



FACT SHEET

MILITARY MUNITIONS RESPONSE PROGRAM (MMRP)



Spring 2004

Former Fort Ord, Monterey, California

For Public Use

SITE DESCRIPTION

Fort Ord is a 28,000-acre former Army base located near Monterey Bay in northwestern Monterey County. The base is bordered by Seaside and Monterey to the west, Del Rey Oaks to the south, and Marina to the north.

SITE HISTORY

Fort Ord became a training installation in 1917 and was used to train Army infantry, cavalry, and field artillery divisions for WWI and II, Korea, Vietnam, and Desert Storm.

In 1991 the site was included on the Base Realignment and Closure (BRAC) list and closed in 1994.

Since the BRAC listing and closure of Fort Ord, munitions responses, including investigations and removal actions, have been performed to address explosive hazards and to prepare Fort Ord property to be transferred to federal, state, and local agencies and communities.

SITE TERMINOLOGY REVIEW

As described in the Fall 2003 fact sheet, the Army implemented new terminology to describe its ordnance and explosives (OE) cleanup program:

- The OE cleanup program is now referred to as the MMRP.
- OE sites are now munitions response sites (MRSs).
- The term now used to describe items with explosive hazards is munitions and explosives of concern (MEC), which includes unexploded ordnance (UXO).
- OE scrap is now referred to as munitions debris.

RARE PLANTS PROTECTED AT RANGES 43-48

During the ongoing removal work on the Ranges 43-48 munitions response site (MRS), the Army has been monitoring the post-burn re-growth of rare plants listed in the Fort Ord Habitat Management Plan (HMP).

One of the HMP-listed species thriving after the 2003 prescribed burn is sand gilia, a federally endangered plant with small purple flowers. This annual plant grows in the sandy openings of the maritime chaparral at the former Fort Ord.

During biological surveys in March and April 2004, sand gilia was observed on almost 40% of the future habitat reserve within the 500-acre site. After the locations of the sand gilia were identified, unexploded ordnance (UXO) removal teams were restricted from the inhabited areas until the plants had produced seeds.

Some sand gilia was found around an 11-acre area near Range 45, which is planned for future development. In this



Sand gilia blooming on Ranges 43-48

area, the Army gathered seeds from the plants. The collected seeds will be grown in a nursery and planted later in habitat areas within Ranges 43-48 requiring restoration work.

Other rare plants being monitored include Seaside bird's-beak, Monterey spineflower, and several shrub species.

The Army monitors HMP-listed species to ensure impacts to these species are minimized during cleanup work.

Ranges 43-48 Munitions Response Update

SURFACE CLEARED; TEAMS SEARCHING SUBSURFACE AND REMOVING RANGE TARGETS

The Army has finished removal work on the surface of Ranges 43-48. UXO removal teams found over 4,500 munitions and explosives of concern (MEC) on the ground and destroyed them by detonation.

Teams are now searching for MEC below the ground with analog ordnance detection instruments. As of June 1, 2004, teams have removed over 900 MEC and 23,000 lbs of munitions debris from the subsurface.

In late March, the Army also began removing the tanks, armored personnel carriers, vehicles, and other metal items that once served as range targets.

To safely access these range targets while minimizing impacts to the environment, armored mechanical equipment are driven over the site's

pre-existing roads and trails.

After reaching the range targets, UXO teams inspect them for MEC. The targets are then placed into a tracked dump truck, and hauled to the designated on-site processing area.

At the processing area, the targets are cut with a large mechanical shear (see photo) or a torch. Finally, the targets are loaded into storage boxes for eventual recycling. *(Continued on back)*



The mechanical shear cutting an old tank

Ranges 43–48 Update *(Continued from front)*

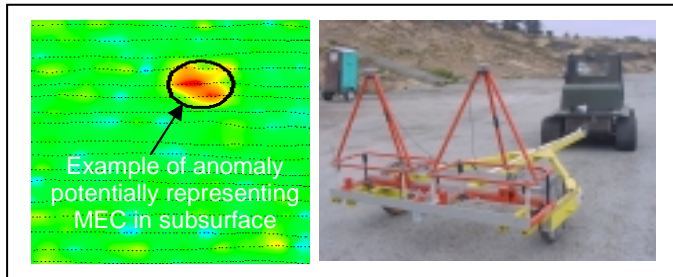
Digital Mapping Set to Start this Summer

The Army tentatively plans to begin mapping Ranges 43–48 in July. The digital mapping will verify the effectiveness of the analog removal work that is currently being done.

To digitally map the site, digital geophysical survey instruments (EM61-MK2 electromagnetometers and G-858 magnetometers) will be operated over areas where the analog removal has been completed.

The data collected with the survey instruments will then be used to create color digital maps, which display the responses recorded by the instruments. In addition, any remaining anomalies indicated by the digital maps that potentially represent MEC in the subsurface will be investigated.

Most of the mapping will be done with a towed array. The towed array consists of three EM61-MK2s linked together and placed on top of a cart, which is pulled over the ground by a vehicle. This system—recently used to digitally map MRS-MOCO.2—can cover an area four times faster than one being pulled by an instrument operator.



Example of anomaly potentially representing MEC in subsurface

Digital maps (left) will be created from the data that will be collected mostly with an EM61-MK2 towed array (right).

DOCUMENT REVIEW UPDATE

The Army has recently made or will make several reports available to the public and regulatory agencies for review (see table below). Actions summarized by these documents include: the surface removals completed on the two areas unintentionally burned in 2003; the subsurface work completed on the Seaside (SEA.1–4) and MOCO.2 sites in March 2004; the prescribed burn conducted on Ranges 43–48 in October 2003; and the sampling work and walk-through finished this past winter on the proposed site of the First Tee golf course.

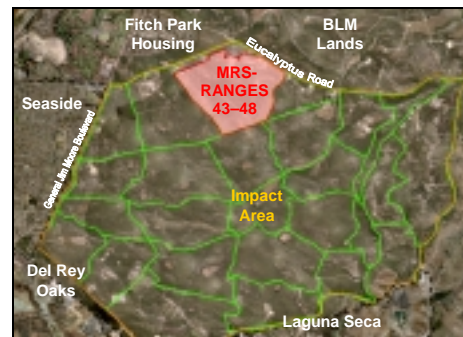
Document	Date Made Available	Comment Deadline
Eucalyptus Fire Area	June '04	July '04
Watkins Gate Burn Area	5/4/04	6/7/04
Draft, MRS-SEA.1–4	July '04	August '04
Draft, MRS-MOCO.2	3/18/04	5/17/04
Draft, R43–48 Burn Summary	4/23/04	5/26/04
Draft, R43–48 Prescribed Burn	4/5/04	5/6/04
Draft Final, R43–48 Burn Relocation	4/6/04	5/12/04
Draft, R43-48 Burn Air Monitoring	3/19/04	4/23/04
Draft Final, First Tee	5/6/04	6/10/04

ARMY PLANNING 2004 FUEL BREAK MAINTENANCE WORK

The Army has begun planning the annual maintenance work on the system of fuel breaks that has been developed in and around the Impact Area to reduce and control the threat of wildfire. This years' work calls for the cutting of approximately 190 acres of vegetation from the fuel breaks.

Previous fuel break maintenance consists of the following work done in 2002 and 2003: (1) widening the subsurface cleared portions of four fuel breaks from 15 to 45 ft to make them safer for fire vehicles and firefighters; (2) removing MEC and cutting brush to establish a new 2-mile-long fuel break in the eastern portion of the Impact Area; and (3) cutting 248 acres of re-grown vegetation from the existing fuel breaks. During this work, UXO teams removed 130 MEC and 40,818 lbs of munitions debris.

The initial work to reestablish the fuel breaks system in the Impact Area was performed in 2001. By cutting vegetation and removing MEC, the Army restored 47 miles of old roads, trails, and fuel breaks in the Impact Area that were regularly used during military training activities. During this work in 2001, UXO teams removed 217 MEC and 6,139 lbs of munitions debris.



Locations of Ranges 43–48 (red) and Impact Area fuel breaks (green)

PROJECT INFORMATION

Site Name: Fort Ord, California
Location: Marina and Seaside, Monterey County, California
Point of Contact: Gail Youngblood, Fort Ord BRAC Environmental Coordinator (831) 242-7924 gail.youngblood@monterey.army.mil

Fort Ord MMRP Figures
(1994 THROUGH JUNE 1, 2004)

- ★ 6.9 million anomalies investigated
- ★ 85,257 MEC items recovered
- ★ 7,242 high explosive (HE) MEC items recovered
- ★ 420,396 lb of munitions debris removed

This fact sheet recaps the significant events of the Fort Ord MMRP and is provided as part of the community relations program.

For more information on the MMRP, log on to our website at www.fortordcleanup.com; visit the information repository in the CSUMB library; visit the Fort Ord Administrative Record office in the city of Seaside at Building 4463, Room 101, Gigling Road; or contact Melissa Broadston by e-mail at melissa.broadston@monterey.army.mil or by phone at (831) 393-1284.