

FORA ESCA REMEDIATION PROGRAM

DRAFT

Group 2

**Land Use Controls Implementation Plan/
Operation and Maintenance Plan
California State University Monterey Bay Off-Campus
Munitions Response Area**

Former Fort Ord
Monterey County, California

May 26, 2015

Prepared for:

FORT ORD REUSE AUTHORITY

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Former Fort Ord
Monterey County, California

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ACRONYMS AND ABBREVIATIONS

AOC	Administrative Order on Consent
ARARs	applicable or relevant and appropriate requirements
Army	United States Department of the Army
bgs	below ground surface
BRAC	Base Realignment and Closure
CBR	chemical, biological, and radiological
CEHND	U.S. Army Corps of Engineers, Huntsville Division
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMS	CMS Environmental, Inc.
County	County of Monterey
CRUP	Covenant to Restrict the Use of Property
CS	O-Chlorobenzylidene Malonitrile
CSU	California State University
CSUMB	California State University Monterey Bay
cy	cubic yards
DDESB	Department of Defense Explosives Safety Board
DMM	discarded military munitions
DTSC	Department of Toxic Substances Control
EOD	explosive ordnance disposal
EPA	United States Environmental Protection Agency
EPP	Environmental Protection Provisions
ESCA	Environmental Services Cooperative Agreement
FFA	Federal Facility Agreement
FORA	Fort Ord Reuse Authority
FOSET	Finding of Suitability for Early Transfer
ft	foot
HFA	Human Factors Applications, Inc.
HMP	Habitat Management Plan
LTO	Long-Term Obligation
LTMM	Long-Term Management Measure
LUC	Land Use Control
LUCIP	Land Use Controls Implementation Plan
MD	munitions debris
MEC	munitions and explosives of concern
mm	millimeter
MOA	Memorandum of Agreement

MR	Munitions Response
MRA	Munitions Response Area
MRS	Munitions Response Site
OMC	Ord Military Community
OMP	Operation and Maintenance Plan
OE	Ordnance and Explosives
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remediation Program
RQA	Residential Quality Assurance
RWQCB	Regional Water Quality Control Board
USA	USA Environmental, Inc.
USACE	United States Army Corps of Engineers
UXB	UXB International, Inc.
UXO	unexploded ordnance

GLOSSARY

Anomaly

Any item that is seen as a subsurface irregularity after geophysical investigation. This irregularity should deviate from the expected subsurface ferrous and non-ferrous material at a site (i.e., pipes, power lines, etc.).

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980

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.

Construction Activity

Development or construction which includes ground-disturbing or intrusive activities such as excavation, digging, development and other ground disturbance that involves displacement of more than ten (10) cubic yards (cy) of soil.

Construction Support

Assistance provided by the United States (US) 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.

Covenant Deferral Request (CDR)

A letter along with a supporting information package known as a CDR assembled by the Federal landholding agency prior to transfer to formally request deferral of the CERCLA covenant until all remediation has been accomplished. The United States Environmental Protection Agency (EPA) requires that the information is: 1) of sufficient quality and quantity to support the request for deferral of the CERCLA Covenant; and 2) that it provides a basis for EPA to make its determination. This information is submitted to EPA in the form of a CDR.

Defense Site

Locations that are or were owned by, leased to, or otherwise possessed or used by the Department of Defense. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions. (10 U.S.C. 2710(e)(1))

Deferral Period

The period of time that the CERCLA covenant, warranting that all remedial action is complete before transfer, is deferred through the Early Transfer Authority.

Discarded Military Munitions (DMM)

Generally, 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 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])

Early Transfers

The transfer, by deed, of federal property by the DoD to a nonfederal entity before all remedial actions on the property have been taken. Section 120 (h)(3)(C) of the CERCLA allows federal agencies to transfer property before all actions necessary to protect human health and the environment have been taken. This provision, known as Early Transfer Authority, authorizes the deferral of the CERCLA covenant when the findings required by the statute can be made and the response action assurances required by the statute are given. The Governor of the state where the property is located must concur with the deferral request for property not listed on the National Priorities List (NPL). For NPL property, the deferral must be provided by the EPA with the concurrence of the Governor. Upon approval to defer the covenant, the DoD may proceed with the early transfer.

Environmental Protection Provisions (EPP)

Deed restrictions or specific notifications that require constraints on certain activities to ensure protection of human health and the environment. These restrictions will be in effect until the deed provisions are terminated, removed, or modified as specified in the appropriate CERCLA decision document and protectiveness of human health and the environment can be assured by the modified restrictions or additional restrictions, if necessary (Army 2007).

Environmental Services Cooperative Agreement Remediation Program (ESCA RP) Team

ARCADIS U.S, Inc. (formerly LFR Inc.), Weston Solutions, Inc., and Westcliffe Engineers, Inc.

Explosive

A substance or a mixture of substances that is capable by chemical reaction of producing gas at such temperature, pressure, and speed as to cause damage to the surroundings. The term “explosive” includes all substances variously known as high explosives and propellants, together with igniters, primers, initiators, and pyrotechnics (e.g., illuminant, smoke, delay, decoy, flare, and incendiary compositions).

Feasibility Study (FS)

A study conducted where the primary objective is “to ensure appropriate remedial alternatives are being developed and evaluated and an appropriate remedy selected” (40 CFR 300.430[e]).

High Explosive (HE)

An explosive substance designed to function by detonation (e.g., main charge, booster, or primary explosive).

Intrusive Activity

An activity that involves or results in the penetration of the ground surface at an area known or suspected to contain MEC. Intrusive activities can be of an investigative or removal action nature.

Mag and dig

A method of target investigation where handheld geophysical instruments are used to detect anomalies, which are immediately investigated (without using collection of digital data and post processing to determine which anomalies to dig) by manual digging or with the assistance of heavy equipment.

Mag and flag

A method of target investigation where handheld geophysical instruments are used to detect anomalies, anomalies are marked with a flag and are later investigated by manual digging or with the assistance of heavy equipment.

Material Potentially Presenting an Explosive Hazard (MPPEH)

Material that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris); or potentially contains a high enough concentration of explosives such that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization or disposal operations). Excluded from MPPEH are munitions within the DoD established munitions management system and other hazardous items that may present explosion hazards (e.g., gasoline cans, compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Military Munitions

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 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 thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear 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)

DoD-established program that manages the environmental, health, and safety issues presented by MEC.

Munitions and Explosives of Concern (MEC)

This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means: (A) UXO, as defined in 10 U.S.C. 101(e)(5)(A) through (C); (B) DMM, as defined in 10 U.S.C. 2710(e)(2); or (C) Munitions constituents (e.g., TNT, cyclotrimethylenetrinitramine [RDX]), as defined in 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions Constituents (MC)

Any materials originating from UXO, DMM, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710[e][3])

Munitions Debris (MD)

Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions Response

Response actions, including investigation, removal actions, and remedial actions to address the explosives safety, human health, or environmental risks presented by UXO, DMM, or MC, or to support a determination that no removal or remedial action is required.

Munitions Response Area (MRA)

Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites. (32 CFR 179.3)

Munitions Response Site (MRS)

A discrete location within an MRA that is known to require a munitions response.

Ordnance and Explosives (OE)

OE is an obsolete term replaced by MEC. See MEC in the glossary for further definition.

Quality Assurance (QA)

The management system implemented by a United States Army Corps of Engineers (USACE) Safety Specialist or a Third Party Safety Specialist to ensure Quality Control (QC) is functioning and that project quality objectives are being met. QC components include planning, implementation, assessment, reporting, and quality improvement.

Quality Control (QC)

The system of inspections, typically performed by the munitions contractor performing the work, of operational activities, work in progress, and work completed to assess the attributes and performance of a process against defined standards that are used to fulfill requirements for quality.

Remedial Actions

Those actions consistent with a permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health, welfare, or the environment. The term includes but is not limited to such actions at the location of the release as storage; confinement; perimeter protection using dikes, trenches, or ditches; clay cover; neutralization; cleanup of released hazardous substances and associated contaminated materials; recycling or reuse; diversion; destruction; segregation of reactive wastes; dredging or excavations; repair or replacement of leaking containers; collection of leachate and runoff; on-site treatment or incineration; provision of alternative water supplies; and any monitoring reasonably required to assure that such actions protect the public health, welfare, and the environment. The term includes the costs of permanent relocation of residents and businesses

and community facilities where the President of the United States determines that, alone or in combination with other measures, such relocation is more cost-effective and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition off site of hazardous substances, or may otherwise be necessary to protect the public health or welfare. The term includes off-site transport and off-site storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials.

Remedial Investigation (RI)

An investigation intended to “adequately characterize the site for the purpose of developing and evaluating an effective remedial alternative” (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.

Response Action

Action taken instead of or in addition to a removal action to prevent or minimize the release of MEC so that it does not cause substantial danger to present or future public health or welfare or the environment.

Small Arms Ammunition (SAA)

Ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns.

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, installation, personnel, or material; and (C) remain unexploded either by malfunction, design, or any other cause. (10 U.S.C. 101[e][5][A] through [C])

UXO-Qualified Personnel

Personnel who have performed successfully in military EOD positions, or are qualified to perform in the following Department of Labor, Service Contract Act, Directory of Occupations, contractor positions: UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, or Senior UXO Supervisor.

UXO Technicians

Personnel who are qualified for and filling Department of Labor, Service Contract Act, Directory of Occupations, contractor positions of UXO Technician I, UXO Technician II, and UXO Technician III.

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1.0 INTRODUCTION

This Land Use Controls Implementation Plan, and Operation and Maintenance Plan (LUCIP/OMP) was prepared by the Environmental Services Cooperative Agreement (ESCA) Remediation Program (RP) Team (the ESCA RP Team) on behalf of the Fort Ord Reuse Authority (FORA) for the Group 2 Munitions Response Area (MRA) within the former Fort Ord in Monterey County, California (Figure 1). Group 2 includes the California State University Monterey Bay (CSUMB) Off-Campus MRA. Originally, Group 2 included the County North MRA; however, in August 2009, the Track 1 Plug-In Approval Memorandum County North Munitions Response Area, Former Fort Ord, California (“the Approval Memorandum”) was issued for the County North MRA by the United States Department of the Army (Army) for public review and comment (Army 2009). A notice announcing agency concurrence with the Approval Memorandum was published on March 16, 2010. The Track 1 Plug-In process was described in the Army’s “Record of Decision, No Further Action Related to Munitions and Explosives of Concern - Track 1 Sites, No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22)” (Army 2005).

The purpose of this LUCIP/OMP is to provide remedy implementation and maintenance information for the Group 2 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD) dated January 7, 2015 (Appendix A).

The selected remedy addresses human health and the environment munitions and explosives of concern (MEC) risk that potentially remains in the CSUMB Off-Campus MRA. Group 2 munitions responses (MEC removals) have been completed, significantly reducing the risks to human health and the environment. The selected remedy for the CSUMB Off-Campus MRA includes Land Use Controls (LUCs) because detection technologies may not detect all MEC present. The LUCs include requirements for: (1) MEC recognition and safety training for those people that conduct ground-disturbing or intrusive activities on the property; (2) construction support by unexploded ordnance (UXO)-qualified personnel for ground-disturbing or intrusive activities; and (3) restrictions prohibiting residential use on a portion of the MRA. These LUCs are intended to limit MEC risk that may remain at the CSUMB Off-Campus MRA.

Munitions constituents that are not present in high enough concentrations to pose an explosive hazard are addressed as hazardous and toxic waste and will be handled accordingly. Such munitions constituents are outside the scope of this LUCIP/OMP. The determination of whether the concentration of munitions constituents present an explosive hazard should be made with the assistance of construction support by UXO-qualified personnel.

The selected remedy will be implemented by FORA under the ESCA and in accordance with the Administrative Order on Consent (AOC) for Cleanup of Portions of the Former Fort Ord, Docket No. R9-2007-003. This LUCIP/OMP was developed to: (1) outline the processes for implementing land use restrictions; and (2) identify procedures for responding to MEC discoveries, including coordinating a response to a discovery of a significant amount of MEC in the Group 2 MRA. The selected LUCs may be modified in the future. In addition, Long-

Term Management Measures (LTMMs) comprised of a deed restriction, annual monitoring and reporting, and five-year review reporting will be implemented for the reuse areas within the CSUMB Off-Campus MRA.

1.1 Regulatory Background

The former Fort Ord was placed on the National Priorities List in 1990. To oversee the cleanup of the base, the Army, California Environmental Protection Agency Department of Toxic Substances Control (DTSC), Central Coast Regional Water Quality Control Board (RWQCB), and United States Environmental Protection Agency (EPA) entered into a Federal Facility Agreement (FFA). One of the purposes of the FFA is to ensure that the environmental impacts associated with past and present activities at the former Fort Ord are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health and the environment. In November 1998, the Army agreed to evaluate MEC at the former Fort Ord and perform a base-wide Munitions Response (MR) Remedial Investigation/Feasibility Study (RI/FS) consistent with CERCLA. The base-wide MR RI/FS program addressed MEC hazards on the former Fort Ord and evaluated past removal actions as well as recommended future remedial actions deemed necessary to protect human health and the environment under future uses. In April 2000, an agreement was signed between the Army, EPA, and DTSC to evaluate MEC at the former Fort Ord subject to the provisions of the FFA. The signatories agreed that the FFA provided the appropriate framework and process to address the Army's MEC activities.

In March 2007, the Army and FORA entered into an ESCA to provide MEC remediation services funding. In accordance with the ESCA and an AOC, FORA is responsible for completion of CERCLA response actions, except for those responsibilities retained by the Army, on approximately 3,300 acres of the former Fort Ord. The AOC was entered into 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 underlying property was transferred to FORA in May 2009. The CSUMB Off-Campus MRA is included in the ESCA. The Army is the responsible party and lead agency for investigating, reporting, making cleanup decisions, and taking cleanup actions at the former Fort Ord. Under the ESCA, FORA is investigating, reporting, and implementing cleanup actions within the ESCA areas on behalf of the Army.

The CSUMB Off-Campus MRA includes sites where MEC were found and munitions response (MEC removals) actions were conducted. The CSUMB Off-Campus MRA contains portions, or all, of several munitions response sites (MRSs) that were suspected of having been used for military training with military munitions. These MRSs were investigated, with all detected MEC removed. These munitions response actions also included Quality Control and Quality Assurance requirements that evaluated the adequacy of the munitions response actions.

Although MEC is not expected to be encountered within these MRSs, it is possible that some MEC may not have been detected and remains present. Because a future land user (e.g., resident, recreational user, maintenance worker, or construction worker) may encounter MEC at the CSUMB Off-Campus MRA, a Group 2 RI/FS was conducted to evaluate remedial

alternatives to address this potential risk to future land users (ESCA RP Team 2013). The Group 2 RI/FS was developed by FORA under the ESCA and in accordance with the AOC. The Group 2 RI/FS evaluated the risks related to potentially remaining MEC within the CSUMB Off-Campus MRA based upon the intended future uses. On January 7, 2015, the Army and EPA, in consultation with DTSC, recorded the final decision in the ROD documenting the selected remedial alternative of LUCs for managing the risk to future land users from MEC that potentially remain in the CSUMB Off-Campus MRA. This LUCIP/OMP was prepared as a result of the selection of LUCs as a component of the remedy in accordance with the ROD for CSUMB Off-Campus MRA.

1.2 FORA ESCA Regulatory Framework and Responsibilities

In connection with the early transfer of a portion of the former Fort Ord, FORA performed a portion of the Army's cleanup obligations under an ESCA grant. Pursuant to the associated AOC, entered into in December 2006 and effective July 25, 2008, and the ESCA, dated March 27, 2007, FORA agreed to implement the selected remedy for the CSUMB Off-Campus MRA.

This LUCIP/OMP fulfills the AOC requirements identified under CSUMB Off-Campus MRA Appendix B, Statement of Work, Tasks 7 and 8. FORA requested EPA's approval to waive Appendix B, Statement of Work, Task 6 (Remedial Design/Remedial Action) requirements of the AOC, as the selected remedy for the CSUMB Off-Campus MRA consists solely of institutional controls implementation. EPA approved this request in a letter to FORA dated March 16, 2015.

1.2.1 FORA Successor in Interest

In 2014, Assembly Bill 1614 was passed to extend FORA's statutory authorities to June 30, 2020, extending the organization by 6 years. The federal deeds, ESCA and AOC fully contemplated the eventual sunset of FORA and made provisions for a successor in interest to perform FORA's Long-Term Obligations (LTOs). For purposes of this LUCIP/OMP, the terminology of "FORA or its successor" refers to obligations or requirements that are currently assigned to FORA, but will eventually be transferred to FORA's successor in interest for the performance of LTOs.

1.3 Area of Remedy Implementation

The area addressed by this LUCIP/OMP consists of those areas included in the Army's ROD, Group 2, California State University Monterey Bay Off-Campus Munitions Response Area, Former Fort Ord, California (Appendix A). The survey plats for the CSUMB Off-Campus MRA are provided in Appendix B.

The CSUMB Off-Campus MRA is located in the north-central portion of the former Fort Ord, bordered by Inter-Garrison Road to the north, the County North MRA to the east and southeast, the Parker Flats MRA to the south, and 8th Avenue and CSUMB campus property to the west and southwest (Figure 1). The CSUMB Off-Campus MRA encompasses

approximately 332.6 acres and is composed mostly of MRS-31, which includes four smaller MRSs: MRS-04C, MRS-07, MRS-08, and MRS-18. The remainder of the MRA consists of MRS-13C and a portion of MRS-13B (Figure 2).

The CSUMB Off-Campus MRA includes two proposed planned reuses: residential (CSUMB campus housing) and non-residential (CSUMB open space park).

1.4 Description of Selected Remedy

The selected remedy addresses risks to human health and the environment from MEC that potentially remains in the CSUMB Off-Campus MRA. Munitions responses (MEC removals) have been completed at the CSUMB Off-Campus MRA, significantly reducing the risks to human health and the environment. The selected remedy for the CSUMB Off-Campus MRA includes LUCs because detection technologies may not detect all MEC present. The LUCs include requirements for:

- (1) MEC recognition and safety training for those conducting ground-disturbing or intrusive activities on the property;
- (2) Construction support by UXO-qualified personnel for ground-disturbing or intrusive activities; and
- (3) Restrictions prohibiting residential use in the proposed future non-residential reuse area.

For the purpose of this remedy, residential use includes, but is not limited to: 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 (Army 2007). Any proposal for residential development in the proposed non-residential reuse portion of the CSUMB Off-Campus MRA will be subject to regulatory agency and Army review and approval.

The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as real property owner or as a government entity.

As part of the LUC implementation strategy, LTMMs comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the CSUMB Off-Campus MRA. The Army will evaluate these areas as part of the installation-wide CERCLA five-year reviews, with the first review for the CSUMB Off-Campus MRA to be conducted in 2017. The selected LUCs may be modified in the future based on the five-year review process.

As part of the early transfer of the subject property, the Army has entered into a State Covenant to Restrict the Use of Property (CRUP) with DTSC that documents land use restrictions. The existing deed to FORA for the CSUMB Off-Campus MRA parcel includes the following land use restrictions: 1) residential use; and 2) excavation (unless construction support and MEC recognition and safety training are provided). The Army will modify the

existing land use restrictions in the federal deed, as necessary, to reflect the selected remedy. FORA, or its successor under the ESCA and the AOC, will prepare and submit annual letter reports to EPA and DTSC summarizing any MEC found and changes in site conditions that could increase the possibility of encountering MEC. Copies of the annual monitoring report will also be provided to the Army for inclusion in the five-year reviews.

While the Army does not consider California laws and regulations concerning CRUPs to be applicable or relevant and appropriate requirements (ARARs), the Army entered into CRUPs with DTSC at the time the property was transferred to FORA. The CRUPs set forth protective provisions, covenants, restrictions and conditions applicable to properties; and compliance responsibility lies with current and future land owners and occupants. Each and every CRUP restriction and requirement (a) runs with the land, (b) is enforceable by DTSC and (c) is imposed on entire properties unless expressly stated. DTSC will modify the existing CRUP, if appropriate, to reflect the land use restrictions included in the selected remedy. Although DTSC and EPA Region 9 disagree with the Army's determination that California laws and regulations concerning CRUPs are not ARARs, they will agree-to-disagree on this issue since the Army executed the CRUPs and DTSC will modify the CRUPs, if appropriate, to be consistent with the identified remedy.

1.4.1 MEC Recognition and Safety Training

For the areas addressed in this LUCIP/OMP, ground-disturbing or intrusive activities are expected to occur. People involved in ground-disturbing or intrusive operations at these areas will be required to attend MEC recognition and safety training to increase awareness of and ability to identify MEC items. Prior to conducting ground-disturbing or intrusive activities, property owners will be required to notify FORA or its successor for MEC recognition and safety training for those performing ground-disturbing or intrusive activities.

MEC recognition and safety training will be evaluated as part of the five-year review process to determine if the training program should continue. If further evaluation indicates that this LUC is no longer necessary, the program may be discontinued with regulatory approval.

1.4.2 Construction Support

Construction support by UXO-qualified personnel is required during any intrusive or ground-disturbing construction activities at the CSUMB Off-Campus MRA in order to address potential MEC risks to construction and maintenance personnel. Construction activities are defined as any activity that involves disturbance of 10 cubic yards (cy) or more. Construction support will be arranged during the construction and maintenance planning stages of the project prior to the start of any intrusive or ground-disturbing activities. CSUMB in consultation with DTSC, shall determine the level of construction support required on a case-by-case basis. Construction support is determined by the probability of encountering MEC.

If evidence of MEC is found during construction support activities, the intrusive or ground-disturbing work will immediately cease, no attempt will be made to disturb, remove, or destroy the MEC, and the local law enforcement agency having jurisdiction on the property will be immediately notified so that appropriate explosive ordnance disposal (EOD) or other personnel can be dispatched to address the MEC, as required under applicable Department of Defense (DoD) directives, laws, and/or regulations. Construction support may be applicable

in the short term during development of the reuse area, and/or in the long-term during established reuse.

Construction support will be evaluated as part of the five-year review process to determine if the LUC should continue. If the MEC-related data collected during the development of the disturbed areas indicate that this LUC is no longer necessary, construction support may be discontinued after regulatory approval.

1.4.3 Restrictions Prohibiting Residential Use

Residential use restrictions placed on the CSUMB Off-Campus MRA proposed future non-residential reuse area at the time the property was transferred to FORA will be maintained. For the purposes of this document, residential reuse includes, but is not limited to: 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 (FOSET, Army 2007).

1.4.4 Long-Term Management Measures

As part of implementation, the LUCIP/OMP describes the following LTMMs:

- **Existing land use restrictions:** The deed to FORA for the CSUMB Off-Campus MRA parcel restricts residential use in the proposed future non-residential reuse area. Residential use includes, but is not limited to: 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. The CRUP for the CSUMB Off-Campus MRA parcel was amended to restrict residential use only in the proposed future non-residential reuse area (Appendix C). [Final CRUP amendment awaiting DTSC signature and will be added as Appendix C to Final LUCIP/OMP.]
- **Annual monitoring and reporting:** FORA, or its successor entity under the ESCA and the AOC, will perform annual monitoring and reporting. FORA or its successor entity will notify the regulatory agencies, as soon as practicable, of any MEC-related information identified during use of the property, and report the results of monitoring activities annually.
- **Five-year review reporting:** Five-year reviews will be conducted by the Army in accordance with CERCLA Section 121(c) and the Fort Ord FFA. The five-year review will evaluate the protectiveness of the selected remedy. Based on the evaluation, the selected LUCs may be modified or discontinued, with the approval of EPA and DTSC.

1.4.5 Other Long-Term Management Measures

A number of other LTMMs are required to be implemented, tracked and reported on the CSUMB Off-Campus MRA in addition to the selected LUCs imposed under the ROD that are required by the deed, CRUP, municipal ordinances and other enforceable documents and agreements. This may include long-term ground water restrictions, construction related restrictions, and other relevant municipal codes.

2.0 SITE DESCRIPTION

The former Fort Ord is located on the Monterey Bay in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Figure 1) and consists of approximately 28,000 acres. State Route 1 passes through the western portion of former Fort Ord, delineating the beachfront from the rest of the base. Laguna Seca Recreation Area and Toro Regional Park border former Fort Ord to the south and southeast, respectively, as well as several small communities, such as Toro Park Estates and San Benancio. The Salinas Valley agricultural uses border the former installation to the North.

The CSUMB Off-Campus MRA is located in the north-central portion of the former Fort Ord, bordered by Inter-Garrison Road to the north, the County North MRA to the east and southeast, the Parker Flats MRA to the south, and 8th Avenue and CSUMB campus property to the west and southwest. The CSUMB Off-Campus MRA encompasses approximately 332.6 acres.

This section provides background information on the CSUMB Off-Campus MRA, including a summary of results of the site-specific remedial investigation and site evaluations presented in the Group 2 RI/FS.

2.1 Site History

Since 1917, portions of the former Fort Ord were used by cavalry, field artillery, and infantry units for maneuvers, target ranges, and other purposes. From 1947 to 1974, Fort Ord was a basic training center. After 1975, the 7th Infantry Division occupied Fort Ord. Fort Ord was selected in 1991 for decommissioning, but troop reallocation was not completed until 1993 and the base was not officially closed until September 1994. The property remaining in the Army's possession was designated as the Presidio of Monterey Annex on October 1, 1994, and subsequently renamed the Ord Military Community (OMC). Although Army personnel still operate parts of the base, no active Army division is stationed at the former Fort Ord. Since the base was selected in 1991 for Base Realignment and Closure (BRAC), site visits, historical and archival investigations, military munitions sampling, and removal actions have been performed and documented in preparation for transfer and reuse of the former Fort Ord property. The Army will continue to retain the OMC and the U.S. Army Reserve Center located at the former Fort Ord. The remainder of the former Fort Ord was identified for transfer to Federal, State, and local government agencies and other organizations and, since base closure in September 1994, has been subjected to the reuse process. Portions of the property on the installation have been transferred. A large portion of the Inland Training Ranges was assigned to the U.S. Department of the Interior, Bureau of Land Management. Other areas on the installation have been, or will be, transferred through economic development conveyance, public benefit conveyance, negotiated sale, or other means.

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, and demolition materials) were conducted at Fort Ord. Because of these activities, MEC, specifically UXO

and discarded military munitions (DMM), have been encountered and are known or suspected to remain present at sites throughout the former Fort Ord.

2.2 Regulatory History

The Army is the responsible party and lead agency for investigating, reporting, making cleanup decisions, and taking cleanup actions at the former Fort Ord under CERCLA. To address the possibility of the public being exposed to explosive hazards, MEC investigations and removal actions began following BRAC listing and closure of Fort Ord. In November 1998, the Army agreed to evaluate military munitions at the former Fort Ord in an Ordnance and Explosives RI/FS (base-wide OE RI/FS) — now termed the base-wide MR RI/FS — consistent with CERCLA. An FFA was signed in 1990 by the Army, EPA, DTSC (formerly the Department of Health Services or DHS), and the RWQCB. The FFA established schedules for performing remedial investigations and feasibility studies and requires that remedial actions be completed as expeditiously as possible. In April 2000, an agreement was signed between the Army, EPA, and DTSC to evaluate military munitions and perform military munitions response activities at the former Fort Ord subject to the provisions of the Fort Ord FFA.

The base-wide MR RI/FS program reviews and evaluates past investigative and removal actions, as well as recommends future response actions deemed necessary to protect human health and the environment regarding explosive safety risks posed by MEC on the basis of proposed reuses. These reuses are specified in the Base Reuse Plan (FORA 1997) and its updates. The base-wide MR RI/FS documents are being prepared in accordance with the FFA, as amended. These documents are made available for public review and comment, and placed in the Army's Fort Ord Administrative Record.

The Army has been conducting military munitions response actions (e.g., investigation, removal) at identified MRSs and will continue these actions to mitigate imminent MEC-related hazards to the public, while gathering data about the type of military munitions and level of hazard at each of the MRSs for use in the base-wide MR RI/FS. The Army is performing its activities pursuant to the President's authority under CERCLA Section 104, as delegated to the Army in accordance with Executive Order 12580 and in compliance with the process set out in CERCLA Section 120. Regulatory agencies (EPA and DTSC) have been and will continue to provide oversight of the munitions response activities pursuant to the FFA.

The Army conducts ongoing and future responses to MEC at the former Fort Ord that are components of the Army's base-wide efforts to promote explosive safety because of Fort Ord's history as a military base. These efforts include: (1) five-year reviews and reporting; (2) notices and restrictions in deeds and property transfer documentations (e.g., letter of transfer); (3) MEC incident reporting; (4) MEC recognition and safety training; (5) school education; and (6) community involvement.

In March 2007, the Army and FORA entered into an ESCA to provide funding for MEC remediation services. In accordance with the ESCA, the AOC, and the FFA Amendment No. 1, FORA is responsible for completion of the CERCLA MEC and related remedial activities,

except for those responsibilities retained by the Army, on approximately 3,300 acres of the former Fort Ord with funding provided 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 underlying property was transferred to FORA in May 2009.

As part of the early transfer of the subject property, the Army has entered into State CRUPs with DTSC that document land use restrictions. The applicability of and requirements for CRUPs are described in California Code of Regulations Section 67391.1 and California Civil Code Section 1471.

As described in Final Summary of Existing Data Report, Former Fort Ord, Monterey County, California (ESCA RP Team 2008), the ESCA areas were combined into nine MRAs, and they were further consolidated into four groups according to similar pathway-to-closure characteristics. Group 1 consists of the Parker Flats and Seaside MRAs. Group 2 consists of the California State University Monterey Bay (CSUMB) Off-Campus MRA. Originally, Group 2 included the County North MRA; however, the County North MRA was removed from Group 2 in 2010 following EPA and DTSC concurrence with the Army's Track 1 Plug-In determination for the County North MRA (Section 1.0). Group 3 consists of Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site MRAs. Originally, Group 3 included the Interim Action Ranges MRA. The Interim Action Ranges MRA was removed from Group 3 for further evaluation as agreed upon by FORA, EPA, DTSC and the Army. Group 4 consists of the Future East Garrison MRA.

2.3 CSUMB Off-Campus MRA Munitions Response Site Summary

To facilitate previous MEC investigations and removal activities, the historical use areas were divided into MRSs. Results of the remedial investigations were presented in the Group 2 RI/FS (ESCA RP Team 2013). The CSUMB Off-Campus MRA encompasses approximately 332.6 acres and is composed mostly of MRS-31, which includes four smaller MRSs: MRS-04C, MRS-07, MRS-08, and MRS-18. The remainder of the MRA consists of MRS-13C and a portion of MRS-13B.

Historical records and recovered MEC and munitions debris (MD) indicate that the majority of the CSUMB Off-Campus MRA had previously been used as a troop training and maneuver area.

2.4 CSUMB Off-Campus MRA Remedial Investigation Summary

The CSUMB Off-Campus MRA contains portions, or all, of several MRSs, where munitions response actions have been conducted. These MRSs are shown on Figure 2. The remedial investigation for the CSUMB Off-Campus MRA is based on the evaluation of previous work conducted for the MRA in accordance with the Group 2 RI/FS Work Plan (ESCA RP Team 2009).

This section provides background information on the Remedial Investigation data collection and review (site evaluations) conducted for the MRSs. A summary of the site evaluations for

the MRSs in the CSUMB Off-Campus MRA as presented in the Group 2 RI/FS (Volume 1; ESCA RP Team 2013) is provided below.

Scope of Removal Actions – Initial investigations included grid sampling within MRS-04C, MRS-07, MRS-08, MRS-13B, and MRS-18. Based on the results of the grid sampling, removal actions designed to address MEC to a depth of up to 3 or 4 feet (ft) below ground surface (bgs) were conducted in MRS-13B and across MRS-31, which encompasses MRS-04C, MRS-07, MRS-08, and MRS-18. The main objective of the removal actions was to remove detected MEC from the MRA to a depth of 3 to 4 ft (or deeper). If an anomaly was detected below a depth of 3 to 4 ft, permission from the U.S. Army Corps of Engineers OE Safety Specialist was obtained prior to continuing the investigation. A removal action was also conducted in MRS-13C and was designed to address MEC to a depth of up to 4 ft bgs. The MEC investigations and removal actions at the CSUMB Off-Campus MRA were performed by Army contractors Human Factors Applications, Inc. (HFA), UXB International, Inc. (UXB), and USA Environmental, Inc. (USA; formerly CMS Environmental, Inc. [CMS]).

A verification and quality assurance action, consisting of a Residential Quality Assurance (RQA) Pilot Study and Implementation Study, was conducted on the removal actions in the proposed future residential reuse area of the CSUMB Off-Campus MRA. The RQA Pilot Study and Implementation Study activities included digital geophysical investigation in a portion of the proposed future residential reuse area. All anomalies detected during these actions were investigated and resolved, and all detected MEC items were removed or destroyed. The verification and quality assurance action was conducted by FORA on behalf of the Army under the ESCA.

These investigations and removal actions conducted within the CSUMB Off-Campus MRA were focused on addressing explosive hazards.

Site Evaluation – The evaluation process was documented by completion of a series of checklists for the CSUMB Off-Campus MRA in accordance with the Group 2 RI/FS Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix B of the Group 2 RI/FS (Volume 1; ESCA RP Team 2013).

CSUMB Off-Campus MRA is composed mostly of MRS-31, which includes four smaller MRSs: MRS-04C, MRS-07, MRS-08, and MRS-18. The remainder of the MRA consists of MRS-13C and a portion of MRS-13B (Figure 2). The MRSs were identified through a review of former Fort Ord records compiled for the Revised Fort Ord Archive Search Report (USACE 1997a) and was used to facilitate MEC investigations and removal actions. The MRA boundaries generally correspond to the boundaries of land transfer Parcel S1.3.2 (Figure 2). Based on the results of the literature review, investigations, and removal actions, the MRA was used for chemical, biological, and radiological (CBR) training (MRS-04C); mine and booby trap training (MRS-07 and MRS-08); practice mortar training (MRS-13B and MRS-13C); minefield practice area (MRS-18); and troop maneuvers, confidence course, and land navigation training (MRS-31). CBR training typically included use of tear gas agents in a test chamber or use of hand grenades containing tear gas agents. There were no buildings identified on facility maps or historical aerial photographs that were located within

or near MRS-04C that may have been used for CBR training (i.e., gas chambers). Several hand grenades (MEC) containing the tear gas agent O-Chlorobenzylidene Malonitrile (CS) and MD from CS grenades were found in the eastern two-thirds of the MRA, but the locations did not coincide with MRS-04C or CBR training areas identified on historical facilities and training maps. The lack of typical CBR facilities and few CS items encountered indicated incidental use of CS grenades, but no evidence of a gas chamber at the CSUMB Off-Campus MRA. Recovered MEC and MD also indicated that practice hand grenade training and practice rifle grenade training occurred in MRS-31.

An initial grid sampling investigation was conducted within MRS-04C, MRS-07, MRS-08, MRS-13B, and MRS-18 in 1994 to determine if further action (removal) was necessary. The grids received a surface and subsurface survey using analog geophysical instruments across the entire grid and anomalies were investigated to a depth of up to 4 feet bgs. Based on the results of the grid sampling investigation, the U.S. Army Corps of Engineers, Huntsville Division (CEHND) Safety Specialist determined the site to contain UXO. Therefore, a removal action was conducted across the entire MRS-31. The removal action in MRS-31 was conducted in three parts with detected anomalies investigated to a depth of up to 3 or 4 feet bgs. The first part of the removal action was conducted by HFA over the majority of the area referred to as the California State University (CSU) Footprint, which included MRS-31, using analog geophysical instruments. Anomalies were excavated up to a depth of 4 ft bgs (HFA 1994). The second and third parts of the removal action were conducted by UXB over the remaining portion of the CSU Footprint in the eastern and central portions of MRS-31. Grids were investigated using analog geophysical instruments and anomalies were initially investigated up to a depth of 3 ft bgs, but the excavation depth requirement was later changed to 4 ft bgs. If an anomaly was detected below a depth of 3 to 4 ft, permission from the U.S. Army Corps of Engineers OE Safety Specialist was obtained prior to continuing the investigation (UXB 1995a, 1995b, and 1995c). A MEC removal action performed by USA in MRS-13C, located along the southern boundary of the CSUMB Off-Campus MRA, and in MRS-13B, located south of MRS-31, was conducted using analog geophysical instruments with detected anomalies investigated to a depth of up to 4 feet bgs (USA 2000a and 2000b).

An RQA Pilot Study was conducted by FORA contractors in the approximately 49-acre proposed future residential (CSUMB campus housing) reuse area of the CSUMB Off-Campus MRA, which includes portions of MRS-31, MRS-13C, and MRS-13B, as an additional verification and quality assurance of prior MEC investigations and removal actions. The RQA data were collected in two phases. During the first phase of the RQA Pilot Study, a digital geophysical mapping investigation and subsurface MEC removal were conducted in approximately 17 acres followed by a soil scrape and second digital geophysical mapping investigation and subsurface MEC removal on approximately five of the 17 acres. During the second phase of the RQA Pilot Study, a detailed data evaluation was conducted on the approximately 49-acre area, and a verification site walk with analog geophysical instruments was conducted to support the data evaluation. The digital and analog geophysical instruments used during the RQA Pilot Study were effective at detecting the types of munitions expected at the CSUMB Off-Campus MRA. The RQA Pilot Study activities included removal of detected MEC and MD from the proposed future residential (CSUMB campus housing) reuse area to the depth of detection and confirmed the results of previous MEC investigations and removal actions. Based on the RQA Process evaluation, including

results of the RQA Pilot Study and RQA Implementation Study, the proposed future residential reuse area in the CSUMB Off-Campus MRA was recommended as acceptable for future residential reuse with appropriate institutional controls, such as the local digging and excavation ordinance, construction support, and disclosures (ESCA RP Team 2012 and 2013).

DTSC released the Residential Protocol (DTSC 2008b) that, when successfully implemented and approved by DTSC, would provide a basis to remove a State residential CRUP on munitions response sites (DTSC 2014). FORA has submitted the Final Residential Protocol Implementation Report, CSUMB Off-Campus MRA, dated October 21, 2014 (ESCA RP Team 2014) to provide data and conclusions to support the removal of the residential CRUP on the proposed future residential reuse area. [Final CRUP amendment awaiting DTSC signature and will be added as Appendix C to Final LUCIP/OMP.]

The majority of MEC and MD encountered within the CSUMB Off-Campus MRA were consistent with the documented historical use of the MRA as a troop training and maneuver area. The types of MEC and MD removed from the MRA included: firing devices, hand grenades and hand grenade fuzes, rifle grenades, mines and mine fuzes, mortars (60 millimeter [mm] and 81mm), various projectiles, illumination flares and signals, smoke generating items, rockets, and simulators. The majority of these items were associated with practice and pyrotechnic munitions.

2.5 CSUMB Off-Campus MRA Munitions Response Site Summaries

This section summarizes the MEC investigations and removal actions conducted for the MRSs identified in the Group 2 RI/FS (Volume 1; ESCA RP Team 2013). MEC encountered during these actions were destroyed by detonation and recovered MD was disposed of or recycled after being inspected and determined not to pose an explosive hazard.

The CSUMB Off-Campus MRA includes MRS-31 (which includes four smaller MRSs: MRS-04C, MRS-07, MRS-08, and MRS-18), MRS-13C, and a portion of MRS-13B where MEC investigations and removal actions have been conducted as presented below. The majority of MEC and MD encountered within the CSUMB Off-Campus MRA were consistent with the documented historical use of the MRA as a troop training and maneuver area. The results of the remedial investigation indicated that the MEC investigations and removal actions conducted within the MRSs successfully detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2013).

MRS-31 (Includes MRS-04C, MRS-07, MRS-08, and MRS-18)

From January to February 1994, HFA conducted initial investigations at MRS-04C, MRS-07, MRS-08, and MRS-18, located within MRS-31, and MRS-13B. Sampling grids were approximately 100 by 100 ft and separated by at least 200 ft. The grids received a surface and subsurface survey across the entire grid using either the Schonstedt Model GA-52C or Model GA-72Cv magnetometer (HFA 1994). Based on the results of the grid sampling, the CEHND Safety Specialist determined the site to contain UXO; therefore, HFA conducted a removal

action across the entire area referred to as the CSU Footprint, which generally corresponds to MRS-31.

From February to June 1994, HFA conducted a subsurface removal action within a portion of the CSU Footprint, which corresponded to the western portion of MRS-31. The site was divided into 100-ft by 100-ft square grids and grids received a surface and subsurface survey across the entire grid using Schonstedt Model GA-52Cv or GA-72Cv magnetometers. Anomalies were marked with flags, and were excavated up to a depth of 4 ft bgs. In accordance with the work plan, non-UXO scrap was initially not removed from the grid. In March 1994, the scope of work was modified to allow HFA to remove non-UXO-related scrap from the grids (HFA 1994).

In June 1994, UXB took over the removal action activities within the remaining portion of the CSU Footprint, which corresponded to the eastern portion and a central portion of MRS-31. The remaining portion was divided into 100-ft by 100-ft square grids. Initially, the geophysical instruments used were the Schonstedt Model GA-52C and Model GA-72Cv magnetometers. In October 1994, UXB began using the Schonstedt Model GA-52Cx magnetometer. Each anomaly was marked with a flag. Excavations were conducted up to a depth of 3 ft bgs until the excavation depth requirement was changed to 4 ft bgs in December 1994. UXB's removal action was conducted over two areas in MRS-31. From July 1994 to July 1995, UXB conducted a subsurface removal action (part of which extended into the adjacent County North MRA) in the eastern portion of MRS-31. From April to June 1995, UXB conducted a subsurface removal action to a depth of 4 ft bgs located approximately in the center of MRS-31 using the Schonstedt Model GA-52Cx magnetometer (UXB 1995a, 1995b, and 1995c).

MRS-13B

MRS-13B was included in the grid sampling investigation performed by HFA from January to February 1994. Fifty-seven sampling grids were approximately 100-ft by 100-ft and separated by at least 200 ft. The grids received a surface and subsurface survey across the entire grid using either the Schonstedt Model GA-52C or Model GA-72Cv magnetometer (HFA 1994). Based on the results of the grid sampling, the CEHND Safety Specialist determined the site to contain UXO. Based on the MRS-13B sampling results, a removal action to a depth of 4 ft bgs was recommended in accordance with the Final Phase I Engineering Evaluation/Cost Analysis (USAECH 1997).

Between August 1995 and April 1998, a removal action was performed by CMS (which became USA Environmental, Inc.) in MRS-13B located south of MRS-31 and MRS-13C. The removal action was conducted by dividing the area into 100-ft by 100-ft grids or portions of grids. The grids were investigated using the Schonstedt Model GA-52Cx magnetometer and subsurface anomalies encountered were investigated up to a depth of 4 ft bgs. Based on the results of the removal action, no further MEC response was recommended for the area (USA 2000a).

MRS-13C

From June to September 1997, a removal action was performed by USA in MRS-13C located along the southern boundary line of the CSUMB Off-Campus MRA. The removal action in MRS-13C was conducted by dividing the area into 100-ft by 100-ft grids or portions of grids. The grids were investigated using the Schonstedt Model GA-52Cx magnetometer and subsurface anomalies encountered were investigated up to a depth of 4 ft bgs. Based on the results of the removal action, no further MEC response was recommended for the area (USA 2000b).

2.6 Potential Future Land and Resource Uses

The future land uses for the CSUMB Off-Campus MRA, summarized below, are based upon the Fort Ord Base Reuse Plan (FORA 1997) and the CSUMB Master Plan (CSUMB 2007). Future land use information is also included in the Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California (HMP; USACE 1997b) and modifications to the HMP provided in Assessment, East Garrison – Parker Flats Land Use Modifications, Fort Ord, California (Zander 2002), and Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification (Army 2004).

The CSUMB Off-Campus MRA is proposed for school/university reuse with residential infill opportunities. The reasonably foreseeable reuses being considered for the CSUMB Off-Campus MRA include:

- Residential (CSUMB campus housing), Parcel S1.3.2 — The western portion of the MRA (approximately 49 acres) is proposed for use as off-campus housing for CSUMB (CSUMB 2007). Construction and maintenance of buildings and roads, installation and maintenance of utilities, as well as the activities of future residents are expected within the reuse area;
- Non-residential (CSUMB open space park), Parcel S1.3.2 — The eastern portion of the MRA (approximately 284 acres) is proposed for an oak woodland and maritime chaparral open space park with a 100-ft buffer along the Natural Resources Management Area interface (ESCA RP Team 2008). Vegetated areas and hiking trails may require maintenance such as planting and weeding. Recreational hiking and bicycling/horseback riding on trails are expected to occur.

3.0 LAND USE CONTROL IMPLEMENTATION STRATEGIES

In this section, performance objectives for the LUC remedy to be implemented at the CSUMB Off-Campus MRA are presented along with the implementation strategy for achieving each objective. Specific actions to be taken to implement each objective, including monitoring and reporting requirements are then presented in Section 4.0.

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.

3.1 MEC Recognition and Safety Training

Performance Objective: Ensure that land users and their contractors involved in ground-disturbing or intrusive activities are educated about the possibility of encountering MEC, and ensure that land users involved in ground-disturbing or intrusive activities stop the activity when MEC is encountered and report the encounter to the appropriate authority.

Implementation Strategy: The MEC recognition and safety training requirement is currently being implemented through either classroom or tailgate instruction offered by both the FORA ESCA RP Team and by the Army. To facilitate long-term implementation of training, FORA will develop an option for delivery of training via web-based video or slide presentation. FORA will also develop and implement a process and procedures for requesting training, providing access to the training materials, and documenting and monitoring training activities. Training activities will be reported in the annual LUC monitoring report. In addition to this ROD requirement, people conducting ground-disturbing or intrusive activities are also required to obtain MEC recognition and safety training as a condition for excavation permits under the local digging and excavation ordinance. Training is also required under the deed restrictions, State CRUP, and Finding of Suitability for Early Transfer (FOSET) Environmental Protection Provisions (EPP) providing for redundancy in this LUC requirement. See Section 4.1 for details on the implementation of this LUC.

3.2 Construction Support

Performance Objectives: Ensure projects involving ground-disturbing or intrusive activities are coordinated with UXO-qualified personnel so encounters with potential MEC items will be handled appropriately. Mechanisms for implementing the requirement for construction support may include local ordinances.

Implementation Strategy: Construction support is required for ground-disturbing or intrusive activities and is being implemented through an excavation permitting process under the Monterey County (County) digging and excavation ordinance. During the excavation

permitting process, the County in consultation with DTSC, determine the level of construction support required for a project on a case-by-case basis. Construction support requirements are determined using current Department of Defense Explosives Safety Board (DDESB) requirements and site-specific conditions, including the probability of encountering MEC. To facilitate implementation of construction support, FORA will develop procedures for construction support planning, including guidelines and requirements for determining appropriate levels of construction support, response to potential MEC finds, reporting and documentation. The procedures will include actions to be taken if evidence of MEC is encountered during ground disturbing activities regardless of the volume of displacement, including requirements for land owners or contractors to stop work and report MEC finds to local law enforcement and notification to regulatory agencies. Major elements of implementing the construction support include construction planning support, response to evidence of MEC during construction support activities, construction support reporting and documentation, and determination of when construction support is no longer necessary. Construction support is also a requirement of the local digging and excavation ordinance, deed restrictions, State CRUP, and FOSET EPP providing for redundancy in this LUC requirement. See Section 4.2 for details on the implementation of this LUC.

3.3 Restrictions Prohibiting Residential Use

Performance Objectives: Ensure that any proposals to allow residential development or modifications to residential restrictions are approved by EPA and Army in coordination with DTSC.

Implementation Strategy: Residential use is currently prohibited within the proposed future non-residential reuse area of the CSUMB Off-Campus MRA by deed restriction, FOSET EPP and State CRUP. To ensure the residential use restriction is maintained, FORA and CSUMB conduct annual inspections of the MRA, including review of property transfers and deed amendments, development activities, and changes in land use. FORA and CSUMB currently conduct annual monitoring and reporting on LUCs. Responsibility for annual monitoring and reporting of LUCs will transfer to CSUMB at property transfer. A memorandum of agreement (MOA) is in place with the local jurisdictions, including CSUMB, outlining their obligation to maintain the LUCs, including the residential use restriction (DTSC 2008a; Appendix D). The residential use restriction is also a provision of the deed restrictions, State CRUP, and FOSET EPP providing for redundancy in this LUC requirement. See Section 4.3 for details on the implementation of this LUC.

3.4 Long-Term Management Measures

As part of the LUCIP/OMP, the following LTMMs will also be implemented in the CSUMB Off-Campus MRA:

Existing land use restrictions: The deed to FORA for the CSUMB Off-Campus MRA parcel restricts residential use over the entire property. The deed will be modified to remove the residential use restriction on the proposed future residential reuse area. The residential use restriction will remain for the proposed future non-residential reuse area. Residential use includes, but is not limited to: 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 the CRUP for the CSUMB Off-Campus MRA parcel restricts residential use. The CRUP for the CSUMB Off-Campus MRA parcel was amended to restrict residential use only in the proposed future non-residential reuse area (Appendix C).

Annual monitoring and reporting: FORA, or its successor entity under the ESCA and the AOC, will perform annual monitoring and reporting. FORA or its successor entity will notify the regulatory agencies, as soon as practicable, of any MEC-related data identified during use of the property, and report the results of monitoring activities annually.

Five-year review reporting: Five-year reviews will be conducted by the Army in accordance with CERCLA Section 121(c) and the Fort Ord FFA. The five-year review will evaluate the protectiveness of the selected remedy. Based on the evaluation, the selected LUCs may be modified or discontinued, with the approval of the EPA and DTSC. See section 4.9.2 for details on the implementation of this LTMM.

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4.0 REMEDY IMPLEMENTATION ACTIONS

This section presents implementation actions to facilitate LUC remedy objectives. Implementation actions including monitoring, maintenance and reporting requirements are outlined. In addition, long-term execution responsibilities have been identified.

All applicable local Building Codes and permits apply to the CSUMB Off-Campus MRA property. In addition, the County has adopted a digging and excavation ordinance that specifies special standards and procedures for ground disturbing activities on the former Fort Ord (“digging and excavation ordinance”). The intent of the ordinance is to ensure that site purchasers, developers or workers are aware of the potential that MEC may still be located on the property, and are aware of the requirements for MEC precautions to be implemented prior to any ground disturbance.

The digging and excavation ordinance applies to the CSUMB Off-Campus MRA property and is applicable to excavation, digging, development and ground disturbance that involves displacement of more than ten (10) cy. For purposes of the LUCIP/OMP, these intrusive actions will be referred to as “construction activities.” Elements of these digging and excavation ordinance include directives for: documentation of previous MEC excavation or removal; detailed project description and mapping; procurement of excavation permits; acknowledgments and permit fees; and procedures and requirements for MEC recognition and safety training, construction support, and after action reporting. As stated in the ordinance, DTSC shall be continually involved in the establishment of controls for these properties.

Post FORA land transfer, CSUMB and the County are required to implement LUC compliance monitoring and reporting. On February 27, 2008, FORA, Monterey County, the Cities of Seaside, Monterey, Del Rey Oaks, and Marina, CSUMB, University of California Santa Cruz, and Monterey Peninsula College (“jurisdictions”) entered into the Memorandum of Agreement Among the Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College and the Department of Toxic Substance Control Concerning Monitoring and Reporting on Environmental Restrictions on The Former Fort Ord, Monterey California (“the MOA”) (DTSC 2008a). As stated in the MOA, the jurisdictions, including CSUMB, are required to follow the CRUP and the County Digging and Excavation Ordinance and monitor and report LUC compliance, as outlined below. For reference, the MOA is provided in Appendix D.

In 2014, Assembly Bill 1614 was passed to extend FORA’s statutory authorities to June 30, 2020. The ESCA fully contemplated the eventual sunset of FORA and made provisions for a successor in interest to FORA’s LTO. For purposes of this LUCIP/OMP, the terminology of “FORA or its successor” refers to obligations or requirements that are currently assigned to FORA, but will eventually be transferred to FORA’s successor in interest.

4.1 MEC Recognition and Safety Training

People involved in ground-disturbing or intrusive operations at the CSUMB Off-Campus MRA will be required to attend a MEC recognition and safety training to increase their awareness of and ability to identify MEC items. Prior to conducting ground-disturbing or intrusive activities, the property owner will be required to notify FORA or its successor or the Presidio of Monterey Directorate of Environmental and Natural Resources Management to provide MEC recognition and safety training for all people performing ground-disturbing or intrusive activities. The actions to implement MEC recognition and safety trainings LUC are detailed below.

MEC recognition and safety training will be evaluated as part of the five-year review (see Section 4.4) process to determine if the training program should continue. If further evaluation indicates that this LUC is no longer necessary, the program may be discontinued upon regulatory approval.

4.1.1 Development of Training Materials and Procedures

Remedy Implementation Phase

- FORA will develop MEC recognition and safety training materials, including video and handouts, to fulfill the requirements for MEC recognition and safety training for people involved in ground-disturbing or intrusive operations.
- FORA MEC Recognition and Safety Training procedure to include: outlining process and tasks to periodically advertise availability of training including how to access Web based training materials; process for public to request training classroom and/or tailgate training, including minimum class size and timing expectations for scheduling live training; process to ensure materials are available to UXO professionals for use in conducting training, make training materials available to UXO professionals for use in conducting classroom or tailgate training, and provide access to web-based video training modules; and monitoring, reporting and audit systems.

Remedy Execution Phase

- FORA will develop procedures to ensure availability of training and provide public notification of the availability of training, to include process for public to request training, options for providing access to the training materials, and how to document and monitor training activities.

4.1.2 Providing Training

Remedy Implementation Phase

- CSUMB will follow established basic notification and training requirements identified in the Monterey County digging and excavation ordinance which include a requirement that workers receive the Safety Alert – Ordnance and Explosives at

former Fort Ord pamphlet, as prepared by the Directorate of Environmental and Natural Resources Management at the Presidio of Monterey, or its successor document, and explain to each such person the information set forth in that notice.

- The State CRUP recommends reasonable and prudent precautions be taken when conducting intrusive operations, including providing the Army's MEC recognition and safety training, or equivalent, to any persons conducting such activities.

Remedy Execution Phase

- MEC Recognition and Safety Training requirements are currently in place through existing deed restriction, State CRUP and Monterey County digging and excavation ordinance.
- CSUMB will execute training requirements and procedures, prior to issuing permits for construction activities, including MEC recognition and safety training as a condition of the applicable digging and excavation ordinance.
- FORA will make training materials available to MEC professionals for use in conducting classroom or tailgate training, and will provide access to web-based video training modules.
- Directorate of Environmental and Natural Resources Management at the Presidio of Monterey will make accessible all available documentation, information, notices and training programs to CSUMB on the Army's Fort Ord Administrative Record.

4.1.3 Monitoring and Reporting of Training Activities

Remedy Implementation Phase

- FORA to develop reporting requirements for CSUMB to track training activities and monitor land owner and contractor compliance with training requirements at part of annual LUC monitoring reporting.
- CSUMB to establish procedures, as required in State CRUP and identified in the Monterey County digging and excavation ordinance, to monitor and report MEC recognition and safety training requirements in the annual LUC monitoring report.

Remedy Execution Phase

- FORA will ensure MEC recognition and safety training requirements remain in place through existing deed restriction, State CRUP, and County digging and excavation ordinance.
- FORA and CSUMB to track training activities and include in the annual LUC monitoring report (see Section 4.4.2).

4.2 Construction Support by UXO-Qualified Personnel for Ground-disturbing or Intrusive Activities

Construction support by UXO-qualified personnel is required during any intrusive or ground-disturbing construction activities at the CSUMB Off-Campus MRA to address potential MEC risks to construction and maintenance personnel. Construction support will be arranged through CSUMB during the construction and maintenance planning stages of the project prior to the start of any “construction activities”. Requirements for construction support will be implemented consistent with the Monterey County digging and excavation ordinance. Construction activities are established in the digging and excavation ordinance and include excavation, digging, development and ground disturbance of any type that involves the displacement of more than ten (10) cy. CSUMB shall determine the level of construction support required on a case-by-case basis during the excavation permitting process. The level of construction support is determined based on the probability of encountering MEC.

If the probability of encountering MEC is determined to be low, UXO-qualified personnel must be contacted to ensure their availability, advised about the project, and placed “on call” to assist if suspected UXO are encountered during construction. Discoveries of MEC on such sites require reassessment of the level of support required. If the probability of encountering MEC is determined to be moderate to high, UXO-qualified personnel must attempt to identify and remove any explosive hazards in the construction footprint prior to any intrusive construction activities. The probability of encountering MEC in CSUMB Off-Campus MRA is considered to be low.

If evidence of MEC is found during “construction activities”, the intrusive or ground-disturbing work will immediately cease, no attempt will be made to disturb, remove, or destroy the MEC, and the local law enforcement agency having jurisdiction on the property will be immediately notified so that appropriate EOD personnel can be dispatched to address the MEC, as required under applicable laws and regulations. Construction support requirements may be applicable in the short term during initial development of the reuse area, and/or in the long-term during reuse and redevelopment activities.

Construction support will be evaluated as part of the five-year review process to determine if the LUC should continue. If the MEC-related data collected during the development of the reuse areas indicate that this LUC is no longer necessary, construction support may be discontinued with regulatory approval.

4.2.1 Construction Support Planning

Remedy Implementation Phase

- FORA will provide references to information to support CSUMB in implementation of construction support requirements, including references that identify current probability of encountering MEC within the MRA and available mapping as appropriate, including the Group 2 ROD and other references in Section 6.0 of the LUCIP/OMP.

- CSUMB will implement requirements for construction support planning consistent with the County’s digging and excavation ordinance as well as State CRUP restrictions.
- CSUMB shall implement the special standards and procedures as defined in the County digging and excavation ordinance. Requirements include description of previous MEC activities, completion and submittal of all other appropriate permits, detailed description of site and proposed “construction activities”, excavation permits and plans for “construction activities”, construction support requirements including construction support, and preparation and submittal of after action reports.
- CSUMB shall provide notice of permit approval to the Army, DTSC and all property owners within 300 feet of impacted property.
- Director of Environmental and Natural Resource Management at Presidio of Monterey to make accessible all available documentation that identifies current probability of encountering MEC in the CSUMB Off-Campus MRA and available mapping, as appropriate, on the Army’s Fort Ord Administrative Record.

Remedy Execution Phase

- Documents available on the Army’s Fort Ord Administrative Record (www.fortordcleanup.com).
- CSUMB to execute the County digging and excavation ordinance construction support planning requirements.

4.2.2 Construction Support Evidence of MEC

Remedy Implementation Phase

- FORA will develop procedures for proper response to potential MEC finds and requirements for reporting and documentation, including actions to be taken if evidence of MEC is encountered during ground disturbing activities.
- FORA to develop procedure for reporting and documenting of potential MEC finds.

Remedy Execution Phase

- Excavation permits issued by CSUMB will require a provision for land owners or contractors to stop work and report potential MEC finds to local law enforcement and notification to FORA and regulatory agencies.
- FORA or its successor will notify the regulatory agencies, as soon as practicable, of any potential MEC finds during “construction activities” or any other MEC finds, and report the potential MEC finds during monitoring activities annually.
- Local law enforcement to respond to reports of potential MEC finds.
- Regulators and Army to determine probability of encountering MEC and determine nature and extent of additional assessment and/or field investigation.

4.2.3 Construction Support Documentation and Reporting

Remedy Implementation Phase

- The monitoring and reporting of construction support requirements is implemented through a MOA between the DTSC and local jurisdictions, which: 1) requires the CSUMB to monitor compliance with all land use covenants; 2) requires CSUMB to report to FORA or the County concerning their compliance with all recorded LUCs within their jurisdiction; and 3) requires FORA or the County to compile data in the jurisdiction reports and transmit those data in a report to the DTSC.
- FORA to update annual LUC inspection checklist to include instructions for review of deeds, State CRUP and local digging and excavation ordinance to verify construction support requirement continue to run with the land.
- CSUMB to develop excavation permit construction support documentation reporting procedures, consistent with County digging and excavation ordinance, to support annual LUC monitoring report.

Remedy Execution Phase

- Construction support contractor documents project and reports per FORA or Monterey County requirements.
- FORA, CSUMB and Monterey County report construction support activities in annual LUC monitoring report.

4.2.4 Determination Construction Support No Longer Necessary

Remedy Implementation Phase

- None

Remedy Execution Phase

- Army to evaluate construction support as part of the five-year review process to determine if the LUC should continue.
- Landowner may request EPA and DTSC review and approval of determination that construction support LUC is no longer necessary for a specific parcel or portion thereof.

4.3 Restrictions Prohibiting Residential Use

Residential use restriction on the proposed future non-residential reuse portion of the CSUMB Off-Campus MRA, as included in the CSUMB Off-Campus MRA property deed, will be maintained and will run with the land. For the purposes of this document, residential reuse includes, but is not limited to: 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 (Army 2007). CSUMB will coordinate DTSC review of developer or land owner's proposals to remove the residential use restrictions, in consultation with EPA and Army.

4.3.1 Maintaining Residential Use Restriction

Ensure restrictions on the proposed future non-residential reuse portion of the CSUMB Off-Campus MRA remain in place by monitoring property LUCs. See also Long-Term Management Measures (Section 4.4).

Remedy Implementation Phase

- FORA to develop annual inspection procedures to ensure residential deed restrictions remain on the proposed future non-residential reuse portion of the property through future property transfer deeds.

Remedy Execution Phase

- FORA is currently conducting annual monitoring and reporting on LUCs. Responsibility for annual monitoring and reporting of LUCs will transfer to the CSUMB at property transfer. An MOA is in place where CSUMB has agreed to maintain the LUCs, including the residential use restriction
- CSUMB is responsible for ensuring residential deed restrictions remain on the proposed future non-residential reuse portion of the property through future property transfer deeds.

4.3.2 Process for Approval of Proposals to Remove Residential Use Restriction

The MOA, CRUP, ROD and deed ensure any future proposals to remove residential use restrictions within the CSUMB Off-Campus MRA are reviewed and removal approved by DTSC in consultation with EPA and Army.

4.4 Long-Term Management Measures

The LUCIP/OMP also describes the following LTMM implementation defined in the ESCA and supporting documents. FORA will implement post-Site Closeout LTO through the ESCA 2037 performance period. The LTOs to be implemented include long-term review, monitoring, and operation and maintenance activities/reporting required to maintain the effectiveness of the remedy. Site Closeout is defined as the time after FORA has performed all the environmental services except LTO. The MOA Annual LUC Report outline will be used to fulfill this LTO (Appendices E and F).

4.4.1 LUCIP/OMP Annual Inspections

LUCIP/OMP objectives compliance includes on-site inspections and review of local building and planning department records, and construction support potential MEC finds report review. For reference, the following are provided in this LUCIP/OMP: Appendix E - Land

Use Control Inspection Methodology and Appendix F - 2014 Update to Former Fort Ord Land Use Reporting Outline.

4.4.2 Annual LUC Monitoring Reports

The LUCIP/OMP annual inspections and record review results will be summarized in an annual LUC monitoring report letter report format (see Appendices E and F). As reference, the following are provided in this LUCIP/OMP: Appendix E - Land Use Control Inspection Methodology and Appendix F - 2014 Update to the Land Use Covenant¹ Report Outline. FORA or its successor will submit the annual monitoring report within 90 days following inspection and record review to the Army, EPA and DTSC. Upon property transfer, CSUMB will be responsible for completing annual LUC reporting. This requirement is established in the executed MOA and CRUP and will be documented in the deed.

4.4.3 CERCLA Five-Year Reviews

The Army shall conduct five-year reviews of the CSUMB Off-Campus MRA remedy as required by CERCLA and the National Contingency Plan. FORA or its successor may assist the Army in these five-year reviews as defined in the ESCA.

4.5 Property Recipient Responsibilities - LUCIP/OMP Inspections, Reporting, and Enforcement

4.5.1 Compliance with LUCIP/OMP

CSUMB, as established in the MOA, has the responsibility to facilitate the LUC remedy performance objective implementation including monitoring, maintenance and reporting as outlined in this plan. This will include LUCIP/OMP annual LUC inspections and reporting (Section 4.4) as well as execution of requirement of the Monterey County digging and excavation ordinance. In addition, CSUMB is required to track and enforce LUC compliance of future property owners. Per the MOA and CRUP reporting requirements, CSUMB will deliver their reports to FORA or successor to send to DTSC.

4.5.2 Property Conveyance

Army to FORA deed for the CSUMB Off-Campus MRA property contains requirements that CSUMB adhere to the Monterey County digging and excavation ordinance. FORA to jurisdictions deed transferring property will include this requirement and also include LUCs and covenants as in the ROD and CRUP. The deed ensures that restrictions continue to run with the land. As these are enforceable by EPA, DTSC and Army, each agency and the Army

¹ The terms land use covenant and land use control are used interchangeably within the context of this LUCIP/OMP.

will receive a draft copy of deed language for review and comment. The final executed deed will be recorded. CSUMB will be responsible for passing on deed restrictions to future land owners.

4.5.3 Notice of Planned Property Conveyances

Property recipients will be notified of the property restrictions and LUC and CRUP compliance requirements. For initial property conveyance from FORA to CSUMB, FORA will be responsible for deed notification. CSUMB will be responsible for FORA/jurisdiction deed recordation. CSUMB will also be responsible for property restriction notification in subsequent land transfers as well as monitoring compliance with LUC and CRUP restrictions on current and future land uses.

4.6 Army LUCIP/OMP Inspections, Reporting, and Enforcement Responsibilities

The Army shall retain ultimate responsibility for remedy integrity. FORA or successor, per the terms and definitions of the ESCA and AOC, is responsible for implementing, inspecting, reporting, and enforcing the LUCIP/OMP requirements until 2037. FORA or successor may transfer responsibilities for implementation to other parties by deed, contract, property transfer agreement, or other means.

4.7 Notification Should Action(s) Interfere with LUCIP/OMP Effectiveness

Within seventy-two (72) hours of discovery of any activity on the property that is inconsistent with the Group 2 LUCIP/OMP objectives, FORA or its successor shall notify EPA, DTSC, and the Army. Examples of inconsistent activities include: not executing requirement for MEC recognition and safety training or construction support; violating CRUP prohibiting residential uses; or not meeting local digging and excavation ordinance and local permitting requirements.

Within forty-five (45) days, FORA or its successor shall identify the LUCIP/OMP inconsistency cause, and evaluate and implement any necessary changes to avoid future noncompliance. In accordance with the MOA, Monterey County have agreed to take on this responsibility when FORA ceases to exist. This reporting requirement does not preclude the Army from taking immediate action to prevent exposure. This reporting requirement will enable the Army to take appropriate action to ensure the effectiveness of the remedy.

4.8 Notification of MEC Item Discovery During Ground-Disturbing Activities

As required in the ROD and in accordance with the digging and excavation ordinance, the property owner shall stop work and notify the local law enforcement agency immediately if any unanticipated potential MEC items (known or suspected) are encountered during ground-disturbing activities. The standard procedure for reporting unanticipated encounters with a known or suspected MEC item in the transferred former Fort Ord property is to immediately call 911, which will transfer the call to the appropriate local law enforcement agency. The local law enforcement agency will promptly request DoD response support (e.g., an EOD

Unit). FORA or CSUMB will notify the regulatory agencies, as soon as practicable, of any MEC-related data identified during the incident. The incident results will be reported in the annual LUC monitoring report. The regulatory agencies may request additional investigation and/or follow-up actions based on the MEC-related data identified during the incident (see Section 4.9.1).

4.9 Additional Response or Remedy Modification

4.9.1 Additional Investigation or Follow-up Action

After the EOD response to unanticipated MEC finds, the Army and EPA may assess the probability of encountering additional MEC based on guidance from the DDESB. The probability of encountering MEC and the resulting level of construction support will be determined jointly by the Army and EPA, in consultation with DTSC. If the probability of encountering MEC is low, construction activities may resume with construction support. If the probability of encountering MEC is determined to be different from originally estimated, EPA in consultation with DTSC will determine an appropriate follow-up action.

If EPA determines that additional investigation and/or action is required, EPA will advise the Army that it is obligated under the FFA to conduct the investigation and/or action. Additional action will be conducted in accordance with an approved work plan. EPA, in consultation with DTSC, will evaluate and approve the results of the investigation. The agency consultation process will be completed as expeditiously as practicable.

The Army will notify FORA if the investigation and/or action is within the scope of FORA's obligations under the ESCA and CRUP. The Army retains full responsibility for Army obligations pursuant to the ESCA "Army Obligations". Nothing shall require FORA, or its successor, to assume responsibility for any Army Obligation, as contractor to the Army, under the terms of the ESCA.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA or its successor assumes responsibility for completion of necessary CERCLA response actions for MEC, a CERCLA hazardous substance (except Army Obligations), which include implementing, maintaining, reporting, and enforcing the LUCs. Although the Army has already contracted for performance of its responsibilities to implement, maintain, monitor, and enforce LUCs, the Army retains the ultimate responsibility for remedy integrity.

Additional response will be conducted in accordance with an approved work plan. EPA, in consultation with DTSC, will evaluate and approve the results of the investigation. The agency consultation process will be completed as expeditiously as practicable.

4.9.2 Remedy Modification

If the Army and EPA, in consultation with DTSC, determine that the selected remedy is no longer protective, the Army and EPA will jointly select an additional response action or modification of the remedy. EPA will advise the Army that it is obligated under the FFA to conduct the investigation and/or response. DTSC will be provided an opportunity to review

and comment on the proposal. The additional actions required and their remedial objectives will be documented in an Explanation of Significant Difference or ROD Amendment, as appropriate.

The Army will notify FORA if the investigation and/or response is within the scope of FORA's obligations under ESCA. If the Army and FORA agree the additional response is within FORA's scope of obligation under the ESCA, FORA will be responsible for implementation. Nothing shall require FORA, or its successor, as contractor to the Army, to assume responsibility for any Army Obligation under the terms of the ESCA.

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5.0 REMEDY IMPLEMENTATION SEQUENCE

This section provides an overview of the execution sequence of the actions proposed in Section 4.0 in order to facilitate the implementation of the LUC remedy performance objectives. The general administrative sequence for establishing the LUC remedy is presented. These are followed by the activity sequence and requirement for pre- and post-land transfer from FORA to CSUMB. As available and appropriate, date driven compliance requirements have been presented.

5.1 General Administrative Sequence for Establishing LUC Remedy

- The Army will place the Final LUCIP/OMP document, within 10 days of regulatory approval, in the Army-maintained Information Repository and on the Army-maintained Administrative Record. FORA will provide Administrative Record reference to Group 2 jurisdictions.
- FORA will be responsible for establishing LUCIP/OMP plans and procedures as outlined in Section 4.0. The plans and procedures should be established and adopted within 6 months of the approved plan.
- FORA or its successor may be required to provide input to the Army in the five-year reviews as defined in the ESCA grant award. The information must be submitted to the Army by February of the review year. The next Five Year Review is scheduled for 2017.

5.2 Long-Term Operation and Maintenance of LUC Remedy

5.2.1 Pre-Land Transfer from FORA to CSUMB

- FORA will implement the established processes and procedures as outlined in LUCIP/OMP Section 4.0.
- FORA will be responsible for executing annual inspections and annual LUC monitoring reports in accordance with Section 4.0. The annual inspections and annual LUC monitoring reports should be completed and provided to EPA and DTSC as outlined in the MOA (see Appendices E and F).
- FORA shall provide at least 60-day prior notice to the Army, EPA, and DTSC of CSUMB Off-Campus MRA property transfer. The notice shall reference LUCIP/OMP implementation, maintenance, inspection, reporting, and enforcement methods. Property conveyance notification requirements will pass to future property owners.
- Prior to land transfer, CSUMB will establish processes and procedures to implement the requirement of the Monterey County digging and excavation ordinance. Additionally, CSUMB will establish processes and procedures to implement other requirements to execute the LUC remedy as outlined in this LUCIP/OMP.
- LUCs shall be maintained by Section 4.0 delineated periodic inspection and enforcement.

- New property owners will be notified of, and shall comply with, any deed restrictions as described in Section 4.5.

5.2.2 Post-Land Transfer from FORA to CSUMB

- CSUMB will implement the established processes and procedures as prescribed in the Monterey County digging and excavation ordinance. Additionally, CSUMB will implement the processes and procedures outlined in this LUCIP/OMP.
- CSUMB will be responsible for completing annual inspections and providing input to FORA or its successor in order to complete the annual LUC monitoring report in accordance with Section 4.0. The annual inspection and monitoring report should be completed and provided to EPA and DTSC as outlined in the MOA (see Appendices E and F).
- Prior to any ground-disturbing or intrusive activities, a property owner or user within the former Fort Ord intending to conduct intrusive activities must first complete a notification and permitting process per the adopted County digging and excavation ordinance. Once an application for a permit is received by CSUMB, the CSUMB shall review the permit to verify the location of the proposed excavation and to determine if any sites within known LUCs will be affected.
- If the work involved is within the CSUMB Off-Campus MRA, the CSUMB shall contact the Army, EPA, FORA (or its successor) and DTSC by email or written correspondence prior to granting the excavation permit. As described in the Monterey County digging and excavation ordinance, the permit applicant may not move or disturb any soil unless the applicant is in compliance with the requirements placed on the property by the CRUP and deed.
- LUCs shall be maintained by Section 4.0 delineated periodic inspection and enforcement.

6.0 REFERENCES

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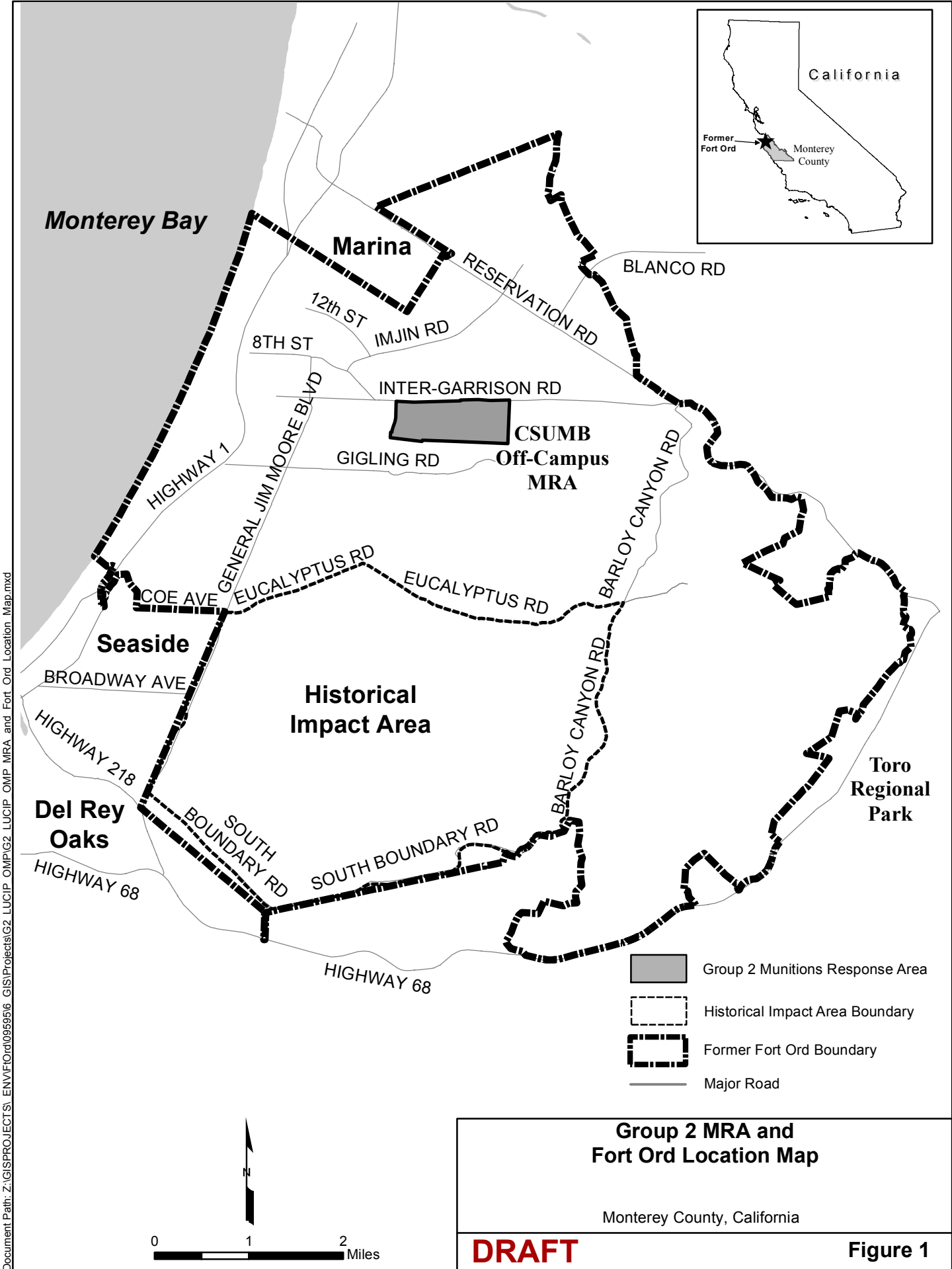
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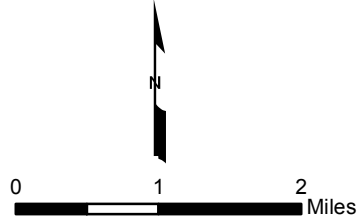
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- Group 2 Munitions Response Area
- Historical Impact Area Boundary
- Former Fort Ord Boundary
- Major Road



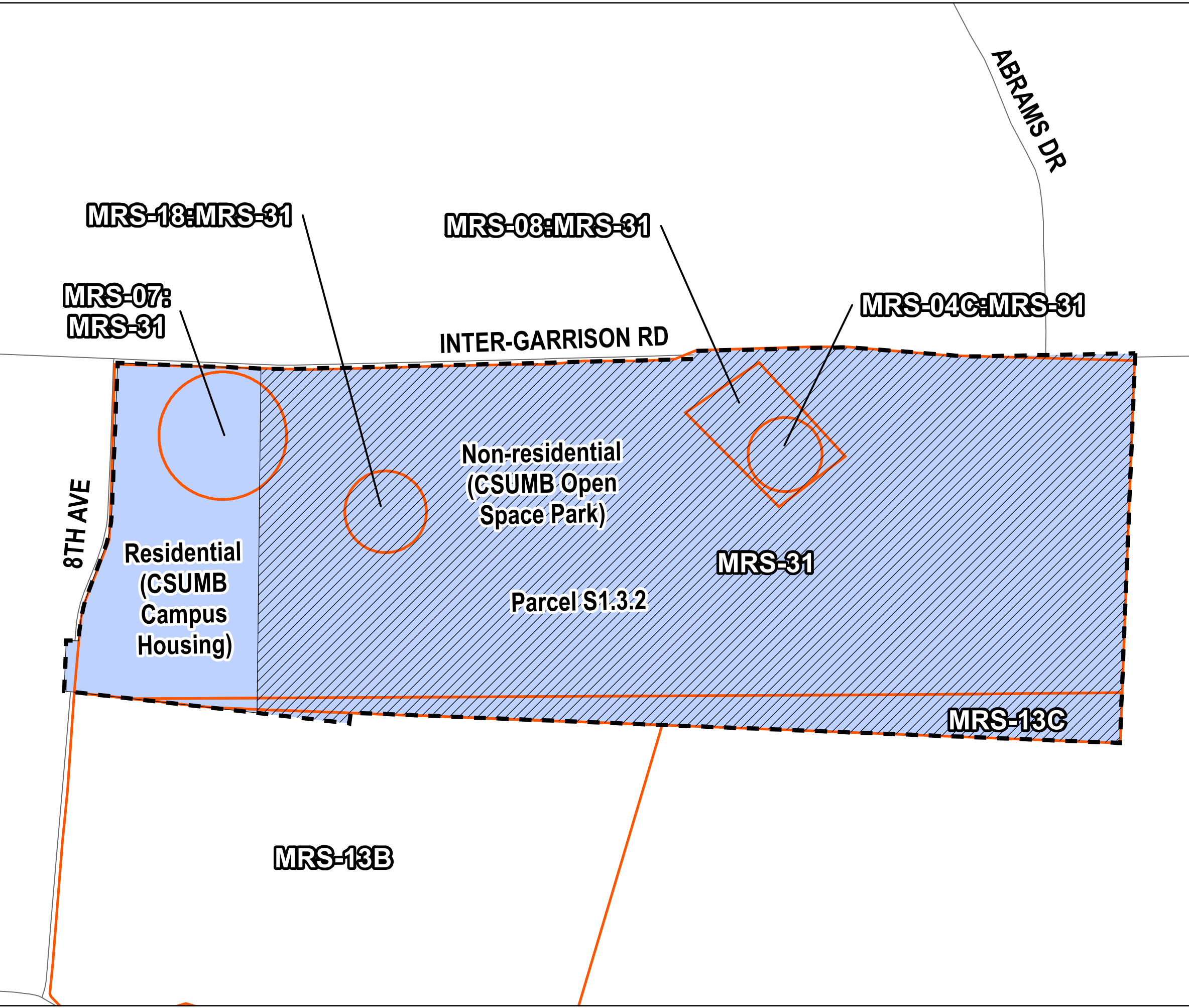
Group 2 MRA and Fort Ord Location Map

Monterey County, California

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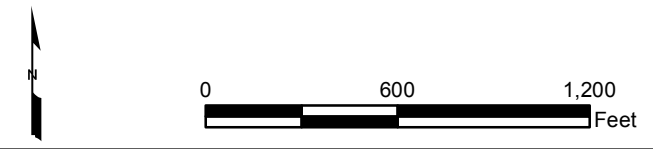
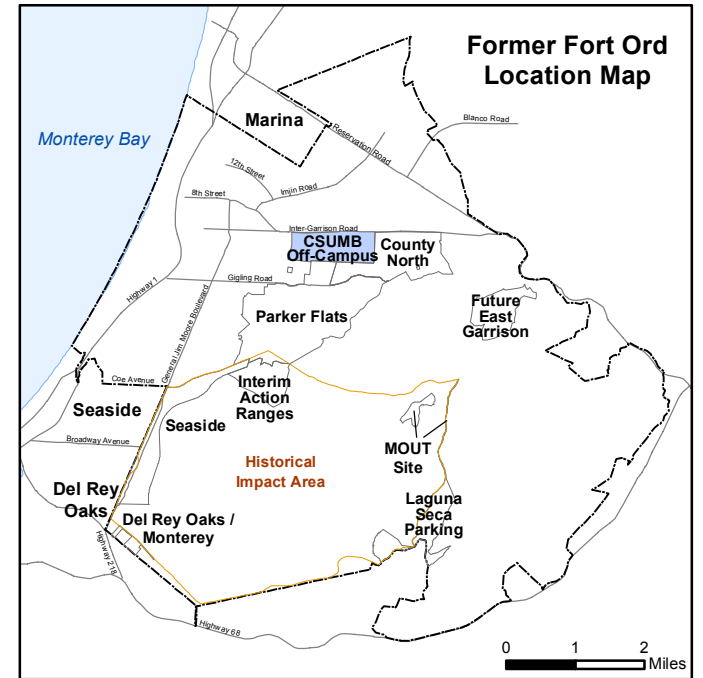
Figure 1

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Legend

- Munitions Response Area (area subject to Land Use Controls)
- Area Subject to Residential Use Restriction
- USACE Parcel
- Munitions Response Site
- Major Road



CSUMB Off-Campus MRA Reuse Areas and Munitions Response Sites

Monterey County, California

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Figure 2

APPENDIX A

**Record of Decision Group 2, California State University Monterey Bay
Off-Campus Munitions Response Area, Former Fort Ord, California,
January 7, 2015**

APPENDIX B

Survey Plats

APPENDIX C

**First Amendment to and Partial Termination of Covenant to Restrict
Use of Property Environmental Restriction, California State University
Monterey Bay, Munitions and Explosives of Concern, Fort Ord Reuse
Authority Early Transfer Parcels**

APPENDIX D

Memorandum of Agreement Among The Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College and the Department of Toxic Substance Control Concerning Monitoring and Reporting on Environmental Restrictions on The Former Fort Ord, Monterey County, California, February 27, 2008

APPENDIX E

Land Use Control Inspection Methodology

APPENDIX F

2014 Update to the Former Fort Ord Land Use Covenant Report Outline

APPENDIX G

Distribution List