# Fort Ord Environmental Cleanup 2006 ANNUAL REPORT

Fort Ord BRAC Office JUNE 2007

# Public Comment Opportunity Coming Up

Track 3 (Impact Area)
Public Meeting
July 10, 2007
6:00 - 8:00 p.m.

Embassy Suites Hotel 1441 Canyon Del Rey, Seaside

See details on page 4

# Review of the Munitions and Explosives Cleanup

The Fort Ord Military Munitions Response Program first identifies where there are hazards from military munitions at the former Fort Ord. Then it evaluates which cleanup methods are appropriate in each situation.

Locating the munitions and explosives of concern (MEC) is not a small task. After all, the total land base of the former Fort Ord is larger than the County of San Francisco. The greatest concentrations are in certain training areas, known as ranges. But MEC have also been found in other areas. The challenge is to ensure that sufficient cleanup has occurred to allow the land reuse planned in each specific area.

The Army has been investigating the location of munitions and explosives of concern since 1993. Thousands of acres have been investigated or cleaned up already.

In 1998 the Army began a process of evaluating the long-term cleanup of munitions and explosives of concern throughout the entire former Fort Ord. The results of this evaluation are described in documents known as Remedial Investigation/Feasibility Studies (RI/FS).

Based on the investigations conducted to date, the Army has organized the evaluation of what type of cleanup ("munitions response") is needed into "tracks" (see box on page 2). This allows the cleanup team to group together areas with similar characteristics for which the cleanup strategies are likely to be the same.

continued on page 2

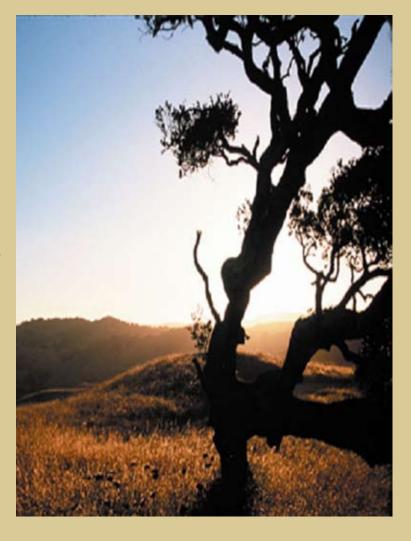
Fort Ord served as a major training facility for the Army from 1917 to 1994. Hundreds of thousands of soldiers who served in World War I, World War II, Korea, Vietnam and other conflicts received at least a portion of their training at Fort Ord. Fort Ord was closed in 1994 as part of a nationwide program to consolidate and reduce the number of military installations after the end of the Cold War.

The Army, in consultation with the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB), now carries out a major program to remedy environmental and safety problems left over from the many years of training operations.

The cleanup program at the former Fort Ord has two goals: (1) protect human health and the environment, and (2) transfer land to the community for other uses. The Fort Ord Environmental Cleanup Program meets these goals by completing work in five major program areas:

- Munitions cleanup
- Soil cleanup
- Groundwater cleanup
- Land transfers
- Community relations program

This Annual Report to the Community describes the progress made by the Fort Ord Environmental Cleanup Program in 2006, and the activities planned for 2007 in each of these five program areas.



Para obtener una copia de la reporta en Espanol, contacte (800) 852-9699.

#### **MUNITIONS** continued from page 1

An RI/FS is prepared for each track. An RI/FS typically consists of two parts: (1) the Remedial Investigation: studies to identify the types and extent of contamination at the site and to determine cleanup criteria; and (2) the Feasibility Study: an evaluation of the remedial alternatives for cleaning up any identified problems (the Feasibility Study). Each RI/FS is reviewed by the regulatory agencies – EPA and DTSC – and there is also an opportunity for public comment on the Proposed Plan. The Record of Decision must be

finalized and approved before the actual cleanup work can begin.

The Track 0 Record of Decision, which addressed areas where there was no evidence of munitions or explosives and no action is required, was completed and approved in September 2002. The Track 1 Record of Decision, which addressed sites where MEC was suspected but not found in subsequent investigations, was completed and approved April 2005. The agencies believe, based on extensive investigations, that no munitions or explosives of concern are present in these areas.



# Munitions Response Tracks

- Track 0: Areas contain no evidence of munitions and explosives of concern (MEC) and have never been suspected as having been used for munitions-related activities.
- Track 1: MEC were suspected, but no further action is necessary because investigations determined (1) suspected training did not occur; (2) training did not involve explosive items; or (3) training involved only the use of practice and/or pyrotechnic munitions items that are not designed to cause injury.
- Track 2: MEC found, removal action was conducted.
- Track 3: MEC known or suspected, actions not complete.

In 2006 the Army focused on completing an RI/FS for a limited number of Track 2 sites, sites where munitions and explosives of concern were previously found and cleaned up. The Army is also preparing a Track 3 RI/FS for an area known as "the Impact Area." The Impact Area is the area where there were training ranges for artillery, rockets and explosives. These are the areas where there are known to be munitions and explosives of concern, and these areas pose the most serious safety risk

Under federal law, agencies may take expedited action to cleanup properties if those sites pose an imminent threat to public health, safety or the environment. These are called "interim actions." In 2002, the Army, after consultation with the regulatory agencies and a public involvement process, decided to proceed with an interim action on three sites known as Ranges 43-48, Range 30A, and MRS-16 (OE-16).

Cleanup of these three areas requires that the Army first conduct a prescribed burn on each site. Dense stands of brush have grown up on each of these sites. As a result munitions removal workers can't see the munitions on the ground and could trigger them if they stepped on them or jostled them. After considerable study, the agencies concluded that prescribed burns are the most acceptable way of removing the vegetation so that workers could do the removal work safely.

In 2003 the Army conducted a prescribed burn on Ranges 43-48, the highest priority Interim Action site. The fire was intended to burn approximately 500 acres, but the fire escaped the primary containment lines and ended up burning approximately 1,000 additional acres. The cleanup of Ranges 43-48 began shortly after the prescribed burn and was completed in late 2005. 9730 munitions and explosives of concern were removed and destroyed during the cleanup.

# 2006 Accomplishments

The major 2006 program activities for the Munitions Response Program included:

- Conducted a prescribed burn at MRS-16 and completed surface removal of munitions and explosives of concern following the prescribed burn
- Completing a Remedial Investigation/Feasibility Study for the Parker Flats Munitions Response Area (Track 2)
- Issued a Remedial Investigation/Feasibility Study for the Impact Area Munitions Response Area (Track 3)
- Conducted ordnance and explosives safety training for schools and rede-

velopment construction crews.

• Implemented Restricted Munitions Response Site Security actions

### Interim Action on MRS-16

On October 19, 2006 the Army conducted a prescribed burn on a former bazooka rocket training range known as MRS-16. The successful burn was the culmination of months of planning by the Army with federal, state and local agencies as well as engineers, scientists, and community members. This burn was the first step in a program to remove munitions and explosives of concern from this site.

Because of the small size of the burn it was completed in several hours. The Army, in consultation with many other agencies, developed a burn plan that allowed the Army to conduct the burn under conditions that minimize smoke impacts. Air monitoring at stations surrounding Fort Ord showed that particulates in the air during the burn did not exceed air quality standards set for prescribed burns.

The removal of munitions and explosives from the surface of MRS-16 was completed in December 2006. 51 muni-





tions and explosives of concern were found on the surface. The removal of subsurface munitions is ongoing. Cleanup workers have discovered several subsurface areas where there are large pits full of expended rocket shells.

Until the removal of the munitions and explosives of concern is completed, the site will be secured and access will be restricted to project personnel and accompanying safety escorts. Cleanup is expected to be completed this summer. When the removal is complete, the Army will ultimately transfer the former rocket range to the US Bureau of Land Management.

#### Parker Flats Munitions Response Area (Track 2)

# Completion of a Remedial Investigation/ Feasibility Study

In 2006 the Army completed the final munitions response Remedial Investigation/Feasibility Study for the Parker Flats Munitions Response Area. This area is approximately 756 acres in size and is located in the central portion of the former Fort Ord between the former Fort Ord Main Garrison and the former impact area (see map). The Parker Flats area was used for many different types of military training. Before World War II it was used for artillery training and for staging. After the war it was used for general training, including overnight camping and training with live and practice munitions.

Between 1995 and 2000 the Army removed munitions on all areas of the Parker Flats Munitions Response Area except under paved roads and parking areas. All detected anomalies were investigated and all munitions or explosives that were found were removed. Over 163,000 excavations were performed. However, a formal Remedial Investigation/Feasibility Study (RI/FS) was needed to go back and evaluate the work that was performed previously.

The Final Parker Flats RI/FS was issued August 31, 2006. A proposed plan, recommending the use of land use controls as the preferred alternative, was issued for public comment in February 2007. The Army is evaluating comments it received from the public. The final decision will be documented in a Record of Decision that will be published soon.

The Parker Flats Munitions Response Area is slated for a variety of reuses including California State University Monterey Bay (CSUMB) expansion, Monterey Peninsula College facilities, Monterey County public facilities, a development that may include residences, a Monterey horse park, a veterans' cemetery, and habitat reserve.

# Impact Area Munitions Response Area

# Finalizing a Track 3 Remedial Investigation/ Feasibility Study

The Army will soon issue a Proposed Plan for cleanup of the "Impact Area." The Impact Area Munitions Response Area is an area in the south central portion of the Former Fort Ord where most of the military training involving munitions and explosives occurred. This is an area where there continue to be munitions and explosives of concern in significant quantities.

A detailed description of this upcoming Proposed Plan is provided on the next page.



**Public Comment Invited** 

# Army Soon to Announce a Plan for Cleanup of Impact Area

The Army will soon announce a proposed plan for cleanup of the "Impact Area," the area on the former Fort Ord where the highest concentrations of munitions and explosives of concern can be found. The public is invited to review the proposed plan and submit comments in writing or at a public meeting.

Historically, the Impact Area was 8,000 acres and was used for training soldiers in the use of rockets, artillery and mortar projectiles, rifle and hand grenades, practice land mines, pyrotechnics and demolition materials. A small percentage of these munitions and explosives never detonated, and could be triggered if bumped or stepped on. These unexploded items are known as "munitions and explosives of concern" (MEC). Many of these items are laying on the surface of

Track 3 (Impact Area) Public Meeting **July 10, 2007** 

6:00 - 8:00 p.m. Embassy Suites Hotel 1441 Canyon Del Rey, Seaside

Representatives of the Army, U.S. Environmental Protection Agency and the California Department of Toxic Substances Control will be a the meeting to answer questions and listen to comments. (Oral and written comments will be accepted at the public meeting.)

#### Meeting Agenda

6:00 - 6:30 Open House 6:30 - 6:50 Presentation 6:50 - 7:00 Break 7:00 - 8:00 Public Comment the ground, but others are embedded in the first few feet of soil.

The historical Impact Area is located in the southwestern portion of the former Fort Ord bounded by Eucalyptus Road on the north, Barloy Canyon Road to the east, South Boundary Road to the south, and General Jim Moore Boulevard to the east. A 6,500-acre portion of the Impact Area that is designated for habitat reserve is the subject of the upcoming cleanup plan. This area is know as the Impact Area Munitions Response Area (see map). In the future, this area will be managed by the Bureau of Land Management.

The Army evaluated four different cleanup alternatives for the Impact Area Munitions Response Area. The proposed

cleanup approach includes: prescribed burning to remove vegetation; surface removal of MEC from the entire site; subsurface MEC removal in selected areas of the site; digital geophysical mapping; and land use controls including the perimeter fence. Public access will be managed or controlled. The cleanup would take 8 years or more.

The Final Track 3 RI/FS report is expected to be posted on the www.FortOrdClean-up.com website in June. Use the keyword"Track 3" or look for"Track 3 Impact Area Munitions Response Area Munitions Response RI/FS."

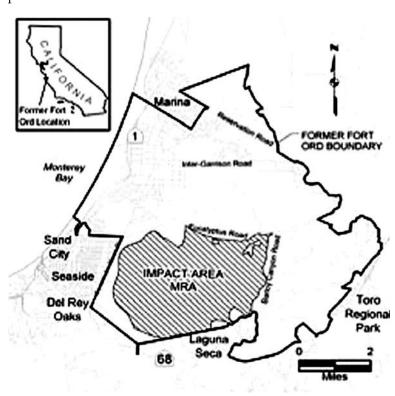
# Future Prescribed Burns Are Part of Cleanup

Vegetation clearance is a first step in the cleanup process. Under an existing Habitat Management Plan designed to protect rare, threatened and endangered species, prescribed burning is the only method that can be used on a large scale within the protected habitat.

Based on past experience and habitat conservation considerations, prescribed burns would be conducted in stages consisting of several smaller burns over several days, rather than one large burn. Each burn would be approximately 100 acres in size, although the actual size could be more or less than 100 acres depending on the site.

The Army will divide the area into smaller sections by using established roads and trails that can be used as temporary fuel breaks. The fire department will determine the size of the prescribed burn taking into account a number of considerations including available fuel breaks, topography, slope, fuel type and loading, and expected fire behavior. Under the Habitat Management Plan, no more than 800 acres would be allowed to be prescribed burned in a year.

The Army will provide public notification of planned prescribed burns. A prescribed burn will be started only when burn conditions will allow a successful fire with as few smoke impacts as possible upon the surrounding community. Multiple burns could occur over a period of several days, possibly interrupted by one or more days. The public will be advised, through the Army's community notification program, to minimize exposure to smoke from prescribed burns. This includes taking precautions such as staying indoors with doors and windows closed, and limiting outdoor activity when smoke is present.



# Soil Cleanup

ost soil cleanup at Fort Ord was completed in previous years. There are two remaining projects: (1) remediation of contaminated soil on several ranges within the Impact Area, and (2) extraction and removal of methane gas produced by a landfill that was previously capped and closed.

### Site 39

Approximately 110,000 cubic yards of soil contaminated with lead and explosive compounds have been identified to date that need to be removed from former military training ranges. These ranges are in an area known as Site 39. A Record of Decision was completed previously describing the cleanup action that would be taken in this area, but this Record of Decision did not include a cleanup goal to address potential risk to plants and animals. The Army is preparing a Focused Feasibility Study and Amendment to the Site 39 (Impact Area) Record of Decision that will describe the cleanup of the contaminated soil that will also protect the plants and animals.

#### Fort Ord Landfill

### Extraction of Landfill Gas

Like many cities, Fort Ord maintained a municipal landfill during its years as an Army training base. Like many such landfills, chemicals entered into the soil from Fort Ord's landfill waste. The landfill is now covered with a special "cap" system so that water cannot reach the waste and leach chemicals through the soil into the groundwater beneath the landfill.

Groundwater beneath the landfill area was contaminated prior to closure of the landfill, and the Army installed a groundwater extraction and treatment facility that has been operating since 1995. Three regulatory agencies -- the U.S. Environmental Protection Agency, the California Regional Water Quality Control Board, and the California Department of Toxic Substances Control -- maintain oversight of the Army's landfill cleanup program. This cleanup project is often referred to as Operable Unit 2 or "OU2." More information on groundwater cleanup is provided on pages 5-6.

Now that the landfill is capped there is an on-going program to make sure that the cap stays intact. The cap system is inspected routinely and repairs are made to any minor damage caused by erosion or animals.

As with all landfills, the decay of the waste produces gases (primarily methane and carbon dioxide). Over time, as wastes (continued on page 6)

Gallons Treated (millions)	System Influent TCE (ppb)	System Effluent TCE (ppb)	Average Discharge Rate (gpm)
122 (since 1987)	Non-detect (below 0.5)	Non-detect (below 0.5)	
1.4 (since 2006)		Non-detect (below 0.5)	
4,295 (since 1995)	13	Non-detect (below 0.5)	766
1,021 (since 1999)	15 (5/2006) 54 (6/2006)	Non-detect (below 0.5)	277
5683.4			
	(millions)  122 (since 1987)  1.4 (since 2006)  4,295 (since 1995)  1,021 (since 1999)	(millions)     (ppb)       122 (since 1987)     Non-detect (below 0.5)       1.4 (since 2006)     (since 1995)       13       1,021 (since 1999)     15 (5/2006) (5/2006) (5/2006)	(millions)         (ppb)         (ppb)           122 (since 1987)         Non-detect (below 0.5)         Non-detect (below 0.5)           1.4 (since 2006)         Non-detect (below 0.5)           4,295 (since 1995)         13         Non-detect (below 0.5)           1,021 (since 1999)         15 (5/2006) (below 0.5)         Non-detect (below 0.5)

# Figure 2: SUMMARY OF GROUNDWATER TREAMENT TO DATE

The above chart provides a quick snapshot of the groundwater treatment that has occurred to date. This figure includes treatment at the newly installed system at Operable Unit 1.

At the first three sites (OU1, OU2 and Sites 2/12), the primary contaminant being removed is trichloroethylene (TCE). TCE is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet burning taste. It is used primarily as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluid, and spot removers. As pure product, TCE is a volatile organic compound, which means it can evaporate quickly.

The Army has removed the soil containing the chemicals that were the original source of the contamination at the former Fritzsche Army Airfield (OU1), and the former truck and auto maintenance facility (Sites 2/12). At the landfill (OU2), the Army has significantly reduced the addition of contaminants into groundwater by capping the landfill, so no water that could carry the contamination into the groundwater passes through the materials in the landfill.

The Army has also built water treatment facilities to extract and clean up contaminated groundwater associated with these three sites. This treatment is gradually removing the contamination. The Army will continue to treat the water for a number of years until the concentrations of contaminants attain the agreed-upon cleanup levels.

The fourth site is known as the Carbon Tetrachloride plume (Operable Unit Carbon Tetrachloride - OUCTP). The groundwater is contaminated with carbon tetrachloride and this contamination is spreading in an underground plume. None of the contaminated groundwater has affected drinking water supplies.

Based on considerable research, it now appears that the source of the carbon tetrachloride was a training facility, which no longer exists, that was in the vicinity of what is now Lexington Court, within the Abrams Park subdivision in the City of Marina. Apparently after the solvent was used to de-grease radios and other equipment at least some of the solvent was dumped out on the ground.

Some of the carbon tetrachloride that was disposed of on the ground remained in the soil in the form of a gas, and the potential existed for these gases to intrude into indoor air in houses near Lexington Court. To eliminate this problem, the Army used a soil vapor extraction system to extract chemical vapors from the soil. After several months of operation, the Army found the levels of carbon tetrachloride were so low that they were barely detectable. The Army and the regulatory agencies believe that no additional cleanup activity is required or recommended for soil gas in the vicinity of Lexington Court.



**SOIL CLEANUP** *continued from page 5* 

continue to degrade, less methane will be produced and the production eventually will decline to near zero. While methane gas has practically no toxic effects, methane can be ignited at concentrations in air of 5 to 15 percent methane and could harm landfill workers and nearby residents.

The Army has installed underground probes to monitor the landfill gas and periodically monitors the air in the probes located below the ground around the landfill to determine the levels of methane and other potentially hazardous gases, such as volatile organic compounds, that could be generated by landfills. Monitoring at the Fort Ord landfill has been conducted since the landfill was capped, and will continue until federal and state regulators determine there's no longer a need.

Previous measurements indicated that the methane in the soil on one side of the landfill in an area known as Area F was higher than the state standard of 5%. The Army installed a landfill gas collection system adjacent to the landfill near the closest residences, which are California State University Monterey Bay housing. The system draws methane and other gases from the soil surrounding the landfill and transports them to a treatment facility.

# 2006 Accomplishments

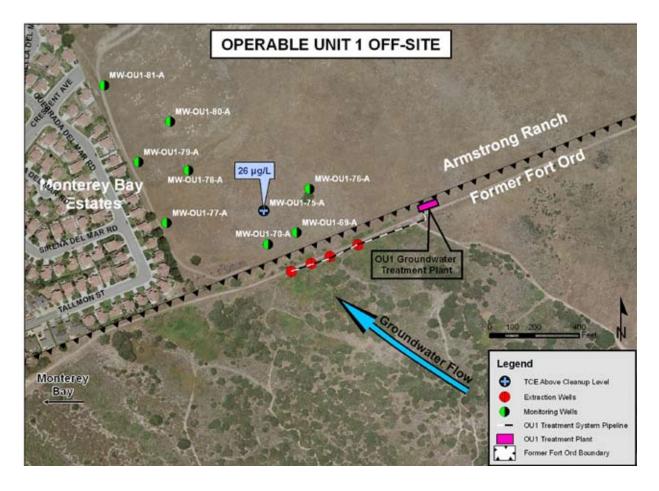
In March 2006 the Army completed the installation of an expanded landfill gas extraction system that includes additional extraction wells around the entire perimeter of Cell F of the landfill and in the interior of Cell F. The Army also replaced the existing carbon filter and potassium permanganate treatment units with a new thermal treatment unit.

The thermal unit destroys the methane and potentially hazardous trace gases in the landfill gas. The treatment system is at the center of the landfill near Area E (see landfill picture).

The new thermal system began operating in April 2006. The Army operates the treatment system to maintain methane concentrations at levels

safely below regulatory standards at the perimeter of the landfill.

The new system meets all state and federal regulations for methane concentrations and also destroys volatile organic chemicals that are present in landfill gas in very small quantities. These chemicals might otherwise migrate to the groundwater. The new system enhances the volume of landfill gas removal, thus preventing further gas migration into groundwater. The new system could shorten the time required to pump and treat groundwater.



# Groundwater Cleanup

Thile the former Fort Ord was still an active Army installation, several areas were contaminated and chemicals of concern leaked into groundwater (see map) deep beneath the surface of the ground. Groundwater is water that is beneath the earth's surface. Rainwater leaches through the soil and when the water reaches a layer of clay, the water is able to go no further and is held in the soil.

Groundwater can be very important because it is often a source of drinking water. Fortunately, none of this contamination affects existing water supplies currently in use in the former Fort Ord and Marina. Nevertheless, the Army is responsible for addressing the contamination.

The four locations where contamination did occur are (see map):

- (1) A former fire-fighting training area near the former Fritzsche Army Airfield now called Marina Airport (known in regulatory terminology as Operable Unit 1 (OU1);
- (2) A former landfill south of the corner of Imjin Parkway and Abrams Road (Operable Unit 2 (OU2);
- (3) A former truck and auto maintenance facility by Highway 1 (Sites 2/12); and
- (4) A more recently discovered former storage area or training facility located immediately north of what is now Lexington Court (Operable Unit Carbon Tetrachloride Plume (OUCTP).

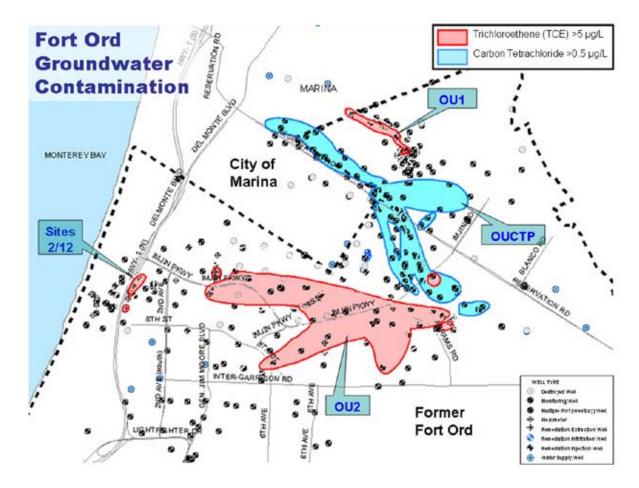
# 2006 Accomplishments

Here's a brief description of progress made during 2006:

#### Carbon Tetrachloride Plume

During 2006 the Army completed significant progress on the carbon tetrachloride problem. In prior annual reports we've been reporting that the Army was still evaluating the best course of action for cleanup of the carbon tetrachloride plume. This year the studies have been completed, a course of action has been determined, and cleanup work is about ready to begin.

In May 2006 the Army presented a proposed plan for treatment of the groundwater to remove carbon tetrachloride. The Army received public comment on this plan during the summer months and is now in consultation with the Regional Water Quality Control Board, California Department of Toxic Substanc-



es Control and the U.S. Environmental Protection Agency. The final cleanup plan will be documented in the Record of Decision, and available to the community in 2007.

The Army has also installed eight new monitoring wells within the Marina city limits to help monitor the flow of the carbon tetrachloride plume. By monitoring these wells the Army will also learn about the effectiveness of the treatment methods it is using.

# Operable Unit 1

The Army has been operating a ground-water extraction and treatment system at OU1 since 1987. In early 2005 the Army determined that contamination from a Fort Ord Cleanup area known as Operable Unit 1 (near the former Fritzsche Army Airfield) was now in groundwater that had moved outside the boundary of the former Fort Ord. This offsite area underlies part of the Armstrong Ranch property in Marina.

In 2006 the Army installed seven new monitoring wells (see photo, bottom of page 6) to help it determine the extent and shape of the groundwater contamination. Since then the wells have been sampled four times and will continue to be sampled every three months. Two additional wells were installed in May 2006 and these have also been sampled three times. Four of the wells show no contamination. One of the wells shows a concentration of Trichlorethylene (TCE) above health-protective maximum contaminant levels.

The Army has installed a second groundwater extraction and treatment system – known as the OU1 Northwest

Treatment Plant — on the former Fort Ord near the fenceline that defines the boundary with Armstrong Ranch. This system is designed to prevent further offsite migration of contaminated groundwater.

The Army will continue to sample groundwater at all of the wells as it evaluates what needs to be done to address the remaining contamination.

The groundwater being investigated in this area is not used for drinking water.

# Operable Unit 2

As noted earlier, the Army has now extracted and treated 4,295 million gallons of water from the groundwater contaminated by Operable Unit 2. Operable Unit 2 is the large landfill located at the corner of Imjin Parkway and Abrams Road. A new extraction well (OU2-EW-08-180) has been installed and will be connected to the treatment system. The treatment system will continue to operate.

# Operable Unit 2/12

This area of contamination is the site of a former truck and auto maintenance facility located just to the west of Highway 1. The Army has extracted and treated 1,012 million gallons of water.

The Army is currently improving the extraction system to make it as efficient as possible. As part of this program the Army recently installed new extraction wells and a new air stripper at the Operable Unit 2/12 groundwater treatment center. The air stripper removes volatile organic compounds (VOC) from groundwater. It is still undergoing testing.

# Groundwater Treatment and Community Development

When the Army first began installing wells and the extraction and treatment systems at OU 2 and 2/12, the City of Marina's development plans were not very specific. But now things are firming up. Anyone driving on Highway 1 between Marina's 12th Street Exit and the Fort Ord Main Gate will have observed the removal of Army buildings and the recontouring of the land. This land will be used for residential and commercial development. Development of the Marina Heights and University Village projects is requiring the developers to move portions of the existing groundwater extraction system and associated pipeline in coordination with the Army.

# Coming in 2007

- Expansion of Operable Unit 1 groundwater treatment system.
- Expansion of Operable Unit 2 groundwater treatment system.
- Enhancement of Sites 2/12 groundwater treatment system.
- Remedy selection for Operable Unit Carbon Tetrachloride Plume.
- Focused Feasibility Study and ROD Amendment for Site 39

# Management of Environmentally Sensitive Lands

Fort Ord public lands are rich in wild-life, including black-tailed deer, turkeys, bobcats, coyotes, burrowing owls, California quail, and the occasional mountain lion. These animals are wild, so be sure to give these animals the space they need so that you can watch their natural behaviors without forcing them to react to or be frightened by you.

The Fort Ord land is also home to a unique habitat in which many rare and endangered plant and animal species live. Even while the cleanup program goes on, the Army must manage the land to protect the unique habitat and species. Many cleanup actions could impact habitat that is important to endangered species, so each proposed action must be evaluated carefully for its potential impacts on sensitive species of plants and animals.

Federal, state, and local laws, regulations, or policies protect rare and endangered species, or species that are in danger of becoming rare, threatened or endangered. Both federal and state government agencies maintain lists of "special-status biological resources."The federal agency responsible for protection of threatened and endangered species is the U.S. Fish & Wildlife Service. In 1997, the Army, the Bureau of Land Management, and other major users of Fort Ord property signed an agreement with the Fish & Wildlife Service to implement a Habitat Management Plan (HMP)

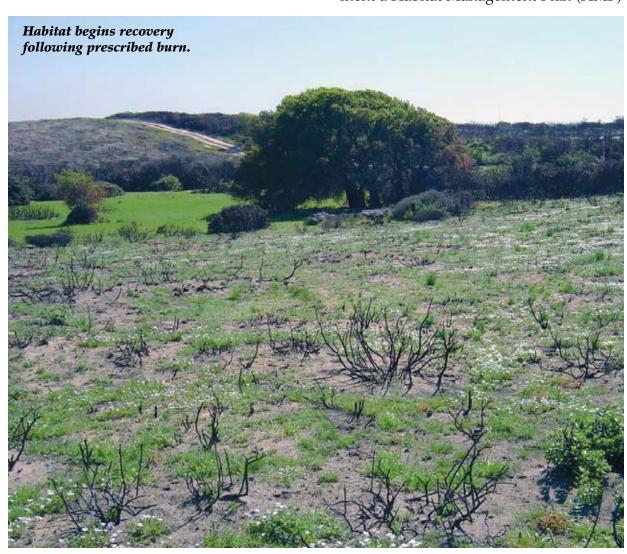


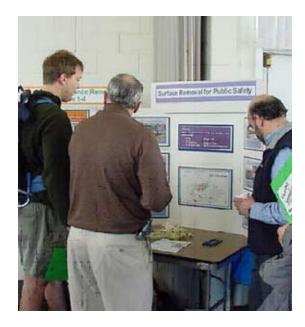
designed to protect rare, threatened and endangered species and their habitats at the former Fort Ord. The plan establishes guidelines for the conservation and management of plant and wildlife species and habitats that largely depend on Fort Ord land for survival. The plan includes requirements such as habitat monitoring and reporting following the cleanup of contaminated sites to ensure a healthy recovery. Management requirements include development of fuel breaks, control of non-native invasive species, and control of unauthorized vehicle access.

The plan was developed with input from federal, state, local, and private agencies and organizations concerned with natural resources and the reuse of Fort Ord. The overall goals of the Habitat Management Plan are (1) to avoid any net loss of populations or important habitat for any of the subject species covered by the plan and (2) to promote preservation, enhancement, and restoration of habitat and populations of Habitat Management Plan species while allowing implementation of the community-based reuse plan. This is being accomplished by transferring the larger contiguous and biologically diverse habitat parcels to natural resource management agencies such as the Bureau of Land Management (BLM) and the California Department of Parks and Recreation. By ensuring habitat reserves are managed to promote the continued existence of these rare, threatened and endangered species and habitats, other areas containing these species can be developed.

In 2004 the U.S. Fish & Wildlife Service announced federal listing of the California tiger salamander as a threatened species. This species is known to exist in several locations on the former Fort Ord, including MRS-16, site of the 2006 prescribed burn. A California tiger salamander was found during the cleanup of MEC on MRS-16 following the prescribed burn. This is important because it showed the species survived the prescribed burn.

The Bureau of Land Management has recently revised its Fort Ord trail maps. These are available online at http://www.blm.gov/ca/hollister/fort\_ord.





# Community Relations Program

The Fort Ord Cleanup Program maintains an extensive community relations program to keep the public informed about the cleanup activities at the former Fort Ord and provide opportunities for the public to participate in decisions before they are made.

During 2006 the Fort Ord Cleanup Program finalized a new Community Relations Plan. This plan was based on community surveys and interviews. A total of 200 surveys were returned and 17 interviews conducted.

# Summary of Major Community Relations Activities for 2006

#### Fort Ord Cleanup Web Page

Increasingly the Fort Ord Cleanup web page (www.FortOrdCleanup.com) is serving as a major source of information for the public. The web page not only provides current news, there are also numerous fact sheets available, and it is now possible to access virtually all recent technical documents in the Fort Ord Administrative Record through the website. It is also possible to search the site using the Google search engine.

# Community Involvement Workshops

Fort Ord hosts quarterly workshops that are open to anyone in the community. The Army provides briefings on current topics and upcoming decisions. The public has the opportunity to provide input and request topics for future workshops.

#### **Public Comment Meeting**

Public comment meetings are held, when needed, in addition to the Community Involvement Workshops. These

(continued on page 10)

# **Land Transfers**

ne of the two goals of the Fort Ord Cleanup Program is to prepare land for transfer for reuse. The Army does not decide the future uses of the land. These decisions are made by the Fort Ord Reuse Authority (FORA). FORA was established by the state legislature and has a board of directors consisting of representatives of local governments, elected officials, and major users of the land.

The first step in preparing land for reuse is to identify and, if needed, remove munitions and explosives, chemicals, or other environmental, health or safety threats from the land. But even after property has been cleaned up, there is still an extensive documentation process that must occur before that land can actually be transferred. In particular, the Army must satisfy the regulatory agencies that it is safe for the land to be used for the intended reuse purpose. The regulatory agencies may recommend some restrictions on the reuse of the property, based on the risk that some munitions, explosives or chemical contamination may remain.

The consultation process between the agencies concludes with the publication and approval of a document called a Finding of Suitability to Transfer (FOST). This process includes an opportunity for the public to comment on the FOST before final approval. The property is eligible for transfer only after this consultation process is completed. In the case of early transfer, a document called Finding of Suitability for Early Transfer (FOSET) is used instead of a FOST. With a FOSET, the agencies conclude that the intended use is presently safe, but that some cleanup will continue after the transfer of the land.

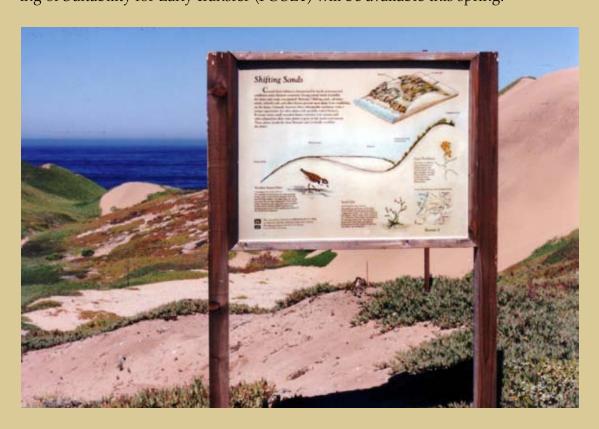
### 2006 Accomplishments

The Army transferred 1,935.76 acres during 2006. This brings the total amount of land transferred since the 1994 installation closure to 15,032.51 acres.

Nearly half of the land transferred in 2006 was transferred to the U.S. Department of the Interior which will in turn transfer the land to the California Department of Parks and Recreation to establish the Fort Ord Dunes State Park.

The remainder of the land was transferred to the Fort Ord Reuse Authority (FORA). This included land for future road rights of way (ROW), as well as land that will be developed for future housing and a business park.

The Army and FORA have been negotiating the possible early transfer of 3,484 acres of former Fort Ord land. This would include the transfer of the remaining lands intended for economic development and related properties. When an agreement has been signed, the land would be transferred to FORA and FORA would conduct the remaining environmental cleanup work on that land. The Army would provide funds for the cleanup. The Army would continue to complete the cleanup of the OU-2 landfill, groundwater, and the land that will ultimately be turned over to the Bureau of Land Management. FORA would complete the cleanup on the economic development properties, with Army funding. The Finding of Suitability for Early Transfer (FOSET) will be available this spring.



meetings provide an opportunity for the public to comment on pending decisions. In 2006 there were three public comment meetings. The public had the opportunity to comment on the Proposed Plan for the Site 16 Record of Decision Amendment, the action plan for cleanup of Operable Unit Carbon Tetrachloride, and the Proposed Plan for Track 2 – Parker Flats.

#### **Monthly Mailing**

The Fort Ord Cleanup Office publishes a monthly bulletin with updates on technical reports, announcements about upcoming events, and other news bulletins.

#### **Information Repository**

The easiest way to access documents is on the web at www.FortOrdCleanup. com. But documents are also available at information repositories located at:

- Fort Ord Administrative Record, Building 4463, Gigling Road, former Fort Ord
- Seaside Library
- California State University Monterey Bay Library

For assistance in finding information of interest to you please contact the Administrative Record desk at (831) 393-9186.

#### **Door-to-door Notification**

In some cases, when the former Fort Ord's immediate neighbors could be directly affected by cleanup activities, the Community Relations Program Office will provide door-to-door notification of upcoming events.

#### **Publications**

The Fort Ord Cleanup Program issues an annual report to the community, usually in April-May of each year.

The Program also issues occasional Community Bulletins, usually concerning particularly controversial topics such as

# How to Get Involved

- To Get the Monthly Mailing Summarizing Cleanup Activities and Announcing All Meetings: Call the Fort Ord hotline at 1-800-852-9699 or send an e-mail to: Melissa.Broadston@monterey. army.mil. The local number for the information line is (831) 242-7383.
- To Request Information: Call the Fort Ord hotline at 1-800-852-9699 or is (831) 242-7383.
- To Get Documents: Documents are posted on the web at www.FortOrdCleanup.com or are available in repositories at the Fort Ord Administrative Record, Building 4463, Gigling Road, former Fort Ord; Seaside Library, and California State University Monterey Bay Library. For assistance in finding information of interest to you please contact the Administrative Record desk at (831) 393-9186.

planned prescribed burns, or other major decisions. In 2006, the Fort Ord Cleanup Program issued a community bulletin describing the Army's plans to conduct a prescribed burn in the Fall 2006.

The proposed plan for cleanup of Operable Unit Carbon Tetrachloride Proposed Plan was sent to 5,000 Monterey Bay area households, with a special mailing of the proposed plan to all Marina Residents and Businesses that reside over the Carbon Tetrachloride plume.

#### **Presentations**

The Army is pleased to make presentation to community groups. Please give us a call if your group would be interested in such a presentation. Among the groups receiving presentations in 2006 were: Monterey High School, Carmel-bythe-Sea Kiwanis Club, Marina Planning Commission, the California Integrated Waste Management Board Conference, and a coordination meeting with the California State University Monterey Bay Environmental Senator and Public Information Officer.

# Information Booth/Community Events

The Fort Ord Cleanup program sets up information booths at major community events. In 2006, the cleanup info booth was set up at the Monterey County Fair, Marina International Festival of the Winds and CSUMB orientation to name a few.

### **Open Houses/Bus Tours**

The Community Relations Office conducts bus tours of the former Fort Ord for community groups and environmental professionals interested in cleanup issues.

#### **Media Relations**

The Community Relations Office also releases news releases whenever there are stories that could be of interest to the public. For example, in 2006 the Community Relations Office issued numerous news releases regarding the prescribed burn conducted in October.

# Munitions and Explosives Safety Awareness Class

As part of the Military Munitions Response Program, Fort Ord conducts munitions and explosives safety awareness classes. This training was conducted in February for faculty, staff and students at York School. This is an annual event. Training is also conducted throughout the year for contractors or other workers who will be working on parts of the former Fort Ord lands where munitions and explosives might be found.





# Let Us Hear From You

**7**e regularly update the Fort Ord **V** Community Relations Plan which describes how community members can participate in decisions about the environmental cleanup of the former Fort Ord. As part of the update, we incorporate recent input from community members through the Environmental Cleanup Survey and community interviews. We are very interested in learning how you would like to participate in the environmental cleanup at Fort Ord. Additionally, the information we collect from the Survey and community interviews will be used to help us determine the level of community interest in this site and to design a public participation program to meet the community's information needs.

The Environmental Cleanup Survey can help the Army to identify your interest in the cleanup. By completing and returning the Survey, you can help yourself, your community, and the Army to develop better communication and understanding. There are three ways you can complete the survey:

- 1. Complete the online survey.
- 2. Download, print, and mail the PDF version of the survey (www. FortOrdCleanup.com/community/reports/cleanupsurvey/).
- 3. Cut out and mail this page

In addition to the survey, we invite you to participate in an interview with a representative of the Army, United States Environmental Protection Agency (USEPA), or the California Department of Toxic Substances Control (DTSC) about your interests and concerns surrounding the cleanup. If you would like to discuss your interests and concerns with a representative, please contact our office and schedule an interview for a time and a location convenient for you.

We hope you will take the time to participate in this important effort by completing the survey or scheduling an interview. Please contact Melissa Broadston at (831) 393-1284, or e-mail melissa.broadston@monterey.army.mil for more information.

### Fort Ord Environmental Cleanup Survey

Fort Ord Base Realignment and Closure Community Relations Office

Room 101, P.O. Box 5008, Monterey, CA 93944-5008

(To expand on your responses, use additional paper)

- 1. When did you become aware of the environmental cleanup of the former Fort Ord?
- 2. How did you first learn about the environmental cleanup of the former Fort Ord? television news ( ), newspapers news ( ), newspaper notices ( ), neighbors/friends ( ), Fort Ord newsletter ( ), other (describe)
- 3. Is the information you currently receive about the Fort Ord cleanup:

about right\_\_\_\_, too much\_\_\_\_, too little\_\_\_\_

4. What type of Fort Ord cleanup activities/ information interests you?

groundwater\_\_\_\_, soil\_\_\_\_,
unexploded ordnance\_\_\_\_,
suitability of property to transfer\_\_\_\_,
vegetation burning\_\_\_, other (describe)

5. How would you like to receive information about the Fort Ord cleanup?

newsletter (mail) \_\_\_\_,
fact sheets/document summaries (mail)\_\_\_\_,
public meetings\_\_\_\_, events/tours\_\_\_,
web site \_\_\_\_, email notices \_\_\_\_,
other (describe)

6. How would you like to communicate your interests or concerns about the cleanup to the Army?

Public meetings\_\_\_\_,
written comments (mail)\_\_\_, email\_\_\_,
telephone (800 number)\_\_\_\_,
small group meetings
(clubs/associations)\_\_\_,
other (describe)

- 7. What time and place would be most convenient for you to attend public meetings about Fort Ord cleanup subjects?
- 8. In what language(s) would you like to receive cleanup information?
- 9. What newspaper do you read the most?
- 10. What library do you use the most?
- 11. Have you visited the cleanup information repository located at: (check all that apply)

CSUMB Library ( )
Monterey County Library, Seaside ( )
Fort Ord Administrative Record,
Building 4463, Ord Military Community ( )

- 12. What are your interests or concerns about the cleanup process?
- 13. How would you like the Army to address your interests or concerns?
- 14. Is there a person, group, or organization you think would be interested in talking to the Army about the Fort Ord cleanup process?
- 15. Is there anything else about the cleanup you would like to share with us?
- 16. Do you live in the Monterey Bay area?

Yes ( ) No ( ).

If yes, how long?

\_\_\_\_0-5 years \_\_\_\_6-12 years \_\_\_\_13-20 years \_\_\_\_21 or more years

Please place my name on the mailing list to receive further information about the Fort Ord environmental cleanup.

(Choose one) I do / do not authorize the release of my name and address at the request of persons public or private.

Address:

Phone Number/e-mail:

Name: \_\_\_

Return the completed survey by mail to:
Fort Ord Environmental Cleanup Survey
Fort Ord Base Realignment and Closure
Attn: Community Relations Office, Room 101
P.O. Box 5008
Monterey, CA 93944-5008

Be sure to affix the appropriate postage. Call (831) 393-1284 for more information.

THANK YOU FOR YOUR TIME AND INTEREST

# How Can You Contact Us?

The Army is responsible for conducting cleanup of the former Fort Ord, but it must do so in a manner that complies with federal and state laws and under the supervision of federal and state regulatory agencies. At Fort Ord, the cleanup is supervised by the U.S. Environmental Protection Agency, California Department of Toxic Substances Control and the Regional Water Quality Control Board. Under an agreement between the agencies, each team assigns a representative to a Base Cleanup Team (BCT). This team makes day-to-day management decisions about the cleanup program. Contacts for each of the participating agencies in Fort Ord's cleanup are

### U.S. Army Representative

# **Department of the Army Fort Ord BRAC Office**

BRAC Environmental Coordinator Gail Youngblood gail.youngblood@monterey.army.mil (831) 393-1284

Community Involvement Melissa Broadston melissa.broadston@monterey.army.mil (831) 393-1284 BRAC Office, P.O. Box 5008 Monterey, CA 93944-5008

### Regulatory Representatives

# U.S. Environmental Protection Agency (Region IX)

1) Judy Huang, Remedial Project Manger (for military munitions issues) huang.judy@epa.gov (415) 972-3681

2) Martin Hausladen, Remedial Project Manager (for all other cleanup issues) hausladen.martin@epa.gov (415) 972-3007 United States Environmental Protection Agency 75 Hawthorne Street, Mail Code SFD-8-3 San Francisco, CA 94105

#### California EPA-DTSC

1) Roman Racca, Remedial Project Manager (for military munitions issues) RRacca@dtsc.ca.gov (916) 255-6407

2) Linda Janssen ljanssen@dtsc.ca.gov (916) 255-3594

Department of Toxic Substances Control 8800 Cal Center Drive Sacramento, CA 95826-3200 (DTSC Public Participation hotline with Spanish Translation capability 1-866-495-5651)

# **Regional Water Quality Control Board, Region 3**

Grant Himebaugh, Remedial Project Manager ghimebaugh@waterboards.ca.gov (805) 542-4636 California Regional Water Quality Control 895 Aerovista Place, Suite 101 San Luis Obispo, CA 93401-7906

### Information Repositories

California State University Monterey Bay (CSUMB)

Library Learning Center 100 Campus Center, Building 12 Seaside, CA 93955 (831) 582-3872

Hours: Call or check website (http://library.csumb.edu) for hours

Seaside Branch Library
550 Harcourt Avenue
Seaside, CA 93955
(831) 899-2055
Hours: Monday-Thursday 10:00 a.m. to
8:00 p.m. Friday and Saturday 10:00 a.m.
to 6:00 p.m.; Sunday 1:00 p.m. to 5:00 p.m.

Administrative Record Department Location

Fort Ord Administrative Record Building 4463 Gigling Road, Room 101 Ord Military Community (former Fort Ord) CA 93944-5008 (831) 393-9186

Hours: Monday-Friday 9:00 a.m. to 4:00 p.m. Closed 12:00 p.m. to 1:30 p.m. for lunch

(closed on all federal holidays; hours can be arranged by special appointment)

# 2005 Annual Report

### Inside This Issue

iviunitions and Explosives Cleanup.	1
Impact Area Plan	4
Soil Cleanup	5
Groundwater Cleanup	7
Management of Environmentally	
Sensitive Lands	8
Land Transfers	9
Community Relations Activities	9
Public Survey	. 11

#### Fort Ord Environmental Cleanup

Community Relations Office P.O. Box 5008 Monterey, CA 93944 PRSRT STD U.S. Postage PAID Monterey, CA Permit No. 49

### Postal Customer