUCTION RUBBLE)	9/30/1983
53465.1042	FTLE-63_LANDFILL 10 (CONSTRUCTION DEBRIS	9/30/1983
53465.1043	FTLE-66_(2) UST (NEVADA & 41ST DIVISION)	12/31/2001
53465.1044	FTLE-67_LANDFILL 2	10/31/2001
53465.1045	FTLE-69_OLD EXPLOSIVE ORDNANCE DEMOLITIO	6/30/2005
53465.1046	FTLE-70_UNDERGROUND GAS SUPPLY PIPING	11/30/1992
53465.1047	FTLE-71_VEHICLE WASHRACKS	9/30/2001
53465.1048	FTLE-72_EMERGENCY FUEL USTS	9/30/1983
53465.1050	FTLE-74_ENGINEER BLUFF	11/30/2007
53465.1051	FTLE-75_UNDERGROUND GASOLINE PIPELINE	10/31/2006
53465.1067	PBC@FortLewis_PBC at Fort Lewis	3/31/2013
53465.1086	MF-DP-008_ASH BURIAL SITE	8/15/1982
53465.1087	MF-DP-009_BRICK & FLOOR BURIAL SITE	8/15/1982

CRL ID	Site Name	Site Closeout Date
53465.1088	MF-DP-018_CAUSTIC SODA PIT	8/15/1982
53465.1089	MF-DP-036_CIVIL ENGINEERING YARD DRAINAG	1/15/1994
53465.1090	MF-DP-061_ACID DRY WELL BLDG745 & CREEK	12/15/2002
53465.1091	MF-FT-027_FIRE TRAINING, H27	8/15/1993
53465.1092	MF-FT-028_OLD FIRE TRAINING SITE, FT-28	8/15/1993
53465.1093	MF-FT-029_OLD FIRE TRAINING AREA	8/15/1982
53465.1094	MF-FT-030_FIRE TRAINING, F30	8/15/1993
53465.1095	MF-FT-031_FIRE TRAINING, F31	8/15/1993
53465.1097	MF-FT-033_FUEL SPILL FTA, SITE 33	8/15/1993
53465.1098	MF-LF-001_LANDFILL 1, CONSTRUCTION DEBRI	4/15/1993
53465.1099	MF-LF-002_BASE LANDFILL, A02	8/15/1993
53465.1103	MF-LF-010_ BASE LANDFILL, E10	8/15/1993
53465.1104	MF-LF-011_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1105	MF-LF-012_BASE LANDFILL 12	8/15/1993
53465.1106	MF-LF-013_ BASE LANDFILL SITE #13	8/15/1993
53465.1107	MF-LF-014_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1108	MF-LF-015_DEMOLITION DUMP	8/15/1982
53465.1109	MF-LF-016_EQUIPMENT BURIAL SITE	8/15/1982
53465.1110	MF-LF-017_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1111	MF-LF-019_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1112	MF-LF-020_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1113	MF-LF-021_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1114	MF-LF-022_VEHICLE MAINTENANCE, 122	8/15/1982
53465.1115	MF-LF-023_NON-INDUSTRIAL LANDFILL	8/15/1982
53465.1116	MF-LF-024_PAVEMENT SWEEPINGS DUMP	8/15/1982
53465.1117	MF-LF-025_PAVEMENT SWEEPINGS DUMP	8/15/1982
53465.1118	MF-OT-026_ORDNANCE DISPOSAL-BURN KETTLES	3/15/1991
53465.1120	MF-RW-003_RADIOACTIVE BURIAL PIT	8/15/1982
53465.1121	MF-RW-035_RADIOACTIVE DISPOSAL, SITE 35	1/15/2005
53465.1122	MF-SD-053_DRAINAGE DITCH, SD53	8/15/1993
53465.1124	MF-SS-037_POL/SPILL DISPOSAL, C37	8/15/1993
53465.1125	MF-SS-038_POL SPILL/DISPOSAL, B38	8/15/1993
53465.1126	MF-SS-040_MOTOR POOL SPILL SITE	8/15/1993
53465.1127	MF-SS-042_FUEL SPILL, C42	8/15/1993
53465.1128	MF-SS-043_POL DISPOSAL SITE	8/15/1982
53465.1129	MF-SS-045_OLD FUEL SPILL SITE	8/15/1982
53465.1130	MF-SS-046_JP-4 SPILL, A46	8/15/1993
53465.1131	MF-SS-049_SPILL SITE SOUTH END BLDG 342	8/15/1993
53465.1132	MF-SS-050_FUEL SPILL, E50	8/15/1993
53465.1133	MF-SS-051_FUEL SPILL, E51	8/15/1993
53465.1134	MF-SS-052_POL SPILL, B52	8/15/1993
53465.1135	MF-SS-055_SURFACE SPILL AREA, SS-55	1/15/1994
53465.1136	MF-SS-059_FUEL SPILL, SITE 59	8/15/1982
53465.1137	MF-SS-063_BLDG 792/1173 SPILL SITE	8/15/1982
53465.1138	MF-ST-041_FUEL SPILL, B41	8/15/1993

CRL ID	Site Name	Site Closeout Date
53465.1139	MF-ST-047_FUEL SPILL, B47	8/15/1993
53465.1140	MF-ST-048_PCP TANK SPILL, J48	8/15/1993
53465.1141	MF-ST-056_SEPTIC TANK, 56	8/15/1982
53465.1142	MF-WP-057_LEACH PITS, C57	8/15/1993
53465.1143	MF-WP-058_WASTE DISPOSAL PIT 58	8/15/1993
53465.1144	MF-WP-062_LEACHING AREA, C62	8/15/1993
53465.1145	MF-WP-064_WASTE PIT AT ENTOMOLOGY SHOP	6/15/2008
53465.1146	MF-ST-065_22 TANKS IN 7 LOCATIONS	8/15/1982
53465.1052	FTLEW-004-R-01_EVERGREEN FIRING RANGE CO	4/30/2007
53465.1053	FTLEW-012-R-01_POPPING KETTLE	12/19/2003
53465.1054	FTLEW-005-R-01_EVERGREEN INFILTRATION RA	12/31/2003
53465.1055	FTLEW-003-R-01_DUD AREA	4/30/2007
53465.1056	FTLEW-010-R-01_MILLER HILL FIRING RANGE	12/31/2003
53465.1057	FTLEW-013-R-01_PRACTICE GRENADE RANGE	4/30/2007
53465.1058	FTLEW-014-R-01_SMALL ARMS IMPACT AREA	4/30/2007
53465.1059	FTLEW-009-R-01_MACHINE GUN RANGE	4/30/2007
53465.1060	FTLEW-001-R-01_110-B DAWN ATTACK COURSE	4/30/2007
53465.1061	FTLEW-002-R-01_222 DEMOLITIONS AREA	4/30/2007
53465.1062	FTLEW-011-R-01_MORTAR RANGE	4/30/2007
53465.1063	FTLEW-008-R-01_FORMER SKEET RANGE	6/15/2013
53465.1064	FTLEW-006-R-01_FORMER MINES AREA	4/30/2007
53465.1065	FTLEW-007-R-01_FORMER MUSTARD GAS AREA	12/19/2003
53465.1073	MF-001-R-01_MUKILTEO TANK FARM-MARINE TR	8/30/2004
53465.1079	MF-002-R-01_GAS CHAMBER AREA	12/31/2008
53465.1080	MF-003-R-01_AIRCRAFT TARGET BUTT & 1000	5/15/2011
53465.1081	MF-003-R-02_AIRCRAFT TARGET BUTT & 1000	11/15/2009
53465.1082	MF-004-R-01_ORDNANCE DISPOSAL-BURN KETTL	6/15/2011
53465.1083	MF-005-R-01_OLD SKEET RANGE	3/15/2011
53465.1084	MF-005-R-02_OLD SKEET RANGE NFA AREA	11/15/2009
53465.1085	MF-006-R-01_OLD SMALL ARMS AREA	11/15/2009
53465.1148	CC FL01_Misc. FLAO RCRA Corrective Actio	3/31/2010
53465.1149	CC FL02_Former Med & CW Incinerator (SWM	8/31/2006
53465.1150	CC FL03_Southwest Wash Rack (SWMU 52-3)	8/31/2006
53465.1153	CC FL06_Former Practice Fire Tng Area (A	1/31/2008
53465.1154	CC FL07_Bldg 1445 Leaking Tank Site (AOC	8/31/2006
53465.1156	CC FL09_Bldg 5115 Leaking Tank Site (AOC	12/31/2011
53465.1158	CC FL11_Bldg A0508 Leaking Tank Site (AO	12/31/2009
53465.1159	CC FL12_Bldg C0817 Leaking Tank Site (AO	1/31/2006
53465.1160	CC FL13_Bldg E0147 Leaking Tank Site (AO	3/31/2010
53465.1161	CC FL14_Bldg E0730 Leaking Tank Site (AO	12/31/2009
53465.1162	CC FL15_Soccer Field Leaking Tank Site (	12/31/2009
53465.1163	CC FL16_Bldg 2061 Leaking Tank Site (AOC	12/31/2009
53465.1164	CC FL17_Bldg 5101 Leaking Tank Site (AOC	12/31/2009
53465.1165	CC FL18_Bldg 8288 Leaking Tank Site (AOC	12/31/2009
53465.1166	CC FL19_Bldg 9790 Leaking Tank Site (AOC	1/31/2006

CRL ID	Site Name	Site Closeout Date
53465.1167	CC FL20_Bldg D0210 Leaking Tank Site (AO	12/31/2009
53465.1168	CC FL21_Bldg E1110 Leaking Tank Site (AO	12/31/2009
53465.1171	CC FL25_Former McCall Woods Range	1/31/2008

COMMUNITY INVOLVEMENT

Community Involvement Plan (Date Last Reviewed):	7/15/2019
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:	1/24/2017
RAB Results of Solicitation:	Insufficient interest in RAB formation at this time.
Current Technical Assistance for Public Participation (TAPP):	N/A
TAPP Title:	N/A
Potential TAPP:	N/A
Administrative Record Location:	Public Works-ED, IMWE-PWE, MS 17, Box 33950, Joint Base Lewis-McChord
Information Repository Location:	Grandstaff Library, Bldg 2109 Pendleton Ave, JBLM, WA & Pierce County Library

FIVE-YEAR / PERIODIC REVIEW SUMMARY

Status	Review Type	Start Date	End Date	Plans Narrative	Actions Narrative	Results Narrative
Complete	FYR	9/1/2016	10/4/2022	The next five-year review will be completed on September 28, 2027, five years after the regulatory signature deadline for the previous five-year review report.	For the remedy at the Logistics Center (OU1) to be protective in the long -term, additional monitoring wells need to be installed and the Army must conduct plume optimization of existing treatment systems. For the remedy at the Illicit PCB Dump Site (OU-1) to be protective in the long-term, routine maintenance of the clay cap must be conducted. For the remedy at the SRCPP (OU2) to be protective in the long-term, the prevention of residential land use needs to be incorporated into the JBLM LUC Plan and annual inspection checklists to ensure protectiveness. For the remedy at Landfill 4 FTLE-57 (OU2) to be protective in the long-term, LUCs must be enforced to include implementation of additional measures that restrict access to the landfill cap. For the remedy at ALGT OU3) to be protective in the long-term, the ROD amendment must be finalized to document the change in remedy from Pump and Treat (per the 1991 ROD) to monitored natural attenuation (MNA).	The remedial action at OUs 1, 2, and 3 currently protect human health and the environment.
Planned	FYR	1/1/2026	9/28/2027	N/A	N/A	N/A