# FY2016

## **FORT ORD**

**Base Realignment & Closure Installation Action Plan** 

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## **Statement of Purpose**

The purpose of the Base Realignment and Closure (BRAC) Installation Action Plan (BIAP) 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 necessary remedial actions (RA).

In an effort to coordinate planning information between the BRAC environmental coordinator (BEC), the regulatory agencies, executing agencies, the BRAC Division and the public, a BIAP was completed. The BIAP is used to track requirements, schedules and tentative budgets for all 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.

## **Installation Information**

#### **Installation Program Summaries**

#### **BRAC-IRP**

**Total Number of Sites:** 46 Number of sites at RIP: 4 Number of sites at RC: 42 Number of sites at RC with LTM: 2

**Primary Contaminants of Concern:** Explosives, Metals, Semi-volatiles (SVOC), Volatiles (VOC)

Affected Media of Concern: Groundwater, Other (Soil Gas), Soil

#### **BRAC-MMRP**

**Total Number of Sites:** 22 Number of sites at RIP: 0 Number of sites at RC: 8 Number of sites at RC with LTM:

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

Affected Media of Concern:

#### **BRAC-NCR**

**Primary Concerns:** 

#### Installation Locale

**BRAC Round: BRAC II** 

Installation Size (Acreage): 27,827.00 Retained by Component (Acreage): 812.00

27,015.00 **BRAC Acreage:** 

0.00 Acres being transferred to another service:

0.00 Acres being transferred to other federal agencies: Acres being transferred to non-federal agencies: 12,157.00

City: Monterey County: Monterey State: California Other Locale Information

> Fort Ord is located on Monterey Bay in Monterey County, California, approximately 80 miles south of San Francisco. The base consists of about 28,000 acres adjacent to the cities of Seaside, Sand City, Monterey, Del Rey Oaks, and Marina. Laguna Seca Recreation Area and Toro Regional Park border Fort Ord to the south and southeast, respectively. Land use east of Fort Ord is primarily agricultural.

- Ord Military Community (retained by component) is 876 acres and the total includes transferred and reacquired parcels.
- The former Fort Ord BRAC acreage is 26,951.
- The number of acres that have been and are scheduled to be transferred to the Bureau of Land Management (BLM) is 14,651.

#### List of Off-Post Properties

N/A

## **Installation Information**

#### **Environmental Condition of Property**

BRAC Round: BRAC II

	CERCLA	MMRP
Acres in Category 1:	2,493.00	0.00
Acres in Category 2:	0.00	0.00
Acres in Category 3:	414.00	0.00
Acres in Category 4:	14,746.00	5,248.00
Acres in Category 5:	9,362.00	5,847.00
Acres in Category 6:	0.00	0.00
Acres in Category 7:	0.00	0.00

#### **Lead Organization**

Base Realignment and Closure Division

#### Lead Executing Agencies for Installation

US Army Corps of Engineers (USACE), Sacramento District

#### Regulator Participation

**Federal** U.S. Fish and Wildlife Service

US Environmental Protection Agency (USEPA) Region 9 Federal Facilities Branch

California Department of Fish and Wildlife State

California EPA (Department of Toxic Substances Control [DTSC] and California Regional Water Quality

Control Board [CRWQCB], Central Coast Region)

**BRAC Closure Round:** BRAC II - Base Realignment And Closure 1991

#### Status of Redevelopment Initiative (Reuse Plan)

**Redevelopment Plan Date:** 199706

**Organization Name:** Fort Ord Reuse Authority(FORA)

#### Existing Legal Agreements/Interim Leases

**Parcel Name Actual Lease/License Date** Length of Lease/License Licensee

N/A

#### Significant Base Tenants

Projected Date of Final Transfer of Property: 202209

#### National Priorities List (NPL) Status

A score of 42 was recorded on 01-FEB-90.

Final RA(C) Completion Date: 202609

Date for NPL Deletion:

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

RAB established

## **Cleanup Program Summary**

#### Previous Year Planned versus Actual Progress

#### Installation Program Cleanup Progress

**Prior Year Progress:** Groundwater treatment system operation and groundwater evaluation, monitoring, and optimization efforts

> continued for Operable Unit Carbon Tetrachloride Plume (OUCTP), operable unit (OU) 2 and Sites 2/12. Outreach, data management, property transfer, and landfill operation and maintenance (O&M) continued. Continued to characterize Site 39 following MEC clearance. OU2 groundwater treatment plant relocation in progress. BRAC

Cleanup Team (BCT) concurred that remedial action is complete for OU1.

**Future Plan of Action:** Continue groundwater treatment and monitoring in three areas. Continue operation of 2/12 SVE system to optimize

groundwater cleanup. Conduct enhanced insitu bioremediation in area 3A to continue remedy in OUCTP A-Aquifer. Outreach, landfill O&M database management, and property transfer will continue. Continue to characterize site 39 following MEC clearance and continue habitat restoration and monitoring within portions of

Fort Ord National Monument. Complete five-year review fiscal year (FY)17.

BRAC-MMRP

MEC remediation completed in Units 5a and 9, and is underway in Units 23 and 28. Initiated MEC remediation in **Prior Year Progress:** 

Unit 25. Initiated planning for FY16-FY17 prescribed burns. Record of decision (ROD) for BLM Area B and MRS-16 is in progress and development of work plans has been initiated. Oversight of the Environmental Services

Cooperative Agreement (ESCA) project continues.

MEC remediation will continue in Units 23, 25, 28 and 31 within the impact area. Three prescribed burns are Future Plan of Action:

planned in support of MEC program. Sign Track 2 ROD for BLM Area B and MRS-16 followed by remedial action implementation. Complete no further action (NFA) document for BLM Area C. Oversight and support for ESCA will

continue.

**BRAC-NCR** 

**Prior Year Progress:** 

**Future Plan of Action:** 

#### Installation Exit Strategy

Property transfer will be completed after completion of all necessary remediation. Portions of the installation were transferred to the FORA under early transfer authority and cleanup of these areas will be managed by FORA under the ESCA process. Exit strategies for specific sites are discussed within the narrative for each site.

## Land Use Control (LUC) Summary

LUC title: Deeds Site(s): FTO-044

ROD/DD title: Carbon Tetrachloride (OU-CT)

Location of LUC

In the vicininty of the OUCTP.

Land Use Restriction: Media specific restriction - Prohibit groundwater extraction that interferes with Remedial Action system, Media specific

restriction - prohibit use of groundwater for consumption or domestic purposes, Media specific restriction - restrict

drinking water well installation, Media specific restriction - restrict withdrawal or use of groundwater for

agricultural/irrigation purposes

Types of Engineering Controls: None

Types of Institutional Controls: Deed Notices. Deed Restrictions

Date in Place: 200712 **Modification Date:** N/A **Date Terminated:** N/A

Inspecting Organization: County Record of LUC: FOSET, FOST **Documentation Date:** N/A

LUC Enforcement: Annual Inspections, 5 Year Reviews, Transferee Reporting

Contaminants: VOC **Additional Information** 

N/A

LUC title: Excavation and Site Reuse

Site(s): FTO-015-R-01

ROD/DD title: MMRP TRACK 2 Del Rey Oaks

Location of LUC Del Rey Oaks, CA

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

otherwise manage excavation below a specified depth, Restrict land use - No daycare/hospital/school use, Restrict

land use - No residential use

**Types of Engineering Controls:** None

Construction Permit, Deed Notices, Dig Permits, Local Use ordinances, Restrictions on land use, Restrictive Types of Institutional Controls:

Date in Place: 200512 **Modification Date:** N/A **Date Terminated:** N/A **Inspecting Organization:** City

Record of LUC: **FOSET** 

**Documentation Date:** 200512

LUC Enforcement: Transferee Reporting Contaminants: Unexploded Ordnance(UXO)

**Additional Information** 

N/A

## Land Use Control (LUC) Summary

LUC title: Excavation and Site Use

Site(s): FTO-007-R-01

ROD/DD title: ESCA Group 2

Location of LUC Group 2 ESCA Areas

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

otherwise manage excavation below a specified depth, Restrict land use - No daycare/hospital/school use

Types of Engineering Controls:

**Types of Institutional Controls:** Construction Permit, Deed Notices, Deed Restrictions, Dig Permits, Education programs, Local Use

ordinances, Restrictions on land use, Restrictive covenants

Date in Place: 201501 **Modification Date:** N/A Date Terminated:

Inspecting Organization: State

Record of LUC: FOSFT **Documentation Date:** N/A

LUC Enforcement: Annual Inspections, 5 Year Reviews, Transferee Reporting

Contaminants: Unexploded Ordnance(UXO)

**Additional Information** 

N/A

LUC title: Excavation and Site Use

Site(s): FTO-015-R-01, FTO-019-R-01, FTO-022

ROD/DD title: ESCA Group 3

Location of LUC Group 3 ESCA Areas

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

otherwise manage excavation below a specified depth, Restrict land use - No daycare/hospital/school use, Restrict

land use - No residential use

**Types of Engineering Controls:** 

Construction Permit, Deed Notices, Deed Restrictions, Dig Permits, Education programs, Local Use Types of Institutional Controls:

ordinances, Restrictions on land use, Restrictive covenants

Date in Place: 201411 **Modification Date:** N/A **Date Terminated:** 

Inspecting Organization: State

Record of LUC: **FOSET Documentation Date:** 

**LUC Enforcement:** Annual Inspections, 5 Year Reviews, Transferee Reporting

Contaminants: Unexploded Ordnance(UXO)

**Additional Information** 

N/A

LUC title: Excavation and Site Use

## Land Use Control (LUC) Summary

Site(s): FTO-020-R-01

ROD/DD title: MMRP TRACK 2 Parker Flats

Location of LUC Parker Flats Area

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

otherwise manage excavation below a specified depth, Restrict land use - No daycare/hospital/school use, Restrict

land use - No residential use

Types of Engineering Controls: None

Construction Permit, Deed Notices, Deed Restrictions, Dig Permits, Education programs, Local Use Types of Institutional Controls:

ordinances, Restrictions on land use, Restrictive covenants

Date in Place: 200809 **Modification Date:** N/A **Date Terminated:** 

**Inspecting Organization:** State

Record of LUC: **FOSET Documentation Date:** 

LUC Enforcement: Annual Inspections, 5 Year Reviews, Transferee Reporting

Contaminants: Unexploded Ordnance(UXO)

Additional Information

N/A

LUC title: Excavation and Site Use

Site(s): FTO-014-R-01

ROD/DD title: MMRP TRACK 3 Impact Area

Location of LUC Impact Area

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

otherwise manage excavation below a specified depth, Restrict land use - Mitigation area(s) protection, Restrict land

use - No daycare/hospital/school use, Restrict land use - No residential use

**Types of Engineering Controls:** Fences, Signs

**Types of Institutional Controls:** Education programs, Restrictions on land use

Date in Place: 200809 **Modification Date:** N/A **Date Terminated:** N/A

Inspecting Organization: Installation Record of LUC: ECOP (Fed to Fed)

**Documentation Date:** N/A

LUC Enforcement: Annual Inspections, 5 Year Reviews

Contaminants: Unexploded Ordnance(UXO)

**Additional Information** 

N/A

## **FORT ORD**

**Base Realignment and Closure Installation Restoration Program** 

## **BRAC-IRP Summary**

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

46/40

#### Sites planned for RIP for FY2017

Site ID Site Name Month

N/A

Sites planned for RC for FY2017

Site ID Site Name Month

N/A

#### Installation Site Types with Future and/or Underway Phases\*

1 Contaminated Ground Water

(FTO-044)

Contaminated Sediments 1

(FTO-003)

1 Fire/Crash Training Area

(FTO-041)

1 Landfill

(FTO-053)

1 Small Arms Range

(FTO-039)

Spill Site Area

(FTO-012)

#### Most Widespread Contaminants of Concern\*

Explosives, Metals, Semi-volatiles (SVOC), Volatiles (VOC)

#### Media of Concern\*

Groundwater, Other (Soil Gas), Soil

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

Site ID	Site Name	Action	Remedy	FY	Cost
FTO-041	SITE 41 FAAF FIRE DRILL AREA (OU1)	FRA	GROUND WATER TREATMENT	1988	TBD
FTO-006	SITE 6-CAR DUMP (SITE 39)	FRA	WASTE REMOVAL - SOILS	1996	TBD
FTO-008	SITE 8 MC RANGES 49 (SITE 39)	FRA	WASTE REMOVAL - SOILS	1996	TBD
FTO-024	SITE 24 OLD DEH YARD	FRA	WASTE REMOVAL - SOILS	1996	TBD
FTO-039B	SITE 39B INTERGARRISON	FRA	WASTE REMOVAL - SOILS	1996	TBD
FTO-007	SITE 7 RANGES 40/41 FIRE DEMO (SITE 39)	FRA	WASTE REMOVAL - SOILS	1997	TBD
FTO-003	SITE 3-BEACH TRAINFIRE RANGES	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-009	SITE 9 FFE TRAINING AREA (SITE 39)	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-016	SITE 16 DOL MAINTENANCE/PETE'S POND	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-017	SITE 17 1400 BLOCK MOTOR POOL	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-031	SITE 31 FORMER DUMP SITE, EAST GARRISON	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-034	SITE 34 FAAF FUELING FACILITY	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-039A	SITE 39A EAST GARRISON SKEET RANGES	FRA	WASTE REMOVAL - SOILS	1998	TBD
FTO-003	SITE 3-BEACH TRAINFIRE RANGES	FRA	WASTE REMOVAL - SOILS	1999	TBD
FTO-012	SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD	FRA	GROUND WATER TREATMENT	2000	TBD
FTO-053	LANDFILL (OU2)	FRA	CAPPING	2003	TBD
FTO-053	LANDFILL (OU2)	FRA	GROUND WATER TREATMENT	2003	TBD

EV

## **BRAC-IRP Summary**

#### Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))\*

Site ID	Site Name	Action	Remedy	FY	Cost
FTO-005	SITE 5-RANGE 36A (SITE 39)	IRA	WASTE REMOVAL - SOILS	2004	TBD
FTO-044	RESERVATION ROAD SITE	IRA	SOIL VAPOR EXTRACTION	2004	TBD
FTO-044	RESERVATION ROAD SITE	IRA	BIOREMEDIATION - IN SITU GROUNDWATER	2004	TBD
FTO-005	SITE 5-RANGE 36A (SITE 39)	FRA	UXO CLEARANCE	2007	TBD
FTO-044	RESERVATION ROAD SITE	FRA	BIOREMEDIATION - IN SITU GROUNDWATER	2012	TBD

#### **Duration of BRAC-IRP**

Date of BRAC-IRP Inception: 198006

Date for Remedy-In-Place (RIP)/Response Complete (RC): 202609/203109 Date of BRAC-IRP completion including Long Term Management (LTM): 206109

<sup>\*</sup>Note: This does not include sites closed prior to installation being identified as BRAC.

## **BRAC-IRP Contamination Assessmen**

#### Contamination Assessment Overview

Fort Ord was identified by the USEPA as a federal Superfund site in 1990 on the basis of groundwater contamination discovered on the base and listed on the NPL. All 28,000 acres of the facility were listed, fence-line to fence-line. Initial investigations pinpointed 39 sites of concern in addition to two operable units (the Fritzsche Army Airfield Fire Drill Area and the Fort Ord Landfill), which had been investigated during the 1980s.

The Installation Restoration Program (IRP) sites of concern included motor pools, vehicle maintenance areas, dry cleaners, sewage treatment plants, firing ranges, hazardous waste storage areas, and unregulated disposal areas. An additional two sites were added during the investigation process: one, a defueling area located at Fritzsche Army Airfield; the other, a fire drill burn pit in East Garrison. In all, 43 sites were investigated and most have either been cleaned up or, in the instance of groundwater contamination, have an effective cleanup (groundwater treatment) in place.

Since 1990, much of the property has been transferred to the identified reusers. Redevelopment projects have been constructed or are underway in several locations across the former Fort Ord. The parties to the Federal Facility Agreement have signed 21 decision documents (DD) addressing groundwater contamination, the landfill closure, soil contamination, and military munitions as well as identifying many areas for no further action. Considerable progress has been made toward completing identified cleanup. The current Army fieldwork includes munitions cleanup, contaminated soil investigation, operating three groundwater treatment systems, habitat management, and maintaining the landfill cover system. The groundwater treatment systems and landfill are in the operation and maintenance stage.

No-action sites are those that require no further action, either because no release of contaminants was identified at the site or because the activity is specifically excluded under Superfund, or where all investigation and closure activities have been completed in accordance with the permitting requirements of the Resource Conservation and Recovery Act (RCRA). For each site proposed as a no action candidate, a brief memorandum (recommending the site as a no action site candidate) was circulated to the community. This process has been completed for all identified no action sites.

Interim action sites are those that have been cleaned up by the excavation of soil contaminated with petroleum, pesticides and/or metals. For each site proposed for an interim action, a brief memorandum outlining individual site characteristics was circulated to the community for review. Excavations have been completed for all identified interim action sites.

Remedial investigation (RI)/feasibility study (FS) sites are those with more complex problems that require developing a risk assessment that addresses exposures to chemicals that might occur given the identified reuse of the area, and assessing applicable or relevant and appropriate requirements, and, possibly, long-term remediation. Cleanup at most of these sites is complete, but additional treatment is required for Site 2/12 based on a vapor intrusion investigation. At Site 39, additional evaluation may be required for areas that are pending munitions cleanup. The cleanup at Site 3 is complete, but ecological monitoring is ongoing.

OUs are those sites that have undergone considerable investigation and have cleanup/treatment units installed. Three OUs have been designated. These are OU1 (Fritzsche Army Airfield Fire Drill Burn Pit), OU2 (Fort Ord landfill), and OU Carbon Tetrachloride Plume (OUCTP). There are three operational groundwater treatment systems: OU2, OUCTP, and Site 2/12. OUCTP is a groundwater contamination site with in situ treatment as part of the treatment system. The OU1 treatment system is in standby since the groundwater in that area meets clean water standards, based on monitoring results.

Regulatory oversight/interest by federal and state agencies remains elevated. Public interest is intermittent and appears to be limited to a small group of citizens concerned about the groundwater and munitions cleanup actions and development. Comments and questions are addressed as the public provides comments on documents under review and during the Army's community involvement workshops.

# **FORT ORD Installation Restoration Program Site Descriptions**

#### Site Name: SITE 3-BEACH TRAINFIRE RANGES

Parcel: NONE

**Regulatory Driver: CERCLA** 

RRSE: HIGH

Program: **BRAC-IRP** 

Contaminants of Concern: Metals

Media of Concern: Soil **BRAC Round: BRAC II** 

Phases	Start	End
PA	.199006	.199012
SI	.199006	.199012
RI/FS	.199006	.199510
RD	.199603	.199704
RA(C)	.199702	.199812
LTM	.200009	.201709

RIP Date: N/A RC Date: 200009

## SITE DESCRIPTION

The former Beach Trainfire Ranges (FTO-003) were identified as Site 3 in the final base-wide RI/FS. The site extends approximately 3.2 miles along the coastline of Monterey Bay at the western boundary of Fort Ord and was used for small arms training from the 1940s until base closure. Spent bullets accumulated on the sand dunes that formed the "backstops" for targets. The selected remedy consisted of contaminated soil excavation and was documented in the interim ROD, Site 3, Beach Trainfire Ranges, Fort Ord, California. After cleanup was completed, postremediation sampling determined that the remaining site-wide average lead concentration in soil was 161 milligrams per kilogram (mg/kg). Subsequent ecological risk assessments (ERA) and evaluations of risks to plants or animals after the lead-impacted soil cleanup have been completed at Site 3 (MRS-22) and include a post-remediation ERA.

A final ROD for the Site 3 Beach Trainfire Ranges, signed in April 2005, requires ecological monitoring to confirm previous results of ecological risk evaluations and assessments that lead concentrations in soil in the non-remediated areas remain protective of the environment. In September 2006. Site 3 was transferred and is now Fort Ord Dunes State Park. The park includes hiking trails, future campgrounds, and ancillary facilities.

In June 2008, the Army prepared the Habitat Restoration and Monitoring Plan (HRMP) which outlines the strategy and methods to be used to further evaluate potential impacts to ecological receptors from exposure to residual metals within non-remediated areas.

## **CLEANUP/EXIT STRATEGY**

As of 2013, the evaluation of impacts to ecological receptors in non-remediated areas indicated further evaluation is needed. In addition, well destruction efforts in 2014 triggered three additional years of habitat monitoring as required by the Biological Opinion. Once this monitoring is complete in 2017, it is likely that LTM will no longer be required and the site can be closed out.

#### Site Name: SITE 12 DOL AUTO MAINT, AREA/CANNIBAL, YD

## STATUS

Parcel: NONE

Regulatory Driver: CERCLA

RRSE: HIGH

Program: BRAC-IRP

Contaminants of Concern: Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Soil

BRAC Round: BRAC II

Phases	Start	End
PA	199006	199012
SI	199006	199012
RI/FS	199006	199510
RD	199507	199712
RA(C)	199612	199911
RA(O)	199912	202409
LTM	202510	205409

**RIP Date:** 199912 **RC Date:** 202409

#### SITE DESCRIPTION

The Sites 2/12 groundwater contamination was discovered in 1989 following the installation and sampling of monitoring wells. The remedy is groundwater extraction, treatment, and reinjection as described in the 1997 base-wide ROD. A groundwater extraction and treatment system was constructed and began operating in 1999. The groundwater treatment plant (GWTP) consists of downhole extraction pumps, two granulated activated carbon (GAC) vessels operated in series, and an air stripper.

In 2011, groundwater monitoring results identified unexpected increasing concentrations of another contaminant of concern (COC), tetrachloroethylene (PCE), found in groundwater up to 28 micrograms per liter ( $\mu$ g/L). As a result, the third five-year review report for Fort Ord recommended a soil gas investigation as documented in the final soil gas investigation report. The investigations revealed the presence of PCE at concentrations up to 1,700 micrograms per cubic meter ( $\mu$ g/m3) and trichloroethylene (TCE) at concentrations up to 2,400  $\mu$ g/m3 near the ground surface and adjacent to commercial structures. These results exceeded their respective screening levels. An RI/FS addendum was completed to define the lateral and horizontal extent of soil gas contamination and a pilot study was conducted by installing five soil vapor extraction (SVE) wells and five air sparging (AS) wells in FY14. Additional groundwater monitoring wells and soil gas probes were installed to monitor both groundwater and soil gas plumes at Sites 2/12.

An Explanation of Significant Differences (ESD) to the 1997 ROD was approved by the regulatory agencies. The ESD highlights key information from the RI/FS Addendum that indicated the need for significant differences to the remedy for Sites 2/12. Based on recommendations in the RI/FS addendum report, modifications to the groundwater remedy include the following elements:

- -Continuation of the current groundwater monitoring program
- -Operation of the existing Sites 2/12 groundwater treatment system (GWTS) in accordance with the 1997 ROD
- -Revision of the aquifer cleanup level for PCE from 3.0 μg/L to 5.0 μg/L
- -Expansion of the existing Sites 2/12 GWTS with additional groundwater extraction
- -Initiation of SVE and treatment with GAC and soil gas cleanup levels of 1,800 μg/m3 for PCE and 1,000 μg/m3 for TCE; and initiation of a soil gas monitoring program.

In order to address PCE in soil gas at the site, an RI/FS Addendum was completed. Five new SVE wells, a new SVE treatment system, and associated pipeline were installed in fall of 2015 during RI/FS Addendum fieldwork as the extension to the existing Site 12 GWTS. Five existing SVE pilot study wells were connected to the new SVE treatment system as part of the remedy. Expected to operate through FY18, the SVE treatment system remediates soil gas that continues to provide a contaminant source to groundwater at the site. The groundwater extraction treatment system was also expanded with a second groundwater extraction well that will continue operations until FY18 to address elevated PCE concentrations in groundwater, detected at a maximum concentration of 92 µg/L, and exceeding the new aquifer cleanup level for PCE of 5 µg/L.

## **CLEANUP/EXIT STRATEGY**

Continue operations of the SVE and treatment system to extract TCE and PCE vapors until FY18 or until remedial action objectives are met.

Continue the remedial action (operation) [RA(O)] phase of groundwater treatment until concentrations meet aquifer cleanup levels documented in the ESD.

Once remedial action objectives have been met, conduct approximately two year (FY19-FY20) of attainment monitoring (up to eight monitoring events) in the LTM phase to validate that groundwater cleanup is complete.

## Site ID: FTO-012 Site Name: SITE 12 DOL AUTO MAINT, AREA/CANNIBAL, YD

Perform a baseline habitat monitoring survey, and conduct habitat monitoring after well abandonment.

#### Site Name: SITE 39 INLAND RANGES

## STATUS

Parcel: BLM (7379.99 acres), SEASIDE (FORA) (FOSET 5) (615.43

acres), MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres), DEL REY OAKS (FORA) (FOST 10) (4.66 acres)

Regulatory Driver: CERCLA

RRSE: HIGH

Program: BRAC-IRP

Contaminants of Concern: Explosives, Metals, Semi-volatiles

(SVOC)

Media of Concern: Soil **BRAC Round:** BRAC II

Phases	Start	End
PA	199006	199012
SI	199006	199012
RI/FS	199006	199510
RD	199603	199801
RA(C)	200809	202609
LTM	202610	203309

RIP Date: N/A

202609 RC Date:

#### SITE DESCRIPTION

FTO-039 was used to train soldiers since 1917 in the use of military weapons including small arms and high explosives. The training resulted in areas contaminated with UXO and munitions constituents (MC). UXO is being addressed under FTO-014-R-01 while contaminated soil from small arms ammunition including metals (e.g. lead, copper, and antimony) and explosives constituents such as cyclotrimethylenetrinitramine (RDX), octogen (HMX) and trinitrotoluene (TNT) from the larger munitions are being addressed under FTO-039. Site 39 was included in the ROD, January 13, 1997, and remedial action is defined in the ROD as soil excavation and disposal on-site, in the former Fort Ord Landfills (OU2 or FTO-053). The final comprehensive base-wide range assessment (BRA) report identified additional areas of contaminated soil within Site 39.

The final FS addendum (FSA) and the final ROD amendment documented the remedial action remedy based on ecological screening levels and included an increase in contaminated soil volumes. These documents originally required the excavation of approximately 125,000 cubic yards of contaminated soil from approximately 53 acres of ranges on former Fort Ord and the transportation and placement of the soil on the on-site landfill. However, to date, the known remediation and restoration surface area to be addressed has increased to 70.5 acres, and more than 152,748 cubic yards of contaminated soil have been excavated and placed at Cell E of the former landfill (FTO-053). The remedy identified in the Site 39 ROD amendment also requires the Army to continue to perform limited soil sampling for metals and constituents of explosives in soil within Site 39 as munitions responses are completed. If there is evidence that military munitions have degraded and released metals or constituents of explosives into soils at Site 39, these specific locations will be evaluated to determine whether additional sampling or remediation is necessary.

#### CLEANUP/EXIT STRATEGY

Approximately 3,300 cubic yards of lead-impacted soil on historical areas (HA) 31/31A require subsurface MEC remediation, characterization, soil excavation, transportation and placement at Cell E of the former landfill for capping in accordance with the 2009 Site 39 ROD amendment. For cost efficiency, the initial characterization of the remaining known remediation area and potential additional remediation areas within Site 39 is being coordinated with the completion of MEC remediation under the Track 3 ROD to ensure all contaminated soil identified will be excavated and capped in Cell E of the OU2 landfill in a single mobilization/construction project.

Soil remediation, uninvestigated areas of Site 39 and over 6,000 acres in the impact area will require or have undergone MEC response and are now going through initial characterization by limited soil sampling.

All Site 39 excavations in habitat reserve areas are required to be restored and monitored to demonstrate successful restoration of critical habitat that supports rare, threatened, and endangered species per the Installation-Wide Multispecies Habitat Management Plan, the 2015 Biological Opinion issued by the U.S. Fish and Wildlife Service, and the Final Habitat Restoration Plan 2009. The known remediation and restoration areas are 70.5 acres in extent.

As a result of known and potential Site 39 areas requiring MEC remediation through FY23, the site strategy has been revised with remedial action construction (RA(C)) to continue through FY26. Long-term monitoring will begin in FY27 and continue through FY32 to complete habitat restoration, monitoring, and reporting as required by the Final Habitat Restoration Plan, Site 39 Inland Ranges, Former Fort Ord, California, September 2009.

## Site Name: SITE 41 FAAF FIRE DRILL AREA (OU1)

## STATUS

Parcel: UCMBEST (FOST 12) (46.32 acres)

Regulatory Driver: CERCLA

RRSE: HIGH

Program: BRAC-IRP

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater BRAC Round: BRAC II

Phases	Start	End
PA	198006	198012
SI	.198405	198612
RI/FS	198701	198705
RA(C)	198707	198806
RA(O)	198807	201503
LTM	.201503	202409

**RIP Date:** 198807 **RC Date:** 201503

## SITE DESCRIPTION

During the operation of Fort Ord, Site FTO-041 was used as a firefighter training area. Over years of use, flammable solvents leached into the soil and groundwater at the site. The Army completed the soil remedy through a series of removal actions with groundwater contamination of TCE remaining. The ROD for this site identifies the remedy which includes extracting groundwater, treatment with GAC, and reinjecting treated water into the aquifer. Results of LTM groundwater remediation program indicate that remediation is complete. The regulatory agencies approved an attainment monitoring program consisting of four to eight events conducted at bimonthly intervals. Per the regulatory agencies' request, four attainment monitoring events were completed by December 2015. Samples collected during the attainment monitoring events were analyzed for 10 constituents of concern listed in the ROD. Emerging contaminants, perfluorocatanoic acid (PFOA) and perfluorocatane sulfonate (PFOS), were also tested at the regulatory agencies' request since these compounds could have been used as part of fire training activities at the OU-1 source area.

Four attainment monitoring events have been completed and Final Remedial Action Completion Report (RACR)/Technical Memorandum, Operable Unit 1, Attainment Monitoring Results Sampling Events #1 through 4, dated March 2016, recommends no further monitoring is required and OU-1 attainment monitoring activity is complete due to the following reasons:

- TCE concentrations at all wells in the attainment monitoring well network have been less than the corresponding Aquifer Cleanup Goals for six consecutive sampling events
- All PFOA and PFOS sample results showed concentrations significantly less than the USEPA provisional health advisory (PHA) screening criteria

The regulatory agencies concurred with the Army's finding that all remedial actions have been implemented and completed at OU-1. Remaining site activities include completion of demolition of the northwest treatment facility and monitoring wells, and habitat monitoring.

#### **CLEANUP/EXIT STRATEGY**

Since on-site remedial actions are now complete, remaining activities will consist of a baseline habitat survey, site closure, well abandonment, and treatment system decommissioning, to be followed by three years of habitat monitoring.

#### Site Name: RESERVATION ROAD SITE

## STATUS

MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres), MARINA Parcel:

(FORA) (FOSET 5) (52.87 acres)

Regulatory Driver: CERCLA

RRSE: HIGH

**BRAC-IRP** Program:

Contaminants of Concern: Volatiles (VOC)

Media of Concern: Groundwater BRAC Round: BRAC II

Phases	Start	End
PA	199701	199701
SI	199701	199802
RI/FS	199701	200309
RD	200309	200601
IRA	200407	200409
RA(C)	200603	201209
RA(O)	201209	202609
LTM	202610	204609

RIP Date: 201209 RC Date: 202609

## SITE DESCRIPTION

OUCTP Site FTO-044: Historical information revealed spent carbon tetrachloride, used to clean radio parts, was directly disposed of on the ground surface. Groundwater contamination of carbon tetrachloride from a surface release at FTO-044 has been under investigation since 1997. The selected remedies in the ROD to address carbon tetrachloride contamination in the three aguifers are: 1) enhanced bioremediation using lactate injection and recirculation in the A-Aquifer as described in the remedial action work plan; 2) groundwater extraction in the Upper 180-Foot Aquifer in an area that is commingled with the FTO-053 OU2 plume and groundwater treatment in the OU2 Groundwater Extraction and Treatment Facility; and 3) monitored natural attenuation (MNA) in the Lower 180-Foot Aguifer.

A previous round of bioremediation injections to address groundwater contamination in the A-Aquifer was completed in FY12. The injection system used single injection events in each of four deployment areas located throughout the footprint of the groundwater plume. The amount of carbon tetrachloride has greatly decreased in the deployment areas; however, post-injection bioremediation monitoring results indicate that a portion of the A-Aquifer plume remains untreated. Bioremediation injections are being deployed in FY17 and FY18 in a new deployment area for two years. Two years of bioremediation monitoring will follow after the completion of bioremediation injections. To address slugs of more contaminated groundwater before they move off-site and to achieve remediation goals in the A-Aquifer, it is estimated that an additional series of bioremediation injections will likely be required in FY24 with follow-on bioremediation monitoring in FY25 and FY26.

## **CLEANUP/EXIT STRATEGY**

A-Aquifer: Construction and operation of the substrate injection and extraction system begin in 2016. After the completion of the bioremediation injection operation, bioremediation monitoring will be performed for two years. An additional set of bioremediation injections will be performed in FY24 with follow-on monitoring in FY25 and FY26 to address slugs of contaminated groundwater before they migrate off-site. Groundwater monitoring will be continued until aguifer cleanup levels identified in the ROD are achieved. The 2015 annual report for groundwater monitoring at OUCTP estimates remedy goals will be achieved in 30 years from deployment of initial bioremediation injections in 2012, and will be completed in FY42.

Upper 180-Foot Aquifer: Contaminated groundwater is extracted and treated utilizing a single extraction well (EW-OU2-09-180) to transport contaminated water to the FTO-053 treatment system. Due to continued carbon tetrachloride detection in EW-OU2-09-180, additional groundwater extraction in the Upper 180-Foot Aquifer has been implemented to improve hydraulic control and containment of the contaminant plume in this aguifer. The 2015 annual report for groundwater monitoring at OUCTP estimates remedy goals will be achieved in thirty (30) years from implementation of the remedy. Remediation in this aguifer will be complete in FY42.

Lower 180-Foot Aquifer: MNA is the selected remedial approach for this aquifer in the ROD. The MNA model predicts that it will take approximately 30 years for the concentrations of carbon tetrachloride to decrease below aquifer cleanup levels. Since the last remedy was implemented at OUCTP in 2012, remediation in this aguifer will be completed in FY42.

Since well abandonment will be performed after achieving remedy goals in FY42, baseline habitat monitoring (FY43) and three years of follow-on monitoring (FY44-FY46) will be conducted at OUCTP as part of the 2015 Biological Opinion. The LTM phase will end in FY46.

Site ID: FTO-053 Site Name: LANDFILL (OU2)

## STATUS

MONTEREY COUNTY (FORA) (FOST 13) (146.8 Parcel:

acres), MARINA (FORA) (FOST 10) (40.18 acres)

Regulatory Driver: CERCLA

RRSE: HIGH

Program: **BRAC-IRP** 

Contaminants of Concern: Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern: Groundwater, Other (Soil Gas), Soil

BRAC Round: **BRAC II** 

Phases	Start	End
PA	199006	199012
SI	.199012	199012
RI/FS	199012	199306
RD	199307	.199612
RA(C)	199512	.200211
RA(O)	199601	.203109
LTM	203110	.206109

RIP Date: 200211 RC Date: 203109

#### SITE DESCRIPTION

FTO-053 (OU2) initially consisted of six landfill cells (150 acres) and associated contaminated groundwater. The north portion of the landfill (Cell A, 30 acres) was used from 1956-1966 while the main landfill (Cells B-F, 120 acres) operated from 1960-1987 and may have received a small amount of chemical waste (paint, oil, pesticides, electrical equipment, ink, and epoxy adhesive) along with household and commercial refuse. The Army began environmental investigation studies in 1988. The 1993 Final RI/FS Report indicated the presence of low levels of VOCs in groundwater, and SVOCs, metals, and pesticides in the soil. Remedies for the landfills included relocation of the waste in Cell A to the main landfill cells, installation of an engineered landfill cap on Cells B to F, installation of a treatment system to extract groundwater from the A-Aquifer and the Upper 180-Foot Aquifer, installation of a treatment system to extract landfill gas (LFG), and institutional controls. The OU2 ROD was signed in 1994 and followed by four ESDs issued in 1995, 1996, 1997, and 2006.

A groundwater treatment facility was constructed in 1995 to remediate groundwater underlying the landfill and continues to operate. Since treatment began, the Army has continuously evaluated effectiveness of the treatment by optimizing the number and locations of extraction wells. Groundwater modeling completed in 2008 and reported in the exit strategy for OU2 estimated that the GWTS would need to remain in operation for approximately another 25 years (FY34) in its current configuration to reach RA objectives. Based on that modeling, a cost benefit analysis evaluated relocating groundwater treatment operations to the OU2 landfill and constructing a new treatment plant. The analysis further indicated that relocating the treatment plant would result in significant cost savings and shorten groundwater cleanup by 10 years. This move provides the Army with a stronger and more flexible system to address future remediation challenges at OU2 and OUCTP (FTO-044), as well. A design-build contract for the treatment plant relocation was awarded in late 2014, and design is in progress. Construction will begin in FY16 and operations will switch over to the new treatment plant in FY17.

Due to the presence of LFG concentrations above applicable remediation criteria along the eastern perimeter of Cell F near adjacent residential areas, a treatment system was installed in 2001 to mitigate the potential effects of LFG. Based on the recommendations of the LFG pilot test evaluation report, the Army expanded the OU2 LFG extraction and treatment system by installing extraction wells around the entire perimeter of Area E and in the interior of Area F, and converting to a thermal treatment unit (TTU) in 2006. This TTU system intercepts LFG before groundwater contamination occurs, thereby shortening overall treatment system operation time.

## **CLEANUP/EXIT STRATEGY**

Relocate the groundwater treatment plant and increase treatment capacity; continue operation of the GWTS until contaminant concentrations in all aguifers meet the cleanup levels identified in the ROD; continue landfill operations and maintenance and LFG extraction and monitoring systems, as required by regulations. The LTM phase will continue through at least FY61.

# **BRAC-IRP Schedule**

Date of BRAC-IRP Inception: 198006

**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: 202609

NPL Deletion Date: TBD

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of BRAC-IRP at Installation (including LTM phase): 206109

## FORT ORD BRAC-IRP Schedule

						= phase	underway
SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE 3-BEACH TRAINFIRE RANGES	LTM						
SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE 12 DOL AUTO MAINT.	RA(O)						
AREA/CANNIBAL.YD	LTM						
SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE 39 INLAND RANGES	RA(C)						
	LTM						
SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE 41 FAAF FIRE DRILL AREA (OU1)	LTM						
SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
RESERVATION ROAD SITE	RA(O)						
	LTM						
SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
LANDFILL (OU2)	RA(O)						
	LTM						
	SITE 3-BEACH TRAINFIRE RANGES  SITE NAME  SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD  SITE NAME  SITE 39 INLAND RANGES  SITE NAME  SITE 41 FAAF FIRE DRILL AREA (OU1)  SITE NAME  RESERVATION ROAD SITE  SITE NAME	SITE 3-BEACH TRAINFIRE RANGES         LTM           SITE NAME         PHASE           SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD         RA(O)           LTM         LTM           SITE NAME         PHASE           SITE 39 INLAND RANGES         RA(C)           LTM         LTM           SITE NAME         PHASE           SITE 41 FAAF FIRE DRILL AREA (OU1)         LTM           SITE NAME         PHASE           RESERVATION ROAD SITE         RA(O)           LTM         LTM           SITE NAME         PHASE           LANDFILL (OU2)         RA(O)	SITE 3-BEACH TRAINFIRE RANGES         LTM           SITE NAME         PHASE         FY17           SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD         RA(O)         LTM           SITE NAME         PHASE         FY17           SITE 39 INLAND RANGES         RA(C)         LTM           SITE NAME         PHASE         FY17           SITE 41 FAAF FIRE DRILL AREA (OU1)         LTM         LTM           SITE NAME         PHASE         FY17           RESERVATION ROAD SITE         RA(O)         LTM           SITE NAME         PHASE         FY17           LANDFILL (OU2)         RA(O)         RA(O)	SITE 3-BEACH TRAINFIRE RANGES         LTM           SITE NAME         PHASE         FY17         FY18           SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD         RA(O)         LTM         LTM           SITE NAME         PHASE         FY17         FY18           SITE 39 INLAND RANGES         RA(C)         LTM         LTM           SITE NAME         PHASE         FY17         FY18           SITE 141 FAAF FIRE DRILL AREA (OU1)         LTM         LTM         FY17         FY18           RESERVATION ROAD SITE         RA(O)         LTM         LTM         LTM         FY17         FY18           LANDFILL (OU2)         RA(O)         RA(O)         RA(O)         RA(O)         RA(O)         RA(O)         RA(O)	SITE 3-BEACH TRAINFIRE RANGES	SITE 3-BEACH TRAINFIRE RANGES	SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21           SITE 3-BEACH TRAINFIRE RANGES         LTM         FY17         FY18         FY19         FY20         FY21           SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21           RESERVATION ROAD SITE         RA(O)         LTM         FY18         FY19         FY20         FY21           LTM         LTM         FY17         FY18         FY19         FY20         FY21

## **FORT ORD**

**Base Realignment and Closure Military Munitions Response Program** 

## **BRAC-MMRP Summary**

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

22/1

Sites planned for RIP for FY2017

Site ID Site Name Month

N/A

Sites planned for RC for FY2017

Site ID Site Name Month

N/A

#### Installation Site Types with Future and/or Underway Phases\*

1 Small Arms Range

(FTO-006-R-01)

20 Unexploded Munitions/Ordnance

(FTO-001-R-01, FTO-002-R-01, FTO-003-R-01, FTO-004-R-01, FTO-005-R-01, FTO-007-R-01, FTO-008-R-01, FTO-009-R-01, FTO-010-R-01, FTO-011-R-01, FTO-012-R-01, FTO-013-R-01, FTO-014-R-01, FTO-015-R-01, FTO-016-R-01, FTO-017-R-01, FTO-018-R-01, FTO-019-R-01, FTO-020-R-01, FTO-022-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 Cost

N/A

#### **Duration of BRAC-MMRP**

Date of BRAC-MMRP Inception: 200111

Date for Remedy-In-Place (RIP)/Response Complete (RC): 202609/202609

Date of BRAC-MMRP completion including Long Term Management (LTM): 205509

<sup>\*</sup>Note: This does not include sites closed prior to installation being identified as BRAC.

## **BRAC-MMRP Contamination Assessmen**

#### Contamination Assessment Overview

In February 1990 the former Fort Ord was listed on the NPL due to groundwater contamination. The FFA was signed in July 1990. The Army began military munitions investigations in 1993, including identification of potential munitions response sites (MRS) through the archive search process. RAs using the Engineering Evaluation/Cost Analysis (EE/CA) process under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) were conducted beginning in 1994. Fort Ord was officially closed in September 1994 in response to the 1991 BRAC. The Army was sued for not following the CERCLA process by not preparing an RI/FS for military munitions.

In 1998 the Army settled the suit by agreeing to complete an RI/FS for military munitions at Fort Ord. To expedite property transfer, the Army categorized the 121 known or suspected sites into three tracks for the purposes of munitions response investigations. The Department of Justice required the Army to evaluate all areas other than identified sites in another track, which became Track 0. In April 2000 an agreement was signed between the Army, USEPA, and California DTSC to evaluate military munitions at the former Fort Ord subject to the provisions of the Fort Ord FFA. Track 0 through Track 3 are described below:

#### Track 0

This track covers areas that do not contain evidence of MEC and have never been suspected as having been used for military munitions-related activities of any kind. The Track 0 process addresses single or grouped areas of land at the former Fort Ord that do not have history of munitions-related use and for which no action is necessary to protect human health and the environment. Details of the Track 0 program and areas addressed are provided in the Track 0 ROD (2002), and the Track 0 ESD (2005).

#### Track 1

This track covers sites where military munitions were suspected to have been used, but based on the RI/FS for each site, it falls into one of the following three categories and NFA is required:

- Category 1: There is no evidence to indicate military munitions were used at the site (i.e., suspected training did not occur); or
- Category 2: The site was used for training, but the military munitions items used do not pose an explosive hazard (i.e., training did not involve explosive items); or
- Category 3: The site was used for training with military munitions, but military munitions items that potentially remain as a result of that training do not pose an unacceptable risk based on site-specific evaluations. Field investigations identified evidence of past training involving military munitions, but training at these sites involved only the use of practice and/or pyrotechnic items that are not designed to cause injury. In the unlikely event that a live item of the type previously observed at the site is found, the item is not expected to function by casual contact (i.e., inadvertent and unintentional contact).

To be included in the Track 1 decision process, the results of the evaluation performed for a site must indicate a strong weight of evidence that the information from the literature review and field investigations supports NFA related to MEC as determined by the project team. Because Track 1 sites do not pose an unacceptable risk to human health or the environment from previous military munitions-related activities, NFA related to MEC is the recommended action at these sites (Track 1 ROD, 2005).

#### Track 2

This track covers sites where MEC items were present and MEC removal has been conducted. Based on site-specific conditions, actions taken, residual potential risks, and anticipated future reuse, each Track 2 site or area will be evaluated through an RI/FS, proposed plan (PP), and ROD.

#### Track 3

This track covers areas where MEC items are known or suspected to be present, but MEC investigations have not yet been completed. Sites will be evaluated through an RI/FS, PP, and ROD.

Numerous parcels and MRSs have been documented as Track 0 areas and Track 1 sites, and transferred with no restrictions. RODs selecting LUCs were signed for two Track 2 munitions response areas (MRAs). The former impact area was evaluated as a Track 3 site; RAs are in progress based on a 2008 Track 3 ROD. Remaining areas are currently being evaluated under the Track 1 and Track 2 processes.

In March 2007, the Army and FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. These acreages affect MMRP sites and have been transferred to FORA under the Early Transfer authority. The ESCA requires FORA to complete munitions response activities necessary to obtain site closeout under CERCLA (except Army obligations that are listed in the ESCA) in areas included in the ESCA. The Army remains the lead agency under CERCLA. The ESCA grant has been paid to FORA according to a schedule described in the agreement.

In the ESCA process, the FORA will develop RI/FSs and implement selected remedial actions for the ESCA areas. These activities will be coordinated with the Army, and will be conducted under supervision of USEPA and DTSC in accordance with the Administrative Order on Consent. The same regulatory oversight, cleanup requirements, and public participation requirements apply to the ESCA as would apply if the Army were conducting the cleanup. Further details concerning FORA's ESCA remediation program can be found at FORA's website at www.fora-esca-rp.com and (831) 883-3506.

# FORT ORD Military Munitions Response Program Site Descriptions

Site ID: FTO-001-R-01
Site Name: BLM-EAST

## STATUS

Parcel: BLM Oil Well Road L20.4 (65.88 acres), BLM (7379.99

acres), MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

Contaminants of Concern: Munitions and explosives of concern

(MEC)

**MRSPP Score:** 

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
RI/FS	200710	201809
RA(C)	201709	201909
LTM	202009	204909

RIP Date: N/A

**RC Date:** 201909

#### SITE DESCRIPTION

The BLM-East (FTO-001-R-01) range complex covers approximately 1,847.1 acres. It is located in the southeast section of former Fort Ord and contains approximately 30 training and maneuver areas. Training maps from 1984 indicate that these areas are several small unit infantry maneuver training areas that were likely used from the 1940s until the closure of the base in 1994, and involved signaling and simulator devices, as well as small arms blank ammunition. Munitions response (MR) including sampling and removal has been conducted on some ranges in the complex. This complex and adjoining property has been transferred to the BLM for use as public lands. The area is subject to the requirements of a MR RI/FS program.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required. This range complex is within areas designated as a natural resource management area (NRMA).

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the munitions response responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 5.6 acres of FTO-001-R-01 are included in the ESCA project. The ESCA parcels are portions of E11b.7.1 and L20.8.

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY19. The cost of ESCA oversight is captured under program management (ESCA Oversight).

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the remaining portion of the range complex includes:

- Track 1 sites: The selected remedy for the following sites is NFA based on the Track 1 ROD (MRS-27X, MRS-32A/B, MRS-63, MRS-69, and MRS-70; 239 acres). The selected remedy for the following sites (MRS-14C, MRS-17, MRS-27N/R/S/U, MRS-32C and MRS-61, MRS-67, MRS-68; and portions of MRS-14B, MRS-27T/Q/V/W, and MRS-64; 943 acres) is NFA based on a Track 1 Approval Memorandum. LTM measures are required based on Track 1 ROD.
- Track 1 future sites: Based on the Final Remaining RI/FS Areas Management Plan and completed site assessment investigations, NFA will be recommended for MRS-14B, MRS-14E, MRS-27K/L/M/O/P/Q/T/V/W, MRS-60, MRS-64 and MRS-65 (537 acres).
- Track 2 future sites: Approximately 143 acres of this range complex where MEC removal was previously conducted (MRS-14D, MRS-25, MRS-26, MRS-12, and MRS-21) are included in Track 2 RI/FS for BLM Area B. The site strategy includes the completion of the Track 2 ROD recommending LUCs for this portion of BLM Area B. LTM will be required (no end date).

An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-002-R-01
Site Name: BLM-EAST OTHER

## STATUS

Parcel: BLM (7379.99 acres), MONTEREY COUNTY (FORA) (FOST 10)

(380.05 acres)

Regulatory Driver: CERCLA Program: BRAC-MMRP

MRSPP Score: 03

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	200710	.201601
RA(C)	201602	.202009
LTM	202010	.204909

RIP Date: N/A

RC Date: 202009

#### SITE DESCRIPTION

The BLM-East Other range complex (FTO-002-R-01) contains 4,929.8 acres that surround the BLM - East complex areas on the southeast portion of former Fort Ord. The acreage of this complex is not specifically identified as a range; however, these areas were used by troops to get from one area to another within BLM - East and as such are defined as range areas. The acreage of the complex was included in 1984 training facilities maps of small unit maneuver areas. The area is not indicated or identified as an area where military munitions were used. This complex has been transferred to the BLM for use as public lands. The area is subject to the requirements of an MR RI/FS program.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required. Previously inaccessible areas where vegetation clearance is conducted for MEC removals will be evaluated for potential soil contamination under the BRA program. If there is evidence that military munitions recovered from the site have degraded and released constituents of explosives or metals into soils, these specific locations will be evaluated to determine if remediation is necessary. This range complex is within areas designated as an NRMA.

Prescribed burning is the preferred method of vegetation clearance in support of any remedial action in habitat areas.

## **CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes the following actions:

- Track 1 sites: The selected remedy for a 3,033-acre portion of the range complex is NFA based on a Track 1 Plug-In Approval Memorandum. LTM measures are required based on Track 1 ROD.
- Track 1 future sites: Based on the Final Remaining RI/FS Areas Management Plan and completed site assessment investigation, NFA has been recommended for a majority of the remainder of this range complex (approximately 1,397 acres). A Track 1 Plug-In DD will prepared. LTM measures will be required based on Track 1 ROD.
- Track 2 future sites: Approximately 562 acres of this range complex are included in Track 2 RI/FS for BLM Area B. The site strategy includes the completion of the Track 2 ROD recommending MEC removal and LUCs for this portion of BLM Area B. LTM will be required (no end date).

An explanation of the remedial activities for MR RI/FS Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-003-R-01
Site Name: BLM-HQ



Parcel: NONE

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil

BRAC Round: BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	201001	.201201
LTM	201202	.201709

RIP Date: N/A

**RC Date**: 201201

#### SITE DESCRIPTION

The BLM-Headquarters (BLM-HQ) occupies 12.9 acres and is located on the northern edge of the impact area and consists of MRS-35, the former range control. The range control supported the impact area which was historically used for small arms training, and as firing and impact areas for a variety of grenades, shoulder-launched projectiles, and other munitions. In 1994 MRS-35 was sampled to a depth of 4 feet. Munitions surface removal was conducted in January 1998. The September 2001 after action report indicates that no further MR is needed to support reuse of the property. The site was evaluated under the MR RI/FS process, and the selected remedy is NFA based on the Track 1 Plug-In process.

Investigation of potential soil contamination was conducted under a separate ROD amendment. Based on the evaluation, NFA related to soil contamination is required. (See FTO-039 for details).

## **CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes implementation of LTM measures through FY17; however, the cost is negligible. An explanation for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP and in the cost-to-complete memorandum for this site.

Site ID: FTO-004-R-01
Site Name: BLM-NORTH

STATUS

Parcel: BLM (7379.99 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: 03

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil

BRAC Round: BRAC II

Phases	Start	End
PA	200111	.200306
RI/FS	201001	201601
RA(C)	201602	201909
LTM	.201910	.204909

RIP Date: N/A

RC Date: 201909

#### SITE DESCRIPTION

The BLM-North range complex (FTO-004-R-01), located in the central portion of the former Fort Ord, includes approximately 727.8 acres and was used for maneuver, training, and weapons ranges from approximately 1930 through the 1950s involving rifle grenades and small arms. The area was later used for small unit infantry maneuver training involving simulators, signaling devices, and blank small arms ammunition until closure of the base in 1994. The area is planned for transfer to the BLM for use as public lands, but this transfer has not been initiated. Vegetation burns were conducted and MEC removal and sampling actions were completed in the area. This area is subject to the requirements of the Fort Ord MR RI/FS program.

The following sites make-up FTO-004-R-01:

- MRS-10A
- MRS-10B
- MRS-19
- MRS-27I
- MRS-27J - MRS-48
- MRS-58

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required. Previously inaccessible areas where vegetation clearance is conducted for MEC removals will be evaluated for potential soil contamination under the BRA program. If there is evidence that military munitions recovered from the site have degraded and released constituents of explosives or metals into soils, these specific locations will be evaluated to determine if remediation is necessary. This range complex includes areas designated as an NRMA.

Prescribed burning is the preferred method of vegetation clearance in support of any remedial action in habitat areas.

## **CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes completion of the Track 2 ROD recommending MEC removal and LUCs. Based on the Track 2 RI/FS for BLM Area B, approximately 185 acres of this range complex would require MEC removal. LTM will be required (no end date).

An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-005-R-01 Site Name: BLM-NORTH- XD

## STATUS

BLM (7379.99 acres), MONTEREY COUNTY (FORA) (FOSET 5) Parcel:

(2290 acres), MONTEREY COUNTY (FORA) (FOST 10) (380.05

acres)

**Regulatory Driver: CERCLA** Program: **BRAC-MMRP** 

MRSPP Score:

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil **BRAC Round: BRAC II** 

Phases	Start	End
PA	.200111	.200306
RI/FS	.200709	.201601
RA(C)	.201602	.201909
LTM	.201910	.204909

RIP Date: N/A

RC Date: 201909

#### SITE DESCRIPTION

The BLM-North-XD range complex (FTO-005-R-01), located in the central portion of the former Fort Ord, includes approximately 507 acres (previously 512.5 acres; five acres was transferred to FTO-020-R-01) and was used for maneuver, training, and weapons ranges from approximately 1930 through the 1950s involving rifle grenades and small arms. The area was later used for small unit infantry maneuver training involving simulators, signaling devices, and blank small arms ammunition until closure of the base in 1994. Some of the area has been transferred to the BLM for use as public lands. The area is subject to the requirements of the Fort Ord MR RI/FS program.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required. Previously inaccessible areas where vegetation clearance is conducted for MEC removals will be evaluated for potential soil contamination under the BRA program. If there is evidence that military munitions recovered from the site have degraded and released constituents of explosives or metals into soils, these specific locations will be evaluated to determine if remediation is necessary. This range complex is within areas designated as an NRMA.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the Fort Ord BRAC Field Office will provide oversight of FORA's activities as described in the ESCA. Approximately 56.3 acres of FTO-005-R-01 are included in the ESCA project. NFA has been approved for the portion of the range complex that is included in the ESCA.

## **CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes:

- Track 1 sites: The selected remedy for 59 acres of this range complex is NFA based on the Track 1 ROD (MRS-59A) and a Track 1 Plug-In Approval Memorandum (MRS-59B and MRS-27F). LTM measures are required based on Track 1 ROD.
- Track 1 future sites: Based on the Final Remaining RI/FS Areas Management Plan and completed site assessment investigation, NFA has been recommended and a Track 1 approval memorandum will be prepared for MRS-27D, MRS-57, and MRS-59 (235 acres).
- Track 2 future sites: Approximately 154 acres of this range complex (MRS-54, MRS-56, MRS-53BLM, MRS-27G, MRS-27H, MRS-41, and MRS-9) are included in Track 2 RI/FS for BLM Area B. The site strategy includes completion of Track 2 ROD recommending MEC removal and LUCs for this portion of BLM Area B. LTM will be required (no end date).

An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

# Site ID: FTO-006-R-01 Site Name: COASTAL SMALL ARMS RANGE



Parcel: NONE

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
LTM	200309	201709

RIP Date: N/A

RC Date: 200306

#### SITE DESCRIPTION

The Coastal Small Arms Range (FT0-006-R-01) covers 951.8 acres and was in use from the 1940s through base closure in 1994. It is also Site FTO-003 under the IRP. Initial walkthrough, munitions sampling, and other activities were conducted on the beach range complex. No further MR is required for this range complex (MRS-22) based on the Track 1 ROD. Significant portions of the area were excavated as part of an RA to address lead-contaminated soil associated with small arms ranges (FTO-003). The area of the complex was transferred to the Department of the Interior, which later transferred it to the state of California. As of March 2009, this area has been opened to the public for use as a state park. Much of the area will be managed as a habitat reserve with designated trails accessible to the public.

Investigation and cleanup of soil contamination associated with the small arms ranges was completed under a separate ROD. NFA regarding soil contamination is required (FTO-003).

## **CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes implementation of LTM measures through FY17; however, the cost is negligible. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-007-R-01
Site Name: CSUMB

## STATUS

Parcel: CSUMB (FORA) (FOSET 5) (322.84 acres)

Regulatory Driver: CERCLA Program: BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil **BRAC Round:** BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	.200710	.201709

RIP Date: N/A

**RC Date:** 201709

#### SITE DESCRIPTION

Archive information indicates that the ranges of this complex (FTO-007-R-01) cover 356.6 acres and were used for infantry maneuver training until the base closed in 1994. These ranges are located in the central portion of former Fort Ord, along the northern edge of the designated range areas. A sampling of the area indicated sites containing practice mines, practice grenades, and booby-trap training areas, Chemical, Biological, Radiological (CBR) training, and ordnance cache burial pits. A subsurface removal action has been completed on the ranges of the complex. The area is planned for development by the California State University, Monterey Bay (CSUMB).

This area includes the following Fort Ord designated MRSs:

- MRS 27Y
- MRS-4C
- MRS-7
- MRS-8
- MRS-13C
- MRS-31 - MRS-18
- Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 332.8 acres of FTO-007-R-01 are included in the ESCA project.

## **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY17. The cost of ESCA oversight is captured under program management (ESCA Oversight).

The selected remedy for the remainder of this range complex (MRS-27Y) is NFA based on the Track 1 ROD. The site strategy for the Track 1 site includes implementation of LTM measures through the FY17 five-year review; however, the cost is negligible. Since this is a zero cost site, AEDB-R will be updated when LTM is underway. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-008-R-01
Site Name: CSUMB-XD



Parcel: NONE

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil

BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
LTM	200309	201709

RIP Date: N/A

RC Date: 200306

#### SITE DESCRIPTION

Archive information indicates that the ranges of this complex (FTO-008-R-01) were used for small unit infantry maneuver training until the area was developed for military housing in 1987. These ranges occupy 41.1 acres and are located in the central portion of former Fort Ord, along the northern edge of the designated range areas. A sampling of the area located one expended munitions debris item and 66 small arms ammunition items. The area has been transferred for use as student and faculty housing and future development to California State University Monterey Bay (CSUMB).

Investigation of potential soil contamination was conducted under the Basewide Range Assessment program. Based on the evaluation no further action (NFA) related to soil contamination is required.

The selected remedy for this range complex (MRS-66) is NFA based on the Track 1 ROD. LTM measures are required based on the Track 1 ROD and will be implemented until the FY17 five-year review, however, the cost is negligible. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

## **CLEANUP/EXIT STRATEGY**

The selected remedy for this range complex (MRS-66) is NFA based on the Track 1 ROD. LTM measures are required based on the Track 1 ROD and will be implemented until the FY17 five-year review, however, the cost is negligible. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

# Site ID: FTO-009-R-01 Site Name: DEVELOPMENT-NORTH

## **STATUS**

Parcel: Marina Coast Water District (FORA)(FOST 10) (1.09

acres),MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres),MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	.200306
RI/FS	200710	.201003
LTM	201010	.201709

RIP Date: N/A

RC Date: 201003

#### SITE DESCRIPTION

Archive information indicates that the ranges of this complex (FTO-009-R-01), located adjacent to the CSUMB range complex in the northern portion of the range areas, were used for small unit infantry maneuver training involving signaling devices, simulator, and small arms blank ammunition. Actual periods of use were not documented. This range complex covers 394.5 acres. A sampling of the area indicated sites containing practice mines, practice grenades, booby-trap training areas, and ordnance cache burial pits. The area is comprised of development areas with habitat requirements.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 393.7 acres of FTO-009-R-01 is included in the ESCA project.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained. The selected remedy is NFA for this area based on the Track 1 plug-in process.

The selected remedy is NFA for the remainder of the range complex (MRS-45A; 0.8 acres) based on the Track 1 Plug-In Approval Memorandum for Multiple Sites, Groups 1-5, at former Fort Ord. LTM measures are required for MRS-45A based on the Track 1 ROD and will be implemented until the FY17 five-year review, however, the cost is negligible. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

# Site ID: FTO-010-R-01 Site Name: EAST GARRISON

## STATUS

Parcel: MONTEREY COUNTY (FORA) (FOSET 5) (2290

acres), MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres)

Regulatory Driver: CERCLA Program: BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
RI/FS	200710	201909

RIP Date: N/A

RC Date: 201909

#### SITE DESCRIPTION

An archives search report found the ranges in the East Garrison (EG) site (FTO-010-R-01) were used for small arms and rifle grenade training from the 1930s through the 1950s, and small arms, infantry maneuver training involving signaling devices and simulators until closure of the base in 1994. This site is located in the east central portion of former Fort Ord and occupies 71.0 acres. Munitions sampling and RAs have been completed on ranges in the complex. Plans for the area include housing development and a habitat reserve. MRSs included in the EG site are MRS-5, MRS-33, MRS-11, and MRS-42. The selected remedy is NFA for MRS-5 in accordance with Track 1 ROD; and MRS-33 in accordance with the Track 1 Plug-In Approval Memorandum. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 41.7 acres of FTO-010-R-01 (MRS-11 and MRS-42) are included in the ESCA project.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex (MRS-11 and MRS-42) includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY19. The cost of ESCA oversight is captured under program management (ESCA Oversight). The range complex is in the RI phase through FY18 and the RA(C) phase through FY19, however this can't be accommodated in AEDB-R, so the phase is noted as RI/FS through FY19. An LTM phase is not required.

The site strategy for the remainder of this range complex (MRS-5 and MRS-33) includes implementation of LTM measures based on the Track 1 ROD, through the FY17 five-year review; however, the cost is negligible.

# Site ID: FTO-011-R-01 Site Name: EAST GARRISON-OTHER

### **STATUS**

Parcel: MONTEREY COUNTY (FORA) (FOSET 5) (2290

acres), MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres)

Regulatory Driver: CERCLA Program: BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
RI/FS	200710	201909

RIP Date: N/A

RC Date: 201909

#### SITE DESCRIPTION

This complex (FTO-011-R-01) contains 385.1 acres around the EG complex in the east central portion of former Fort Ord that is not currently identified as ranges or sites but may have been used for small unit infantry maneuver training involving signaling devices, blank ammunition, and simulators. Areas included in this complex are: EG Area 2, EG Area 4NE, and EG Area 4. The selected remedy is NFA for EG Areas 2 and 4NE in accordance with Track 1 Plug-In Approval Memorandum. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 204.5 acres of FTO-011-R-01 (EG Area 4) is included in the ESCA project.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY19. The cost of ESCA oversight is captured under program management (ESCA oversight). The range complex is in the RI phase through FY18 and the RA(C) phase through FY19, however this can't be accommodated in AEDB-R, so the phase is noted as RI/FS through FY19. An LTM phase is not required.

The site strategy for the remainder of this range complex (EG Areas 2 and 4NE) includes implementation of LTM measures based on the Track 1 ROD, through the FY17 five-year review; however, the cost is negligible.

Site ID: FTO-012-R-01
Site Name: GARRISON-NORTH

## STATUS

Parcel: MST (FORA) (FOST 10) (7 acres), MARINA (FORA) (FOST 10)

(40.18 acres), VETERANS CENTÉR (FOST 9) (4.62 acres)

**Regulatory Driver:** CERCLA **Program:** BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	.200111	.200603
LTM	.200603	.201709

RIP Date: N/A

RC Date: 200603

#### SITE DESCRIPTION

This complex (FTO-012-R-01), located in the northern section of former Fort Ord and occupying 141.0 acres, includes designated military weapons training areas and disposal sites likely operated between the 1930s and 1967. Discarded military munitions were located in some areas during installation restoration program actions.

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required.

#### **CLEANUP/EXIT STRATEGY**

This range complex includes MRSs 1, 2, 6, 13A, 20, 24D, and 24E. The selected remedy is NFA for the MRSs within this range complex based on the Track 1 ROD and Track 1 Plug-In Approval Memorandum. LTM measures are required based on the Track 1 ROD and will be implemented through the FY17 five-year review; however, the cost is negligible. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-013-R-01
Site Name: GARRISON-SOUTH

## STATUS

Parcel: SEASIDE (FORA) (FOST 12) (70.31 acres),MPC (FOST 9)

(15.17 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	.200510	.201110
LTM	.201111	.201709

RIP Date: N/A

**RC Date:** 201110

#### SITE DESCRIPTION

Garrison-South (FTO-013-R-01), located west of Parker Flats range area, occupies 92.3 acres. This complex includes designated practice grenade training areas used prior to the 1960s at which time military housing was developed in the area. Sampling was completed in all suspected areas. This range complex includes the following MR sites (MRS-24B, MRS-39, MRS-49, MRS-24A, and MRA-24C).

Investigation of potential soil contamination was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required.

#### **CLEANUP/EXIT STRATEGY**

The selected remedy for the MRSs within this range complex is NFA based on the Track 1 ROD (MRS-24B, MRS-39, and MRS-49) and a Track 1 Plug-In Approval Memorandum (MRS-24A and MRS-24C).

LTM measures are required based on the Track 1 ROD and will be implemented through FY17; however, the cost is negligible. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

### Site ID: FTO-014-R-01 Site Name: MULTI-USE RANGE AREA - BLM



Parcel: BLM (7379.99 acres)

Regulatory Driver: CERCLA Program: **BRAC-MMRP** 

MRSPP Score: 03

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil

BRAC II BRAC Round:

Phases	Start	End
PA	.200111	.200306
RI/FS	.200307	.200608
RA(C)	200609	.202609
LTM	.202610	.205509

RIP Date: N/A

RC Date: 202609

#### SITE DESCRIPTION

The Multi-Use Range Area - BLM range complex (FTO-014-R-01) is located within the confines of the impact area in the southwest portion of the former Fort Ord and covers 6.316.8 acres (in 2006 the acreage was increased from 5,905.1 based on transferring 391 acres from FTO-016-R-01 and 20.7 acres from FTO-017-R-01). These ranges include the impact areas of approximately 27 small arms, mortar, rocket, and machine gun ranges as well as demolitions and incendiary munitions training areas used from the 1930s until the base was closed in 1994. The ranges contain similar expended munitions and MEC. The area is not in use by the Army. Vegetation on this complex is protected under the installation-wide multispecies HMP. The area is planned to be transferred to the BLM as a habitat reserve when all RAs are complete.

Investigation and cleanup of soil contamination are conducted under a separate ROD amendment. See FTO-039. This range complex is within areas designated as an NRMA containing central maritime chaparral (CMC).

Prescribed burning has been identified as the preferred method of vegetation clearance to support the removal of MEC in NRMA containing CMC.

The Track 3 ROD for the Impact Area MRA was signed in May 2008. Based on the Track 3 ROD, the selected remedy for the Impact Area MRA is technology-aided surface MEC remediation, with subsurface MEC remediation in selected areas and LUCs. RA was initiated in 2008. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Areas of this range complex are a part of the Track 3 Impact Area MRA addressed in the Track 3 ROD. Track 3 ROD also selected the final remedy for the approximately 273 acres of Ranges 43-48 where an interim RA was conducted. Even though this acreage is a part of FTO-016-R-01, because the Track 3 remedy is an MRA-wide comprehensive RA, the cost for eventual site closure for the 273-acre portion of Ranges 43-48 is captured under FTO-014-R-01 with the rest of the Track 3 Impact Area MRA.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes the implementation of the RA as described in the Track 3 ROD. The range complex will be divided into manageable work units, and a site-specific prescribed burn plan and MEC RA work plan will be prepared for each unit. RA(C) phase is expected to span several years. LTM is required (no end date).

# Site ID: FTO-015-R-01 Site Name: MULTI-USE RANGE AREA - DRO

### **STATUS**

Parcel: DEL REY OAKS (FORA) (FOSET 5) (5.04 acres), DEL REY

OAKS (FORA) (FOST 10) (4.66 acres)

**Regulatory Driver:** CERCLA **Program:** BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
RI/FS	200610	201709
LTM	201710	204609

RIP Date: N/A

**RC Date:** 201709

#### SITE DESCRIPTION

The Multi-Use Range Area Digital Del Rey Oaks (DRO) range complex (FTO-015-R-01) is located on the western edge of the Impact Area, occupies 335.3 acres, and includes the hardstand, firing lines, and preparation areas for three small arms and mortar ranges that are now adjacent to a connector highway and local residential areas. The ranges were used from the 1930s until the base was closed in 1994.

Investigation and cleanup of soil contamination associated with the small arms ranges was completed under a separate ROD. Additional investigation of potential soil contamination, including residues of explosives, was conducted under the BRA program. NFA regarding soil contamination is required. See FTO-039.

A 324-acre portion of this range complex where MEC removal was previously conducted was transferred to the city of Del Rey Oaks as an early transfer with land use restrictions. A Track 2 ROD for this portion of the range complex was signed in November 2008 selecting LUCs as the remedy. MRS-15DRO.1A and MRS-15DRO.2A were addressed as NFA sites in a Track 1 Plug-In Approval Memorandum. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the remaining portions of the range complex includes:

- Track 1 sites: The selected remedy is NFA for MRS-15DRO.1A and MRS-15DRO.2A based on a Track 1 Approval Memorandum. LTM measures are required based on Track 1 ROD.
- -Track 2 sites: Implementation of the selected remedy based on the Del Rey Oaks ROD is required. LTM is required (no end date).

In March 2007 the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 9.1 acres of FTO-015-R-01 are included in the ESCA project.

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY17. The cost of ESCA oversight is captured under program management (ESCA oversight).

# Site ID: FTO-016-R-01 Site Name: MULTI-USE RANGE AREA - IA

### STATUS

Parcel: BLM (7379.99 acres), SEASIDE (FORA) (FOSET 5) (615.43

acres), MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres)

**Regulatory Driver:** CERCLA **Program:** BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	.200306
RI/FS	200307	.200407
RA(C)	200709	.201809
LTM	.201810	.204809

RIP Date: N/A

RC Date: 201809

#### SITE DESCRIPTION

The Multi-use Range Area - IA range complex (FTO-016-R-01) is located within and just north of the impact area in the southwest portion of the former Fort Ord and covers 550.78 acres (previously 923.9 acres; 391 acres were transferred to FTO-014-R-01 in 2006 and approximately 18 acres were transferred from FTO-018-R-01 in 2008). These ranges were used for combined weapons training including mortars, 40mm grenades, anti-tank rockets, demolition charges, incendiary devices, and small arms from the 1930s until the base closed in 1994. An interim action (IA) has been conducted in portions of this range complex to address immediate risks of MEC due to the type of munitions on the ranges, and the proximity of the ranges to local residential areas and schools. The completed actions will be further evaluated in the MR RI/FS program for site closeout.

Investigation and cleanup of soil contamination was conducted under a separate ROD amendment. See FTO-039. This range complex is within areas designated as an NRMA containing CMC.

An IA ROD covered MRS-Ranges 43-48, Range 30A and MRS-16 that comprised this site. Interim RA has been taken at Ranges 43-48 and MRS-16. Range 30A was included in a subsequent ROD for the Track 3 Impact Area MRA. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the munitions response responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 198.5 acres (part of MRS-Ranges 43-48) of FTO-016-R-01 are included in the ESCA project.

# **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY18. The cost of ESCA oversight is captured under program management (ESCA oversight).

The site strategy for the remaining portions of the range complex includes:

- MRS-16: LTM measures, including post-remediation habitat monitoring, are required as described in the remedial action report. The site is subject to the Track 2 RI/FS finalized in 2015. The site strategy includes the completion of the Track 2 ROD recommending LUCs for MRS-16. The LTM phase for MRS-16 will be indefinite.
- Completion of the Track 3 remedy for the southern (non-ESCA) portion of Ranges 43-48 (see FTO-014-R-01).

# Site ID: FTO-017-R-01 Site Name: MULTI-USE RANGE AREA - OB/OD



Parcel: BLM (7379.99 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: No longer required

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil

BRAC Round: BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	.200307	.200601
LTM	.200809	.204409

RIP Date: N/A

RC Date: 200601

#### SITE DESCRIPTION

The Multi-use Range Area ¿ Open Burning (OB)/Open Detonation (OD) range area (FTO-017-R-01) covers 1.8 acres (revised based on transferring 20.7 acres to FTO-014-R-01) and was an explosive ordnance disposal (EOD) range used for disposal of various types of commercial explosives and military munitions in the south-central portion of the former Fort Ord, within the confines of the Impact Area. Disposal occurred by OB and OD. The range was used until October 1992, when former Fort Ord¿s EOD unit was deactivated. From January 1994 to January 1997, this range was reactivated for disposal of UXO identified from the former Fort Ord Time-Critical Removal Action Program implemented outside the impact area. Potential contaminants present at the range as a result of past activities include explosive compounds and metals (FTO-005). The Army retains control of the area, currently, but the area is planned for transfer to the BLM when cleanup of the surrounding area is complete (FTO-014-R-01). Reuse is planned to be limited to a habitat area.

Investigation of potential soil contamination, including residues of explosives, was completed through the RCRA closure process and NFA is required. The RCRA closure included completion of MRA within the OB/OD site. See FTO-005. This range complex is within areas designated as an NRMA containing CMC.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the range complex includes the implementation of LTM measures required under the Track 3 ROD (FTO-014-R-01). An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

### Site ID: FTO-018-R-01 Site Name: MULTI-USE RANGE AREA - SEA

### STATUS

SEASIDE (FORA) (FOSET 5) (615.43 acres),MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres) Parcel:

**Regulatory Driver: CERCLA** Program: **BRAC-MMRP** 

MRSPP Score: **Evaluation pending** 

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil **BRAC Round:** BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	.200710	.201909

RIP Date: N/A

201909 RC Date:

#### SITE DESCRIPTION

The Multi-use Range Area - SEA range complex (FTO-018-R-01) is located on the western edge of the impact area and includes the hardstand, firing lines, and preparation areas for approximately nine small arms and mortar ranges used from the 1930s until the base was closed in 1994. This complex is now adjacent to a connector highway and local residential areas. This range complex includes MRS-SEA.1 through 4, and MRS-MOCO.2.

Investigation of potential soil contamination, including residues of explosives, was completed under a separate ROD and documented in the BRA program. Based on the evaluation, NFA related to soil contamination is required.

In March 2007, the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 452.5 acres (rounded to 453 acres) of FTO-018-R-01 are included in the ESCA project.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY19. The cost of ESCA oversight is captured under program management (ESCA oversight).

The number of acres reported in the closed, transferring, transferred (CTT) report does not match the number of acres for the ESCA project at this range complex. The CTT report contained a mapping error; a small portion was incorrectly included in the range complex. The MR portion of the AEDB-R has been revised as follows: FTO-018-R-01 is now 452.5 acres, and FTO-016-R-01 is now 550.78 acres.

# Site ID: FTO-019-R-01 Site Name: MULTI-USE RANGE AREA - SOUTH

## STATUS

Parcel: York School (FOST 10) (101.2 acres), MONTEREY COUNTY

(FORA) (FOSET 5) (2290 acres), CITY OF MONTEREY (FORA)

(FOSET 5) (23.31 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil BRAC Round: BRAC II

Phases	Start	End
PA	200111	200306
RI/FS	200710	201709

RIP Date: N/A

**RC Date:** 201709

#### SITE DESCRIPTION

The Multi-use Range Area - South (FTO-019-R-01) is located on the southern edge of the impact area, occupies 232.7 acres, and includes the hardstand, firing lines, and preparation areas for approximately four small arms and mortar ranges used from the 1930s until the base was closed in 1994. The Multi-use Area Range - South is now adjacent to a connector highway, local businesses, race track, and residential areas. This site has been transferred. Sampling and appropriate removal actions are completed on this complex. Sites included in FTO-019-R-01 are: MRS-30, MRS-43, MRS-46, MRS-47, and MOCO.1.

Investigation of potential soil contamination, including residues of explosives, was conducted under the BRA program. Based on the evaluation, NFA related to soil contamination is required..

In March 2007 the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 101.6 acres of FTO-019-R-01 are included in the ESCA project (a portion of MRS-43, MRS-47, and MRS-30).

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY17. The cost of ESCA oversight is captured under program management (ESCA oversight).

The selected remedy for the remainder of this range complex (MRS-MOCO.1 and MRS-46) is NFA. The site strategy includes implementation of LTM measures based on the Track 1 ROD, until the FY17 five-year review; however, the cost is negligible. Since this is a zero cost site, AEDB-R will be updated when LTM is underway. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

Site ID: FTO-020-R-01
Site Name: PARKER FLATS

### **STATUS**

Parcel: MST (FORA) (FOST 11) (27.01 acres),MPC (FORA) (FOSET 5)

(10.97 acres), SEASIDE (FORA) (FOSET 5) (615.43

acres), MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil **BRAC Round:** BRAC II

Phases	Start	End
PA	200111	200306
RI/FS	200710	201809
RA(C)	201810	201909
LTM	201910	204909

RIP Date: N/A

RC Date: 201909

#### SITE DESCRIPTION

An Archives Search Report (ASR) found the Parker Flats range complex (FTO-020-R-01) to have been used for rifle grenade and shoulder launched projectile training from the 1940s through 1970s. The area is 1,139.2 acres (revised from 1133.2 previously, approximately 5 acres had been transferred from FTO-005-R-01) and is in the central portion of former Fort Ord. The area is designated for development including the Monterey Peninsula College police officer training area, equestrian center, and veteran's cemetery. Munitions removal was conducted in MRS-13B and in the southern 600 acres of the complex. Sites in this complex include MRS 3, 4A, 4B, 13B, 27A, 27B, 27C, 27G (partial), 37, 40, 44PBC, 44EDC, 50, 52, 53, 54EDC, and 55. The complex also includes the areas between these sites.

Investigation and remediation of soil contamination was conducted under the BRA. NFA related to soil contamination is required.

Track 2 ROD for the 758-acre portion of this site where a MEC removal was previously conducted, was signed in August 2008 selecting LUCs as the remedy. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section.

In March 2007 the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 1,060.9 acres of FTO-020-R-01 are included in the ESCA project.

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY19. The cost of ESCA oversight is captured under program management (ESCA oversight).

The site strategy for the remainder of this range complex includes LUC remedy implementation in three transfer parcels (Parcel F2.6 Army Maintenance Center, Parcel L2.3 Monterey-Salinas Transit (MST) Facility Park and Ride, and Parcel L2.4.1 MST Facility Maintenance Center). LTM is required (no end date).

# Site ID: FTO-022-R-01 Site Name: SOUTH RANGE AREA

## STATUS

Parcel: MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres)

Regulatory Driver: CERCLA
Program: BRAC-MMRP

MRSPP Score: Evaluation pending

Contaminants of Concern: Munitions and explosives of concern

(MEC)

Media of Concern: Soil **BRAC Round:** BRAC II

Phases	Start	End
PA	.200111	.200306
RI/FS	.200710	.201709

RIP Date: N/A

RC Date: 201709

#### SITE DESCRIPTION

The South Range Area range complex (FTO-022-R-01) covers 421.7 acres and contains ranges outside the historic impact area in the southeast and southwest of former Fort Ord that are suspected to have been used for rifle grenades in the 1930s-1950s; and from the 1960s to the closure of the base in 1994 as small unit infantry maneuver training areas. This site area has been transferred. Sites in this complex include MRS 14A, 29, and 62.

Investigation and remediation of soil contamination was conducted under the BRA program. NFA related to soil contamination is required.

In March 2007 the Army and the FORA entered into an ESCA concerning a total of 3,426 acres of the former Fort Ord property. Even though the MR responsibilities associated with the ESCA areas have been transferred to FORA, the BRAC office will provide oversight of FORA's activities as described in the ESCA. Approximately 193.4 acres of range complex (FTO-022-R-01) are included in the ESCA project (MRS-14A and MRS-29).

#### **CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY17. The cost of ESCA oversight is captured under program management (ESCA oversight).

The selected remedy for the remainder of this range complex (MRS-62) is NFA. The site strategy includes implementation of LTM measures based on the Track 1 ROD, until the FY17 five-year review; however, the cost is negligible. Since this is a zero cost site, AEDB-R will be updated when LTM is underway. An explanation of the RAs for Tracks 0-3 can be found in the Cleanup Program Summary section of the BIAP.

# **BRAC-MMRP Schedule**

Date of BRAC-MMRP Inception: 200111

**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** FTO-004-R-01 **BLM-NORTH** MMRP: Remaining Sites 20160401 FTO-002-R-01 **BLM-EAST OTHER** MMRP: Remaining Sites 20160401 FTO-005-R-01 BLM-NORTH- XD MMRP: Remaining Sites 20160401

Final RA(C) Completion Date: 202609

NPL Deletion Date: TBD

Schedule for Next Five-Year Review: 2017

Estimated Completion Date of BRAC-MMRP at Installation (including LTM phase): 205509

#### FORT ORD BRAC-MMRP Schedule

RA(C)								= phase	underway
RA(C)	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	FTO-001-R-01	BLM-EAST	RI/FS						
SITE ID			RA(C)						
SITE ID			LTM						
SITE ID	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	FTO-002-R-01		_				•		
SITE ID			LTM						
SITE ID	SITE ID	SITE NAME		EV17	EV40	EV10	EV20	EV24	EV22.
SITE ID				FII/	F110	FTI9	F120	FIZI	FIZZŦ
SITE ID				EV47	EV40	EV40	EV20	EV24	EV22
SITE ID				FII/	F I IO	FIIÐ	F 120	FIZI	FIZZŦ
SITE ID	110 004101	BEM NORTH	, ,						
SITE ID									
SITE ID				FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	F10-005-R-01	BLM-NORTH- XD	` '						
SITE ID									
SITE ID				FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	FTO-006-R-01	COASTAL SMALL ARMS RANGE	LTM						
SITE ID				FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	FTO-007-R-01	CSUMB	RI/FS						
SITE ID	SITE ID		PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
DEVELOPMENT-NORTH	FTO-008-R-01	CSUMB-XD	LTM						
SITE ID	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID   SITE NAME   PHASE   FY17   FY18   FY19   FY20   FY21   FY22+ FY20-011-R-01   EAST GARRISON-OTHER   RI/FS	FTO-009-R-01	DEVELOPMENT-NORTH	LTM						
SITE ID	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	FTO-010-R-01	EAST GARRISON	RI/FS						
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-012-R-01         GARRISON-NORTH         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-013-R-01         GARRISON-SOUTH         LTM         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-014-R-01         MULTI-USE RANGE AREA - BLM         RA(C)         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-015-R-01         MULTI-USE RANGE AREA - DRO         RI/FS         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         RA(C)         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         LTM         FY17         FY18         FY19         FY20 <t< td=""><td>SITE ID</td><td>SITE NAME</td><td>PHASE</td><td>FY17</td><td>FY18</td><td>FY19</td><td>FY20</td><td>FY21</td><td>FY22+</td></t<>	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID	FTO-011-R-01	EAST GARRISON-OTHER	RI/FS						
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-013-R-01         GARRISON-SOUTH         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-014-R-01         MULTI-USE RANGE AREA - BLM         RA(C)         LTM         FY18         FY19         FY20         FY21         FY22+           FTO-015-R-01         MULTI-USE RANGE AREA - DRO         RI/FS         LTM         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         RA(C)         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         FY18         FY19         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID   SITE NAME   PHASE   FY17   FY18   FY19   FY20   FY21   FY22+	FTO-012-R-01	GARRISON-NORTH	LTM						
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-014-R-01         MULTI-USE RANGE AREA - BLM         RA(C)         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-015-R-01         MULTI-USE RANGE AREA - DRO         RI/FS         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         RA(C)         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         FY17         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
RA(C)	FTO-013-R-01	GARRISON-SOUTH	LTM						
LTM	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-015-R-01         MULTI-USE RANGE AREA - DRO         RI/FS         LTM         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         LTM         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+	FTO-014-R-01	MULTI-USE RANGE AREA - BLM	RA(C)						
NULTI-USE RANGE AREA - DRO			LTM						
NULTI-USE RANGE AREA - DRO	SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         Image: Record of the control	FTO-015-R-01								
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         Image: Record of the control			LTM						
FTO-016-R-01         MULTI-USE RANGE AREA - IA         RA(C)         LTM         RA(C)         LTM         FY10         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         LTM         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+	SITE ID	SITE NAME		FY17	FY18	FY19_	FY20	FY21_	FY22+
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         TY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+	FTO-016-R-01						1120		773
SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+           FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         LTM         FY18         FY19         FY20         FY21         FY22+           SITE ID         SITE NAME         PHASE         FY17         FY18         FY19         FY20         FY21         FY22+	-	-	` '						
FTO-017-R-01         MULTI-USE RANGE AREA - OB/OD         LTM         FY17         FY18         FY19         FY20         FY21         FY22+	CITE ID	CITE NAME		EV/-Z-	EV4.0	EV40	E)(00	EV64	EVAC
SITE ID SITE NAME PHASE FY17 FY18 FY19 FY20 FY21 FY22+				FY1/	FY18	FY19	FY20	FY21	FY22+
					E)(4.0	E\(\d	E\(00	EV64	EV66
TIO-010-11-01 WIDELT-OSE MAINGE AINEA - SEA MI/1-3			_	FY17	FY18	FY19	FY20	FY21	FY22+
	1 10-010-R-01	WIDETI-USE NAME AREA - SEA	NI/F3						

#### FORT ORD BRAC-MMRP Schedule

SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTO-019-R-01	MULTI-USE RANGE AREA - SOUTH	RI/FS						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTO-020-R-01	PARKER FLATS	RI/FS						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY17	FY18	FY19	FY20	FY21	FY22+
FTO-022-R-01	SOUTH RANGE AREA	RI/FS						

# **FORT ORD**

Base Realignment and Closure
Natural and Cultural Resources Program

# **BRAC-NCR Summary**

**General Project Descriptions** 

# **BRAC-NCR Schedule**

Schedule

# **Community Involvemen**

Technical Review Committee (TRC): 199001

Community Involvement Plan (Date Published): 201309

Restoration Advisory Board (RAB): RAB established

RAB Adjournment Date: 199905

RAB Adjournment Reason: Installation Commander determined RAB should be adjourned.

#### **Additional Community Involvement Information**

Community involvement is conducted in accordance with the Fort Ord Community Relations Plan which is periodically updated.

RAB: The Fort Ord RAB held monthly public meetings for five years where cleanup actions were presented and discussed. Participants in these meetings frequently expressed frustration with RAB meeting procedures, extended meetings and delays in the discussion of cleanup issues. RAB participation declined to eight members in 1998. After several attempts at facilitation by the USEPA and the Army, as well as DTSC and CRWQCB, and in spite of the efforts of many talented community members, the RAB was assessed as ineffective in providing a forum for the exchange of information and a source of advice for the Army. Subsequently, the RAB was disbanded by the Army in May 1999.

Community Involvement Mobile Workshops: The RAB public meeting process was replaced by community involvement workshops (CIW) to provide community members an opportunity to discuss cleanup plans, examine cleanup documents and express their interests or concerns. The meeting format is continually assessed and modified using community input and participant critiques to sustain an effective information exchange forum. Currently, the CIWs are held twice a year and are in the form of an open house, presentations, and a bus tour of cleanup sites

The objective of the CIWs is to provide an opportunity for community members to participate in the cleanup decision- making process. In addition to presentations on proposed cleanup plans, CIWs provide updates from the BCT when appropriate. The BCT participates in the CIWs. Questions and comments by community members are solicited during the open house and bus tour portions of each workshop. Comment cards are also provided at each CIW for comments and questions as well as input for future topics on any cleanup subject. Questions, requests, and comments from attending community members are addressed in the CIW or in a response that is posted on www.FortOrdCleanup.com and provided at the next CIW in a document called "Closing the Loop".

TRC: Local and regional air, water, wildlife, land managers, public health, regulatory and service agencies, as well as educational institutions and government representatives review and comment on cleanup plans and documents as members of the Fort Ord TRC. The TRC meets twice a year to discuss technical material and provide advice to the BCT (Army, USEPA, DTSC, and the CRWQCB) concerning pending cleanup decisions. The TRC was established in 1990.

The Fort Ord TRC and the community outreach program for the environmental cleanup at Fort Ord serve the purpose of the former Fort Ord RAB. It should be noted that the TRC meeting includes time to summarize comments from the CIW that usually occurs prior to the TRC. This is one way in which the TRC serves as an opportunity for sharing community concerns and input with local and regional regulatory and service agency representatives.

Community Surveys: Community interest was surveyed in 2013 and was analyzed in the "Analysis of the 2013 Community Survey and 2013-2014 Community Outreach Program." The Final Community Plan Update Number 4, (Administrative Record number BW-2671A) was issued in November 2013. Updates to this plan were based on the results of community surveys in 2007, 2009, and 2011 as well as analysis of the community outreach program since 2006 (the date of the previous version of the Community Relations Plan). In addition, in accordance with Department of Defense guidance, a 2015 community survey is in progress and the results will be reported in the future report: "Draft Analysis of the 2015 Community Survey and 2015-2016 Community Outreach Program" (draft report is scheduled for December 2016).

More information is available at 831-393-1284 or www.FortOrdCleanup.com.

#### Administrative Record is located at

Fort Ord Administrative Record Building 4463 Gigling Road Ord Military Community, CA 93944-5004 Telephone: (831) 393-9693 www.fortordcleanup.com

Information Repository is located at

# **Community Involvemen**

Seaside Library 550 Harcourt Avenue Seaside, CA 93955 (831) 899-2055

California State University Monterey Bay Library (831) 582-3733

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

TAPP Title: N/A

Potential TAPP: N/A