

FY2016

YAKIMA TRAINING CENTER
Army Defense Environmental Restoration Program
Installation Action Plan

Printed 02 June 2017

Table of Contents

Statement Of Purpose.....	1
Acronyms.....	2
Installation Information.....	4
5-Year / Periodic Review Summary.....	5
Land Use Control (LUC) Summary.....	6
Cleanup Program Summary.....	9
Installation Restoration Program.....	10
IRP Summary.....	11
IRP Contamination Assessment.....	12
IRP Previous Studies.....	13
Installation Restoration Program Site Descriptions.....	14
YFCR-01 TVR/Old MATES.....	15
YFCR-32 BUILDING 815.....	16
YFCR-47 ASP BURN PITS.....	17
YFCR-50 LANDFILL/BURN PIT (1954-1968).....	18
YFCR-53 FIRE TRAINING AREA.....	19
Installation Restoration Program Site Closeout (No Further Action) Sites Summary.....	20
Installation Restoration Program Schedule.....	22
Installation Restoration Program Milestones.....	22
IRP Schedule Chart.....	24
Military Munitions Response Program.....	25
MMRP Summary.....	26
MMRP Contamination Assessment.....	27
MMRP Previous Studies.....	28
Military Munitions Response Program Site Descriptions.....	29
YTCR-001-R-01 BURIED MUNITIONS AREA (BLDG. 217).....	30
Military Munitions Response Program Site Closeout (No Further Action) Sites Summary.....	31
MMRP Schedule.....	32

Table of Contents

Military Munitions Response Program Milestones.....	32
MMRP Schedule Chart.....	33

Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC), and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA).

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), the Yakima Training Center (YTC), the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

Acronyms

AEDB-R	Army Environmental Database-Restoration
AOC	Area of Concern
ASP	Ammunition Storage Point
CA	Corrective Action
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operation)
CMS	Corrective Measures Study
CS	Confirmatory Sampling
CTT	Closed, Transferred, or Transferring
DD	Decision Document
DERP	Defense Environmental Restoration Program
DES	Design
DMM	Discarded Military Munitions
Ecology	Washington State Department of Ecology
ER,A	Environmental Restoration, Army (Formerly called DERA)
ERP	Environmental Restoration Program
FRA	Final Remedial Action
FTP	Fire Training Pit
FY	Fiscal Year
IAP	Installation Action Plan
IMCOM	Installation Management Command
IRA	Interim Remedial Action
IRP	Installation Restoration Program
JBLM	Joint Base Lewis-McChord
K	thousand
LTM	Long-Term Management
LUC	Land Use Controls
MATES	Mobilization and Training Equipment Site
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MRS	Munitions Response Site
MTCA	Model Toxics Control Act
N/A	Not Applicable
NFA	No Further Action
NPL	National Priorities List
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
POL	Petroleum, Oil, and Lubricants
RA	Remedial Action
RA(C)	Remedial Action - Construction
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment

Acronyms

RFI	RCRA Facility Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site Inspection
SWMU	Solid Waste Management Unit
TAPP	Technical Assistance for Public Participation
TCE	Trichloroethylene
TRC	Technical Review Committee
TVR	Tracked Vehicle Repair
USAEC	US Army Environmental Command
USEPA	US Environmental Protection Agency
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound
YFCR	AEDB-R abbreviation for Yakima Training Center
YTC	Yakima Training Center

Installation Information

Installation Locale

Installation Size (Acreage): 327231

City: Yakima

County: Yakima, Washington and Kittitas

State: Washington

Other Locale Information

The Yakima Training Center is a sub-installation of Joint Base Lewis-McChord (JBLM) and is located approximately 100 miles east of the base and about 10 miles north of the city of Yakima (pop 75,000). It encompasses 327,231 acres within Yakima and Kittitas Counties in central Washington State. The YTC population is predominantly transient Soldiers performing maneuvers with a few permanent adult residents and on-site workers and no children. The only significant adjacent population center is Selah, to the west (population 6,300).

Installation Mission

The mission of the YTC is to provide military training facilities, maneuver areas, and ranges for the US and allied nations.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

Joint Base Lewis-McChord Environmental Restoration Program (ERP) at Public Works

Regulator Participation

State

Washington State Department of Ecology (Ecology), Hazardous Waste and Toxics Reduction Program, Central Regional Office

National Priorities List (NPL) Status

YAKIMA TRAINING CENTER is not on the NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

Installation at RIP/RC.

Installation Program Summaries

IRP

Primary Contaminants of Concern: Munitions and explosives of concern (MEC), Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Affected Media of Concern: Groundwater, Soil

MMRP

Primary Contaminants of Concern: Munitions and explosives of concern (MEC)

Affected Media of Concern: Soil

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Complete	201201	201209	2012
Planned	201701	201709	2017

Last Completed 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
ASP Burn Pits (SWMU 27)	YFCR-47
DD 1954-68 Landfill/Burn Pits (SWMU 57)	YFCR-50
Fire Training Pit (SWMU 59)	YFCR-53
Former Pesticide Handling Area (SWMU 5)	YFCR-32
TVR/Old MATES	YFCR-01

Results The remedies for the sites are currently protective of human health and the environment. Extent of TCE plume may not be defined at the TVR/Old MATES site, particularly in the down-gradient/off-site direction.

Actions Continue monitoring at TVR-5 and TVR-6.

Plans If subsequent sampling indicates consistent concentrations above the cleanup level, install appropriately placed downgradient monitoring wells.

Recommendations and Implementation Plans:

The 2012 periodic review indicates the remedies for the sites are currently protective of human health and the environment because land use controls (LUC) are in place to prevent exposure to contaminated soil and groundwater. Groundwater monitoring will determine when Washington State Model Toxics Control Act (MTCA) cleanup levels are attained and groundwater LUCs can be removed.

Land Use Control (LUC) Summary

LUC Title: ASP Burn Pits LUC

Site(s): YFCR-47

ROD/DD Title: ASP Burn Pits (SWMU 27)

Location of LUC

Site Boundary

Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Dig Permits, Restrictions on land use

Date in Place: 200705

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200705

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: PAH, PCBs, PETROLEUM HYDROCARBON

Additional Information

Annual Inspection conducted in December 2013.

LUC Title: Buried Munitions LUC

Site(s): YFCR-52, YTCR-001-R-01

ROD/DD Title: Buried Munitions (aka YFCR-52/YTCR-001-R

Location of LUC

Building 218

Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation

Types of Engineering Controls: None

Types of Institutional Controls: Dig Permits, Restrictions on land use

Date in Place: 200705

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200705

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: Unexploded Ordnance(UXO)

Additional Information

Annual Inspection conducted in December 2013.

LUC Title: DD 1954-68 LF/BP LUC

Site(s): YFCR-50

Land Use Control (LUC) Summary

ROD/DD Title: DD 1954-68 Landfill/Burn Pits (SWMU 57)

Location of LUC

Landfill/burn pits boundary

Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Media specific restriction - restrict drinking water well installation, Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Dig Permits, Restrictions on land use

Date in Place: 200705

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200705

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: METALS

Additional Information

Annual Inspection conducted in December 2013.

LUC Title: FTP LUC

Site(s): YFCR-53

ROD/DD Title: Fire Training Pit (SWMU 59)

Location of LUC

Site boundary

Land Use Restriction: Media specific restriction - restrict drinking water well installation

Types of Engineering Controls: None

Types of Institutional Controls: Dig Permits, Restrictions on land use

Date in Place: 200705

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200705

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: PETROLEUM HYDROCARBON

Additional Information

Annual Inspection completed in December 2013.

LUC Title: SWMU 5 LUC

Site(s): YFCR-32

ROD/DD Title: Former Pesticide Handling Area (SWMU 5)

Location of LUC

Site boundary

Land Use Control (LUC) Summary

Land Use Restriction: Restrict land use - No residential use

Types of Engineering Controls: None

Types of Institutional Controls: Dig Permits, Restrictions on land use

Date in Place: 200705

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200705

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: METALS, PESTICIDES

Additional Information

Annual Inspection completed in December 2013.

LUC Title: TVR/Old MATES LUC

Site(s): YFCR-01

ROD/DD Title: TVR/Old MATES

Location of LUC

1) 1000 feet around TVR/Old MATES site boundary (drinking water control), and 2) Building 843 (excavation control)

Land Use Restriction: Media specific restriction - Prohibit, or otherwise manage excavation, Media specific restriction - restrict drinking water well installation

Types of Engineering Controls: None

Types of Institutional Controls: Dig Permits, Restrictions on land use

Date in Place: 200705

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: Installation

Record of LUC: Master Plan or Equivalent

Documentation Date: 200705

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: VOC

Additional Information

Annual Inspection conducted in December 2013.

Cleanup Program Summary

Installation Historic Activity

The YTC is a sub-installation of JBLM. It is not on the NPL, but is addressed under the Resource Conservation and Recovery Act (RCRA). In 1995 in response to a RCRA permit application for a hazardous waste open burning/open detonation unit, the United States Environmental Protection Agency (USEPA) completed a RCRA facility assessment (RFA). This RFA identified 77 solid waste management units (SWMU) and 38 AOCs and recommended corrective action (CA) for a majority of the units and areas. In Washington, RCRA CA is addressed in accordance with the Model Toxics Control Act (MTCA) regulations. Since an agreed order or consent decree has not been assigned for the YTC CA sites, the JBLM ERP is addressing the RCRA CA sites at YTC in the MTCA voluntary cleanup program, with consultation from the Ecology Hazardous Waste and Toxics Reduction Program.

Final remedies have been selected at all Installation Restoration Program (IRP) sites with concurrence from the Ecology. The LUC remedies, selected in accordance with their respective decision document (DD), are in place at the following four sites:

- YFCR-32,
- YFCR-47,
- YFCR-50, and
- YTCR-001-R-01 (also know as YFCR-52).

The LUC and long-term management (LTM) remedies selected in accordance with their respective DDs are in place at YFCR-01 and YFCR-53.

Military munitions response program (MMRP) sites identified after the 1995 RFA and in the July 2003 closed, transferred, or transferring (CTT) range inventory were addressed under the MMRP. No further action (NFA) was proposed for all but one YTC MMRP site in the site inspection (SI) which was completed in May 2008. The one remaining site YTCR-001-R-01 was combined with YFCR-52. YFCR-52 was administratively closed in 2013.

Installation Program Cleanup Progress

IRP

Prior Year Progress: LTM including groundwater monitoring (YFCR-01 and YFCR-53) and LUCs (six sites) continued to be implemented.

Future Plan of Action: LTM including groundwater monitoring and LUCs will continue.

MMRP

Prior Year Progress: YTCR-001-R-01 was reactivated to implement LUCs. The site was previously known as YFCR-52 which will be closed. Maintenance of the LUC remedy at the site was continued

Future Plan of Action: Maintenance of the LUC remedy will continue at YTCR-001-R-01 (aka YFCR-52).

YAKIMA TRAINING CENTER
Army Defense Environmental Restoration Program
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 51/46

Installation Site Types with Future and/or Underway Phases

- 2 Burn Area
(YFCR-47, YFCR-50)
- 1 Fire/Crash Training Area
(YFCR-53)
- 2 Spill Site Area
(YFCR-01, YFCR-32)

Most Widespread Contaminants of Concern

Munitions and explosives of concern (MEC), Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern

Groundwater, Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
YFCR-46	AMMUNITION STORAGE POINT	FRA	REMOVAL	2003
YFCR-53	FIRE TRAINING AREA	FRA	NATURAL ATTENUATION	2004
YFCR-53	FIRE TRAINING AREA	FRA	REMOVAL	2004
YFCR-01	TVR/Old MATES	FRA	NATURAL ATTENUATION	2005

Duration of IRP

Date of IRP Inception: 198205

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 200609/204603

Date of IRP completion including Long Term Management (LTM): 204603

IRP Contamination Assessment

Contamination Assessment Overview

As of March 2014, all YTC IRP sites are remedy-in-place(RIP)/response complete (RC). Two sites, YFCR-01 and YFCR-53 are undergoing compliance operations in the corrective measures implementation (operations) [CMI(O)] phase. This includes, groundwater monitoring for volatile organics compounds (VOC) and petroleum hydrocarbons.

In addition to YRCR-01 and YFCR-53, four remaining sites have ongoing LUCs:

- YFCR-32,
- YFCR-47,
- YFCR-50, and
- YTCR-001-R-001 (YFCR-52)

In 2013, MMRP site YTCR-001-R-01 was combined with YRCR-52, since they refer to the same site.

Cleanup Exit Strategy

Maintenance of LUC remedies will be ongoing for

- YFCR-01,
- YFCR-32,
- YFCR-47,
- YFCR-50,
- YFCR-52, and
- YFCR-53.

The groundwater monitoring will continue at YFCR-01 and YFCR-53.

IRP Previous Studies

Year	Title	Author	Date
1991	Preliminary Assessment for Yakima Firing Center	Shapiro and Associates, Inc.	FEB-1991
1993	SI Report for Yakima Training Center	Ecology and Environment, Inc	SEP-1993
1995	RCRA Facility Assessment	SAIC for USEPA Region 10	JUL-1995
2001	SI Report for ASP Burn Pits (YFCR-47)	Shannon & Wilson	OCT-2001
	SI Report for Fire Training Pit (YFCR-53)	Shannon & Wilson	NOV-2001
	SI Report for 1954-1068 Landfill/Burn Pits (YFCR-50)	Shannon & Wilson	NOV-2001
2003	SI Report for Pesticide Handling Area	Hart Crowser	MAR-2003
2005	SI Report Pre-1954 Landfill (YFCR-49) 1954-1968 Landfill/Burn Pits (YFCR-50)	General Dynamics Information Technology	AUG-2005
2006	SI Report for YTC Groundwater Investigation	General Dynamics Information Technology	AUG-2006
	SI Report TVR/Old Mates (YFCR-01), Former Pesticide Handling Area (YFCR-48)	General Dynamics Information Technology	DEC-2006
2007	Final Historical Records Review, Yakima Training Center MMRP	FPM Group	APR-2007
	Final Site Inspection Work Plan , Yakima Training Center MMRP	FPM Group	SEP-2007
2008	RCRA Corrective Action Completion Report (Draft)	General Dynamics Information Technology	JAN-2008
	Final SI Report Yakima Training Center MMRP	FPM Group	MAY-2008
2012	Periodic Review Report Yakima Training Center	USACE Seattle District	SEP-2012

YAKIMA TRAINING CENTER
Installation Restoration Program
Site Descriptions

Site ID: YFCR-01
Site Name: TVR/Old MATES

STATUS

Regulatory Driver: RCRA
RRSE: LOW
Contaminants of Concern: Volatiles (VOC)
Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	199009.....	199106
CS.....	199205.....	199508
RFI/CMS.....	200204.....	200508
CMI(C).....	200509.....	200509
CMI(O).....	200510.....	204603
RIP Date:	200510	
RC Date:	204603	

SITE DESCRIPTION

YFCR-01 includes the main motor pool former washrack (AOC 2) and hazardous material storage shed (AOC 5), and the track vehicle repair (TVR)/Old Mobilization and Training Equipment Site (MATES) groundwater plumes. In accordance with a February 2007 DD, NFA is needed for AOC 2 and AOC 5. At the May 2004 IAP Workshop, the USAEC environmental restoration manager decided that TVR/Old MATES would be administratively addressed as part of YFCR-01, since the furthest downgradient monitoring wells are located near AOC 2 and AOC 5. In accordance with a February 2007 DD, the final remedy for the TVR/Old MATES site is LUCs and long-term groundwater monitoring. This site tracks all LUC costs for YTC.

A periodic review of the YTC sites was conducted in FY12, which included YFCR-01. The review recommended that additional downgradient wells may need to be installed if current monitoring wells continue to show high or increasing concentrations of trichloroethylene (TCE). Subsequent sampling in FY13 into FY16 shows decreasing concentrations of TCE. the highest concentration of TCE detected in samples collected in September 2014 was 24 ug/L. As of April 2016 no additional wells have been completed for this site.

CLEANUP/EXIT STRATEGY

The YTC LTM includes semiannual groundwater monitoring events for the foreseeable future. Groundwater wells are monitored twice a year.

The IRP includes periodic reviews and eventual decommissioning of 15 monitoring wells (TVR-1 through TVR-7, MTS-1 through MTS-4, MMP-1, MMP-2, 815-2, and ARC-2).

STATUS

Regulatory Driver: RCRA
RRSE: LOW
Contaminants of Concern: Pesticides
Media of Concern: Soil

Phases	Start	End
RFA.....	199001.....	199106
CS.....	199205.....	199508
RFI/CMS.....	200410.....	200609
LTM.....	200610.....	204603
RIP Date:	N/A	
RC Date:	200609	

SITE DESCRIPTION

Former Building 815 (SWMU 5) was located in the Public Works Yard and was used for pesticide storage. Mixing, storage, rinsing, and loading of pesticides occurred inside the northwest corner of the former building and outside the back door (north side) of the building. An SI was conducted in 2003 and additional investigation was conducted in 2006. In accordance with a February 2007 DD, the final remedy for the site is LUCs. The LUCs are administered through the YTC LUC Plan. Costs are captured under site YFCR-01.

CLEANUP/EXIT STRATEGY

Continue to implement LUCs to prevent residential use.

Site ID: YFCR-47
Site Name: ASP BURN PITS

STATUS

Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Polycyclic Aromatic Hydrocarbons (PAH)

Media of Concern: Soil

Phases	Start	End
RFA.....	199501.....	199510
RFI/CMS.....	199801.....	200501
LTM.....	200610.....	204603

RIP Date: N/A

RC Date: 200501

SITE DESCRIPTION

The Ammunition Supply Point (ASP) Burn Pits Site (SWMU 27) was included in the 1995 RFA because "ammunition packing materials including wood that was reportedly treated with pentachlorophenol" were burned in unlined burn pits. Four burn pits, each having a dimension of approximately 100 feet by 20 feet, were apparently used from an unknown start date until they were backfilled with soil in 1985. In accordance with a February 2007 DD, the final remedy for the site is LUCs. The LUCs are administered through the YTC LUC Plan. Costs are captured under site YFCR-01.

CLEANUP/EXIT STRATEGY

Continue to implement LUCs.

Site ID: YFCR-50

Site Name: LANDFILL/BURN PIT (1954-1968)

STATUS

Regulatory Driver: RCRA

RRSE: LOW

Contaminants of Concern: Polycyclic Aromatic Hydrocarbons (PAH)

Media of Concern: Soil

Phases	Start	End
RFA.....	199501.....	199601
RFI/CMS.....	200201.....	200609
LTM.....	200610.....	204603

RIP Date: N/A

RC Date: 200609

SITE DESCRIPTION

The 1954-1968 Landfill/Burn Pits (SWMU 57) consists of seven unlined pits that received burned waste generated between 1954 and either 1968 or 1974. Investigations in 2003 and 2006 indicated that the only complete exposure pathway is direct contact; however, the direct contact pathway does not pose an unacceptable risk or hazard given the current and future land use. In accordance with a February 2007 DD, the final remedy for the site is LUCs to prevent residential use and unplanned excavations. The LUCs are administered by YTC LUC Plan. Costs are captured under site YFCR-01.

CLEANUP/EXIT STRATEGY

Continue to implement LUCs to prevent residential land use and unplanned excavations.

Site ID: YFCR-53

Site Name: FIRE TRAINING AREA

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater

Phases	Start	End
RFA.....	199501.....	199510
RFI/CMS.....	199801.....	200112
DES.....	200201.....	200303
CMI(C).....	200304.....	200409
CMI(O).....	200409.....	204603

RIP Date: 200409

RC Date: 204603

SITE DESCRIPTION

The former Fire Training Pit site (SWMU 59) was apparently used two or three times per year to practice extinguishing fires. The start date for this practice is unknown. Except for a single training event in 1990, it concluded in 1987. Apparently, common practice for each event was to saturate the open, unlined earthen pit with water, then add and ignite 500 to 1,000 gallons of waste jet propellant number 4, aviation fuel, diesel fuel, or motor gasoline before extinguishing the fire. In 2003-2004 approximately 1000 cubic yards of soil with fuels were removed. COCs for the site are gasoline, diesel, and heavy oil range hydrocarbons (TPH-G, TPH-D, TPH-O). In the DD, the final remedy for the site is LUCs and long-term groundwater monitoring. Costs for LUCs are captured under site YFCR-01.

A periodic review of the YTC monitoring program was conducted in FY12. No changes to the monitoring at YFCR-53 were recommended. During the September 2014 sampling event the highest concentrations of TPH-G, TPH-D, and TPH-O were 1,100 ug/L, 22,000 ug/L, and 3,400 ug/L respectively.

CLEANUP/EXIT STRATEGY

The exit strategy includes periodic reviews and groundwater monitoring for the foreseeable future until contaminant concentrations in FTP-1 fall below MTCA Method A cleanup levels. At the conclusion of monitoring, the five monitoring wells will be decommissioned.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
YFCR-02	SEWAGE TREATMENT PLANT LAB	199603	Site is still active and ineligible for Environmental Restoration, Army (ER,A) funds
YFCR-03	PHOTO LAB	199106	1991 Preliminary Assessment (PA)
YFCR-04	RANGE 1 (RIFLE)	199603	Site is still active and ineligible for ER,A funds
YFCR-06	RANGE 3 (PISTOL)	199603	Site is still active and ineligible for ER,A funds
YFCR-07	RANGE 4 (TANK GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-08	RANGE 5 (TANK GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-09	RANGE 7 (M79/203)	199603	Site is still active and ineligible for ER,A funds
YFCR-10	RANGE 8 (M79/203 TRNG)	199510	Site is still active and ineligible for ER,A funds
YFCR-11	RANGE 9 (HAND GRENADE)	199603	Site is still active and ineligible for ER,A funds
YFCR-12	RANGE 10 (TPT AMMO)	199603	Site is still active and ineligible for ER,A funds
YFCR-13	RANGE 10Z (UNK)	199603	Site is still active and ineligible for ER,A funds
YFCR-14	RANGE 11 (M16/M60)	199603	Site is still active and ineligible for ER,A funds
YFCR-15	RANGE 12 (M60)	199603	Site is still active and ineligible for ER,A funds
YFCR-16	RANGE 13 (AERIAL GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-17	RANGE 14 (106 REC RIFLE)	199603	Site is still active and ineligible for ER,A funds
YFCR-18	RANGE 15 (TANK GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-19	RANGE 16 (AERIAL)	199603	Site is still active and ineligible for ER,A funds
YFCR-20	RANGE 17 (AERIAL GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-21	RANGE 19 (AIR DEFENSE)	199603	Site is still active and ineligible for ER,A funds
YFCR-22	RANGE 20 (UNK)	199603	Site is still active and ineligible for ER,A funds
YFCR-24	RANGE 22 (AERIAL GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-25	RANGE 22C (UNK)	199603	Site is still active and ineligible for ER,A funds
YFCR-26	RANGE 23 (SQUAD)	199603	Site is still active and ineligible for ER,A funds
YFCR-27	RANGE 24 (BTN SIZE)	198309	Site is still active and ineligible for ER,A funds
YFCR-28	RANGE 26 (TANK GUNNERY)	198309	Site is still active and ineligible for ER,A funds
YFCR-29	RANGE 27 (AERIAL GUNNERY)	199603	Site is still active and ineligible for ER,A funds
YFCR-30	RANGE 28 (DEMO AREA)	199603	Site is still active and ineligible for ER,A funds

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
YFCR-31	RANGE 30 (UNK)	199603	Site is still active and ineligible for ER,A funds
YFCR-33	SANITARY WASTE TREATMENT PLANT	199603	Site is still active and ineligible for ER,A funds
YFCR-34	VEHICLE WASHRACK	200609	Feb 2007 Decision Document
YFCR-35	SOLID WASTE LANDFILL	199806	Because of operational dates, site is ineligible for ER,A funds
YFCR-36	ACTIVE RANGE NO. 4	199603	Site is still active and ineligible for ER,A funds
YFCR-37	ACTIVE RANGE NO. 1	199603	Site is still active and ineligible for ER,A funds
YFCR-39	BURN AREAS (AT ARTILLERY FIRING POINTS)	199603	Site is still active and ineligible for ER,A funds
YFCR-40	RANGE 2 (PISTOL & MG)	199603	Site is still active and ineligible for ER,A funds
YFCR-41	FORMER MATES FACILITY (BLDG. 845)	199509	Administratively combined with YFCR-01.
YFCR-42	MATES FACILITY (BLDG. 951)	199603	Site is still active and ineligible for ER,A funds
YFCR-43	TANK MAINTENANCE (BLDG. 851)	199509	Site is still active and ineligible for ER,A funds
YFCR-44	VEHICLE MAINTENANCE (BLDG. 806)	199509	Site is still active and ineligible for ER,A funds
YFCR-45	JP-4 BLADDER SITE (NEAR BLDG. 450)	199612	April 1996 letter from Fort Lewis Public Works to WSDOE
YFCR-46	AMMUNITION STORAGE POINT	200309	Feb 2007 Decision Document
YFCR-48	PESTICIDE STORAGE (BLDG. 975)	199603	Site is still active and ineligible for ER,A funds
YFCR-49	ORIGINAL LANDFILL (PRE-1954)	200709	Feb 2007 Decision Document
YFCR-51	LANDFILL PITS (1968-1969)	200305	Rich Wilson February 2006 memo
YFCR-52	BURIED MUNITIONS AREA (BLDG. 217)	200309	This Site was combined with MMRP site YTCR-001-R-01. the IRP site is no longer active see MMRP.
YFCR-54	WASHRACK USTS	199310	Site is still active and ineligible for ER,A funds

IRP Schedule

Date of IRP Inception: 198205

Past Phase Completion Milestones

1983

ISC (YFCR-54 - WASHRACK USTS)
RFA (YFCR-27 - RANGE 24 (BTN SIZE), YFCR-28 - RANGE 26 (TANK GUNNERY))

1991

RFA (YFCR-01 - TVR/Old MATES, YFCR-03 - PHOTO LAB, YFCR-32 - BUILDING 815, YFCR-34 - VEHICLE WASHRACK, YFCR-35 - SOLID WASTE LANDFILL)

1995

RFA (YFCR-41 - FORMER MATES FACILITY (BLDG. 845), YFCR-43 - TANK MAINTENANCE (BLDG. 851), YFCR-44 - VEHICLE MAINTENANCE (BLDG. 806))
CS (YFCR-01 - TVR/Old MATES, YFCR-32 - BUILDING 815, YFCR-34 - VEHICLE WASHRACK, YFCR-35 - SOLID WASTE LANDFILL)

1996

RFA (YFCR-04 - RANGE 1 (RIFLE), YFCR-06 - RANGE 3 (PISTOL), YFCR-07 - RANGE 4 (TANK GUNNERY), YFCR-08 - RANGE 5 (TANK GUNNERY), YFCR-09 - RANGE 7 (M79/203), YFCR-10 - RANGE 8 (M79/203 TRNG), YFCR-11 - RANGE 9 (HAND GRENADE), YFCR-12 - RANGE 10 (TPT AMMO), YFCR-13 - RANGE 10Z (UNK), YFCR-14 - RANGE 11 (M16/M60), YFCR-15 - RANGE 12 (M60), YFCR-16 - RANGE 13 (AERIAL GUNNERY), YFCR-17 - RANGE 14 (106 REC RIFLE), YFCR-18 - RANGE 15 (TANK GUNNERY), YFCR-19 - RANGE 16 (AERIAL), YFCR-20 - RANGE 17 (AERIAL GUNNERY), YFCR-21 - RANGE 19 (AIR DEFENSE), YFCR-22 - RANGE 20 (UNK), YFCR-24 - RANGE 22 (AERIAL GUNNERY), YFCR-25 - RANGE 22C (UNK), YFCR-26 - RANGE 23 (SQUAD), YFCR-29 - RANGE 27 (AERIAL GUNNERY), YFCR-30 - RANGE 28 (DEMO AREA), YFCR-31 - RANGE 30 (UNK), YFCR-33 - SANITARY WASTE TREATMENT PLANT, YFCR-36 - ACTIVE RANGE NO. 4, YFCR-37 - ACTIVE RANGE NO. 1, YFCR-39 - BURN AREAS (AT ARTILLERY FIRING POINTS), YFCR-40 - RANGE 2 (PISTOL & MG), YFCR-42 - MATES FACILITY (BLDG. 951), YFCR-45 - JP-4 BLADDER SITE (NEAR BLDG. 450), YFCR-46 - AMMUNITION STORAGE POINT, YFCR-47 - ASP BURN PITS, YFCR-48 - PESTICIDE STORAGE (BLDG. 975), YFCR-49 - ORIGINAL LANDFILL (PRE-1954), YFCR-50 - LANDFILL/BURN PIT (1954-1968), YFCR-51 - LANDFILL PITS (1968-1969), YFCR-52 - BURIED MUNITIONS AREA (BLDG. 217), YFCR-53 - FIRE TRAINING AREA)
PA (YFCR-02 - SEWAGE TREATMENT PLANT LAB)

1997

CS (YFCR-45 - JP-4 BLADDER SITE (NEAR BLDG. 450))

2002

RFI/CMS (YFCR-46 - AMMUNITION STORAGE POINT, YFCR-53 - FIRE TRAINING AREA)

2003

RFI/CMS (YFCR-51 - LANDFILL PITS (1968-1969))
CMI(C) (YFCR-46 - AMMUNITION STORAGE POINT)
DES (YFCR-46 - AMMUNITION STORAGE POINT, YFCR-53 - FIRE TRAINING AREA)

2004

CMI(C) (YFCR-53 - FIRE TRAINING AREA)

2005

RFI/CMS (YFCR-01 - TVR/Old MATES, YFCR-47 - ASP BURN PITS)
CMI(C) (YFCR-01 - TVR/Old MATES)

2006

RFI/CMS (YFCR-32 - BUILDING 815, YFCR-34 - VEHICLE WASHRACK, YFCR-49 - ORIGINAL LANDFILL (PRE-1954), YFCR-50 - LANDFILL/BURN PIT (1954-1968))

2007

LTM (YFCR-49 - ORIGINAL LANDFILL (PRE-1954))

Projected Phase Completion Milestones

See attached schedule

IRP Schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID

Site Name

ROD/DD Title

ROD/DD Date

Final RA(C) Completion Date: 200509

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of IRP at Installation (including LTM phase): 204603

YAKIMA TRAINING CENTER IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
YFCR-01	TVR/Old MATES	CMI(O)						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
YFCR-32	BUILDING 815	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
YFCR-47	ASP BURN PITS	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
YFCR-50	LANDFILL/BURN PIT (1954-1968)	LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
YFCR-53	FIRE TRAINING AREA	CMI(O)						

YAKIMA TRAINING CENTER
Army Defense Environmental Restoration Program
Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 10/9

Installation Site Types with Future and/or Underway Phases

1 Unexploded Munitions/Ordnance
(YTCR-001-R-01)

Most Widespread Contaminants of Concern

Munitions and explosives of concern (MEC)

Media of Concern

Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
YTCR-001-R-01	BURIED MUNITIONS AREA (BLDG. 217)	FRA	INSTITUTIONAL CONTROLS	2015

Duration of MMRP

Date of MMRP Inception 200212

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201503/204603

Date of MMRP completion including Long Term Management (LTM): 204603

MMRP Contamination Assessment

Contamination Assessment Overview

This site could not be closed because the 2004 geophysical investigation indicated several small items which could be discarded military munitions (DMM) are located under the concrete slab.

Cleanup Exit Strategy

When the building is demolished, the site will be cleared.

MMRP Previous Studies

Title

Author

Date

There are no Previous Studies

YAKIMA TRAINING CENTER
Military Munitions Response Program
Site Descriptions

Site ID: YTCR-001-R-01

Site Name: BURIED MUNITIONS AREA (BLDG. 217)

STATUS

Regulatory Driver: RCRA
MRSPP Score: Evaluation pending

Phases	Start	End
RFA.....	200212.....	200307
CS.....	200606.....	200805
RFI/CMS.....	200805.....	201503
CMI(C).....	201403.....	201503
CMI(O).....	201403.....	204603
RIP Date:	201503	
RC Date:	204603	

SITE DESCRIPTION

This Munitions Response Site (MRS) encompasses about one acre in the southwest portion of the cantonment area. The MRS includes a developed area of barracks, streets and other infrastructures i.e. above ground steam and electrical pipes and buried water and sewer lines. Structures occupying the area include Buildings 216, 217, and 218. According to personal interviews with YTC personnel, the area around Buildings 217 and 218 was used as a DMM area during 1941-1951. The first discovery of buried munitions reportedly occurred in the early-1950s. In 1987 or 1988, Bangalore torpedoes and bazooka rockets were discovered on the west side of Building 217.

This site was originally identified as YFCR-52 in the 1995 RFA but was moved to the MMRP in 2004. Site YFCR-52 has been closed.

No evidence of DMM was discovered in undisturbed areas of the site during a 2004 geophysical investigation. However, the possibility of DMM exists under the concrete slab buildings. Thus, the JBLM ERP has implemented LUCs on possible future building demolition. LUC costs for this site are captured under site YFCR-01. This is a zero cost site.

CLEANUP/EXIT STRATEGY

LUCs will remain until the building is demolished. The site will be cleared of DMM after the building is demolished.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
YTCR-002-R-01	RANGE #1	200805	Active range no action MMRP.
YTCR-003-R-01	RANGE #1, #3 AND #4	200705	Active range no action MMRP.
YTCR-004-R-01	RANGE #1, #4 - TD	200805	Active range no action MMRP.
YTCR-005-R-01	RANGE #10	200705	Active range no action MMRP.
YTCR-006-R-01	RANGE #5, #6 AND #7	200705	Active range no action MMRP.
YTCR-007-R-01	RANGE #8	200705	Active range no action MMRP.
YTCR-008-R-01	RANGE #8A	200705	Active range no action MMRP.
YTCR-009-R-01	SFOD Range	200805	Active range no action MMRP.
YTCR-010-R-01	SFOD/KDP Range	200805	Active range no action MMRP.

MMRP Schedule

Date of MMRP Inception 200212

Past Phase Completion Milestones

2003

RFA (YTCR-001-R-01 - BURIED MUNITIONS AREA (BLDG. 217), YTCR-002-R-01 - RANGE #1, YTCR-003-R-01 - RANGE #1, #3 AND #4, YTCR-004-R-01 - RANGE #1, #4 - TD, YTCR-005-R-01 - RANGE #10, YTCR-006-R-01 - RANGE #5, #6 AND #7, YTCR-007-R-01 - RANGE #8, YTCR-008-R-01 - RANGE #8A, YTCR-009-R-01 - SFOD Range, YTCR-010-R-01 - SFOD/KDP Range)

2008

CS (YTCR-001-R-01 - BURIED MUNITIONS AREA (BLDG. 217), YTCR-002-R-01 - RANGE #1, YTCR-004-R-01 - RANGE #1, #4 - TD, YTCR-009-R-01 - SFOD Range, YTCR-010-R-01 - SFOD/KDP Range)

2015

CMI(C) (YTCR-001-R-01 - BURIED MUNITIONS AREA (BLDG. 217))

RFI/CMS (YTCR-001-R-01 - BURIED MUNITIONS AREA (BLDG. 217))

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID	Site Name	ROD/DD Title	ROD/DD Date
---------	-----------	--------------	-------------

Final RA(C) Completion Date: 201503

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of MMRP at Installation (including LTM phase): 204603

YAKIMA TRAINING CENTER MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
YTCR-001-R-01	BURIED MUNITIONS AREA (BLDG. 217)	CMI(O)						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 200507

Restoration Advisory Board (RAB): No

Reason Not Established: Installation at RIP/RC.

Additional Community Involvement Information

None

Administrative Record is located at

Public Works-ED
IMLM-PWE
MS 17 (W. Myers)
Box 339500
Joint Base Lewis-McChord, WA 98433-9500
(253) 477-3742

Information Repository is located at

Yakima Public Library
102 N 3rd St.
Yakima, WA 98901
(509) 452-8541

Current Technical Assistance for Public Participation (TAPP):N/A

TAPP Title: N/A

Potential TAPP: N/A

