# EXPLANATION OF SIGNIFICANT DIFFERENCES No. 1 RECORD OF DECISION, PARKER FLATS MUNITIONS RESPONSE AREA, TRACK 2 MUNITIONS RESPONSE SITE FORMER FORT ORD, CALIFORNIA

United States Department of the Army

April 27, 2018

### INTRODUCTION AND STATEMENT OF PURPOSE

### **Site Name and Location**

The former Fort Ord is located in northwestern Monterey County, California, approximately 80 miles south of San Francisco, California (Figure 1). Department of Defense (DoD) conducted munitions-related activities (e.g., live-fire training, demilitarization) involving different types of conventional military munitions (e.g., artillery and mortar projectiles, rockets and guided missiles, rifle and hand grenades, practice land mines, pyrotechnics, bombs, demolition materials) at Fort Ord. Because of these activities, DoD's Military Munitions (also defined as "Military Munitions") including munitions and explosives of concern (MEC), specifically unexploded ordnance (UXO) and discarded military munitions (DMM), have been encountered at various sites throughout the former Fort Ord. A Glossary of Military Munitions Response Program Terms is provided in Appendix A.

The Track 2 Parker Flats Munitions Response Area (Track 2 Parker Flats MRA) is approximately 758 acres in size and located in the central part of the former Fort Ord between the former Fort Ord Main Garrison and the historical impact area (Figure 1). The Track 2 Parker Flats MRA is composed of 13 munitions response sites (MRSs) (in part or whole) at which the Department of the Army (Army) completed munitions responses (cleanup) (Figure 2).

The Army evaluated the Track 2 Parker Flats MRA in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The *Final Track 2 Munitions Response Remedial Investigation / Feasibility Study Parker Flats Munitions Response Area* (Track 2 Parker Flats RI/FS) (MACTEC 2006) documents this evaluation. The Army subsequently signed the *Record of Decision Parker Flats Munitions Response Area Track 2 Munitions Response Site* (the Track 2 Parker Flats ROD) (Army 2008).

The Army subsequently transferred a majority of the Track 2 Parker Flats MRA to the Fort Ord Reuse Authority (FORA) as part of a Covenant Deferral under CERCLA 120 (h). Under an Environmental Services Cooperative Agreement (ESCA) with the Army, FORA accepted responsibility for implementing the selected remedy. This transferred portion is referred to as the "Parker Flats MRA Phase I" by the FORA ESCA Remediation Program (Figure 2).

### **Identification of Lead and Support Agencies**

The Army is the lead agency for investigating, reporting, making cleanup decisions, and implementing cleanup actions at the former Fort Ord. The U.S. Environmental Protection Agency (EPA) is the lead

oversight regulatory agency, with California Department of Toxic Substances Control (DTSC) as the support regulatory agency.

In March 2007, the Army and FORA entered into an ESCA for the Army to provide FORA funding to complete munitions response actions required for remedy implementation. In accordance with the ESCA and an Administrative Order on Consent (AOC), FORA is responsible for completion of CERCLA response actions on approximately 3,300 acres of the former Fort Ord with funding provided by the Army, except for those responsibilities retained by the Army. The AOC was entered into voluntarily by FORA, EPA, DTSC, and the United States Department of Justice Environment and Natural Resources Division in December 2006 (EPA Region 9 CERCLA Docket No. R9-2007-03). The EPA is the lead regulatory agency for the FORA ESCA Remediation Program, which is subject to the AOC. The DTSC is the support agency under the AOC.

### **Statement of Purpose**

This Explanation of Significant Differences (ESD) documents a significant change to the remedy for the Track 2 Parker Flats MRA Development Reserve Reuse Area identified as 5b in Plate 2 and Table 2 of the Track 2 Parker Flats ROD in compliance with CERCLA §117(c) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) §§300.435(c)(2)(i) and 300.825(a)(2). The Army and regulatory agencies signed the Track 2 Parker Flats ROD in August 2008. Although the Fort Ord Base Reuse Plan designated the Development Reserve Reuse Area as a parcel that could include residential development as part of the reasonably anticipated future use, the selected remedy placed a residential use restriction on this parcel. Additional evaluation and verification fieldwork in the Development Reserve Reuse Area that FORA subsequently conducted support removal of the residential use restriction. This ESD describes the significant change, summarizes the information that led to the change, and affirms that the revised remedy complies with both the NCP and CERCLA's statutory requirements.

### **Circumstances Requiring an ESD**

This ESD highlights key information showing that the Land Use Control (LUC) residential use restriction is no longer necessary for the 36 acres of the Development Reserve Reuse Area (Figure 3). The Track 2 Parker Flats RI/FS describes this acreage as the "County Development Reserve." Based on the Fort Ord Base Reuse Plan, the reasonably anticipated future use of this acreage (approximately 36 acres) could include residential development (FORA 1997).

The Track 2 Parker Flats RI/FS preferred remedial alternative of LUCs did not include a restriction against residential use (Volume III; MACTEC 2006). In its October 18, 2006 letter, DTSC indicated that in addition to the other elements of the LUC alternative "...it would be appropriate to establish land use restrictions to assure the property will not be used for residential or other sensitive uses without further investigation" (DTSC 2006). In a letter dated October 16, 2006, EPA also requested the Army include a residential use restriction in the preferred remedial alternative of LUCs to ensure this area was "reviewed again" prior to allowing residential development (EPA 2006).

Based on the Track 2 Parker Flats RI/FS the Army's position was that a residential use restriction was not necessary for the Track 2 Parker Flats MRA; however, in consideration of regulatory input, the Army's Track 2 Parker Flats ROD included a LUC prohibiting residential use. Therefore, residential development

in the Track 2 Parker Flats MRA was prohibited until such a time as the area could be further reviewed, with a new determination made regarding its suitability for residential development.

As part of the FORA's ESCA Remediation Program, FORA conducted an additional evaluation of the designated future residential reuse areas within the ESCA Parker Flats properties to support removal of the residential use restriction component of the LUC remedy (ESCA RP Team 2017). The additional evaluation included the Development Reserve Reuse Area. The evaluation, which was subject to regulatory review by EPA and DTSC, recommended the designated future residential reuse areas including the Development Reserve Reuse Area as acceptable for residential use as long as appropriate institutional controls were implemented. Based on review of the evaluation, the regulatory agencies have indicated that removal of the residential use restriction from the designated future residential reuse areas within the ESCA Parker Flats properties, including the Development Reserve Reuse Area, is appropriate. Other components of the LUC remedy, including Military Munitions Recognition and Safety Training (referred to in the selected remedy as MEC recognition and safety training; which is consistent with the Army's 3Rs Explosives Safety Education Program), and construction monitoring, remain unchanged.

The Army prepared this ESD to modify the residential use restriction for the 36 acres that make up the Development Reserve Reuse Area that was included as part of the selected remedy. Per NCP §300.825(a)(2), this ESD will become part of the Administrative Record. The Administrative Record contains the Track 2 Parker Flats ROD and supporting information. The location of the Administrative Record is provided below:

Fort Ord Administrative Record (<a href="www.fortordcleanup.com">www.fortordcleanup.com</a>)
Building 4463 Gigling Road, Room 101
Ord Military Community, California 93944-5008
(831) 393-9693
Hours: Mon-Fri 9:00 am-4:00 pm. Other hours by appointment. Closed daily, 12:00 pm-1:30 pm and

federal holidays.

### SITE HISTORY AND SELECTED REMEDY

### Site History

Since 1917 and until base closure in 1994, the Army used portions the former Fort Ord for maneuvers, live-fire training, and other munitions-related purposes. Because of these activities, MEC (specifically UXO and DMM) have been encountered at sites throughout the former Fort Ord.

The Track 2 Parker Flats MRA is approximately 758 acres in size and located in the central part of the former Fort Ord. The Track 2 Parker Flats MRA is composed of 13 MRSs (in part or whole). Many of these MRSs were used for munitions live-fire training (e.g., artillery, mortar training) and other munitions-related purposes (Figure 2). As described in the Track 2 Parker Flats RI/FS, the 13 MRSs were first identified in Archives Searches conducted in 1993, 1994, and 1997. The Army investigated and conducted MEC removal actions within these MRSs.

The Track 2 Parker Flats RI/FS was developed based on an evaluation of previous response actions conducted, consideration of the risks from MEC that potentially remain present, and the reasonably anticipated future land uses as the Fort Ord Base Reuse Plan described. The public comment period for

the Proposed Plan was completed in March 2007. The Track 2 Parker Flats ROD was signed in August 2008.

### **Selected Remedy**

The selected remedy contained in the Track 2 Parker Flats ROD addresses risks to human health and the environment from MEC that potentially remain in the Track 2 Parker Flats MRA. LUCs were included in the final remedy because detection technologies may not have detected every Military Munition present, and some areas contain barriers (e.g., pavement, buildings) that, while providing protection against MEC potentially present, precluded detection and removal. Components of the LUC remedy outlined in the Track 2 Parker Flats ROD include: (1) Military Munitions Recognition and Safety Training for workers who will conduct ground disturbing or intrusive activities; (2) construction monitoring for ground disturbing or intrusive activities to address MEC that may remain in the subsurface; and (3) restrictions against residential use. The LUCs are described below.

### Military Munitions Recognition and Safety Training

Ground-disturbing or intrusive activities are expected to occur in the Track 2 Parker Flats MRA. People who conduct such activities are required to attend the Military Munitions Recognition and Safety Training to increase their awareness of and ability to recognize when they may have encountered a munition. Prior to conducting planned ground disturbing or intrusive activities, the landowner will be required to notify the Army or the Army's representatives to arrange for the training. This training will be provided to every worker who will perform ground disturbing or intrusive activities.

As part of the five-year review, the Army or its representatives would assess whether the training program should continue. If experience indicates that MEC have not been encountered within the area, the Army, in coordination with FORA or its successor, and after regulatory approval from EPA and DTSC, may discontinue the program. However, the training program may be subject to reinstatement should MEC be encountered in the future.

### **Construction Monitoring**

UXO-qualified personnel will provide construction monitoring during any ground disturbing or intrusive activities at the Track 2 Parker Flats MRA to address potential explosive safety risks posed by MEC that may remain present to construction personnel. Construction monitoring will be arranged by the transferee during the planning stages of a construction project, in accordance with the local municipal code requirements for an excavation permit, prior to the start of ground disturbing or intrusive activities. UXO-qualified personnel will monitor ground disturbing or intrusive construction activities for the potential presence of Military Munitions. During ground disturbing activities, if potential MEC are encountered, ground disturbing activities in the area and adjacent areas will cease and the encounter will be reported to local law enforcement who will request DoD Explosive Ordnance Disposal support of an explosives or munitions emergency. After the response, the Army will reassess the probability of encountering MEC and consult with the regulatory agencies. If the regulatory agencies concur that probability remains low, construction may resume with construction monitoring. If the probability is determined to be moderate or high, then the Army may require further investigation for MEC that may be encountered within the construction footprint before construction can resume.

Construction monitoring may be applicable in the short-term during development or in the long-term after established use. The Army will notify the regulatory agencies, as soon as practicable, of MEC- and

other munitions-related data identified during property use, and report the results of monitoring activities annually. The Army will also conduct five-year reviews.

As part of the annual monitoring and five-year review reporting, the Army, EPA, and DTSC will review MEC- and other munitions-related data collected during property development to determine whether construction monitoring should continue. If experience indicates that MEC have not been encountered during development or use of an area, construction monitoring may, with regulatory approval, be discontinued. However, it may be subject to reinstatement if MEC are encountered in the future.

### **Restrictions Against Residential Use**

Based on the Track 2 Parker Flats RI/FS, the Army's position is that the additional layer of protection provided by a residential use restriction was not necessary for the Track 2 Parker Flats MRA; however, in consideration of regulatory input, the preferred remedial alternative included a LUC prohibiting residential use. For the purpose of the Track 2 Parker Flats ROD, residential use includes: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12. It should be noted that, per the Fort Ord Base Reuse Plan (FORA 1997), only the Development Reserve Reuse Area could include residential development as a potential future use.

### **Remedy Implementation**

Under the ESCA and AOC, FORA is responsible for implementation of the selected remedy in the ESCA Parker Flats MRA Phase I portion of the Track 2 Parker Flats MRA (Figure 3). FORA has prepared the Final Remedial Design/Remedial Action, Land Use Controls Implementation, and Operation and Maintenance Plan, Parker Flats Munitions Response Area Phase I, Former Fort Ord, Monterey County, California (ESCA RP Team 2009) for its implementation actions. The Army prepared the Final Remedial Design/Remedial Action Work Plan, Parker Flats Munitions Response Area, Former Fort Ord, California, Revision 1 (MACTEC/Shaw 2009) for the remainder of the Track 2 Parker Flats MRA. In a letter dated July 27, 2009, EPA determined that remedial actions have been implemented and completed at the Track 2 Parker Flats MRA (EPA 2009). The Army and FORA continue to implement, maintain, enforce, monitor and report the implementation of the remedy according to the respective implementation plans.

### **BASIS FOR THE ESD**

The residential use restriction LUC's performance objective is to preclude residential development or modification to residential restrictions without approval by EPA in coordination with DTSC. "LUCs will be maintained until EPA and DTSC concur that the land use may be conducted in a manner protective of human health and the environment without the LUCs. This concurrence may be based on: 1) New information (e.g. limited geophysical mapping, site development); or 2) Where the depth of soil disturbance related to ground disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and any MEC encountered during such activities is removed."

The Army successfully completed the removal of MEC in 2000. The Track 2 Parker Flats RI/FS described the site conditions and the results of the evaluation of previously completed response actions, and determined that existing Parker Flats data could be used to complete a risk assessment and feasibility study. Based on the RI and risk assessment, the Army evaluated remedial alternatives in the feasibility

study. The 2008 Track 2 ROD defined the remedy to address the risk to human health and the environment from MEC that potentially remain present in the Track 2 Parker Flats MRA.

LUCs were selected as the final remedy to provide protection against MEC potentially present in the Track 2 Parker Flats MRA including the Development Reserve Reuse Area. Components of the LUC remedy outlined in the Track 2 Parker Flats ROD include: (1) Military Munitions Recognition and Safety Training, for workers who will conduct ground disturbing or intrusive activities; (2) construction monitoring for ground disturbing or intrusive activities to address MEC that potentially remain in the subsurface; and (3) restrictions against residential use to ensure residential development in the Track 2 Parker Flats MRA does not occur until additional evaluation is conducted.

In 2013, FORA conducted additional evaluation and verification fieldwork, which included geophysical mapping and investigation of targets that potentially represented Military Munitions that could be MEC, in the designated future residential reuse areas within the ESCA Parker Flats properties, including the Development Reserve Reuse Area. The additional evaluation and verification fieldwork were documented in the *Final Residential Protocol Implementation Technical Report, Parker Flats Munitions Response Area, Former Fort Ord, Monterey County, California* ("Parker Flats MRA RPI Technical Report"; ESCA RP Team 2017).

The additional evaluation and verification in the Parker Flats MRA RPI Technical Report documented the successful application of an alternative process to the California DTSC Residential Protocol in the designated future residential reuse areas within the ESCA Parker Flats properties that included the Development Reserve Reuse Area (Figure 3). The DTSC Residential Protocol prescribes required procedures to overcome technical challenges associated with reducing the risk posed by MEC that potentially remain to levels acceptable for residential use. The Army completed removal actions using analog survey instruments over the entire Development Reserve Reuse Area. The Military Munitions encountered were primarily related to pre-World War II live-fire training (37 millimeter [mm] projectiles), maneuvers, and training with practice hand grenades.

The evaluation included an evaluation of completed MEC removal actions and associated documentation to determine whether an additional geophysical survey was needed based on (1) munitions recovered and (2) the detection capabilities of the analog survey instruments for smaller-sized munitions. The additional verification by FORA included geophysical survey in specific identified areas and investigation of associated anomalies to confirm that intact smaller-sized munitions were not present in the future residential reuse areas in the ESCA Parker Flats properties that included the Development Reserve Reuse Area, and that potential technical challenges had been resolved.

Based on this evaluation, including the application of an alternative process to the DTSC Residential Protocol, FORA recommended the Development Reserve Reuse Area be determined to be acceptable for residential reuse with appropriate institutional controls.

The additional evaluation and verification fieldwork that FORA conducted provided new information sufficient to (1) address the uncertainty of MEC remaining in the subsurface; and (2) support modification of the LUC remedy by removing the residential use restriction for the Development Reserve Reuse Area of the Track 2 Parker Flats MRA.

### **Summary of Site Risks**

The Track 2 Parker Flats ROD presented the selected remedy addressing risks to human health and the environment from MEC that potentially remain in the Track 2 Parker Flats MRA. The Army completed a MEC removal action, thereby, significantly reducing the risks to human health and the environment from Military Munitions. The selected remedy included LUCs because detection technologies may not have detected every Military Munition present, and some areas contain barriers (e.g., pavement, buildings) that, while providing protection against MEC potentially present, precluded detection and removal (Army 2008). The LUCs included a residential use restriction to ensure that EPA, in coordination with DTSC, approved proposals to allow residential development or modification to the residential use restriction.

FORA's additional evaluation and verification fieldwork successfully confirmed the quality and effectiveness of the previous removal actions, and demonstrated that potential technical challenges had been addressed. FORA's additional evaluation and verification fieldwork provide new information sufficient to address the uncertainty of MEC remaining in the subsurface, and support removal of the residential use restriction from the 36 acres of the Development Reserve Reuse Area of the Track 2 Parker Flats MRA.

The Track 2 Parker Flats ROD required additional regulatory review, which was completed and documented in the Parker Flats MRA RPI Technical Report (ESCA RP Team 2017). Based on regulatory review of the evaluation, and this ESD, the regulatory agencies have indicated that removal of the residential use restriction from the 36 acres that make up the Development Reserve Reuse Area (referred to as the "designated residential reuse area" in FORA ESCA Remediation Program documentation) within the Track 2 Parker Flats MRA is appropriate.

### **DESCRIPTION OF SIGNIFICANT DIFFERENCES WITHIN THE SELECTED REMEDY**

This ESD modifies the LUC component of the remedy by removing the residential use restriction in the approximately 36 acres that make up the Development Reserve Reuse Area as identified in Figure 3.

The deeds and California Covenant to Restrict Use of Property (CRUP) for the Track 2 Parker Flats MRA Development Reserve Reuse Area of Parcels E18.1.1, E18.1.2, E19a.1 and E19a.5 contain environmental protection provisions, including a residential use restriction. The Army will modify the deed restriction, and DTSC will modify the CRUPs, as necessary, to be consistent with this ESD and the final remedy.

### **Changes in Expected Outcomes**

The modification of the residential use restriction component of the LUC remedy is not expected to impact the protectiveness of the LUC remedy. The LUC remedy continues to be protective of human health and the environment through implementation of the remaining LUC components. These components include Military Munitions Recognition and Safety Training; construction monitoring; and continuation of the existing residential use restriction in the other portions of the Track 2 Parker Flats MRA.

### STATUTORY DETERMINATIONS

The remedy, including the actions described in this ESD, continues to satisfy the requirements of CERCLA §121. In accordance with the Track 2 Parker Flats ROD, the selected remedy provides protection for both human health and the environment through implementation of LUCs to mitigate the risk from MEC that potentially remain present. The Army, EPA, and DTSC have determined the remedy remains protective of human health and the environment.

### PUBLIC PARTICIPATION COMPLIANCE

A public meeting notification for this ESD was published in the Monterey Herald and the Salinas Californian on July 22, 2017. An ESD fact sheet was made available to the public on July 25, 2017. The ESD fact sheet presented the Army's modification of the residential use restriction component of the LUC remedy. The ESD fact sheet also summarized information in the Track 2 Parker Flats ROD and the Parker Flats MRA RPI Technical Report. Both reports and other supporting documents are available in the Administrative Record. The Administrative Record and Information Repositories are located at:

- Fort Ord Administrative Record, Building 4463, Gigling Road, Room 101, Ord Military Community, California (www.fortordcleanup.com).
- Seaside Branch Library, 550 Harcourt Avenue, Seaside, California.
- California State University Monterey Bay Tanimura and Antle Family Memorial Library, 100
   Campus Center, Seaside, California.

The public meeting was held on August 9, 2017 to present the explanation of the changes being made to the remedy. At this meeting, representatives from the Army, EPA, and DTSC were present, and the public had the opportunity to submit written and oral comments about the ESD. Representatives from FORA were also present to answer questions. A 30-day public comment period was held from July 26, 2017 to August 25, 2017. The Army's response to the comments received during this period are included in the Responsiveness Summary, which is part of this ESD.

A notification of the availability of the Final ESD will be made in the Monterey Herald and the Salinas Californian.

Enclosure 1 provides a summary of comments received during the Public Comment Period and the Army's responses.

Enclosure 2 provides references.

Signature Sheet for the foregoing Explanation of Significant Differences to the Record of Decision for Parker Flats Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California, among the United States Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.

Thomas E. Lederle

Chief

Base Realignment and Closure Division

U.S. Department of the Army

26 APR 2018

Date

Signature Sheet for the foregoing Explanation of Significant Differences to the Record of Decision for Parker Flats Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California, among the United States Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.

William K. Collins

**BRAC Environmental Coordinator** 

William 12. Collins

Fort Ord BRAC Office

U.S. Department of the Army

4/26/2018

Date

Signature Sheet for the foregoing Explanation of Significant Differences to the Record of Decision for Parker Flats Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California, among the United States Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.

Angeles Herrera

Assistant Director, Superfund Division Federal Facilities and Site Cleanup Branch U.S. Environmental Protection Agency, Region IX 5/21/2018

Date

Signature Sheet for the foregoing Explanation of Significant Differences to the Record of Decision for Parker Flats Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California, among the United States Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.

The State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) had an opportunity to review and comment on the Explanation of Significant Differences (ESD) to the Record of Decision (ROD) and our concerns were addressed.

Charlie Ridenour, P.E.

**Branch Chief** 

Cleanup Program - Sacramento Office California Environmental Protection Agency Department of Toxic Substances Control

### **ENCLOSURE 1**

Summary of Comments Received during the Public Comment Period and Army Responses

Public comments received during the public comment period and the Army's responses are summarized below.

Comments were received from the public: (1) at the public meeting held on August 9, 2017; and (2) in written comments received during the 30-day public comment period from July 26, 2017 to August 25, 2017.

<u>Comment 1:</u> Comments were made expressing support for removing the residential use restriction, acknowledging that the Army performed complete investigations and removal processes and that the regulatory agencies confirmed that removing the restriction is appropriate.

Response: The comments are acknowledged.

Comment 2: Comments were made expressing an understanding of the following: (1) the reason for removing the restriction on residential development; (2) that removal of the residential use restriction does not mean residential housing will be built in the specified area, it is indicating to the land use jurisdiction where residential housing is and is not appropriate; (3) the Army does not have jurisdiction over local land use decisions; and (4) opposition to changing the remedy to remove the residential use restriction, citing concern the remedy change will facilitate development, result in loss of natural habitat and tourism, increase traffic, and further diminish water supplies. Some commentators who opposed the change did so while also acknowledging the reason for the change, and that the Army does not have jurisdiction over local land use decisions.

<u>Response</u>: The concerns with anticipated future development are not applicable to the remedy change. The remedy change is not a land use decision or determination regarding the relative merits of development in the area. Land use decisions are made by appropriate jurisdiction and must be consistent with land use restrictions placed on the property. Jurisdictions are the decision-makers regarding land use and the associated aspects of development that may occur.

The cleanup of former Fort Ord is being conducted under CERCLA, which requires that remedial action be conducted to support reasonably anticipated future land reuses at a site. As a base closure site, the Army is required to clean up the site to support reuse as described in the Fort Ord Base Reuse Plan (FORA 1997) and the Assessment East Garrison – Parker Flats Land Use Modifications, dated May 2002 ("the 2002 Land Use Assessment;" Zander 2002). The latter document supported a conversion of approximately 447 acres of development reuse area to habitat reserve, thus preserving oak woodlands and maritime chaparral (also see response to Comment 3). The 2002 Land Use Assessment has been referred to as the "swap." The remedy change to remove the residential use restriction from the Track 2 Parker Flats development reserve reuse area is consistent with the reasonably anticipated future land reuses.

<u>Comment 3</u>: Comments were made that land use modification described in the "Land Swap Agreement" (the 2002 Land Use Assessment) removed residential use from the Monterey County-portion of the subject area. A commentator also noted that FORA has not amended the Base Reuse Plan to remove

residential use from the Parker Flats area to reflect the Land Swap Agreement. Another commentator noted that none of the subject area within the Seaside City Limits is planned for residential use in the 1997 Base Reuse Plan.

<u>Response</u>: The comments regarding the basis of the reasonably anticipated future residential land reuse of the Track 2 Parker Flats development reserve reuse area are not applicable to the remedy change. The reasonably anticipated future land reuses were identified in the Track 2 Parker Flats RI/FS and Track 2 Parker Flats ROD. The reasonably anticipated future land reuses for the Track 2 Parker Flats MRA are in accordance with the following documents:

- Fort Ord Base Reuse Plan, dated June 13, 1997 (FORA 1997);
- Assessment East Garrison Parker Flats Land Use Modifications, dated May 2002 ("the 2002 Land Use Assessment"; Zander 2002); and
- Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification, dated August 2004 ("the 2004 MOU"; Army 2004).

The reasonably anticipated future land use for the development reserve area is consistent with these documents and the City of Seaside 2005 General Plan Update. For reference, the reasonably anticipated future land reuses and associated land use modifications were compiled in the *Final Reassessment Report, Fort Ord Reuse Plan Reassessment*, dated December 14, 2012, and supporting Appendix A Final Scoping Report (FORA/EMC 2012).

The Track 2 Parker Flats development reserve reuse area was not included in the 2002 Land Use Assessment and 2004 MOU. The areas described in the 2002 Land Use Assessment correspond with portions of the Track 2 Parker Flats MRA designated for development, specifically the MPC officer training and Emergency Vehicle Operations Center (EVOC) facilities, Monterey Horse Park, Veterans Cemetery, and areas converted to the approximately 447-acre Habitat Reserve and Oak Woodland Habitat Reserve (2002 Land Use Assessment Figure 5).

<u>Comment 4:</u> Comment were made that there have been a number of comment letters on past ESCA documents concerning the Parker Flats MRA expressing opposition to the removal of the residential restriction, and that community acceptance is a critical part of the CERCLA decision-making process.

<u>Response</u>: Under CERCLA and the National Contingency Plan, the Army follows the public participation and community involvement process, and encourages members of the local community and other interested parties to make comments on proposed cleanup decisions. The Army, in conjunction with the regulatory agencies, take comments into consideration prior to making a final cleanup decision. The Army received comments from community members expressing a broad range of views.

The nine CERCLA evaluation criteria specified in the EPA's Guidance includes assessment of community acceptance as a modifying criterion (EPA 1988). The Fact Sheet: A Change to Track 2 Record of Decision for the Parker Flats Munitions Response Area, Former Fort Ord, California, and the associated public meeting presentation provided an explanation of the nature of the proposed remedy change, and summarized the information that led to proposing the change. While the Army acknowledges that some members of the community are opposed to the change, considering all of the comments received and after consulting with the regulatory agencies, it is determined that the change described in this ESD is appropriate.

<u>Comment 5:</u> Comments were made expressing concern regarding the effectiveness of the LUCs, citing concerns with remedy implementation and enforcement, and noted that it is inappropriate to make local entities deal with incidental munitions encounters.

Response: The Army, EPA and DTSC have determined that development and reuse at the Track 2 Parker Flats MRA, including the development reserve reuse area, can occur safely with the modified remedy (i.e., LUCs) that includes: Military Munitions Recognition and Safety Training for workers conducting ground disturbing or intrusive activities; construction monitoring for ground disturbing or intrusive activities; and restrictions against residential use except in the Track 2 Parker Flats development reserve reuse area. The remedy has been implemented and determined through Army five-year reviews to be effective and protective (Army 2007, 2012, and 2017, respectively). The proposed change is limited to removal of the residential use restriction from a portion of the Track 2 Parker Flats MRA based on new information, and will not impact the implementation or effectiveness of the LUCs or overall protectiveness of the remedy.

As described in the Track 2 Parker Flats ROD, the standard procedure for reporting any encounter with a known or suspected Military Munitions item in transferred former Fort Ord property is to report the encounter immediately to local law enforcement; the local law enforcement agency will promptly request Department of Defense support for response. A deed notice to the effect is included in nearly every deed that has transferred the former Fort Ord property from the Army.

<u>Comment 6:</u> Comment was made that the framework for the cleanup of the Track 2 Parker Flats MRA that includes the ESCA dilutes the CERCLA process, diminishes credibility and gives the impression a local agency is changing a federal agency decision.

Response: The remedy change follows the CERCLA process. The Army and FORA entered into an ESCA to provide funding for munitions response actions necessary for remedy implementation. Under the ESCA, FORA is responsible for completion of the CERCLA response actions and implementing the selected remedy for the ESCA properties, which includes the development reserve reuse area addressed by this ESD. However, the Army remains the lead agency under CERCLA, and is responsible for making cleanup decisions at the former Fort Ord. The Fact Sheet: A Change to Track 2 Record of Decision for the Parker Flats Munitions Response Area, Former Fort Ord, California, identifies the Explanation of Significant Differences (ESD) process and explains how the process is used to make significant changes to the selected remedy.

<u>Comment 7:</u> Comments were made that the decision to change the remedy should be based on factual and scientific data, including review of records on the types of munitions and weapons used, historical use of the area, including types of military training and types of munitions used, and effectiveness of previous munitions removal actions. A comment was made that military training at Fort Ord included such activities as tank training; Combat Development Experimental Command (CDEC) was located at Fort Ord; and that there is a potential for burial pits.

Response: As presented in the Fact Sheet: A Change to Track 2 Record of Decision for the Parker Flats Munitions Response Area, Former Fort Ord, California, the decision to remove the residential use restriction from the Track 2 Parker Flats development reserve reuse area is based on additional evaluation and verification which confirmed the area as acceptable for residential reuse. The detailed evaluation of the area included review of records on the types of training, weapons and munitions used in the area, and review of the quality and effectiveness of previous removal actions. The additional

evaluation and verification is documented in the *Final Residential Protocol Implementation Technical Report, Parker Flats Munitions Response Area* (ESCA RP Team 2017), which was reviewed by the Army, EPA, and DTSC.

The Track 2 Parker Flats RI/FS evaluated the types of military training that occurred in the MRA, and addressed the comment about the potential for tank training, as described in the response to a community comment. Burial pits that were encountered during MEC removal activities were investigated. Previous research indicated that Fort Ord buildings were used for administrative functions of CDEC, and field experiments were conducted in Fort Hunter Liggett.

<u>Comment 8:</u> Comment was made regarding how the clean-up process satisfies the DTSC requirement that all munitions be removed.

<u>Response</u>: MEC removal actions were successfully completed by the Army in 2000. This work was evaluated in the Track 2 Parker Flats RI/FS. However, the potential existed that MEC may remain present in the property. Therefore, to manage the risk to future land users from MEC that potentially remain in the property, the LUC remedy was selected in the Track 2 ROD.

As presented in the Fact Sheet: A Change to Track 2 Record of Decision for the Parker Flats Munitions Response Area, Former Fort Ord, California, the decision to remove the residential use restriction from the development reserve reuse area is based on additional evaluation and verification which confirmed the area as acceptable for residential reuse. The detailed evaluation of the area included review of records on the types of training, weapons and munitions used in the area, and review of the quality and effectiveness of previous removal actions. The additional evaluation and verification is documented in the Final Residential Protocol Implementation Technical Report, Parker Flats Munitions Response Area (ESCA RP Team 2017), which was reviewed by the Army, EPA, and DTSC. The DTSC stated in a letter dated January 9, 2017, that the data evaluations for the Parker Flats MRA designated residential reuse areas, which include the Track 2 Parker Flats development reserve reuse area, are comparable in concept to the DTSC Residential Protocol and that a potential variance request to remove any existing and applicable restrictions to the Parker Flats MRA designated residential reuse areas is appropriate (DTSC 2017).

<u>Comment 9:</u> Some commentators asked if there were examples of residential developments located on former training areas where live ordnance and chemicals had been utilized in the training.

Response: Comments regarding examples of residential developments located on former training areas are not relevant to the remedy change. However, former military training sites and ranges are currently being reused for residential development, including Benicia Arsenal in Benicia, California and former Camp Beale near Marysville, California. During development of the ESCA and the AOC governing the remaining MEC removal activities required for approximately 3,300 acres of the former Fort Ord, the EPA and the DTSC required adequate use of the best available (and appropriate) detection technologies and related processes to remove MEC to the point that the land could be released for potential residential reuse. To satisfy these requirements, FORA developed a thorough, data-driven implementation process was developed as part of the FORA ESCA Remediation Program to support the acceptability of a parcel for residential use, referred to as the ESCA Residential Quality Assurance (RQA) Process. As specified in the ESCA, FORA developed the RQA Pilot Study, including recommending study areas and developing success criteria for EPA and DTSC to determine if, and when, the ESCA RQA

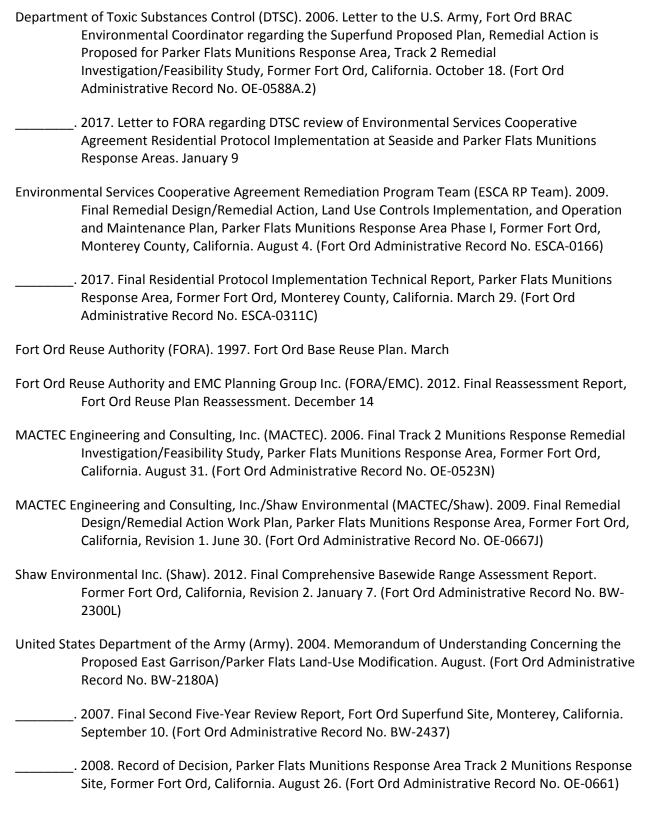
Process would be applied to proposed ESCA residential parcels. This process was successfully applied to the Track 2 development reserve reuse area.

**Comment 10:** Comments were made that there is no mention of lead in soils or soil testing.

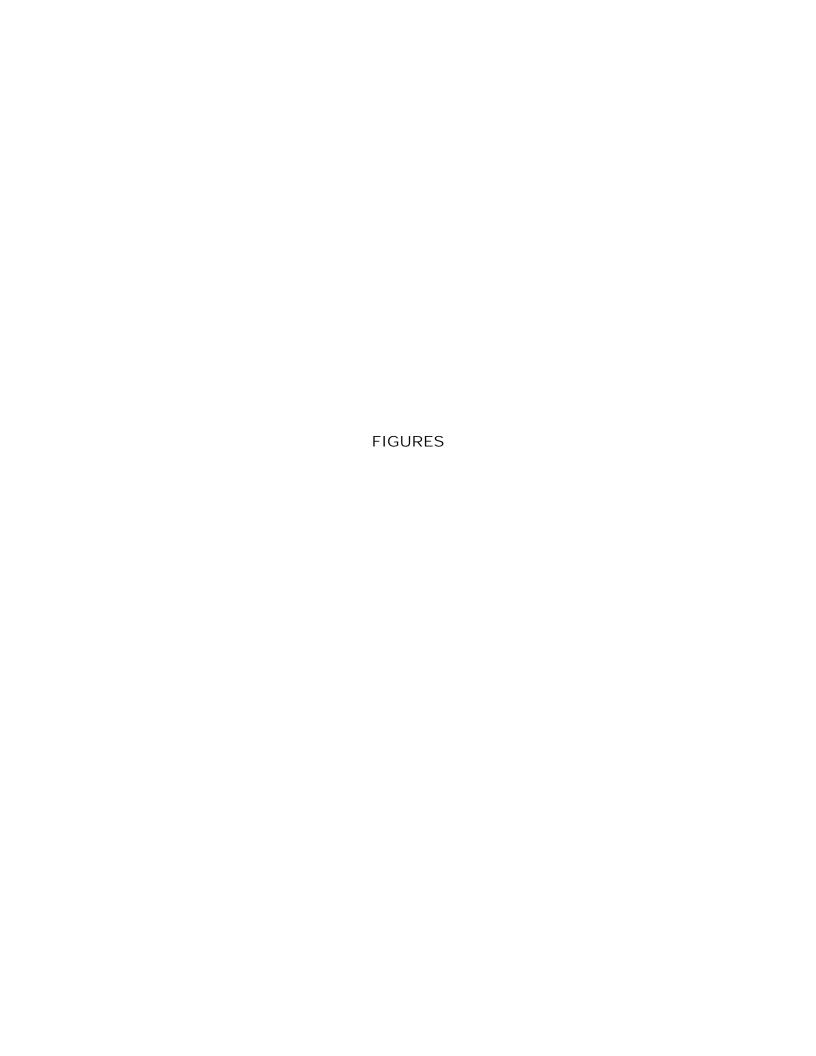
Response: The potential for soil contamination from munitions constituents, including lead, at the former Fort Ord is addressed under the Army's Basewide Range Assessment program (Shaw 2012). The Basewide Range Assessment for the Track 2 Parker Flats MRA included a literature review for all the MRSs within the MRA and site reconnaissance within specific MRSs (including MRS-13B). Following reconnaissance, soil samples were collected from a subset of sites (sampling was not required in MRS-13B). Samples were analyzed for explosives and perchlorate. Selected samples were also analyzed for lead, copper, antimony, semi-volatile organic compounds and total petroleum hydrocarbons. The results of this sampling are provided in the Comprehensive Basewide Range Assessment Report (Shaw 2012).

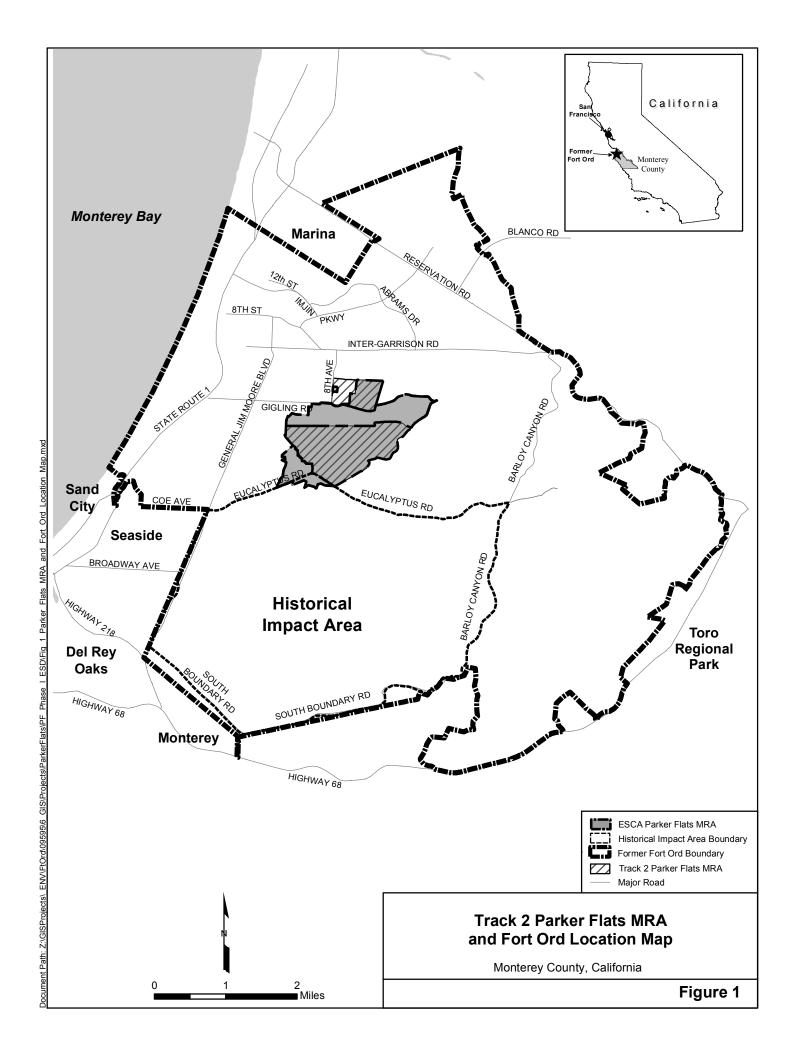
### **ENCLOSURE 2**

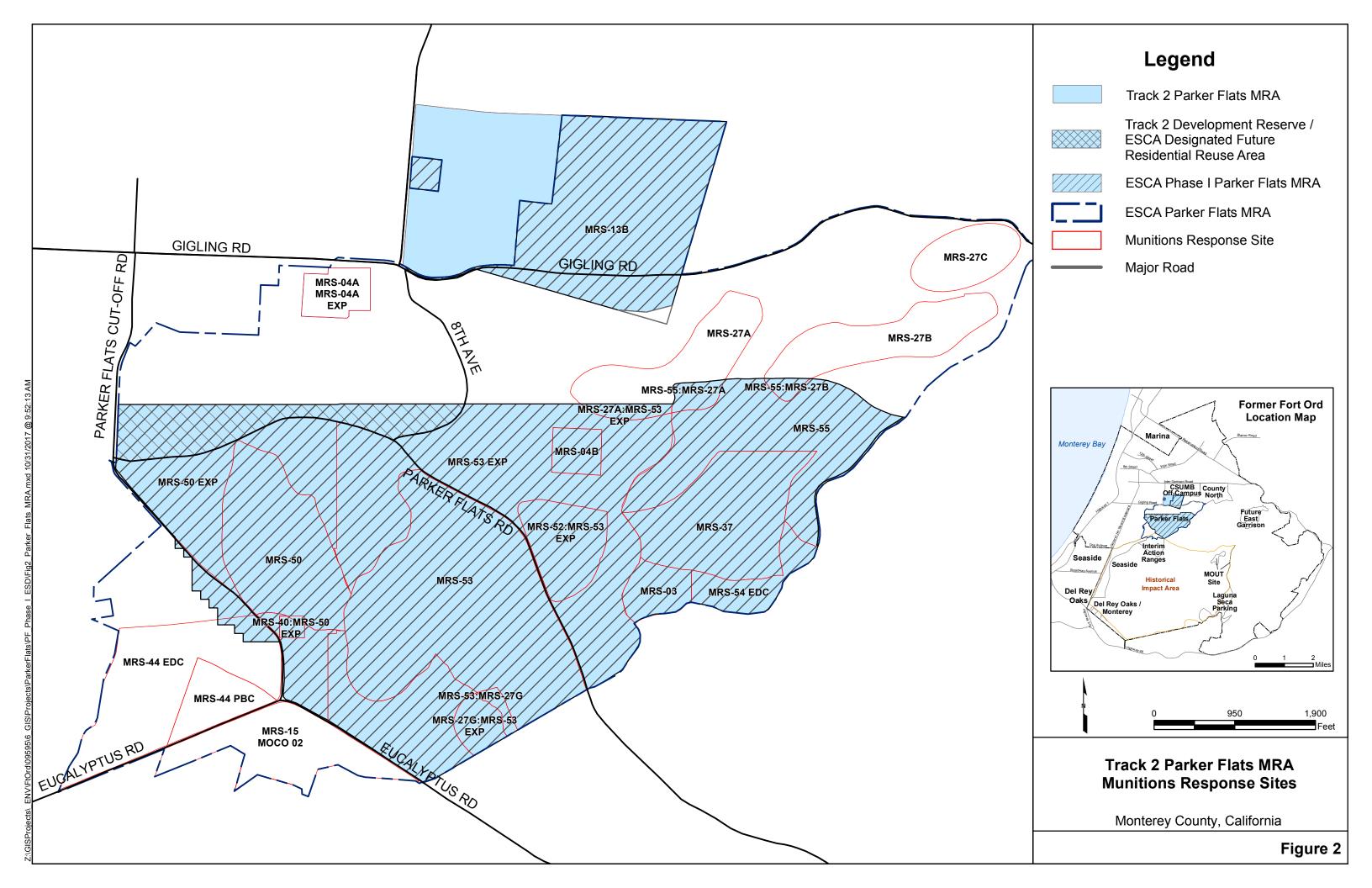
### References

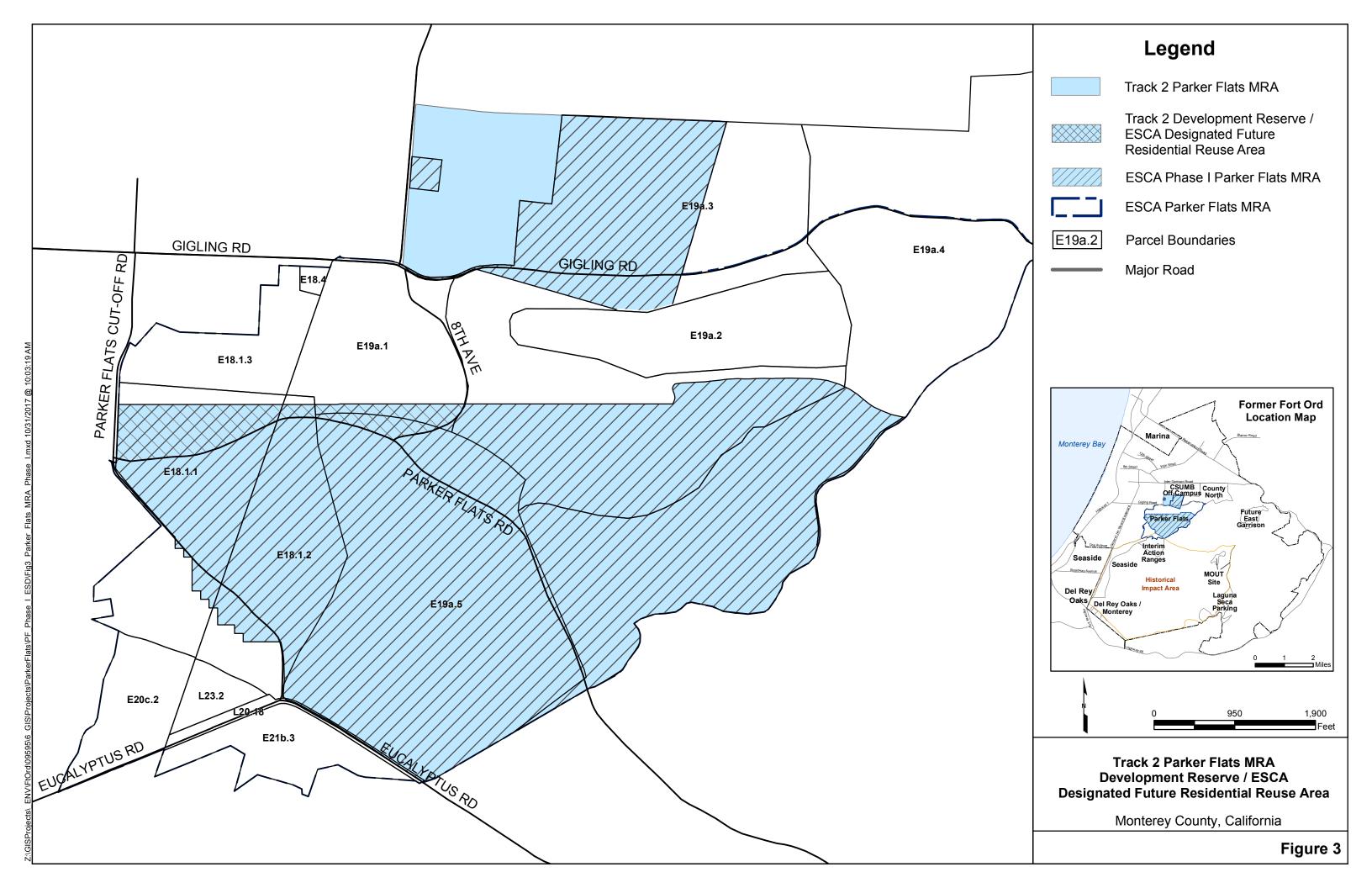


	. 2012. Final 3 <sup>rd</sup> Five-Year Review Report for Fort Ord Superfund Site, Monterey County, California. September 17. (Fort Ord Administrative Record No. BW-2632)
	.2017. Final 4 <sup>th</sup> Five-Year Review Report for Fort Ord Superfund Site, Monterey County, California. September 8. (Fort Ord Administrative Record No. BW-2834)
U.S. Envir	onmental Protection Agency (EPA). 1988. Guidance for Conducting Remedial Investigation/Feasibility Studies Under CERCLA. Interim Final. EPA 540/G-89/001. October
	. 2006. Letter to the U.S. Army, Fort Ord BRAC Environmental Coordinator regarding comments on the Revised Draft <i>Proposed Plan for Parker Flats Munitions Response Area, Track 2 Munitions Response RI/FS, Former Fort Ord, California</i> . October 16. (Fort Ord Administrative Record No. OE-0588B)
	. 2009. Letter to the U.S. Army, Fort Ord BRAC Environmental Coordinator regarding Remedial Action Completion at the Parker Flats Munitions Response Area. July 27. (Fort Ord Administrative Record No. OE-0667L)
Zander As	ssociates (Zander). 2002. Assessment East Garrison – Parker Flats Land Use Modifications, Fort Ord, California. May. (Fort Ord Administrative Record No. BW-2180)









### APPENDIX A GLOSSARY OF MILITARY MUNITIONS RESPONSE PROGRAM TERMS

### APPENDIX A

### Glossary of Military Munitions Response Program Terms

**Administrative Record** – A compilation of all documents relied upon to select a remedial action pertaining to the investigation and cleanup of the former Fort Ord. *Source:* (1).

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, otherwise known as Superfund) – CERCLA authorizes federal action to respond to the release or threatened release of hazardous substances into the environment or a release or threatened release of a pollutant or contaminant into the environment that may present an imminent or substantial danger to public health or welfare. *Source:* (1).

Construction Support – Assistance provided by the Department of Defense (DOD), explosive ordnance disposal (EOD) or unexploded ordnance (UXO)-qualified personnel and/or by personnel trained and qualified for operations involving chemical agents (CA), regardless of configuration, during intrusive construction activities on property known or suspected to contain UXO, other munitions that may have experienced abnormal environments (e.g., discarded military munitions [DMM]), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, to ensure the safety of personnel or resources from any potential explosive or CA hazards. *Source:* (3).

**Discarded Military Munitions (DMM)** – Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance (UXO), military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2)).

For the purposes of the Basewide Military Munitions Response Program (MMRP) being conducted at the former Fort Ord, DMM does not include small arms ammunition.

**Explanation of Significant Differences** – A document issued after adoption of the Record of Decision (ROD) which explains differences in the remedial action that significantly change but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance or cost.

**Feasibility Study (FS)** – An evaluation of potential remedial technologies and treatment options that can be used to clean up a site. *Source* (1).

**Historical Impact Area** – The historical impact area consists of approximately 8,000 acres in the southwestern portion of former Fort Ord, bordered by Eucalyptus Road to the north, Barloy Canyon Road to the east, South Boundary Road to the south, and North-South Road (renamed General Jim Moore Boulevard) to the west. *Source:* (1).

**Institutional Control (IC)** – (a) Non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use; (b) are generally, to be used in conjunction with, rather than in lieu of, engineering measures such as waste treatment or containment; (c) can be used during all stages of the cleanup process to accomplish various cleanup-related objectives; and (d) should be "layered" (i.e., use multiple ICs) or implemented in a series to provide overlapping assurances of protection from contamination. *Source:* (4).

**Land Use Controls (LUCs)** – Physical, legal, or administrative mechanisms that restrict the use of, or limit access to, real property, to manage risks to human health and the environment. Physical

mechanisms encompass a variety of engineered remedies to contain or reduce contamination, or physical barriers to limit access to real property, such as fences or signs. *Source:* (3).

Military Munitions – Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense (DOD), the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components of the above.

The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101(e)(4)(A through C)).

**Military Munitions Response Program (MMRP)** – Department of Defense (DOD)-established program to manage the environmental, health and safety issues presented by munitions and explosives of concern (MEC). *Source*: (1).

**Mortar** – Mortars typically range from approximately 1 inch to 11 inches in diameter or larger, and can be filled with explosives, toxic chemicals, white phosphorus or illumination flares. Mortars generally have thinner metal casing than projectiles but use the same types of fuzing and stabilization. *Source*: (2).

**Munitions Debris (MD)** – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal. *Source* (3).

Munitions and Explosives of Concern (MEC) – Distinguishes specific categories of military munitions that may pose unique explosives safety risks, such as: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. 101(e)(5)(A through C); (B) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or (C) munitions constituents (e.g., Trinitrotoluene [TNT], Cyclotrimethylene trinitramine [RDX]), as defined in 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose an explosive hazard. (32 CFR 179.3).

For the purposes of the Basewide Military Munitions Response Program (MMRP) being conducted for the former Fort Ord, MEC does not include small arms ammunition.

**Munitions Response Area (MRA)** – Any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). Examples are former ranges and munitions burial areas. A MRA comprises of one or more munitions response sites (MRSs). (32 CFR 179.3).

**Munitions Response Site (MRS)** – A discrete location within a Munitions Response Area (MRA) that is known to require a munitions response. (32 CFR 179.3).

**Projectile** – An object projected by an applied force and continuing in motion by its own inertia, as a bullet, bomb, shell, or grenade. Also applied to rockets and to guided missiles. *Source:* (2).

**Record of Decision (ROD)** – A ROD is the document used to record the remedial action decision made at a National Priorities List property. The ROD will be maintained in the project Administrative Record and project file. *Source:* (1).

**Remedial Investigation (RI)** – The RI is intended to "adequately characterize the site for the purpose of developing and evaluating an effective remedial alternative" (National Contingency Plan, 40 CFR 300.430[d]). In addition, the RI provides information to assess the risks to human health, safety, and the environment that were identified during risk screening in the site investigation. *Source:* (1).

**Small Arms Ammunition** – Ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns. *Source* (3)

**Track 2 Sites** – Track 2 Sites are those where MEC was found and removal action has been completed. Track 2 sites differ from Track 1 sites in that a removal action has been completed and that land use controls may be applicable based on future identified land uses and results of the removal actions. *Source:* (1).

**Unexploded Ordnance (UXO)** – Military munitions that: (A) have been primed, fuzed, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or materials; and (C) remain unexploded, whether by malfunction, design, or any other cause. (10 U.S.C. 101(e)(5)(A through C)).

For the purposes of the Basewide Military Munitions Response Program (MMRP) being conducted for the former Fort Ord, UXO does not include small arms ammunition.

### **Sources:**

- (1) Non-standard definition developed to describe Fort Ord-specific items, conditions, procedures, principles, etc. as they apply to issues related to the munitions and explosives of concern (MEC) cleanup.
- (2) U.S. Department of Defense Environment, Safety and Occupational Health Network and Information Exchange. 1996. Unexploded Ordnance (UXO): An Overview. October.
- (3) U.S. Department of Defense Manual Number 6055.09, Volume 8, SUBJECT: DoD Ammunition and Explosives Safety Standards: Glossary, Incorporating Change 2. January 24, 2018.
- (4) Institutional Controls: A Site Managers' Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups. US EPA Office of Solid Waste and Emergency Responses (OSWER) 9355.0-74FS-P, EPA 540-F-00-005. September, 2000.