

# FY2009

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 US Army Environmental Command (USAEC), Fort Ord, the regulatory agencies, executing agencies, the BRAC Division and the public, a BIAP was completed. The BIAP is used to track requirements, schedules and 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: 3  
Number of sites at RC: 41  
Number of sites at RC with LTM: 1  
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: 4  
Number of sites at RC with LTM: 4  
Primary Contaminants of Concern: Munitions and explosives of concern (MEC)  
Affected Media of Concern: Soil

## Installation Locale

BRAC Round: BRAC II

Installation Size (Acreage): 27,827.00  
Retained by Component (Acreage): 812.00  
BRAC Acreage: 27,015.00  
Acres being transferred to another service: 0.00  
Acres being transferred to other federal agencies: 0.00  
Acres being transferred to non-federal agencies: 12,157.00

City: Monterey

County: Monterey

State: California

### Other Locale Information

Fort Ord is located near Monterey Bay in Monterey County, California, approximately 80 miles south of San Francisco. The base consists of about 28,000 acres near 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.

### List of Off-Post Properties

N/A

### 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:	13,767.00	5,248.00
Acres in Category 5:	5,847.00	5,847.00
Acres in Category 6:	4,494.00	0.00
Acres in Category 7:	0.00	0.00

# Installation Information

**Lead Organization**

Base Realignment and Closure Division

**Lead Executing Agencies for Installation**

US Army Corps of Engineers (USACE), Sacramento District

**Regulator Participation**

Federal US Environmental Protection Agency (USEPA) Region 9 Federal Facilities Branch  
State California EPA (Department of Toxic Substances Control and Regional Water Quality Control Board, 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:** 201809

**National Priorities List (NPL) Status**

A score of 42 was recorded on 199002.

**Final RA(C) Completion Date:** 201909

**Date for NPL Deletion:**

BRAC-IRP N/A  
BRAC-MMRP N/A

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

RAB established 1994

# Cleanup Program Summary

## Previous Year Planned versus Actual Progress

FY08 plan executed in FY09 for the Installation Restoration Program (IRP):

IRP FTO-003: As required by the Track 1 record of decision (ROD), monitoring and restoration activities (long-term management measures) were completed via an agreement with property recipient, California State Parks. In FY09 this site was transferred from Department of the Interior to the state of California for reuse as a state park and subsequently opened to the public.

IRP FTO-039: The ROD amendment initially planned for FY08 was delayed due to extended review time and is expected late FY09. The ROD delay affected initiation of the soil excavation remedy.

IRP FTO-012: As planned for FY09, operation of the groundwater (GW) treatment system continued. Optimization measures will be implemented in FY09/FY10 as planned.

IRP FTO-041: The construction work to enhance the existing treatment system to capture the off-post plume was implemented and operations continue.

IRP FTO-053: Two treatment systems are operational at this site: (1) a GW treatment system and (2) a landfill gas extraction/thermal treatment system. As planned for FY09, both of these systems remain operational. In addition, optimization studies were completed for this area in FY08 which indicated a need to relocate the GW treatment system. In FY09 a cost estimate was developed for this proposed change.

IRP FTO-044: As planned for FY09, design and construction of a bioremediation treatment unit began following the ROD signature. Construction is expected continue through FY10.

FY08 plan executed in FY09 for the Military Munitions Response Program (MMRP):

MMRP ESCA: As planned for FY09, payment of the remaining ESCA liability was completed. As planned for FY09, the local reuse authority is developing work plans and remedial investigations at several ESCA sites, meeting all required deadlines.

In March 2007 the Army and FORA entered into an ESCA concerning 3,426 acres of the former Fort Ord. The ESCA affects 12 munitions response sites:

- FTO-001-R-01,
- FTO-005-R-01,
- FTO-007-R-01,
- FTO-009-R-01,
- FTO-010-R-01,
- FTO-011-R-01,
- FTO-015-R-01,
- FTO-016-R-01,
- FTO-018-R-01,
- FTO-019-R-01,
- FTO-020-R-01 and
- FTO-022-R-01.

In FY09 the acreages were transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental response activities necessary to obtain site closeout for munitions and explosives of concern (MEC) under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in areas included in the ESCA. Under the terms of the ESCA the BRAC office will provide oversight of FORA's ESCA activities. The Army site strategy for ESCA-portions of the affected sites includes oversight of FORA's ESCA activities until FORA obtains site closeout, which is expected in FY14.

MMRP Decision Documents and Work Plans:

A ROD was completed for Track 2 Del Rey Oaks. Originally planned for FY08, it was delayed until early FY09 due to longer review times. As planned for FY09, a remedial design/remedial action (RD/RA) work plan addressing land use controls (LUCs) for Track 2 Parker Flats was developed. A similar plan will be developed for Track 2 Del Rey Oaks in FY09. As planned for FY09, an RD/RA work plan was developed for Track 3. And as planned for FY09, a work plan for the remaining MMRP RI/FS sites was developed; an RI is planned to follow in FY09-FY10. The site strategy planned for FTO-002-R-01 in FY08 was modified in FY09

## Cleanup Program Summary

to include an RI/FS, a ROD, and a prescribed burn and MEC removal.

### MMRP RA(C):

As planned for FY09, in accordance with the Track 3 ROD, a prescribed burn was completed in FY09 at units 18/22 under favorable weather conditions. A follow-on MEC removal for these units is ongoing as planned.

### Installation Program Cleanup Progress

#### BRAC-IRP

- Prior Year Progress: Three groundwater treatment plants (GWTPs) were operated. In situ groundwater (GW) treatment for Operable Unit - Carbon Tetrachloride Plume (OU-CTP) was constructed and implemented. Outreach continued as did landfill LTM.
- Future Plan of Action: Long-term operation (LTO) of three GW treatment plants and outreach will continue as will in situ treatment for OU-CTP. Landfill long term management (LTM) will continue. A ROD amendment for Site 39 will be signed followed by initiation of an RA (soil excavation).

#### BRAC-MMRP

- Prior Year Progress: Oversight of the ESCA project continued. Outreach and LTM of three GW treatment systems continued and a Track 2 ROD for Parker Flats and Track 2 ROD for Del Rey Oaks was completed. The Track 3 ROD impact area was completed as was the prescribed burn at Units 18 and 22. Follow-on MEC clearance is on-going. ESCA parcels were transferred.
- Future Plan of Action: Ordnance and explosives (OE) awareness and site security programs will continue. Prescribed burns and MEC remediation on Army-owned lands will also continue. The remaining Track 0 and 1 parcels will be transferred. Oversight and support for ESCA will continue and an RI/FS for the remaining MMRP areas will be developed.

### Installation Exit Strategy

Property transfer will be achieved after completion of all remediation activities as needed and satisfaction of cleanup requirements under regulatory oversight and involvement of federal and state agencies. Portions of the installation were transferred to 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 vicinity 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

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

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-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

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: 200809

Modification Date: N/A

Date Terminated: N/A

Inspecting Organization: State

Record of LUC: FOSET

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-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/Response Complete (RC)

BRAC Sites\*: 46/41

### Sites planned for RIP for FY2010

Site ID	Site Name	Month
N/A		

### Sites planned for RC for FY2010

Site ID	Site Name	Month
N/A		

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

- 1 Contaminated Ground Water (FTO-044)
- 1 Contaminated Sediments (FTO-003)
- 1 Fire/Crash Training Area (FTO-041)
- 1 Landfill (FTO-053)
- 1 Small Arms Range (FTO-039)
- 1 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-010	SITE 10 BURN PIT NEAR MAIN FIRE STATION	FRA	WASTE REMOVAL - SOILS	1995	TBD
FTO-014	SITE 14 707TH MAINTENANCE FACILITY	FRA	WASTE REMOVAL - SOILS	1995	TBD
FTO-015	SITE 15 DEH YARD	FRA	WASTE REMOVAL - SOILS	1995	TBD
FTO-020	SITE 20 SOUTH PARADE GROUNDS, 3800 BLOCK	FRA	WASTE REMOVAL - SOILS	1995	TBD
FTO-021	SITE 21 4400/4500 MOTOR POOL, EAST BLOCK	FRA	WASTE REMOVAL - SOILS	1995	TBD
FTO-022	SITE 22 4400/4500 MOTOR POOL, WEST BLOCK	FRA	WASTE REMOVAL - SOILS	1995	TBD
FTO-030	SITE 30 DRIVER TRAIN. AREA EAST GARRISON	FRA	WASTE REMOVAL - SOILS	1995	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-040	FAAF DEFUELING AREAS	FRA	WASTE REMOVAL - SOILS	1996	TBD
FTO-042	CRESENT BLUFFS BURN PIT	FRA	WASTE REMOVAL - SOILS	1996	TBD

## BRAC-IRP Summary

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

Site ID	Site Name	Action	Remedy	FY	Cost
FTO-003	SITE 3-BEACH TRAINFIRE RANGES	FRA	WASTE REMOVAL - SOILS	1997	TBD
FTO-007	SITE 7 RANGES 40/41 FIRE DEMO (SITE 39)	FRA	WASTE REMOVAL - SOILS	1997	TBD
FTO-012	SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD	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-012	SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD	FRA	GROUND WATER TREATMENT	1999	TBD
FTO-053	LANDFILL (OU2)	FRA	CAPPING	2002	TBD
FTO-053	LANDFILL (OU2)	FRA	GROUND WATER TREATMENT	2002	TBD
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

### Duration of BRAC-IRP

Date of BRAC-IRP Inception: 198006  
 Date for Remedy-In-Place (RIP)/Response Complete (RC): 201609/203610  
 Date of BRAC-IRP completion including Long Term Management (LTM): 203909

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

# BRAC-IRP Contamination Assessment

## Contamination Assessment Overview

After completion of the first phase of remedial investigation (RI)/feasibility (FS) fieldwork, the installation restoration (IR) sites clearly could be categorized based on whether a release was identified at a site and if a release had occurred, the nature and extent of the release. Therefore, using the initial site characterization information and existing pre RI/FS data, the 43 sites were categorized as:

- (1) base-wide RI sites,
- (2) interim action (IA) sites, or
- (3) no action (NoA) sites.

These three categories are defined as follows; the individual RI, IA, and NoA sites are listed in Sections 7.0, 9.0, and 10.0, respectively:

- RI Sites: These have sufficient contamination to warrant a full RI, baseline risk assessment (BRA), ecological risk assessment (ERA), and FS
- NoA Sites: These sites do not warrant RA under CERCLA
- IA Sites: These are sites with limited volume and extent of contaminated soil and, as a result, are easily excavated, as an IA.

To accelerate the cleanup process, IA and NoA sites were addressed in separate remedial categories from the RI sites and were supported by their own records of decision (ROD). These RODs provided a process for accelerated transfer of NoA sites and cleanup of IA sites under BRAC, rather than delaying cleanup or transfer actions until a final ROD for Fort Ord is signed. The NoA ROD was signed in April 1995 and the IA ROD was signed in March 1994. The RI sites ROD signed in January 1997 addressed cleanup of a range of sites for which full RI/FSs were deemed necessary.

In addition to the RI, NoA, and IA site RODs, three operable units (OU) at Fort Ord were also supported by their own RODs (OU 1, the FAAF Fire Drill Area; OU 2, the Fort Ord landfills; and OUCTP). These follow individual paths to the final ROD for Fort Ord. The ROD for OU 1 was signed in September 1995, the OU 2 ROD was signed in August 1994, and the OUCTP ROD was signed in 2008.

Off-post GW contamination has been identified at OU1 and OUCTP. Off-site contamination at OU1 was identified in December 2004. Initial characterization has indicated that the contamination has migrated approximately 1,500 feet off-site. The USACE is conducting a pilot study to develop information for full remedial design that will address the off-site GW contamination plume.

In late 2007 the Army developed a pilot study at OU1 to collect the information needed to design and install a GW extraction and treatment system to address the off-site contamination. The pilot system was installed in mid 2008 and was operational in August 2008. Monitoring results from the pilot study indicate that one additional year may fully address the problem. The system will be operated as necessary to maintain GW concentrations below the aquifer cleanup levels, followed by five years of confirmation GW monitoring. Because the plume has moved outside the Fort Ord property limits, the USEPA is requiring an Explanation of Significant Differences (ESD) to document the changes to the OU1 ROD. The ESD will be completed in 2010.

GW contamination from OUCTP has been identified off-site in the city of Marina. Concentrations levels are low and will be addressed using bioremediation techniques in the uppermost aquifer. The ROD signed in February 2008 established RAs to include bioremediation treatment in the uppermost aquifer, extraction and treatment in the upper 180-foot aquifer, and monitored natural attenuation (MNA) in the lower 180-foot aquifer.

Regulatory oversight/interest by federal and state agencies remains elevated.

GW at FTO-053 - Landfill (OU2) is a complicating factor affecting the cleanup actions. Groundwater flow in the 180 foot aquifers is complex and is further complicated by off-site pumping. Uncertainties include discontinuous low permeable layers which allow contamination to migrate into lower unaffected zones, and GW extraction by municipal and agricultural users modifies GW flow. Additional characterization is underway to further understand the hydrogeologic conditions and optimize the extraction system to capture contaminated water.

Public interest is intermittent and appears to be limited to a small group of citizens concerned about the GW cleanup actions and development. Comments and questions are addressed as the public brings them to the Fort Ord BRAC office's attention.

# FORT ORD

## Installation Restoration Program

### Site Descriptions

Site Name: SITE 3-BEACH TRAINFIRE RANGES

**STATUS**

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.....	201509

RIP Date: N/A  
 RC Date: 200009

**SITE DESCRIPTION**

The former Beach Trainfire Ranges (FTO-003) were identified as Site 3 in the Final Basewide Hazardous and Toxic Waste (HTW) RI/FS (HLA, 1995). 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 the targets. The beach ranges provide critical habitat for several plant and animal species that are listed as rare, threatened, or species of special concern (Harding ESE, 2002). The Final Basewide (HTW) RI/FS evaluated cleanup alternatives for soil containing lead and other metals (HLA, 1995) to protect human health, and indicated further study was required to assess impacts to the environment (ecological receptors) at the site. The selected remedy consisted of the excavation of contaminated soil and was documented in the Interim ROD, Site 3, Beach Trainfire Ranges, Fort Ord, California (Site 3 Interim ROD; Army, 1997). After the cleanup was completed, post-remediation sampling determined that the remaining site-wide average lead concentration in soil was 161 milligrams per kilogram (mg/kg) (IT, 2000). Subsequent ecological risk assessments and evaluations of risks to plants or animals after the cleanup for lead had been completed at Site 3 (MRS-22) included a Post-Remediation Ecological Risk Assessment (IT, 2000). Site 3 is proposed for reuse as a state park consisting of hiking trails, campgrounds, and ancillary facilities. Boardwalks through the dunes will connect parking lots on the eastern portion of the site with the beach to the west.

A final ROD for the Site 3 Beach Trainfire Ranges, signed in April 2005, required ecological monitoring to confirm previous results of ecological risk evaluations and assessments.

In 2007 the Army conducted ecological monitoring work, which identified two areas requiring revegetation and monitoring to ensure the remedy is still protective of the environment. The Army has contracted with the California Department of Parks and Recreation the future property owner to conduct the revegetation activities and associated reports on the project. The initial work is planned for spring 2009. The work is expected to be completed in five years.

**CLEANUP/EXIT STRATEGY**

Complete revegetation and ecological monitoring in accordance with the Site 3 habitat restoration and monitoring plan. The purpose of this work will be to validate previous results of ecological risk evaluations/assessment in accordance with the ROD. Include monitoring results and analysis completed at the time of the next five-year review.

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.....	201709
LTM.....	201710.....	202209

RIP Date: 199912  
 RC Date: 201709

**SITE DESCRIPTION**

FTO-012 Site 12 is located in the northwest portion of Fort Ord, east of Highway 1 and adjacent to Imjin Parkway. It encompasses approximately 12 acres. This site consisted of light industrial activities related to vehicle maintenance and unit level maintenance. Operations caused both soil and GW contamination. The area was assessed in the base-wide RI/FS (HLA, 1995).

Contaminated soils and associated debris were excavated during cleanup activities at the site, and the area was backfilled with clean soil. RAs to address soil contamination have been completed.

In April 1999 construction of a GW pump and treat system was completed and system operations began. During the operation of the treatment system, GW has been sampled to verify that the treatment system is operating effectively. Since 1999, water samples and water levels from GW monitoring wells have been collected every three months. This GW monitoring information has been compiled into quarterly and annual reports to show the long-term trends.

From 2003 to 2005 Fort Ord initiated a GW optimization study of the operations. The optimization work identified that an addition of an air stripper with potassium permanganate adsorption would allow the system to operate at a greater volume and reduce the overall treatment period. The air stripper system has been installed and is operational. Groundwater modeling was completed in 2008 and the results indicate that remediation to meet RA objectives would take an additional eight years until FY 2017.

**CLEANUP/EXIT STRATEGY**

System operations will continue. Locations of monitoring wells will be modified (unneeded wells destroyed/new wells constructed) as plume footprint changes (shrinks) to ensure monitoring data accurately delineates plume footprint. GW sampling frequency will be reduced for specific wells as identified in annual reports. Once aquifer cleanup levels are met, treatment system operations will cease and monitoring continued to validate the remediation and support site closeout decision. The GW treatment system, extraction wells and pipelines as well as any remaining monitoring wells will be destroyed at site closeout.

### STATUS

Parcel: DEL REY OAKS (FORA) (FOST 10) (4.66 acres),BLM (7444 acres),MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres),SEASIDE (FORA) (FOSET 5) (615.43 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.....	201609
LTM.....	201610.....	202309

RIP Date: N/A

RC Date: 201609

### SITE DESCRIPTION

FTO-039 Site 39 is in the southwestern portion of the former Fort Ord and includes the impact area (approximately 8,000 acres) and the 2.36-inch rocket range (approximately 50 acres). The impact area is bounded by Eucalyptus Road to the north, Barloy Canyon Road to the east, South Boundary Road to the south, and General Jim Moore Blvd to the west. The 2.36-inch rocket range is immediately north of Eucalyptus Road, near the north-central portion of the impact area.

The impact area was reportedly used since the early 1900s for ordnance training exercises. Over the years, various types of ordnance have been used or found in the impact area, including hand grenades, mortars, rockets, mines, artillery rounds, and small arms rounds. Some training activities using petroleum hydrocarbons were also conducted. The 2.36-inch rocket range was reportedly used for anti-armor (bazooka) training during and shortly after World War II.

The proposed future use of most of the impact area will be a natural resource management area (NRMA). This area will be managed by the US Department of the Interior, Bureau of Land Management (BLM), and public access will be managed or restricted. Several areas within, but along the periphery of, the impact area have a proposed future land use other than as a NRMA. The Military Operations on Urbanized Terrain (MOUT) Area, in the northeastern edge of the impact area, are proposed for use as a law enforcement training area. The areas along the south and west boundary of the impact area are proposed for several uses, including commercial and residential development, a school expansion, and relocation of Highway 68. Identified soil contamination in the areas along the south and west boundary of the impact area has been addressed to support the identified reuse(s) in those areas. In many cases the agencies have concurred that cleanup goals have been met and the property, in some cases, has been transferred.

The selected RAs for Site 39 in the base wide ROD (Army, 1997) were excavation of soils with concentrations above 1,860 parts per million lead (the identified level to address human health) and placement of soils in the Fort Ord Landfill in accordance with the substantive requirements of the Corrective Action Management Unit (CAMU) regulations. The cleanup levels to address ecological risks were not identified in the 1997 ROD. Additional investigations have occurred since the 1997 ROD to fully characterize the area. An ecological risk assessment and FS addendum to identify remedial cleanup levels was completed in 2007, with a ROD amendment to the 1997 ROD being staffed for signature. The FS addendum identified the specific areas and volumes of contaminated soils to be excavated and removed. The current estimate is 125,000 cubic yards. The ROD amendment also includes a process to address additional areas of contamination that may be identified in the future during munitions and explosives of concern remediation. The ROD amendment was required to establish cleanup levels to address ecological risks and due to the significant increases in soils volumes to be excavated and placed at the former Fort Ord landfill.

There is no impact to the GW at Site 39.

### CLEANUP/EXIT STRATEGY

Site ID: FTO-039  
Site Name: SITE 39 INLAND RANGES

Excavations as identified in the FS addendum will be completed and the ROD amendment finalized in 2009. Habitat restoration will begin in 2010. Monitoring will be conducted to ensure habitat recovery is occurring as required by Fort Ord's installation-wide multispecies management plan and biological opinions and the applicable habitat restoration and monitoring plans. If funding is received as requested, all construction activities will be completed by 2013 and the former landfill parcel (150 acres) can be transferred.

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.....	201309
LTM.....	201310.....	202009

RIP Date: 198807  
 RC Date: 201310

**SITE DESCRIPTION**

FTO-041, the Fritzsche Army Airfield Fire Drill Area (FDA), also known as OU 1, was a training area for the Fort Ord Fire Department. Fuel and off specification solvents were discharged from on-site storage tanks into an unlined pit, ignited, and then extinguished with water. Training was discontinued in 1985.

Fort Ord's site investigation concluded that soil and GW cleanups were required in this area. The approved remedy was carbon treatment for GW and biodegradation for soil. Approximately 4,000 cubic yards of contaminated soil were excavated in 1987. The OU 1 ROD (1995) approved no further action (NFA) for soil.

A GW extraction and treatment facility was constructed in 1988 to remediate volatile organic compounds (VOCs) in GW. Currently, the extraction system in the original plume footprint has been shut off and rebound study has been completed and is under agency review.

In 1998 GW contamination was identified outside the capture area. The Army initiated additional work to define the extent of the downgradient contamination.

In 2002 the Army issued a performance-based acquisition (PBA) with insurance to address the remaining contamination. The PBA contractor initiated work in 2003 and is working with the regulatory agencies to complete the on-site remedial work.

In December 2004 contaminated GW was identified beyond former Fort Ord's original property limits. In October 2005 the PBA contractor notified the Army they were not responsible for the contamination beyond the property boundary. The Army did not agree with the contractor's conclusion. The Army is using another contractor, to determine the contamination extent outside Fort Ord's original boundary.

In summer 2006 the PBA contractor installed a GW extraction and treatment system at the boundary of the former Fort Ord. The contractor has continued to install additional extraction wells to address the total on-site plume area.

In late 2007 the Army developed a pilot study to collect the required information needed to design and install a GW extraction and treatment system to address the off-site contamination. The pilot system was installed in mid-2008 and operational in August. Monitoring results from the pilot study indicate that one additional year of operation may fully address the problem. The system will be operated as necessary to maintain GW concentrations below the aquifer cleanup levels, followed by five years of confirmation GW monitoring. Because the plume has moved outside the former Fort Ord property limits, the USEPA is requiring an ESD to document the changes to the ROD. The ESD will be completed in 2010.

**CLEANUP/EXIT STRATEGY**

The PBA contractor will complete work on the site extraction and treatment system. The Army will complete the pilot study and

Site ID: FTO-041

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

then determine if additional RAs are required. Both systems will be operated to reach aquifer cleanup levels, monitoring will be continued to assess status, and appropriate changes will be made to the system as aquifer conditions change. Once cleanup levels are achieved and have regulatory approval the treatment system will be shut down. The treatment system, wells, piping, and monitoring wells will then be destroyed.

## STATUS

Parcel: MARINA (FORA) (FOSET 5) (52.87 acres), MONTEREY COUNTY (FORA) (FOSET 5) (2290 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.....	199701.....	199701
SI.....	199701.....	199802
RI/FS.....	199701.....	200309
RD.....	200309.....	200601
IRA.....	200407.....	200409
RA(C).....	200603.....	201509
RA(O).....	201510.....	202409
LTM.....	202410.....	203909

RIP Date: 201510

RC Date: 202409

## SITE DESCRIPTION

FTO-044, the Operable Unit Carbon Tetrachloride (OUCTP), is located in the north-central portion of Fort Ord. Based upon some limited historical information, electronics maintenance activities existed in the north-central part of the former Fort Ord during the 1950s. Carbon tetrachloride appears to have been discharged to the ground after it was used to clean radio parts. Construction of base housing occurred in the area during the 1980s to the early 1990s. Data collected for site investigation for inclusion in the RI/FS indicate that carbon tetrachloride has migrated through the soil to GW. A soil vapor extraction system installed as a pilot study has successfully removed remaining soil vapor contamination.

GW contamination has migrated downgradient and affects three aquifer units below the site. These are the A, 180-foot, and 400-foot aquifers. The GW plume in the A aquifer is long and narrow (10,000 by 700 feet). Current use of the area impacted by the plume is residential housing in the source area on Fort Ord and in the area furthest downgradient (in the city of Marina). The central portion of the plume (approximately 5,000 feet) overlies a designated habitat preserve area. Contamination in the lower aquifer units was caused by migration through previously existing wells that were screened across the three aquifers. Well abandonment has been completed on wells previously used by the Army, as well as on all identified conduits.

An RI/FS was completed in 2006, which identified three remedial treatment technologies to address the GW contamination as follows:

- A aquifer: in situ bioremediation;
- Upper 180-foot aquifer: capture in the OU 2 GW extraction system and treat;
- Lower 180-foot aquifer: MNA.

A pilot test system was installed in late 2007 to refine the design of the in situ bioremediation system. Full system build-out should be completed in 2009/2010. RA will likely take 15 years for bioremediation and 30 years for MNA, based on GW modeling. Additional extraction wells will be required to capture contaminated GW in the Upper 180-foot aquifer and treated in the FTO 53 treatment system.

## CLEANUP/EXIT STRATEGY

The identified remedy will be installed, monitored and adjusted appropriately to ensure progress is made to reach aquifer cleanup level. Once Alternate Concentration Limit (ACL) is reached, regulatory agencies will be coordinated with to shut down the treatment system in A aquifer and the upper 180-foot aquifer; the aquifers will be monitored to identify changes after shutdown. If ACL holds, any remaining system infrastructure will be removed. The lower 180-foot aquifer will be monitored to ensure MNA criteria is attained.

Site ID: FTO-053

Site Name: LANDFILL (OU2)

## STATUS

Parcel: MONTEREY COUNTY (FORA) (FOST 12) (146.8 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.....	203609
LTM.....	203610.....	203909

RIP Date: 200211

RC Date: 203610

## SITE DESCRIPTION

FTO-053 OU2 consists of two adjacent landfill areas covering 150 acres and associated contaminated GW and was used for residential and commercial disposal of waste from Fort Ord. The north landfill (Area A, 30 acres) was used from 1956 to 1966. The main landfill (Areas B through F, 120 acres) operated from 1960 to 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 initiated studies in 1988. The Final RI/FS Report (1993) indicated the presence of low levels of VOCs in GW, and semi-volatile organic compounds (SVOCs), metals, and pesticides in the soil.

Remedies for the Fort Ord Landfills included landfill capping and closure, GW extraction and treatment in conjunction with institutional controls. The north landfill has been excavated and clean closed. A construction completion report for cap construction was issued; however, the regulatory agencies did not concur on that document, since issues relating to landfill gas remained to be addressed.

A GW treatment facility was constructed in 1995 to remediate GW underlying the landfill and continues to be in operation. Remediation was expected to take about 30 years. From 2003 to 2005 the Army assessed the treatment system to determine whether actions to optimize the extraction/treatment system could be identified. Actions such as optimizing locations of extraction wells, and extracting landfill gases before they could add to GW contamination were identified. A number of these actions have occurred. The optimization assessment originally estimated that approximately 12 years would be required to reach aquifer cleanup levels.

GW modeling completed in 2008 and reported in the technical memorandum exit strategy for Sites 2 and 12 and OU2 at former Fort Ord, California, and dated January 2009, identified that to reach Remedial Action Objectives the [GW treatment system (GWTS)] will need to remain in operation for approximately another 27 years in its current configuration.

Based on the modeling identified above which identifies the extended period (27 years) for completion of RAs and the increased operations and maintenance costs for the existing GW treatment plant, the treatment plant operator has recommended relocating and construction of a new facility at the landfill site. A cost estimate for the plant relocation and construction has been developed using RA cost engineering and requirements (RACER) and included in the 2009 Cost-to-Complete.

GW monitoring has identified low level contamination (below action levels) in municipal water supply wells downgradient to the landfill plume. Well monitoring will continue to determine if RA is required.

Based on the recommendations of the landfill gas (LFG) pilot test evaluation report, the Army expanded the OU2 LFG extraction and treatment system, which included installation of extraction wells around the entire perimeter of Area E and in the interior of Area F, and converting from treatment with granular activated carbon (GAC) and potassium permanganate (KMnO<sub>4</sub>) to a thermal treatment unit. The goals of this system include intercepting landfill gas before GW contamination occurs, thus shortening the overall time that the GW treatment system needs to operate. The LFG treatment system is operational.

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

## CLEANUP/EXIT STRATEGY

System operations will continue. Locations of monitoring wells will be modified (unneeded wells destroyed/new wells constructed) as the plume footprint shrinks. GW sampling frequency will be reduced for specific wells as identified in annual reports. Once aquifer cleanup levels are met, the treatment system will be shut down. Monitoring will continue to validate remediation and the support site closeout decision. The GW treatment system, extraction wells and pipelines as well as any remaining monitoring wells will be destroyed at site closeout.

## 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
FTO-039	SITE 39 INLAND RANGES	ROD Amendment Site 39 Inland Ranges	20091001
FTO-040	FAAF DEFUELING AREAS	OU1 Off Post ESD	20100901

Final RA(C) Completion Date: 201609

NPL Deletion Date: N/A

Schedule for Next Five-Year Review: 2012

Estimated Completion Date of BRAC-IRP at Installation (including LTM phase): 203909

## FORT ORD BRAC-IRP Schedule

  = phase underway

SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-003	SITE 3-BEACH TRAINFIRE RANGES	PA						
		SI						
		RI/FS						
		RD						
		RA(C)						
		LTM						
FTO-012	SITE 12 DOL AUTO MAINT. AREA/CANNIBAL.YD	PA						
		SI						
		RI/FS						
		RD						
		RA(C)						
		RA(O)						
		LTM						
FTO-039	SITE 39 INLAND RANGES	PA						
		SI						
		RI/FS						
		RD						
		RA(C)						
		LTM						
FTO-041	SITE 41 FAAF FIRE DRILL AREA (OU1)	PA						
		SI						
		RI/FS						
		RA(C)						
		RA(O)						
		LTM						
FTO-044	RESERVATION ROAD SITE	PA						
		SI						
		RI/FS						
		RD						
		IRA						
		RA(C)						
		RA(O)						
		LTM						

## FORT ORD BRAC-IRP Schedule

SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-053	LANDFILL (OU2)	PA						
		SI						
		RI/FS						
		RD						
		RA(C)						
		RA(O)						
		LTM						

# FORT ORD

Base Realignment and Closure  
Military Munitions Response Program

# BRAC-MMRP Summary

**Installation Total Army Environmental Database-Restoration (AEDB-R) BRAC Sites/Response Complete (RC)**

BRAC Sites\*: 22/4

**Sites planned for RIP for FY2010**

Site ID	Site Name	Month
N/A		

**Sites planned for RC for FY2010**

Site ID	Site Name	Month
N/A		

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

- 1 Small Arms Range  
(FTO-006-R-01)
- 21 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-021-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): 201909/201909

Date of BRAC-MMRP completion including Long Term Management (LTM): 203909

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

# BRAC-MMRP Contamination Assessment

## Contamination Assessment Overview

In February 1990 the former Fort Ord was listed on the NPL due to GW 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. Removal actions using the Engineering Evaluation (EE)/Cost Analysis (CA) process under 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. In order to expedite property transfer, the Army categorized the 121 known or suspected sites into three tracks. 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 Department of Toxic Substances Control (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

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 (Track 0 ROD, 2002), and the Track 0 ESD (Track 0 ESD, 2005).

### Track 1

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 necessary at these sites (Track 1 ROD, 2005).

### Track 2

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 would be evaluated through an RI/FS, proposed plan (PP) and ROD.

### Track 3

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

In March 2007 the Army signed an ESCA with FORA to manage the cleanup of MEC on the portions of Fort Ord properties that remain to be transferred to FORA and subsequently the local jurisdictions under the existing 1997 Fort Ord Base reuse plan. In the ESCA process, the FORA would be working as an agent/contractor for the Army. Public outreach and updates on the clean up work will be prepared by FORA and/or its contractors and supplied to the Army to be posted on the cleanup website ([www.fortordcleanup.com](http://www.fortordcleanup.com)) and in the administrative record. FORA and/or its contractors will attend US Army public outreach meetings and provide updates to the public as a part of the Army's overall briefings on the cleanup efforts at the former Fort Ord. The same regulatory oversight, cleanup requirements, and public participation requirements will apply to the ET/ESCA as would apply if the Army were conducting the cleanup. The early transfer of these lands is expected summer 2009.

Further details concerning FORA's mission and current actions can be found at FORA's website at [www.fora.org](http://www.fora.org) or by calling (831) 883-3672 and at [www.fora-esca-rp.com](http://www.fora-esca-rp.com).

# FORT ORD

## Military Munitions Response Program

### Site Descriptions

## STATUS

Parcel: MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres),BLM (7444 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.....	201909
LTM.....	201910.....	203909

RIP Date: N/A  
 RC Date: 201909

## SITE DESCRIPTION

BLM-East (FTO-001-R-01) 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 these areas were used as several small unit infantry maneuver training areas likely from the 1940s until the closure of the base in 1994. Training involved signaling and simulator devices as well as small arms blank ammunition. Munitions response including sampling and removal has been conducted on some ranges in the complex. Other ranges remain to be sampled. BLM-East and adjoining property have been transferred to US BLM for use as public lands.

The area is subject to the requirements of a Munitions Response (MR) RI/FS. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

Investigation of potential soil contamination is conducted under a separate RI/FS program. This range complex is an area designated as a Natural Resource Management Area.

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 12 munitions response sites. The acreage will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 5.6 acres of FTO-001-R-01 is included in the ESCA project. The ESCA parcels are 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 FY14. The site strategy for the remaining portion of the range complex includes:

- Track 1 sites: No further RA and long-term management measures are required for 239 areas of the range complex based on the Track 1 ROD (MRS-27X, MRS-32A/B, MRS-63, MRS-69 and MRS-70)
- Track 1 future sites: Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, site assessment and Track 1 approval memorandum are required for 1,382.81 acres (MRS-17, MRS-14B, MRS-32C, MRS-27J/K/L/M/N/O/P/Q/R/S/T/U/V/W, MRS-60, MRS-61, MRS-64, MRS-65, MRS-67 and MRS-68).
- Track 2 future sites: Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, site assessment, Track 2-type RI/FS, proposed plan and ROD are required for 220 acres where MEC removal was conducted (MRS-14C/D/E, MRS-25, MRS-26, MRS-12 and MRS-21).

LTM will be required for this range complex through FY39.

## CLEANUP/EXIT STRATEGY

The site strategy for the ESCA portion of this range complex includes oversight of the FORA ESCA remediation program until site

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

closeout is attained, which is expected in FY14.

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

- Track 1 sites: No further RA is required for this portion of the range complex based on the Track 1 ROD (MRS-27X, MRS-32A/B, MRS-63, MRS-69 and MRS-70; 239 acres). LTM measures are required based on Track 1 ROD. The LTM requirement will end based on the 2012 five-year review.
- Track 1 future sites: site assessment and Track 1 approval memorandum are required for 939 acres (MRS-17, MRS-27J/K/L/M/N/O/P/Q/R/S/T/U/V/W, MRS-61, MRS-64, MRS-65, MRS-67 and MRS-68). LTM will be required through 2017 five-year review.
- Track 2 future sites: site assessment, Track 2 RI/FS, proposed plan and ROD are required for 664 acres (MRS-32C, MRS-14B/C/D/E, MRS-25, MRS-26, MRS-12 and MRS-21). LTM will be required.

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

**STATUS**

Parcel: MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres),BLM (7444 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.....	201709
RA(C).....	201710.....	201909
LTM.....	201910.....	203909

RIP Date: N/A  
RC Date: 201909

**SITE DESCRIPTION**

The BLM East Other range complex (FTO-002-R-01) contains approximately 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. The complex has been transferred to the BLM for use as public lands. The area is subject to the requirements of an MR RI/FS. This area is assumed to have been used during the same period as BLM East range complex.

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

Investigation of potential soil contamination is conducted under a separate RI/FS program. This range complex is within areas designated as Natural Resource Management Area. Prescribed burning is the preferred method of vegetation clearance in support of any RA in habitat areas.

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

- A remedial investigation followed by a Track 1 plug-in decision document will be required for a majority of this FTO. The results of the Track 1 plug-in decision document are expected to require NFA.
- Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, 553 acres of this range complex will be evaluated in a Track 2-type RI/FS and ROD. The Track 2 area would require MEC removal.
- This range complex would require LTM.

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes RI followed by a Track 1 plug-in decision document for a majority of this FTO that is expected to require no further action. Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, 553 acres of this range complex will be evaluated in a Track 2-type RI/FS and ROD. The Track 2 area would require MEC removal. The addition of a Track 2 component is a change in site strategy that results in a significant increase in the Cost-to-Complete estimate. This range complex would require LTM.

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

## STATUS

Parcel: NONE  
Regulatory Driver: CERCLA  
Program: BRAC-MMRP  
MRSP 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.....	200910.....	201109
LTM.....	201110.....	203909

RIP Date: N/A  
RC Date: 201109

## SITE DESCRIPTION

The whole BLM-HQ impact area was historically used for small arms training, and as firing and impact areas for a variety of grenades, shoulder-launched projectiles, and other munitions. This use occurred over the entire operating history of the base. This 12.9-acre portion of the impact area consists MRS-35, the former range control area. In 1994 all of MRS-35 was sampled to a depth of 4 feet. A total of 508 small arms and 2 munitions response items (a grenade fuze and a ground illumination signal) were located. Munitions surface removal was conducted in January 1998. The September 2001 after action report indicates that no further munitions response is needed to support reuse of the property. This area is subject to the requirements of a pending MR RI/FS. Additional information regarding the MR RI/FS process is included in this BIAP.

Investigation of potential soil contamination is conducted under a separate RI/FS program.

## CLEANUP/EXIT STRATEGY

The site strategy for this range complex includes a Track 2-type RI/FS, PP and ROD. This range complex would require LTM measures after the completion of RI/FS phase. The LTM phase will be composed of MEC monitoring and a five-year review.

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

## STATUS

Parcel: BLM (7444 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	201309.....	201609
RA(C).....	201610.....	201809
LTM.....	201810.....	203909

RIP Date: N/A

RC Date: 201809

## SITE DESCRIPTION

The BLM North range complex, located in the central portion of 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 surface-to-air arms ammunition until closure of the base in 1994. The area is planned for transfer to BLM for use as public lands, but this transfer has not been initiated. A vegetation burn was conducted in 1997 and removal and sampling actions were completed in the area. This area is subject to the requirements of a pending MR RI/FS. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

Investigation of potential soil contamination is conducted under a separate RI/FS program. This range complex includes areas designated as natural resource management areas. Prescribed burning is the preferred method of vegetation clearance in support of any RA in habitat areas.

The site strategy for this range complex includes a Track 2-type MR RI/FS, Proposed Plan and ROD. An RA is also proposed for this area. The following sites make-up FTO-004-R-01:

- MRS-10A,
- MRS-10B,
- MRS-19,
- MRS-27I,
- MRS-27J,
- MRS-48, and
- MRS-58.

Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, except for approximately 200 acres of this range complex where one-foot removal was previously conducted, the Track 2 area would require MEC removal.

This range would require LTM measures after the completion of RI/FS and RA.

## CLEANUP/EXIT STRATEGY

The site strategy for this range complex includes Track 2-type MR RI/FS, PP and ROD and RA. The following sites make up FTO-004-R-01:

- MRS-10A,
- MRS-10B,
- MRS-19,
- MRS-48, and
- MRS-58.

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

This range complex requires LTM after the completion of RI/FS and RA.

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

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

**STATUS**

Parcel: MONTEREY COUNTY (FORA) (FOST 10) (380.05 acres),BLM (7444 acres),MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	200709.....	201709
LTM.....	201710.....	203909

RIP Date: N/A

RC Date: 201709

**SITE DESCRIPTION**

The BLM-North-XD range complex (FTO-005-R-01), located in the central portion of former Fort Ord, includes approximately 507 acres (this site was previously 512.5 acres; however, five acres have been 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 surface-to-air arms ammunition until closure of the base in 1994. The area has been transferred to BLM for use as public lands. A visual inspection of munitions of the observable surface area has been completed in this area. The area is subject to the requirements of the Fort Ord MR RI/FS program. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

Investigation of potential soil contamination is conducted under a separate RI/FS program. This range complex is within areas designated as natural resource management area. Prescribed burning is the preferred method of vegetation clearance in support of any RA in habitat areas.

MRS-59A, MRS-59B and MRS-27F were addressed as NFA sites in the July 19, 2006 Track 1 Plug-In Approval Memorandum for Multiple Sites, Groups 1-5, at Former Fort Ord, California.

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 12 munitions response sites. The acreages will be transferred to FORA under the Early Transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 56.3 acres of FTO-005-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 FY14.

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

- Track 1 sites: No further RA is required for this 59-acre portion of this range complex based on the Track 1 ROD (MRS-59A, MRS-59B and MRS-27F).
- Track 1 future sites: Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, a Track 1 approval memorandum is required in 235 acres of habitat-designated areas (MRS-27D, MRS-27E, MRS-57 and MRS-59).
- Track 2 future sites: Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, Track 2 RI/FS, proposed plan and ROD are required for approximately 157 acres where MEC removal may be required (MRS-54, MRS-56, MRS-53BLM, MRS-27GH, MRS-41 and MRS-9).

LTM measures will be required for this range complex through FY39.

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

## CLEANUP/EXIT STRATEGY

The site strategy for the remaining portion of the range complex includes oversight of the ESCA portion of the site.

NOTE: A small portion of this site is a part of the ESCA. Total ESCA acres: 56.28

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

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

**STATUS**

Parcel: NONE  
Regulatory Driver: CERCLA  
Program: BRAC-MMRP  
MRSP 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.....	201209

RIP Date: N/A  
RC Date: 200306

**SITE DESCRIPTION**

The Coastal Small Arms Range (FTO-006-R-01) covers approximately 951.8 acres and was in use from the 1940s through base closure in 1994. In the IRP this is also Site FTO-003. Initial walkthrough, munitions sampling, and other activities on the beach range complex, located on the coast of Monterey Bay, found no munitions and explosives of concern and 17 munitions debris items along with numerous (more than 239 items) small arms ammunition. Significant portions of the area were excavated as part of an RA to address lead-contaminated soil associated with small arms ranges. The area of the complex was initially transferred to the Department of the Interior and was later transferred to the state of California. As of March 2009 this area has been opened to the public for use as a state park and recreational area. Much of the area will be managed as a habitat reserve with designated trails accessible to the public. The area is subject to the requirements of the Track 1 ROD under the MR RI/FS program. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

Investigation of potential soil contamination was completed under a separate RI/FS program.

NFA is required for this range complex (MRS-22) based on the Track 1 ROD. LTM measures are required based on Track 1 ROD. The next five-year review (FY12) will serve as the site closeout documentation.

**CLEANUP/EXIT STRATEGY**

Site closeout is expected with the next five-year review anticipated in FY12.

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

## STATUS

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

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	201409

RIP Date: N/A

RC Date: 201409

## SITE DESCRIPTION

Archive information indicates that the ranges of this complex (FTO-007-R-01) cover approximately 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 indicates sites containing practice mines, practice grenades, and booby-trap training areas, Chemical, Biological, Radiological (CBR) training, and ordnance cache burial pits. A 100 percent removal action has been completed on the ranges of the complex. The area has been transferred under the Fort Ord ESCA and FOSET 5. The area is planned for development by the California State University, Monterey Bay (CSUMB).

This area includes the following Fort Ord designated MRS sites:

- MRS 27Y,
- MRS-4C,
- MRS-7,
- MRS-8,
- MRS-13C,
- MRS-31, and
- MRS-18 (CSUMB).

No RA is required for munitions response site MRS-27Y in accordance with Track 1 (ROD). RA will be required for MRS sites 4C, 7, 8, 13C, 31, and 18; however, this work is a part of the ESCA. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

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 12 munitions response sites. The acreages have been transferred to FORA under the early transfer authority. ESCA requires FORA to complete the environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 332.8 acres of FTO-007-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 FY2014. An RA will be required for MRS sites 4C, 7, 8, 13C, 31, and 18; however, this work is a part of the ESCA.

For the non-ESCA portions of this site, no further RA is required for the remaining portion of this range complex based on the Track 1 ROD (MRS-27Y) and the five-year review. LTM measures are required based on Track 1 ROD. LTM requirement for this area will end based on the 2012 five-year review.

## CLEANUP/EXIT STRATEGY

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

The site strategy for this range complex includes project oversight on the ESCA portion (332.8 acres) and LTM on MRS-27Y (23.76 acres, Track 1 ROD).

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

## STATUS

Parcel: NONE

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	201209

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 approximately 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. No further RA is planned for this area. The area has been transferred for use as student and faculty housing and future development to the CSUMB. The area is subject to the requirements of the Track 1 ROD under the MR RI/FS program. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP. FTO-008-R-01 is also known as MRS-66.

No further RA is required for this range complex (Fort Ord designated site MRS-66) based on the Track 1 ROD. LTM measures are required based on Track 1 ROD. The next five-year review (FY12) will serve as the site closeout documentation.

## CLEANUP/EXIT STRATEGY

Site closeout is expected with the next five-year review anticipated in FY12.

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

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

Phases	Start	End
PA.....	200111.....	200306
RI/FS.....	200710.....	201409

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

RIP Date: N/A

RC Date: 201409

## 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 approximately 394.5 acres. A sampling of the area indicates sites containing practice mines, practice grenades, booby-trap training areas, and ordnance cache burial pits. The area has been addressed under Track 1 and determined to require no further action. The area has been transferred under the Fort Ord ESCA. The area is comprised of development areas with habitat requirements. This site includes MRS-45A and 393.7 other acres.

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 12 munitions response sites. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 393.7 acres of FTO-009-R-01 is included in the ESCA project.

The number of acres reported in the CTT report is not the same as the number of acres in the ESCA project. The ESCA is just a portion of this range complex (393.7 acres). The remaining acres (0.8 acres) in this range complex are attributed to the Army and the Army will retain responsibility for site closeout.

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 FY2014. For the Army-owned (non-ESCA) portions of this site, no further RA is required for the remaining portion (MRS-45A) of this range complex based on the Track 1 ROD. LTM measures are required based on the Track 1 ROD plug-in process documented in the July 19, 2006 Track 1 Plug-In Approval Memorandum for Multiple Sites, Groups 1-5, at former Fort Ord. The LTM requirement for this portion of FTO-009-R-01 will end based on the 2012 five-year review. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

## CLEANUP/EXIT STRATEGY

The site strategy for this range complex includes program oversight on the ESCA portion (393.96 acres, oversight on MRS-45) and LTM on MRS-66 (Track 1 Plug-In ROD).

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

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

**STATUS**

Parcel: MONTEREY COUNTY (FORA) (FOST 10) (380.05 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.....	201409

RIP Date: N/A  
RC Date: 201409

**SITE DESCRIPTION**

An archives search report found the ranges in the East Garrison Area 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. The East Garrison site is located in the east central portion of former Fort Ord and occupies approximately 71.0 acres. Munitions sampling and removal actions have been completed on ranges in the complex. Plans for the area include housing development and a habitat reserve. The area is subject to the requirements of the Fort Ord MR RI/FS. Sites included in the East Garrison Site are MRS-5, MRS-33, MRS-11, and MRS-42. Sites MRS-5 and MRS-33 are included in the Finding of Suitability to Transfer number 10 and are scheduled to soon transfer. No RA is required for the following munitions response site in accordance with Track 1 ROD: MRS-5. No RA is expected for the MRS-33 munitions response site in accordance with the Track 1 Plug-In Approval Memorandum: MRS-33. The remaining portions (MRS-11 and MRS-42) of site FTO-010-R-01 are included in the ESCA. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

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 12 munitions response sites. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. Even though the munitions response responsibilities associated with the ESCA areas has been transferred to FORA, the BRAC office will provide oversight of FORA's ESCA activities as described in the ESCA. Approximately 41.7 acres of FTO-010-R-01 are included in the ESCA project.

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 FY2014. For the Army-owned (non-ESCA) portions of this site, no further RA is required for the remaining portion of this range complex based on the Track 1 ROD (MRS-5) and the Track 1 Plug-In Progress (MRS-33). LTM measures are required based on Track 1 ROD. LTM requirement will end based on the 2012 five-year review.

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes project oversight on the ESCA portion (41.72 acres, oversight on MRS-42/11) and LTM on MRS-5/33 (29.28 acres, Track 1 ROD/Plug-In).

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

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

## STATUS

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

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	201409

RIP Date: N/A

RC Date: 201409

## SITE DESCRIPTION

This complex (FTO-011-R-01) contains the acreage (385.1 acres) of the area around the East Garrison 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. FTO-011-R-01 is planned to be transferred to multiple users. Areas included in this complex are: EG Area 2, EG Area 4NE, and EG Area 4. No RA is expected for the following munitions response sites in accordance with Track 1 Plug-In Approval Memorandum: EG Area 2 and EG Area 4NE. The remaining portion of site FTO-011-R-01 (EG Area 4) is included in the ESCA. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

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 12 munitions response areas. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. Even though the munitions response responsibilities associated with the ESCA areas has been transferred to FORA, the BRAC office will provide oversight of FORA's ESCA activities as described in the ESCA. Approximately 204.5 acres of FTO-011-R-01 is 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 FY2014. EG Area 4 is included in the ESCA. For the Army-owned (non-ESCA) portions of this site, no further RA is required for the remaining portion of this range complex based on the Track 1 ROD and the Track 1 Plug-In Process (EG Area 2 and EG Area 4NE). LTM measures are required based on Track 1 ROD and Track 1 Plug-in Process. LTM requirement will end based on the 2012 five-year review.

## CLEANUP/EXIT STRATEGY

The site strategy for this range complex includes project oversight on ESCA portion (181.96 acres, oversight on EGA4 which includes MRS-24/42EXP and E11.b.6.1)

NOTE: Only 181.96 acres of the 203.4 ESCA acres for this site have MMRP issues. The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site close-out is attained, which is expected in FY14. Site MRS-EG Area 4 is included in the ESCA.

For the Army-retained (non-ESCA) portions of this site, further RA is not required for the remaining portion of this range complex based on the Track 1 ROD and the Track 1 Plug-in process (MRS-EG Area 2, MRS-EG Area 4NE, and MRS- E11b.6.1). LTM measures are required based on Track 1 ROD and Track 1 plug-in process. LTM requirement will end based on the 2012 five-year review.

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

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

**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 CENTER (FOST 9) (4.62 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	201209

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 approximately 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 IRP actions. An interim response action is complete. The area of the complex has transferred. The area is subject to the requirements of the Fort Ord MR RI/FS. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

This range complex includes the Fort Ord designated sites MRS 1, 6, 13A, 20, 24D, and 24E. No further RA is required for this range complex based on the Track 1 ROD and Track 1 Plug-In Approval Memorandum. LTM measures are required based on Track 1 ROD. The next five-year review (FY12) will serve as the site closeout documentation.

**CLEANUP/EXIT STRATEGY**

Site closeout is expected with the next five-year review anticipated in FY12.

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

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

**STATUS**

Parcel: MPC (FOST 9) (15.17 acres),SEASIDE (FORA) (FOST 11) (70.62 acres)  
Regulatory Driver: CERCLA  
Program: BRAC-MMRP  
MRSP 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.....	200510.....	201009
LTM.....	201010.....	203909

RIP Date: N/A

RC Date: 201009

**SITE DESCRIPTION**

Garrison South (FTO-013-R-01), located west of Parker Flats range area, occupies approximately 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 and NFA is required. The area is subject to the requirements of the Fort Ord MR RI/FS. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP. This range complex includes the following munitions response sites (MRS-24B, MRS-39, and MRS-49, MRS-24A and MRA-24C).

Investigation of potential soil contamination is conducted under a separate RI/FS program.

MRS-24B, 39, and 49, were addressed as NFA sites in Track 1 ROD based on the results of sampling investigations. MRSs were formerly referred to as ordnance and explosives sites (e.g. OE-24B).

The site strategy for this range complex includes an NFA decision document for MRS-24A and parcel E20c.1, where sampling investigations have been conducted, as a Track 1 plug-in site. Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, a Track 2-type FS is recommended for MRS-24C. This range complex would require 30 years of LTM measures after the completion of RI/FS.

No further RA is required for Track 1 sites portion of the range complex based on the Track 1 ROD (MRS-24B, MRS-39, and MRS-49). LTM measures are required based on Track 1 ROD. For Track 1 a plug-in approval memorandum is required to document NFA (MRS-24A/parcel E20c.1).

For Track 2 future sites a Track 2-type RI/FS, a PP and a ROD are required (MRS-24C, 9.32 acres).

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes a NFA decision document for MRS-24A and parcel E20c.1, where sampling investigations have been conducted, as a Track 1 plug-in site. Based on the Preliminary Draft Remaining RI/FS Areas Management Plan, a Track 2-type FS is recommended for MRS-24C. This range complex would require 30 years of LTM measures after the completion of RI/FS.

The site strategy for this range complex includes:

- For Track 1 sites: No further RA is required for this portion of the range complex based on the Track 1 ROD (MRS-24B, MRS-39, and MRS-49). LTM measures are required based on Track 1 ROD.
- For Track 1 future sites: Track 1 plug-in approval memorandum is required to document NFA (MRS-24A/parcel E20c.1).
- For Track 2 future sites. A Track 2-type RI/FS, PP and a ROD are required (MRS-24C, 9.32 acres).

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

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

**STATUS**

Parcel: BLM (7444 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSPP Score: 02

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.....	200608
RA(C).....	200609.....	201809
LTM.....	201910.....	203909

RIP Date: N/A

RC Date: 201809

**SITE DESCRIPTION**

The Multi-Use Range Area - BLM range complex (FTO-014-R-01) is located within the confines of the impact area. 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 a concentration of similar expended munitions and UXO. The area is not in use by the Army. RAs will be completed following the MR RI/FS process. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section. Vegetation on this complex is protected under the Installation-wide Multispecies Habitat Management Plan. The area is planned to be transferred to BLM as a habitat reserve when all removal action is complete.

Investigation of potential soil contamination is conducted under a separate RI/FS program. This range complex is within areas designated as natural resource management area containing central maritime chaparral. Prescribed burning is has been identified as the preferred method of vegetation clearance to support the removal of munitions and explosives of concern in Natural Resource Management Area containing central maritime chaparral. The areas of this range complex are to be reassigned to BLM.

The final Track 3 impact area multi-range area (MRA) MR RI/FS was completed in June 2007. Track 3 ROD for the impact area MRA was signed May 15, 2008. The overall approach for completing all of the RA in the impact area MRA is described in the draft work plan, remedial design/RA, Track 3 impact area MRA, munitions and explosives of concern removal, August 2008.

This range complex encompasses 6,316.8 acres that 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 interim RA was conducted. Even though this acreage is a part of FTO-016-R-01, because the Track 3 remedy is a MRA-wide comprehensive response action, the cost for eventual site closure for the 273-acre portion of Ranges 43-48 is captured in cost estimate with the rest of the Track 3 impact area MRA under FTO-014-R-01.

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes the completion of Track 3 PP and ROD, followed by RA. This range complex would require LTM measures after the completion of RI/FS and RA.

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

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

MRSP 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.....	201409
LTM.....	201410.....	203909

RIP Date: N/A

RC Date: 201409

## SITE DESCRIPTION

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

Investigation of potential soil contamination, including residues of explosives, is conducted under a separate RI/FS program.

A 324-acre portion of this range complex where a munitions and explosives of concern (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 RI/FS was completed for this portion of the site in August 2007. The resulting ROD was signed in November 2008 selecting land use controls as the remedy. MRS-15DRO.1A and MRS-15DRO.2A were addressed as NFA sites in the July 19, 2006 Track 1 Plug-In Approval Memorandum for Multiple Sites, Groups 1-5, at Former Fort Ord, California. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the IAP.

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 12 munitions response sites. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 9.1 acres of FTO-015-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 FY14.

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

- For Track 1 sites: No further RA is required for this portion of this range complex based on the Track 1 ROD (MRS-15DRO.1A and MRS-15DRO.2A). LTM measures are required based on Track 1 ROD. LTM cost is included in the MEC Institutional Controls cost of the Track 2 sites, below.
- For Track 2 sites: Implementation of the selected remedy (Track 2, Del Rey Oaks Munitions Response Area), including LTM, is required.

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

**STATUS**

Parcel: BLM (7444 acres), MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres), SEASIDE (FORA) (FOSET 5) (615.43 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSPP Score: 04

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.....	201409
LTM.....	201410.....	203909

RIP Date: N/A

RC Date: 201409

**SITE DESCRIPTION**

The Multi-Use Range Area - IA range complex is located within and just north of the impact area in the southwest portion of former Fort Ord and covers about 550.78 acres. 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 based closed in 1994. A surface removal action in exposed areas of the complex was completed in 2001. An IA has been developed for this complex to address dangerous UXO conditions arising from the type of munitions on the ranges and the proximity of the ranges to local residential areas and schools. Removal to depth is pending a successful burn of the vegetation as required by the installation-wide multispecies habitat management plan that covers approximately 90 percent of the range complex. The Army currently retains control of the area and it is undeveloped. The ranges of the complex are fenced and patrolled. The habitat area of the complex is planned to be transferred to the BLM, and the former range firing lines, hardstands, and other perimeter lands to Monterey County for use as a police training facility. An IA RI/FS and ROD have been completed for this area, which will be further addressed in the MR RI/FS program for site closeout. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

Investigation of potential soil contamination is conducted under a separate RI/FS program.

An IA RI/FS and ROD were completed for 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.

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 12 munitions response sites. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 198.5 acres of FTO-016-R-01 are included in the ESCA project.

The Multi-Use Range Area IA range complex (FTO-016-R-01) covers approximately 550.78 acres. This range complex originally included 923.9 acres; however, 391 acres were transferred to FTO-014-R-01 in 2006 and approximately 18 acres were transferred from FTO-018-R-01 in 2008.

**CLEANUP/EXIT STRATEGY**

The site strategy for the ESCA-portion of this range complex includes oversight of the FORA ESCA remediation program until site close-out is attained, which is expected in FY14.

The site strategy for this range complex included subsurface removal based on an IA ROD. Most of the requirements of the IA

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

ROD for ranges 43-48 were completed in 2005 and for MRS-16 in 2006-08.

For the southern portion of Ranges 43-48 (non-ESCA portion), site strategy is to implement the selected remedy as part of the Track 3 ROD (reference: Track 3 Proposed Plan; also see FTO-014-R-01); the cost estimate is included in FTO-014-R-01 CTC.

For MRS-16, the site strategy is to complete a site closeout report with LTM.

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

Site ID: FTO-017-R-01

Site Name: MULTI-USE RANGE AREA - OB/OD

## STATUS

Parcel: BLM (7444 acres)

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	203909

RIP Date: N/A

RC Date: 200601

## SITE DESCRIPTION

This site is also covered under site FTO-005 in the IRP.

This range area covers approximately 1.8 acres and was an explosive ordnance disposal (EOD) range used for disposal of various types of commercial explosives and military ordnance and munitions in the south-central portion of former Fort Ord, within the confines of the impact area. Disposal occurred by open burn/open detonation (OB/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 (TCRA) Program for UXO/Ordnance and Explosives Work Plan (OEW) found outside the Inland Ranges. Potential contaminants present at the range as a result of past activities include explosive compounds and metals. The Army retains control of the area and reuse is anticipated to be limited to a habitat area.

The PA date reflected in the site status box is a result of the June 27, 2003 US Army Closed, Transferred, and Transferring (CTT) Range and Site Inventory, Final, at the Presidio of Monterey (Former Fort Ord) BRAC property, California.

The range complex will be included in the Track 3-type MR RI/FS, PP and ROD that will be funded under FTO-014-R-01. The 1.8 acres remain in FTO-017-R-01 because of the range type in the CTT report referenced above.

This range complex requires LTM measures which are underway.

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

## CLEANUP/EXIT STRATEGY

The range complex will be included in the Track 3-type MR RI/FS, PP and ROD that will be funded under FTO-014-R-01. The 1.8 acres remains in FTO-017-R-01 because of the range type in the CTT report references above.

This range complex requires LTM measures which are underway.

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

Site ID: FTO-018-R-01

Site Name: MULTI-USE RANGE AREA - SEA

## STATUS

Parcel: MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres), SEASIDE (FORA) (FOSET 5) (615.43 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.....	201409

RIP Date: N/A

RC Date: 201409

## SITE DESCRIPTION

This complex (FTO-018-R-01) is located on the western edge of the impact area 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 that are now adjacent to a connector highway and local residential areas. The ranges of the complex (FTO-018-R-01) are currently fenced and patrolled. The entire area will be transferred to the adjacent municipalities. The area is subject to the requirements of a pending MR RI/FS. A non-time critical removal action was completed in 2004, except in areas where site conditions preclude anomaly detection/identification (e.g. a berm).

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 12 munitions response sites. The property will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA (reference: ESCA Section C.4.2) Approximately 452.5 acres (rounded to 453 acres) of FTO-018-R-01 are included in the ESCA project.

This range complex includes the Fort Ord designated MRS sites MRS-SEA.1 through 4, and MRS-MOCO.2. These sites require RAs which will be addressed by the ESCA. Some activities will be retained by the Army for this site: development of a five-year review report, restoration advisory board (RAB) activities, and administrative record documentation until the site is closed via the ESCA process. These activities are in addition to ESCA oversight. It is expected that the entire site will be closed with the completion of the ESCA in FY14.

The number of acres reported in the 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 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.

## CLEANUP/EXIT STRATEGY

The site strategy for this range complex includes project oversight for the ESCA project and some specific LTM for Army responsibilities not covered by the ESCA project.

The entire site is part of the ESCA project that is currently in progress. ESCA ACRES: 452.5 and the number of acres reported in the CTT report does not match the number of acres for the ESCA project at this range complex. The CTT report contained a mapping error. The MR portion of 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.

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

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)

Phases	Start	End
PA.....	200111.....	200306
RI/FS.....	200710.....	201509

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP Score: Evaluation pending

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

Media of Concern: Soil

BRAC Round: BRAC II

RIP Date: N/A

RC Date: 201509

### SITE DESCRIPTION

This complex Multi Use Range Area - South (FTO-019-R-01) is located on the southern edge of the impact area, occupies approximately 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. The area is planned to transfer to the county of Monterey, the city of Monterey, and York School. Sampling and appropriate removal actions are completed on this complex. Portions of the area have been leased to York School and the Laguna Seca Raceway. The remainder is currently under Army control and undeveloped, however, transfer is in progress. Sites included in FTO-019-R-01 are: MRS 30 (an ESCA site), MRS 43 (transfer is in progress), MRS 46 (transfer is in progress, MRS 47 (an ESCA site), and MOCO.1 (a portion (E29B.1) is in the ESCA and another portion (E29B.2) is scheduled to soon be transferred). An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of this BIAP.

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 12 munitions response sites. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. Even though the munitions response responsibilities associated with the ESCA areas has been transferred to FORA, the BRAC office will provide oversight of FORA's ESCA activities as described in the ESCA. Approximately 101.6 acres of FTO-019-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 FY2014. Site MRS-43, MRS-47, and MRS-30 are included in the ESCA.

For the non-ESCA portions of this site (MRS-MOCO.1 and MRS-46), no further RA is required for the remaining portions of this range complex based on the Track 1 ROD and Track 1 Plug-In ROD Process and these areas are expected to be transferred. LTM measures are required based on the Track 1 ROD. LTM requirements will end based on the 2012 five-year review.

### CLEANUP/EXIT STRATEGY

The site strategy for this range complex includes project oversight on the ESCA portion (101.6 acres, oversight on MRS-43/47/30) and LTM on MRS-MOCO.1/46 (Track 1 Plug-In).

NOTE: The site is included in the ESCA project that is currently in progress. ESCA ACRES: 101.6

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

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

**STATUS**

Parcel: MPC (FORA) (FOSET 5) (10.97 acres),MST (FORA) (FOST 11) (27.03 acres),MONTEREY COUNTY (FORA) (FOSET 5) (2290 acres),SEASIDE (FORA) (FOSET 5) (615.43 acres)

Phases	Start	End
PA.....	200111.....	200306
RI/FS.....	200710.....	201409
LTM.....	201410.....	203909

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSPP Score: Evaluation pending

RIP Date: N/A

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

RC Date: 201409

Media of Concern: Soil

BRAC Round: BRAC II

**SITE DESCRIPTION**

An archive search report found the Parker Flats range complex (FTO-020-R-01) to be used for rifle grenade and shoulder launched projectile training from the 1940s through 1970s. The area is approximately 1,139.2 (revised from 1,133.2 previously) acres 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 the MRS-13B and in 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 of potential soil contamination is conducted under a separate RI/FS program.

Track 2 RI/FS was completed for the 758-acre portion of this site where a MEC removal was previously conducted. The resulting ROD was signed in August 2008 selecting land use controls as the remedy. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section.

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 12 munitions response sites. The acreages will be transferred to FORA under the early transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. 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 ESCA activities as described in the ESCA. Approximately 1,060.9 acres of FTO-020-R-01 are included in the ESCA project.

Remedy implementation in three transfer parcels (Parcels 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) remains as part of the Army's responsibilities under this site.

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 FY14.

The site strategy for the remaining portion of the range complex is to implement the selected remedy (parcels F2.6, L2.3 and L2.4.1; portions of MRS-13B). LTM measures are required.

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex is as follows:

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

- For the ESCA-portion of this range complex, it includes oversight of the FORA ESCA remediation program until site closeout is attained, which is expected in FY14.

- For the remaining portion of the range complex implementation of the selected remedy (parcels F2.6, L2.3 and L2.4.1; portions of MRS-13B). LTM is required.

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

Site ID: FTO-021-R-01  
Site Name: ROCKET RANGE AREA (FAAF)

**STATUS**

Parcel: NONE

Regulatory Driver: CERCLA

Program: BRAC-MMRP

MRSP 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.....	201009.....	201209
LTM.....	201210.....	203909

RIP Date: N/A

RC Date: 201209

**SITE DESCRIPTION**

The Fritzsche Army Air Field (FAAF) rocket range area, consisting of 70.8 acres, is located north of the existing runway of the former FAAF in the northern section of former Fort Ord. This range area was identified through a review of a 1942 Fort Ord Master Plan map showing a 2.36-in. rocket practice range, prior to the establishment of the airfield. This range was used for small arms training, 2.36-in. rockets, and demolition charges. The dates of use for this range are reportedly unknown, but assumed to be from the 1940s to approximately 1970. A 100 percent removal action has been completed on the complex. The land has been transferred to the city of Marina. Land use controls are in place. No further RA is planned. The area is subject to the requirements of a pending MR RI/FS. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section of the IAP.

Investigation of potential soil contamination is conducted under a separate RI/FS program.

The site strategy for this range complex includes Track 2-type MR RI/FS, a PP, and a ROD for the areas where removal was completed.

This range complex would require LTM measures after the completion of RI/FS. LTM will be composed of MEC monitoring, five-year review, and site close-out documentation.

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes Track 2-type MR RI/FS, a PP and a ROD.

LTM will be composed of MEC monitoring, a five-year review, and site closeout documentation, after the completion of RI/FS and RA.

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

**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

MRSP 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

RIP Date: N/A

RC Date: 201809

**SITE DESCRIPTION**

This complex (FTO-022-R-01) covers approximately 421.7 acres and contains ranges outside the MRA 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. A portion of the area (FTO-022-R-01) is planned for transfer to local municipalities and businesses. Another portion of the area is currently leased to the Laguna Seca Raceway. The area is subject to the requirements of the Fort Ord MR RI/FS and the results of the basewide RA. An explanation of the remedial activities for Tracks 0-3 can be found in the Cleanup Program Summary section. Sites in this complex include MRS 14A, 29, and 62 and approximately 193.4 acres of FTO-022-R-01 is included in the ESCA project.

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 12 munitions response sites. The acreages will be transferred to FORA under the Early Transfer authority. ESCA requires FORA to complete environmental 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 ESCA grant has been paid to FORA according to a schedule described in the agreement. Even though the munitions response responsibilities associated with the ESCA areas has been transferred to FORA, the BRAC office will provide oversight of FORA's ESCA activities as described in the ESCA. Approximately 193.4 acres of range complex FTO-022-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 FY2014. Sites MRS-14A, and MRS-29 are included in the ESCA.

For the Army-owned (non-ESCA) portions of this site (MRS-62), no further RA is required for the remaining portions of this range complex based on the Track 1 ROD. LTM measures are required based on the Track 1 ROD. LTM requirements for this portion of the site will end based on the 2012 five-year review.

**CLEANUP/EXIT STRATEGY**

The site strategy for this range complex includes LTM on MRS-62 and project management/oversight on ESCA portion (MRS-14A/29) Track 2-type MR RI/FS, a PP and a ROD.

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

## 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
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Final RA(C) Completion Date: 201909

NPL Deletion Date: N/A

Schedule for Next Five-Year Review: 2012

Estimated Completion Date of BRAC-MMRP at Installation (including LTM phase): 203909

## FORT ORD BRAC-MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-001-R-01	BLM-EAST	PA						
		RI/FS						
		LTM						
FTO-002-R-01	BLM-EAST OTHER	PA						
		RI/FS						
		RA(C)						
		LTM						
FTO-003-R-01	BLM-HQ	PA						
		RI/FS						
		LTM						
FTO-004-R-01	BLM-NORTH	PA						
		RI/FS						
		RA(C)						
		LTM						
FTO-005-R-01	BLM-NORTH- XD	PA						
		RI/FS						
		LTM						
FTO-006-R-01	COASTAL SMALL ARMS RANGE	PA						
		LTM						
FTO-007-R-01	CSUMB	PA						
		RI/FS						
FTO-008-R-01	CSUMB-XD	PA						
		LTM						
FTO-009-R-01	DEVELOPMENT-NORTH	PA						
		RI/FS						
FTO-010-R-01	EAST GARRISON	PA						
		RI/FS						
FTO-011-R-01	EAST GARRISON-OTHER	PA						
		RI/FS						
FTO-012-R-01	GARRISON-NORTH	PA						
		LTM						

## FORT ORD BRAC-MMRP Schedule

SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-013-R-01	GARRISON-SOUTH	PA						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-014-R-01	MULTI-USE RANGE AREA - BLM	PA						
		RI/FS						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-015-R-01	MULTI-USE RANGE AREA - DRO	PA						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-016-R-01	MULTI-USE RANGE AREA - IA	PA						
		RI/FS						
		RA(C)						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-017-R-01	MULTI-USE RANGE AREA - OB/OD	PA						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-018-R-01	MULTI-USE RANGE AREA - SEA	PA						
		RI/FS						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-019-R-01	MULTI-USE RANGE AREA - SOUTH	PA						
		RI/FS						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-020-R-01	PARKER FLATS	PA						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-021-R-01	ROCKET RANGE AREA (FAAF)	PA						
		RI/FS						
		LTM						
SITE ID	SITE NAME	PHASE	FY10	FY11	FY12	FY13	FY14	FY15+
FTO-022-R-01	SOUTH RANGE AREA	PA						
		RI/FS						

## Community Involvement

Technical Review Committee (TRC): 199001

Restoration Advisory Board (RAB): RAB established 1994

RAB Adjournment Date: 199905

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

Community Involvement Plan (Date Published): 200606

### Additional Community Involvement Information

#### Restoration Advisory Board:

The Fort Ord RAB held monthly public meetings for five years in which current cleanup actions were scheduled to be 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 Workshops:

The RAB public meeting process was replaced by Community Involvement Workshops (CIWs) to provide community members an opportunity to discuss cleanup plans, examine cleanup documents and express their interests or concerns. A community meeting was held by the USEPA and the Army in May 1999 to solicit input from community members concerning the format for future public meetings. Using that input plus ideas and concerns collected during other community relations activities, the Army developed the date, time, and format for CIWs. The meeting format is continually assessed and modified using community input and participant critiques to sustain an effective information exchange forum.

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 provides updates from the BRAC Cleanup Team (BCT), the Fort Ord Community Advisory Group and the USEPA Technical Assistance Grant consultant when appropriate. Questions and comments by community members are solicited on agenda subjects and an open forum is provided at each workshop for comments and questions as well as input for future agenda topics on any cleanup subject.

Questions, requests, and comments from attending community members are addressed in the CIW or a response is scheduled for a subsequent meeting. Summaries describing the events and issues discussed at CIWs are produced and available for review in the Information Repositories, on the cleanup website, and in the Administrative Record.

#### Technical Review Committee (TRC):

Local and regional air, water, wildlife, land, 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 quarterly to discuss technical material and provide advice to the 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 which usually occurs the evening 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 interest was surveyed in 2007. The analysis of the survey results did not indicate a sufficient, sustained interest in a RAB. Another community survey began in March 2009.

More information about the Fort Ord community involvement program is available by calling 831-393-1284 or at

[www.FortOrdCleanup.com](http://www.FortOrdCleanup.com).

Administrative Record is located at  
Fort Ord Administrative Record  
Building 4463 Gigling Road  
Ord Military Community, CA 93944-5004  
Telephone: (831) 393-9186  
[www.fortordcleanup.com](http://www.fortordcleanup.com).

Information Repository is located at  
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

