

OTH-024

**Environmental Baseline Survey
Pacific Gas and Electric Company
Substation Parcel
Former Fort Ord, California**

Prepared for

**Department of the Army
Corps of Engineers**
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C _ NTENTS

SELECTED ACRONYMS	iv
EXECUTIVE SUMMARY	vi
1.0 INTRODUCTION	1
1.1 Purpose and Objectives	1
1.2 Procedures for Conducting an Environmental Baseline Survey (EBS)	2
1.3 Procedures for Preparing a Finding of Suitability to Transfer (FOST)	3
1.4 Summary	3
1.5 Report Organization	4
1.6 Limitations	4
2.0 PARCEL DESCRIPTION	5
2.1 Fort Ord Physical Setting	5
2.2 Proposed Parcel Reuse	5
2.3 PG&E Substation Parcel Description	5
2.4 Previous and Current Activities on Parcel	6
2.5 Historical Uses on Adjacent Property	6
3.0 APPROACH TO CONDUCTING ENVIRONMENTAL BASELINE SURVEYS	7
3.1 Records Search	7
3.2 Interviews	8
3.3 Visual Inspections	8
3.4 Sampling	8
3.5 Identification of Hazardous Substance/Waste Management Practices	8
3.6 Identification of Potential Impacts from Adjoining Properties	9
3.7 Installation Restoration Program	9
4.0 RESULTS OF ENVIRONMENTAL BASELINE SURVEY FOR PG&E SUBSTATION PARCEL	10
4.1 Environmental Conditions of Parcel	10
4.2 Asbestos Management Program	10
4.2.1 Summary of Program	11
4.2.2 Program Status and EBS Results	12
4.3 Lead-Based Paint Management Program	12
4.3.1 Summary of Program	13
4.3.2 Program Status and EBS Results	13
4.4 Polychlorinated Biphenyls Management Program	13
4.4.1 Summary of Program	13
4.4.2 Program Status and EBS Results	14
4.5 OEW Assessment Programs	14
4.5.1 Summary of Programs	15
4.5.2 Program Status and EBS Results	15
4.6 Community Environmental Response Facilitation Act (CERFA)	16
4.6.1 Summary of CERFA Program	16
4.6.2 Program Status and EBS Results	17
4.7 Potential Impacts From Adjoining Properties	17
4.8 FOST Preparation	19

5.0 FINDINGS AND CONCLUSIONS	20
5.1 Findings	20
5.2 Conclusions	20
6.0 REFERENCES	22

TABLES

- 1 Reuse Parcels
- 2 EBS Points-of-Contact
- 3 Definitions of CERFA Categories
- 4 Adjacent Property IRP Sites, OEW Areas, and SWMUs

PLATES

- 1 Fort Ord and Neighboring Areas
- 2 Reuse Parcel Boundaries
- 3 Parcel Map
- 4 Asbestos Investigations in Buildings
- 5 Lead-Based Paint Investigations in Buildings
- 6 Storage Tanks and IRP Sites
- 7 Possible Ordnance-Related Training Areas
- 8 CERFA Parcel Classifications
- 9 Property Transferable Under CERCLA

APPENDIXES

- A RESPONSES TO AGENCY COMMENTS ON DRAFT EBS/FOST
- B DRAFT FOST AND LEGAL DESCRIPTION
- C ASBESTOS SURVEY HISTORY

DISTRIBUTION

SELECTED ACRONYMS

ACM	Asbestos-Containing Materials
ARAR	Applicable or Relevant and Appropriate Requirement
Army	U.S. Department of the Army
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BRAC	Base Realignment and Closure
BTC	Base Transition Coordinator
CEQA	California Environmental Quality Act
CERFA	Community Environmental Response Facilitation Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
COE	U.S. Army Corps of Engineers
DEH	Directorate of Engineering and Housing
DENR	Directorate of Environmental and Natural Resource Management
DoD	Department of Defense
DTSC	California EPA Department of Toxic Substances Control
EBS/EBST	Environmental Baseline Survey/Environmental Baseline Survey for Transfer
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
ENRD	Environmental and Natural Resources Management Division, DEH
EPA	U.S. Environmental Protection Agency
FORA	Fort Ord Reuse Authority
FORG	Fort Ord Reuse Group
FOST	Finding of Suitability to Transfer
FOSL	Finding of Suitability to Lease

IAROD	Interim Action Record of Decision
IRP	Installation Restoration Program
LBP	Lead-Based Paint
NEPA	National Environmental Policy Act
NPL	National Priorities List
NoAROD	No Action Record of Decision
OEW	Ordnance and Explosive Waste
OU	Operable Unit
PCB	Polychlorinated Biphenyl
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROC	Record of Concurrence
ROD	Record of Decision
SOC	Statement of Conditions
SWMU	Solid Waste Management Unit
USAEC	U.S. Army Environmental Center
UST/AST	Underground Storage Tank/Aboveground Storage Tank
UXO	Unexploded Ordnance

EXECUTIVE SUMMARY

This parcel-specific Environmental Baseline Survey (EBS) presents the results of an assessment of the known existing environmental conditions for a portion of former Fort Ord, Monterey County, California. The area encompassed by this EBS is known as the Pacific Gas and Electric Company (PG&E) Substation Parcel.

The purpose of the EBS is to support transfer of real property by deed or by lease by identifying available information about existing environmental conditions on a parcel and adjacent areas. A Finding of Suitability to Transfer (FOST), which documents the environmental suitability of a parcel for transfer on the basis of specified criteria, may be prepared on the basis of the information in the EBS. According to Department of Defense and Department of the Army guidance, the appropriate official of the respective military department will certify through a FOST that one of the conditions listed below is true:

- The requirements of CERCLA Section (§) 120(h)(3) have been met (i.e., all remedial action necessary to protect human health and the environment has been taken)
- The requirements of CERCLA §120(h)(4) have been met for the parcel because no CERCLA hazardous substances, petroleum products, or

their derivatives were stored for 1 year or more, known to have been released, or disposed of on the parcel.

The EBS and FOST are coordinated and complementary documents that provide information regarding the environmental suitability of a parcel for transfer with respect to available information and specific criteria. These documents are reviewed by the appropriate federal and state agencies, and the agency staff comments are incorporated as necessary into subsequent versions of the documents.

On the basis of available information, the PG&E Substation Parcel EBS indicates that the requirements of CERCLA §120(h)(3) appear to have been met for the parcel. On the basis of FOST guidance criteria, the parcel may be considered by the Army as suitable for transfer by deed to PG&E. Health- or safety-related environmental conditions currently exist or are suspected to exist on the PG&E Substation Parcel, including the suspected or known presence of asbestos, lead-based paint, and electrical transformers containing polychlorinated biphenyls. Areas in which such conditions exist include areas otherwise suitable for transfer by deed according to FOST guidance criteria.

1.0 INTRODUCTION

This parcel-specific Environmental Baseline Survey (EBS) presents the results of an assessment of known existing environmental conditions for a portion of former Fort Ord, Monterey County, California (Plate 1). The area examined in this EBS is the Pacific Gas and Electric Company (PG&E) Substation Parcel, as shown on Plates 2 and 3. Information presented in this EBS will be used to prepare a parcel-specific Finding of Suitability to Transfer (FOST) for the PG&E Substation Parcel, should the Army determine that such a FOST is appropriate, as discussed below. This EBS, Version 2, incorporates comments received from regulatory agencies on the draft (Version 1) EBS issued May 30, 1995 (Appendix A).

Fort Ord became an active military installation in 1917 and was selected for closure pursuant to the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510; BRAC91). On July 11, 1991, the President approved the BRAC91 list of recommended closures and realignments, including the closure of Fort Ord and the realignment of troops from Fort Ord to Fort Lewis, Washington. On February 13, 1992, the Army filed a Notice of Intent (NOI) to prepare an *Environmental Impact Statement (EIS)* to examine the impacts of closing Fort Ord and realigning troops to Fort Lewis. The EIS was completed (COE, 1993), and an EIS Record of Decision (ROD) was signed by the Department of the Army in December 1993 (Army, 1993d).

In Fall 1993, the Army initiated several EBSs to support the transfer of excess real property at Fort Ord. The approach developed for Fort Ord includes consideration of a number of issues that affect real property transfer, including the nature and extent of contamination at the installation and other health and safety issues associated with the condition of buildings. To accommodate the reuse needs of the surrounding community, the Army will prepare parcel-specific EBSs on the basis of requests received from the community. Table 1 shows the reuse parcels for which the Army is currently planning or preparing parcel-specific EBSs or FOSTs. These

parcels were identified by the Army and the community-based Fort Ord Reuse Group (FORG) (FORG, 1993). FORG has since been replaced by the Fort Ord Reuse Authority (FORA), which was established in mid-1994 pursuant to State Senate Bill 899 (SB 899). Modifications to the list of parcels may be made periodically based on the changing needs of the local community.

This EBS was prepared for Fort Ord on behalf of the U.S. Army Corps of Engineers (COE), Sacramento District, which has been retained by the Army to conduct surveys to support real-property transfer at Fort Ord. This EBS was prepared by Harding Lawson Associates (HLA) in accordance with the COE February 21, 1995, Revised Amendment to the Supplemental Scope of Work (SSOW) dated September 2, 1993, under Contract DACA05-86-C-0241, Modifications P00091, P000120, P00130, P00223, and P00239.

1.1 Purpose and Objectives

Under current Department of Defense (DoD) and Department of the Army (Army) procedures, the Army's determination on transferability of excess property associated with base closures includes the following steps: (1) reviewing currently available information on the environmental conditions on the property, (2) preparing an EBS, (3) obtaining a determination by the Army in terms of specific criteria that the property is suitable for transfer, and (4) preparing a FOST to document the property's suitability for transfer in terms of those specified criteria. DoD and Army policy on the preparation of an EBS and subsequent FOST, including the specific criteria to be used by the Army in assessing the suitability of a parcel for transfer, is presented in the most recent DoD guidance on the EBS/FOST process, released June 1, 1994 (DoD, 1994), and Army implementing guidance dated November 10, 1994 (Army, 1994). This EBS was prepared on the basis of these most recent guidance documents.

The purpose of the EBS is to support transfer of real property by deed or lease by providing an

assessment of the existing environmental conditions on a parcel and adjacent areas on the basis of pre-existing information. To the extent that information is available to the authors, the EBS discusses the following:

- Status of site investigations
- Nature and extent of known contamination, if any
- Solid and hazardous waste management practices
- Underground storage tank (UST) management practices
- Status of building surveys for asbestos, lead-based paint, or radon
- Other information pertaining to environmental conditions on the parcel.

The EBS focuses on the identification and documentation of environmental site characterization activities and the presence or likely presence of hazardous substances or hazardous wastes on a portion of real property considered for transfer. The EBS addresses hazardous substances or wastes, including certain substances not usually regulated under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act), such as petroleum products, asbestos, and lead-based paint in structures. The EBS includes consideration of soil or groundwater contamination and a description of potential public health and safety issues, such as those associated with the condition of buildings, that may affect the Army's ability or decision to transfer such property, to the extent that relevant information is available. The EBS may not constitute a complete site characterization because it is based on existing available information. An EBS may be updated to reflect more recently acquired information or to support transfer of additional areas.

The FOST is prepared based on the EBS. The purpose of the FOST is to document the environmental suitability of a parcel for transfer to non-federal agencies or the public, in terms of

specified criteria. The FOST compares these criteria with known site characteristics documented in the EBS.

As stated in the most recent DoD guidance, the EBS/FOST program has the following objectives:

- Protecting human health and the environment
- Preparing EBSs and FOSTs in a consistent manner to assess, determine, and document the environmental suitability of properties for transfer
- Ensuring transfer of property without interfering with cleanup actions
- Ensuring compliance with applicable environmental requirements, allowing DoD to demonstrate compliance with CERCLA §120(h) before property is transferred
- Providing for adequate public and regulatory participation without unduly encumbering the DoD's authority and mandate to make property available for reuse in a timely manner
- Ensuring sufficient environmental review of the real property being considered for transfer is conducted to avoid unwarranted risks of future liability.

1.2 Procedures for Conducting an Environmental Baseline Survey (EBS)

Procedures for conducting an EBS are described in the June 1994 DoD guidance noted above (DoD, 1994). The EBS is similar to a CERCLA Preliminary Assessment (PA) and may include information from many sources, including ongoing programs, such as Fort Ord's CERCLA remedial investigation/feasibility study (RI/FS), building surveys for asbestos, lead-based paint, and radon, solid waste management activities, and other programs, as discussed in Section 3.0. Specific activities may include the following:

- Identification of parcel boundaries

- Search and review of existing records regarding environmental conditions on the parcel
- Description of known current or past activities on the parcel
- Interviews with current and/or former employees involved in operations on the parcel
- Description of known hazardous substance or hazardous waste management practices on the parcel or an adjacent property
- Documentation of observations made during visual and physical inspections
- Description of possible sources of contaminants on the parcel or on adjacent parcels, on the basis of available information
- Documentation of ongoing response actions.

1.3 Procedures for Preparing a Finding of Suitability to Transfer (FOST)

Procedures for conducting a FOST are also described in the DoD guidance noted above (*DoD, 1994*) and in Army implementing guidance (*Army, 1994*). A FOST is expected to be a relatively brief document, only a few pages long. A FOST is prepared by the BRAC Environmental Coordinator (BEC) in conjunction with the BRAC Cleanup Team (BCT) to document its certification of the suitability of a parcel for transfer, based on information in the EBS and the specific certification criteria described in FOST guidance. According to DoD guidance (*DoD, 1994*), a senior-level environmental official, equivalent to at least a Deputy Assistant Secretary from the military department, will certify through the FOST that one of the conditions listed below is true:

- The requirements of CERCLA §120(h)(3) have been met for the parcel being transferred (i.e., all remedial action necessary to protect human health and the environment has been taken)

- The requirements of CERCLA §120(h)(4) have been met for the parcel because no CERCLA hazardous substances, petroleum products, or their derivatives were stored for 1 year or more, known to have been released, or disposed on the parcel.

DoD guidance specifies the format for a FOST. A FOST should contain:

- Purpose
- Legal description of property and map
- Regulatory coordination, describing state agencies and U.S. Environmental Protection Agency (EPA) review of draft documents
- Findings of the EBS review, summarizing all known current or historical environmental conditions in the parcel
- Discussion of environmentally sensitive areas, listing any such areas, including wetlands, cultural or historic resource areas, or areas containing endangered species
- Analysis of intended reuse and determination of suitability for transfer under CERCLA
- Listing of specific recommended restrictions on the use of the parcel
- Signature, according to the signature authority discussed above.

A copy of the draft FOST and the legal description of the PG&E Substation Parcel are included in Appendix B.

1.4 Summary

The EBS and FOST are coordinated and complementary documents that provide information regarding the environmental suitability of a parcel for transfer with respect to available information and specific criteria. The EBS summarizes existing environmental information and provides a technical basis for the FOST. The EBS also provides a mechanism for documenting both known CERCLA and non-CERCLA information (e.g., possible health-related

conditions associated with the presence of non-CERCLA asbestos-containing materials). The FOST provides a brief overview of the contents of the EBS and presents conclusions about the parcel's suitability for transfer and restriction on its use.

1.5 Report Organization

The remaining sections of this EBS describe environmental conditions relevant to transfer of the PG&E Substation Parcel. Section 2.0 describes the Fort Ord setting and general characteristics of the PG&E Substation Parcel, including parcel location and boundaries, current and historical land use, anticipated land use following transfer, and land use adjacent to the PG&E Substation Parcel. Section 3.0 describes the specific activities conducted for the PG&E Substation Parcel EBS and FOST. Section 4.0 presents the results of the EBS, describing available information about existing environmental conditions on the PG&E Substation Parcel, and describes the status of FOST preparation. Section 5.0 summarizes the findings and conclusions of the EBS.

1.6 Limitations

This document was prepared for the sole use of HLA's client, the U.S. Army Corps of Engineers, Sacramento District, the only intended beneficiary of our work, to support the preparation of the FOST. No other party should rely on the information contained herein for other purposes without the prior written consent of HLA.

Although the EBS is a publicly-available document, distribution of this document to other parties does not constitute HLA's consent for those or other parties to rely on the information contained herein. This document may not contain sufficient information for the purposes of other parties.

HLA's professional services in this EBS, including the preparation of this document, were conducted in accordance with practices and procedures generally accepted in the environmental consulting field in northern California at this time; no other warranty is given or implied by this report.

Information about the presence or absence of hazardous substances in the area discussed in this report is based on limited data and observations. Environmental conditions may change over time and may be different away from locations where data or samples were collected or observations made. HLA does not and cannot have complete knowledge of environmental conditions in the area discussed. Furthermore, this report is complete and accurate only to the extent that cited reports and agency information are complete and correct, and to the extent that all relevant information has been provided to HLA. The purpose of the EBS is to identify and describe available information. In the EBS, HLA has not attempted to independently verify the completeness or accuracy of the information presented, or to independently assess the environmental condition of the area described.

2.0 PARCEL DESCRIPTION

This section presents relevant parcel descriptive information, including an overview of Fort Ord's physical setting, the proposed reuse of the parcel, previous and current activities on the parcel, and historical uses of adjacent parcels.

2.1 Fort Ord Physical Setting

The former Fort Ord (Fort Ord) is adjacent to Monterey Bay in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Plate 1). The base comprises approximately 28,000 acres adjacent to the cities of Seaside, Sand City, Monterey, and Del Rey Oaks to the south and Marina to the north. The Southern Pacific Railroad and Highway 1 pass through the western part of Fort Ord, separating the beachfront portions from the rest of the base. Laguna Seca Recreation Area and Toro Regional Park border Fort Ord to the south and southeast, respectively. Land use east of Fort Ord is primarily agricultural, as was land use at Fort Ord before the Army acquired the property.

After it opened in 1917, Fort Ord primarily served as a training and staging facility for infantry troops. No permanent improvements were made until the late 1930s, when administrative buildings, barracks, mess halls, tent pads, and a sewage treatment plant were constructed. From 1947 to 1975, Fort Ord was a basic training center. After 1975, the 7th Infantry Division (Light) occupied Fort Ord. Light infantry troops are those who perform their duties without heavy tanks, armor, or artillery. Fort Ord was selected for decommissioning in 1991 and placed on the BRAC91 list, but troop reallocation was not completed until 1993. Fort Ord officially closed September 30, 1994.

The three major developed areas within Fort Ord are the Main Garrison, Fritzsche Army Airfield (FAAF), and the East Garrison. The remaining approximately 20,000 acres of undeveloped property were used for training activities.

The Main Garrison contains commercial, residential, and light industrial facilities.

Construction began in 1940 and ended in the 1960s, starting in the northwest corner of the base and expanding southward and eastward. A small airfield that was present in the central portion of the Main Garrison during the 1940s and 1950s was decommissioned when FAAF was completed, and its facilities were redeveloped as motor pools or for other operations.

FAAF, which served as the general airfield for Fort Ord, is in the northern portion of the base, adjacent to the City of Marina. FAAF was originally outside the formal boundaries of Fort Ord but was incorporated into the base in 1960 and expanded in 1961.

The East Garrison occupies 350 acres on the northeastern edge of the base and consists of military and industrial support areas, recreational facilities, and recreational open space.

2.2 Proposed Parcel Reuse

It is intended that the PG&E Substation Parcel be transferred to Pacific Gas and Electric Company for electrical utility and transmission purposes. It is expected that the PG&E Substation will continue to be used as an electrical substation after transfer.

2.3 PG&E Substation Parcel Description

The PG&E Substation Parcel encompasses approximately 1.5 acres in the north-central portion of the Main Garrison of Fort Ord (Plate 3). The legal description of the parcel is included in Appendix B. The parcel is rectangular and approximately 210 feet wide east to west and 305 feet long north to south. The parcel is bordered to the north by Gigling Road and Troop Housing units, to the west by the Hayes Army Hospital (with parking lots and a helipad), to the south by a softball field and open space, and to the east by a 2-million-gallon water storage tank and open space. The parcel contains electrical transmission equipment owned by PG&E and three buildings, two of

which are owned by PG&E. Building 4428 was constructed by the Army in July 1972 for use as an electrical switch station with circuit breakers (Temple, 1995b). Buildings 4429 and 4429A were constructed and are reported to be owned by PG&E on land outgranted to PG&E by the Army. They also contain electrical switching equipment. Other electrical equipment on the parcel includes three single-phase transformers, a voltage regulator, a bank of capacitors, 12 and 60 KV circuit breakers, and switches (Dameron, 1995).

2.4 Previous and Current Activities on Parcel

According to available information, the land and structures present on the PG&E Substation Parcel have been and are currently used only for the purpose of electrical utility transmission and distribution (Temple 1995b).

2.5 Historical Uses on Adjacent Property

The area surrounding the PG&E Substation Parcel consists of both developed and undeveloped property. The developed properties within approximately 1 mile of the PG&E Substation Parcel boundaries include the following:

- Residential areas, including troop barracks to the north and family housing to the west and southwest (Marshall, Stilwell, and Fitch Parks)
- Local services and commercial areas, including dry cleaners, banks, theaters, churches, schools, dental clinics, Hayes Hospital, and a fire station to the west
- Military support/industrial areas, including motor pools, machine shops, and maintenance facilities to the north and northeast

- Training areas, including a track and field and confidence courses to the north
- Recreational areas, including picnic grounds, ball fields, tennis and racquetball courts, and a recreation center to the west.

The undeveloped properties surrounding the PG&E Substation Parcel include open space and training grounds to the south and the east.

Several sites in the vicinity of the PG&E Substation Parcel are actively being investigated as part of a RI/FS program at Fort Ord, including:

- Site 10: Burn Pit 0.6 mile west
- Site 11: Army and Air Force Exchange Service (AAFES) Fueling Station 0.75 mile west
- Site 14: 707th Maintenance Facility 0.8 mile north
- Site 20: South Parade Ground, 3800 & 519th Motor Pools 0.7 mile northwest
- Site 21: 4400/5500 Block Motor Pool, East 0.5 mile east
- Site 22: 4400/5500 Block Motor Pool, West 750 feet east
- Site 23: 3700 Block Motor Pool 0.6 mile north
- Site 24: Old DEH Yard 0.5 mile northwest.

Many Fort Ord maintenance facilities and motor pools contained grease racks, hazardous waste temporary storage areas, and USTs. Many USTs in adjacent properties have either been removed or are slated for removal in the future.

3.0 APPR ACH T C NDU TING ENVIR NMENTAL BASELINE SURVEYS

This section describes the activities performed for the PG&E Substation Parcel EBS. The procedures followed are described in EBS guidance (*DoD, 1994; Army, 1994*), which outlines the process for preparing an EBS and subsequent FOST. This EBS for the PG&E Substation Parcel considers currently available information from various sources, including interviews with Fort Ord personnel and results of investigations conducted under the RI/FS or other programs. These include ordnance and explosive waste (OEW) investigations, UST investigations, results of building inspections, and evaluation of the potential for adverse impacts from other parcels in the vicinity of the PG&E Substation Parcel. The information obtained in conducting this EBS is presented in Section 4.0.

A number of environmental programs are currently ongoing or complete at Fort Ord, including the Basewide RI/FS, the UST program, building surveys for asbestos-containing materials (ACM) and lead-based paint (LBP), resampling for radon beneath buildings, radiological surveys, management of transformers containing polychlorinated biphenyls (PCBs), evaluation of potential releases from onpost solid waste management units (SWMUs), and an assessment for the presence of OEW. New information will likely be available in the future because the programs are ongoing. The availability of new information could change the assessment of suitability or the Army's decision to transfer all or portions of the PG&E Substation Parcel.

3.1 Records Search

Existing reports and other available records, including federal government and state and local agency records, have been reviewed to identify past or current activities relating to environmental conditions within and in the vicinity of the PG&E Substation Parcel. Documents and information reviewed during EBS preparation include the following types of reports or investigative or management plans developed by Fort Ord as part of the Installation Restoration Program (IRP) and BRAC programs:

- RI/FS literature surveys and base inventory reports
- Preliminary assessment/site inspections
- Enhanced preliminary assessments
- Work plans
- Sampling and analysis plans
- Construction information for buildings
- Results of building surveys for asbestos, lead-based paint, radon, and radiological programs
- Inventories and management programs for USTs and SWMUs
- Hazardous waste management surveys, including surveys for management of transformers containing PCBs and oils and Fort Ord's Defense Environmental Restoration Program - Management Inventory System (DERP-MIS) records
- Air monitoring reports/Emission inventories
- Documents developed during the Community Environmental Response Facilitation Act (CERFA) assessment
- Records of an archive records search regarding ordnance-related training activities and areas
- Documentation of searches of federal and state environmental databases, including the EPA's National Priorities List (NPL) and Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) databases and the list of California state Superfund sites, which was obtained from the final CERFA report (*ADL, 1994*).

3.2 Interviews

Fort Ord (now Presidio of Monterey-Annex) or COE personnel were interviewed as necessary to support the EBS. For each of the environmental programs being conducted at Fort Ord, the Army identified a specific point of contact, as listed in Table 2. As specifically noted in Section 4.0, these persons were contacted at various times to obtain schedule and status updates for the assessment and abatement or remedial actions underway. Other current or former Fort Ord employees were also contacted to gather information about past or current activities, as documented in Section 4.0. In some cases, interviews documented in this EBS were conducted as part of previous assessments.

3.3 Visual Inspections

Visual inspections were conducted as necessary either to confirm information generated in the EBS or to identify additional potential problems. One visual inspection for the PG&E Substation Parcel was conducted during the EBS to verify site conditions and the position and number of buildings present. Previous visual inspections in the vicinity of the parcel were performed routinely during other investigations, such as site investigations at nearby IRP sites. Additionally, specific inspections have been conducted previously by other contractors in support of building surveys for asbestos and lead-based paint. The results of the visual inspections are noted in appropriate portions of Section 4.0.

3.4 Sampling

The EBS and FOST are typically based on available data. However, according to DoD guidance, sampling of various environmental media, including soil, groundwater, or building materials, is appropriate in the EBS to support decision-making and the preparation of a FOST. Considering the current conditions on the PG&E Substation Parcel and the historical use of the parcel, sampling in the EBS did not appear necessary to support decision-making and possible preparation of a FOST for the PG&E Substation Parcel.

3.5 Identification of Hazardous Substance/Waste Management Practices

Documents identified by Fort Ord and interviews with Fort Ord personnel provided information on procedures for management of hazardous materials and waste at Fort Ord. Relevant documents identified by Fort Ord and reviewed for this EBS include the following:

- Evaluation of Solid Waste Management Units (AEHA, 1988)
- Regulation 200-1 of the Fort Ord Hazardous Waste Management Plan (HWMP), September 4, 1990
- Fort Ord Underground Storage Tank Management Plan (HLA, 1991a)
- Verification of Solid Waste Management Units, Fort Ord, California (HLA, 1993)
- Fort Ord Spill Prevention, Control, and Countermeasures Plan, Table 1 and Section VI, Detailed Spill History (SPCC; Dynamac Corporation, 1993)
- Pest Management, Army Regulation 420-76 (June 3, 1986)

Use of pesticides at Fort Ord is governed by and conforms to Army Regulation 420-76, Pest Management, and is consistent with planned future reuse of parcels. Areas in which above-normal use of pesticides (herbicides, insecticides, rodenticides) occurred have been identified as part of the basewide investigation at IRP Sites 15, 24, and 33. No other areas of pesticide use have been identified that contain residual levels of hazardous substances that pose a threat to human health or the environment.

A database list of hazardous waste generators, dated April 19, 1990, was reviewed. Other potentially relevant documents, including the HWMP, Hazardous Waste Facility Inventory Report, Spill Plan, and site-specific spill reports, were not available for review.

Fort Ord personnel interviewed include Ms. Claire Murdo, Mr. Richard Schmitt, and Ms. Linda Temple. Ms. Murdo was interviewed in December 1993 and in February 1994. She provided information about the status of revisions to various management documents and provided some background to development of these documents. Mr. Schmitt provided the database list of hazardous waste generators and summarized the development and evolution of hazardous waste management activities at Fort Ord. Ms. Temple updated UXO/OEW issues as of December 1994 and January 1995 (Temple, 1994a, b, 1995a).

3.6 Identification of Potential Impacts from Adjoining Properties

Potential impacts from adjoining properties were identified on the basis of available land use information for properties within approximately 1 mile of the PG&E Substation Parcel boundary. The 1-mile search distance is consistent with the American Society for Testing and Materials (ASTM) standard for property transfer investigations. Several activities were conducted to evaluate potential impacts from adjoining properties within 1 mile. The boundaries of the PG&E Substation Parcel were first located on a Fort Ord site map, which was prepared using a computer-aided design/drafting (CADD) program. The areas surrounding the PG&E Substation Parcel then were searched for known or suspected locations of Fort Ord IRP sites, SWMUs, USTs, and other previously identified areas where potentially hazardous materials may have been stored, released, or disposed onpost. The process also considered the nature of the potentially contaminated medium (e.g., soil, groundwater, air) and the likelihood for contamination in that medium to affect the PG&E Substation Parcel.

Additionally, the results of known building surveys for asbestos, lead-based paint, and radon

were considered in identifying possible sources of potentially hazardous materials. For sites near the Fort Ord installation boundary, possible impacts from areas immediately offpost were also identified by reviewing the results of a search of environmental databases maintained by federal, state, and local agencies, as noted above.

Information from this process is presented in Section 4.7. For the PG&E Substation Parcel, all areas considered fall within the installation boundary.

3.7 Installation Restoration Program

Fort Ord was placed on the NPL on February 21, 1990. Since then, the Army has conducted site investigations at 41 identified sites to assess the nature and extent of contamination at Fort Ord. Thousands of soil, groundwater, air, and biota samples have been collected. The investigations are described in numerous basewide or site-specific reports, including the RI/FS Work Plan (HLA, 1991c), Sampling and Analysis Plan (HLA, 1991b), and site investigation reports that are either completed or in preparation and that contain site-specific work plans for subsequent site characterization activities. A draft final basewide RI/FS report has also been prepared (HLA, 1994c). The scopes of the investigations documented in these reports were developed in coordination with the relevant regulatory agencies.

No IRP sites are located within the PG&E Substation Parcel. However, approximately eight IRP sites are located in the vicinity of the parcel. These sites are being investigated under the installation's RI/FS program. Information from investigations of these IRP sites was included in development of this EBS. Information from other site investigation activities, including evaluation of potential soil contamination associated with USTs, was also included in the PG&E Substation Parcel EBS.

4.0 RESULTS F ENVIR NMENTAL BASELINE SURVEY F R PG&E SUBSTATION PARCEL

The results of the PG&E Substation Parcel EBS are presented below and include a discussion of potential environmental impacts from adjoining properties.

4.1 Environmental Conditions of Parcel

Three buildings are located on the PG&E Substation Parcel: Buildings 4428, 4429, and 4429A. Consequently, the Army has conducted building surveys for asbestos and LBP within the parcel. These surveys indicated that one building contains asbestos and all three structures on the PG&E Substation Parcel should be considered to contain lead-based paint (LBP). No radon gas testing was conducted within the parcel because the three buildings present are not living or office spaces. No radiological survey activities have been conducted in the buildings on the parcel because no radioactive materials have been stored in them. Additionally, because USTs and aboveground storage tanks (ASTs) are not present and no SWMUs exist on the PG&E Substation Parcel, no studies associated with these potential activities have been conducted by the Army for this parcel. The Fort Ord RI/FS program has not identified any IRP sites within the PG&E Substation Parcel, and no investigations are planned by the Army. No OEW surveys have been conducted within the PG&E Substation Parcel because review of archive documents did not identify any potential OEW activities on the parcel. However, because there are electrical transformers on the PG&E Substation Parcel, the Army has included it in its PCB management program.

4.2 Asbestos Management Program

The descriptions of the asbestos management program and its status are based on information that the Army made available to HLA (current through December 1994). Asbestos surveying, testing, sampling, or analysis, or assessment or evaluation of the precision, accuracy, or

applicability of the methods or data presented herein were not performed by HLA as part of the EBS.

The purpose of the asbestos management program at Fort Ord is to identify asbestos-containing materials (ACM) in Army-controlled buildings, evaluate the ACM's friability, condition, and potential for damage, and implement response actions appropriate to the findings. According to Mark Reese, Environmental Protection, HQ 7th ID AFZW-DE-ERND, asbestos-related work at Fort Ord is performed in accordance with the following documents/guidelines:

- Department of the Army Regulation (AR) 200-1, *Environmental Protection and Enhancement* Chapter 10, "Asbestos Management Program" May 23, 1990

To control asbestos, minimize environmental release, and minimize subsequent occupational and incidental exposure, Chapter 10 of AR 200-1 requires that the following objectives be met:

- Exclude ACM from procurements and uses where possible
- Handle, store, transport, and dispose of asbestos and perform asbestos-related work in accordance with applicable regulations
- Perform building surveys to maintain an inventory of ACM, assess the potential for exposure to asbestos, and implement operations and maintenance programs and management plans to minimize potential exposure to personnel
- Maintain a nonoccupational environment safe from asbestos exposure.

- Department of the Army
Memorandum, "Policy Guidance - Lead-Based Paint and Asbestos in Army Properties Affected by Base Realignment and Closure"
November 15, 1993

The purpose of this memorandum is to provide Army policy guidance on identifying and eliminating LBP and asbestos hazards for properties affected by Base Realignment and Closure (BRAC). The guidance requires the following:

- Compliance with all applicable regulations and coordination with regulators to ensure compliance
- Maintenance of minimum essential operations, maintenance, and repair standards to prevent deterioration of BRAC properties and to assure sufficient protection of human health and the environment
- Verification that asbestos surveys and assessments have been or will be performed for BRAC properties prior to disposal
- ACM will be removed from BRAC properties if:
 - Protection of human health requires removal, such as for damaged friable ACM
 - A property is intended to be used as a school (K-12) or child care facility
 - A property is unsalable without removal or its removal prior to sale is cost-effective
 - The Army intends to demolish the building prior to property disposal
- Friable or potentially friable asbestos that presents a health hazard and that has been stored or disposed underground or elsewhere on the property will be properly disposed

- Final BRAC actions taken regarding asbestos will be dependent on the overall disposal plan and any reuse of the building

- If the Army is pressed for early release of vacant property and it is known that the buyer intends to demolish the property or remove the asbestos before reoccupancy in accordance with applicable regulations, removal of threatening asbestos may not be required. Negotiations are necessary to ensure that the Army's liability is minimized, and notice and disclosure of any restrictions are required in the transfer language.

4.2.1 Summary of Program

An asbestos survey of approximately 350 nonhousing buildings (i.e., retail stores, office buildings, lavatories, dining halls, barracks, general purpose buildings, vehicle maintenance and storage, oil storage, bus/taxi stations, and ammunition bunkers) performed in 1989 and 1990 found both friable and nonfriable ACM. ACM was found in tank and pipe insulation, HVAC vibration joint cloths, exhaust flues, acoustic ceiling treatment, floor tile, linoleum and associated mastics, and debris in the buildings (*Weston, 1990; DEI, 1993*).

From October 1991 to April 1993, a basewide asbestos survey of an additional 2,689 nonhousing and barracks structures was performed and found both friable and nonfriable ACM such as tank and pipe insulation, HVAC vibration joint cloths, exhaust flues, acoustic ceiling treatment, floor tile, linoleum and associated mastics, and debris in the buildings (*DEI, 1993*). This report included the information from *Weston, 1990*, referenced above.

Surveys of housing units that are scheduled for disposal began in October 1993 and were completed in June 1995. The final summary report for the housing surveys will be made available to the recipients of the property (*Reese, 1994*).

4.2.2 Program Status and EBS Results

Of the three structures within the PG&E Substation Parcel, one has been surveyed for ACM. Available results are summarized in the table in Appendix C, which lists buildings within the PG&E Substation Parcel by (1) their building numbers, (2) the building construction dates, (3) whether the building has been surveyed for asbestos, (4) whether friable and/or nonfriable ACM were identified, and (5) if ACM was found, the numerical condition assessment rating assigned. In those surveys, which were conducted by another subcontractor, ratings range from 1 to 13, with the rating of 1 indicating the highest concern.

According to ACM survey results, none of the buildings surveyed within the PG&E Substation Parcel contain friable ACM with ratings 1 to 5; one building (4429A) contains nonfriable ACM rated 6 to 13; and two buildings were not surveyed. Plate 4 indicates buildings within the PG&E Substation Parcel in which (1) ACM with ratings 6 to 13 were identified and (2) structures for which no asbestos survey information is available. Information in Appendix C was prepared by ATC Environmental Inc. (formerly DEI) from its Fort Ord asbestos survey database (DEI, 1993).

4.3 Lead-Based Paint Management Program

The descriptions of the LBP management program and status are based on information that the Army made available to HLA (current through December 1994). HLA performed no LBP surveys, testing, sampling, or analysis as part of this EBS, and no evaluation of the precision, accuracy, or applicability of the methods or data presented herein.

The purpose of the LBP management program at Fort Ord is to identify and control LBP and lead-contaminated dust in target facilities and eliminate LBP hazards in BRAC properties in accordance with Title X of Public Law 102-550 Residential Lead-Based Paint Reduction Act of 1992. The act applies to buildings constructed prior to 1978, planned for disposal after

January 1995, and intended to be used for residential habitation. Target facilities are Army-owned or leased facilities constructed prior to 1978 and used regularly by children 6 years old or younger or by pregnant women as family housing, child development centers, family child care homes, schools, playgrounds, or similar facilities.

In 1978, the Consumer Products Safety Commission reduced the allowable lead concentration in residential paint to 0.06 percent. On the basis of this revised allowable lead concentration, painted structures built prior to 1978 that have not been surveyed as of the date of this report are suspected of containing LBP.

According to Mr. Mark Reese, the LBP Management Program at Fort Ord is performed in accordance with the following Army documents/guidelines:

- Department of the Army Memorandum, "Policy Guidance - Lead-Based Paint and Asbestos in Army Properties Affected by Base Realignment and Closure" November 15, 1993

The purpose of the memorandum is to provide Army policy guidance on identifying and eliminating LBP and asbestos hazards for properties affected by BRAC. The guidance requires the following:

- Compliance with all applicable regulations and coordination with regulators to ensure compliance
- Maintenance of minimum essential operations, maintenance, and repair standards to prevent deterioration of BRAC properties and to assure sufficient protection of human health and the environment
- In accordance with Title X of Public Law 102-550 (1) inspection of housing constructed before 1978 and affected by BRAC activities (in which children younger than 6 years of age may be expected to reside), or (2) abatement of LBP in housing constructed prior to 1960

- Taking steps to ensure that (1) properties sold for residential habitation are free of immediate LBP hazards prior to residential habitation, or (2) if a property is transferred before the Army can perform the LBP investigation, that conditions of sale will prevent use of the property for residential habitation until investigations are completed and potential LBP hazards existing at the time of transfer have been eliminated by the Army or the recipient
- Management of nondefective surfaces in place to prevent them from becoming hazards
- Notification of potential transferee if evidence suggests that LBP may be present.
- Department of the Army
Memorandum, "Lead-Based Management Program"
April 28, 1993

The purpose of this memorandum is to determine the greatest health risks and target resources to achieve acceptable environmental standards for individuals exposed to lead. The memorandum requires the following:

- Assessing lead water levels
- Assessing blood levels in children
- Assessing LBP contamination
- Developing abatement programs for high risk health areas
- Establishing data tracking system.

4.3.1 Summary of Program

LBP surveys of pre-1978 housing areas were conducted by U.S. Army Environmental Hygiene Agency (AEHA) in accordance with modified HUD guidelines and as described in the AEHA LBP inspection report (AEHA, 1994a). The scope of the AEHA lead survey did not include the

PG&E Substation Parcel because there are no housing units within the parcel. No hazard assessment was conducted as part of the AEHA survey or this EBS. No other LBP surveys or LBP abatement activities for structures within the PG&E Substation Parcel had been scheduled as of the date of this report.

4.3.2 Program Status and EBS Results

LBP surveys began in November 1993 and were completed by March 1994. No parcel-specific data are available, however, because no housing units are within the PG&E Substation Parcel. Building 4428 was constructed in 1972 and should be considered to contain LBP. Construction dates are not known for the other two structures on the PG&E Substation Parcel; they should be considered to contain LBP. Plate 5 shows the LBP information for buildings within the PG&E Substation Parcel.

4.4 Polychlorinated Biphenyls Management Program

The descriptions of the PCB management program and status are based on information that the Army made available to HLA (current through October 1994). The purpose of the PCB management program at Fort Ord is to identify transformers and other materials that may contain PCBs and evaluate their potential to contain PCBs. As part of this program, HLA also examined transformer storage locations and areas where transformers were reportedly buried.

According to an Army memorandum dated August 25, 1982, all PCB transformers and PCB-filled electromagnets at Fort Ord are to be inspected on a weekly, quarterly, or annual basis as required by the EPA's Rule on PCBs, 40 CFR Parts 761, 761.120, and 268 and any other applicable environmental regulations. These guidelines also apply to the handling, use, storage, and disposal of PCBs and PCB-contaminated material.

4.4.1 Summary of Program

Several sampling episodes for PCBs in transformer oils have been conducted at

Fort Ord. According to the Fort Ord Enhanced Preliminary Assessment (*Weston, 1990*), all transformers at Fort Ord were tested for PCBs in 1987 and 1988. Information from Fort Ord personnel (*Temple, 1994b*) indicates that additional sampling was conducted between 1985 and 1987. The sampling programs encompassed approximately 1,000 transformers throughout Fort Ord, including those at the PG&E substation, ranging in size from 1.5 to 750 KVA. Most of the sampled transformers were pole-mounted, although pad- or ground-mounted transformers were also included in the sampling program. PCB test results indicated that dielectric fluids from three transformers in Building 3702 located on Sixth Avenue, about 0.5 mile north of the PG&E Substation Parcel, had PCB concentrations ranging from 360,000 to 860,000 ppm and that oil from a transformer located near Building 2066 (Main Garrison Sewage Treatment Plant) had a PCB concentration of 100 ppm. No other transformer fluids had PCB levels exceeding the Toxic Substances Control Act (TSCA) limit of 50 ppm. Approximately 168 transformers had PCB levels between 5 and 50 ppm and were considered PCB contaminated on the basis of State of California guidelines at that time. The remaining transformers at Fort Ord had PCB levels under 5 ppm (*Weston, 1990*).

4.4.2 Program Status and EBS Results

The transformers present on the parcel belong to PG&E. No reported releases of PCBs from these transformers are known to have occurred on the PG&E Substation Parcel. According to a Facilities Engineering Work Request dated June 6, 1990, the dielectric fluid from the three transformers at Building 3702, about 0.5 mile north of the parcel, was removed and disposed, and the transformer oil was replaced with non-PCB-containing dielectric fluid. All transformers with PCBs between 50 and 500 ppm in the dielectric fluid, including those on the PG&E Substation Parcel, have been replaced (*Weston, 1990*). The last transformers containing greater than 500 ppm PCBs were removed and replaced with non-PCB transformers in 1992 (*Temple, 1994b*). There was no basewide program to replace transformers with PCB levels between 5 and 50 ppm; these are replaced with

non-PCB transformers on an as-needed basis (*Weston, 1990*). HLA's review of Army documents indicates that many transformers have been removed and disposed and that dielectric fluid from the transformers has been tested for PCBs, changed out, and disposed as necessary. Little supporting documentation is available to match test results and disposal manifests to specific transformers and their current or former locations.

The only documented release of transformer oil occurred in the late 1970s on Seventh Avenue. The contaminated soil was removed by roads and grounds personnel and taken offpost. No information was available as to the exact location of the release and whether any soil sampling was performed (*Weston, 1990*).

4.5 OEW Assessment Programs

This section describes the investigations performed to evaluate whether OEW from past training activities at Fort Ord is present on the parcel. Ordnance-related training at Fort Ord occurred primarily at the Beach Trainfire Ranges along the western boundary of Fort Ord, and within the Inland Ranges, which comprise approximately 8,000 acres in the southwest portion of Fort Ord. In addition, several areas outside the Beach Trainfire and Inland Ranges have been identified as potential ordnance-related training areas. As a result of past training activities, OEW may also be present in these areas.

OEW is defined as the following materials: bombs and warheads; guided and unguided ballistic missiles; artillery, mortar, and rocket ammunition; small arms ammunition; antipersonnel and antitank mines; demolition charges; pyrotechnics; grenades; torpedoes and depth charges; containerized or uncontainerized high explosives and propellants; and all similar or related items designed to cause damage to personnel or material. Soils with explosive constituents will be considered OEW if the concentration is sufficient to present an imminent hazard. Unexploded ordnance (UXO), a subset of OEW, consists of unexploded bombs, warheads, artillery shells, mortar rounds, and chemical weapons. The investigations regarding

the potential physical hazards and potential contamination from OEW at Fort Ord are discussed below.

4.5.1 Summary of Programs

Investigations related to OEW at Fort Ord are conducted under two separate programs. The first program, which includes the investigation and removal of OEW, is being managed by the U.S. Army Engineer Division, Huntsville (USAEDH), Mandatory Center of Expertise (MCX) for OEW at Army installations. The main objective of this program is to evaluate and address physical hazards due to any OEW that may be present. USAEDH's program includes (1) an archive search to identify the types of ordnance and locations of ordnance training areas at Fort Ord, (2) a random grid sampling program to evaluate the presence of OEW, and (3) a clearance program to remove and dispose of OEW if it is detected during the sampling program. The sampling program consists of visual and magnetometer sweeps conducted in a representative number of randomly selected grid areas within a parcel. If OEW is found, the nature and extent of contamination is evaluated; based on that evaluation, a "clearance" (i.e., removal and disposal action) may be performed over the entire parcel. The areas identified for OEW investigation and the technical procedures are described in work plans for each phase of the investigation (HFAI, 1993, 1994a, 1994b; UXB, 1994).

The second program was performed by HLA and managed by the Sacramento District COE as part of the RI/FS. It evaluated the likelihood that soil and/or groundwater at ordnance training areas was contaminated with ordnance-related chemical residues. The investigation consisted of (1) a research task to identify possible ordnance-related training areas and to develop a list of potential ordnance-related contaminants, (2) a sampling and analysis program to evaluate the nature and extent of explosive compounds and metals in selected ordnance training areas at Fort Ord, and (3) a risk assessment and feasibility study using data collected during the sampling and analysis program.

The results of the research task and a work plan describing the areas of investigation and technical approach are presented in the *Draft Final Data Summary and Work Plan, Site 39 - Inland Ranges (HLA, 1994a)*. The results of the Site 39 RI are presented in the *Draft Final Fort Ord Basewide RI/FS (HLA, 1994b)*.

Information obtained during these two investigations was used to identify sites containing potential OEW. Areas in the vicinity of the PG&E Substation Parcel identified during these investigations as potential ordnance training areas (i.e., areas containing potential OEW) are shown on Plate 7.

4.5.2 Program Status and EBS Results

The results of the archive search conducted by USAEDH are presented in the Archives Search Report (USAEDH, 1993) and draft Supplement No. 1 to the Archives Search Report (USAEDH, 1994). The results of the records survey of potential ordnance training areas performed for the Fort Ord RI/FS are presented in the *Draft Final Data Summary and Work Plan for Site 39 (HLA, 1994a)*. Those reports identify the types of ordnance used at Fort Ord and describe areas both inside and outside of the Inland Ranges where ordnance-related training may have occurred. A multiple-phase work plan (HFAI, 1993, 1994a, 1994b; UXB, 1994) was prepared at the direction of USAEDH, which describes the OEW investigation program proposed to address potential physical OEW hazards in areas within and near reuse parcels, as they were identified at that time. Investigation for ordnance-related chemical residues as part of the Fort Ord RI/FS was not warranted in the potential OEW areas near the PG&E Substation Parcel (HLA, 1994a).

The above-mentioned reports were used to identify potential OEW areas within the vicinity of the PG&E Substation Parcel. One training area, Chemical, Biological and Radioactive (CBR) Training Area 1, is 400 feet from the PG&E Substation Parcel (Plate 7). The investigation of CBR Training Area 1 (USAEDH Site No. 4B) is discussed below. Several other known or potential ordnance training areas have been

identified within a 1-mile radius of the PG&E Substation Parcel; these areas are discussed with regard to adjoining properties in Section 4.7.

- CBR Training Area 1

Four areas for training troops in chemical, biological, and radioactive (CBR) warfare maneuvers were identified at Fort Ord during the review of historical training facilities maps. One of these areas, CBR Training Area 1, is near the PG&E Substation Parcel (Plate 7). According to USAEDH's research, classroom training with chemical agents similar to tear gas took place in these areas. Minute amounts of dilute mustard gas, probably part of Chemical Agent Identification Sets (CAIS), were possibly used to familiarize troops with this substance (USAEDH, 1993). USAEDH located the CBR areas and found evidence of pyrotechnic use (e.g., flares) and a suspected washout area at one of the CBR training areas. Fort Ord Range Control suggested to HLA that the suspected washout area was most likely used by troops practicing vehicle decontamination. Based on available information, it does not appear that chemical agents were released to the environment as a result of activities at the CBR training areas. Available site history information indicated that this area did not warrant investigation for potential ordnance-related residues as part of the Fort Ord RI/FS. CBR Training Area 1 was investigated by USAEDH as Site No. 4B for the potential presence of OEW. Sampling at the site is complete and small arms rounds and expended training items were located and removed from the grids sampled (HFAI, 1994c). No subsequent removal action was recommended by USAEDH.

4.6 Community Environmental Response Facilitation Act (CERFA)

This section discusses the CERFA program, including the purpose of CERFA legislation, the effect of the legislation on real property transfer, and the findings of the Fort Ord CERFA report.

4.6.1 Summary of ERFA Program

CERFA (Public Law 102-426) was enacted on October 19, 1992, and amended CERCLA in two principal areas. First, CERFA added CERCLA §120(h)(4), which requires the identification of uncontaminated property ("CERFA parcels"). The fundamental purpose of CERCLA §120(h)(4) is to expedite identification of real property having the greatest opportunities for redevelopment at facilities at which federal operations are terminating. Properties are identified by evaluating their current and historical uses. Specific procedures for conducting the evaluation are described in the CERFA legislation. In general, the procedures encompass the following:

- A search of government records
- Review of recorded chain of title documents
- Review of aerial photographs reflecting prior uses
- Visual inspection of the property
- Physical inspection of and review of information for adjacent properties
- Interviews with current or former employees.

For installations on the NPL, the identification of uncontaminated property is not considered complete until the USEPA concurs.

The second principal change provided by CERFA is in the classification of the requirements of CERCLA §120(h)(3) for declaring that all necessary remedial actions have been taken. Generally, according to CERFA, remedial action has been taken if an approved remedial system has been constructed and demonstrated to the EPA administrator to be operating properly and successfully. This revision permits the transfer of real property within a time frame significantly more favorable to communities surrounding closing installations by allowing such transfer to proceed potentially well before remedial actions are concluded.

As noted above, a focus of the CERFA program is the identification of uncontaminated property. The CERFA report functions as a basewide EBS for Fort Ord and provides information that supports the preparation of parcel-specific EBSs. Because real property identified as uncontaminated under CERFA appears to have no history of storage, release, or disposal of CERCLA hazardous substances or petroleum products or their derivatives, and because no remedial actions are, therefore, considered necessary, a deed for transfer of such real property can indicate that the requirements of CERCLA §120(h)(4) have been met.

4.6.2 Program Status and EBS Results

A CERFA assessment was initiated for Fort Ord in Fall 1992. The CERFA program for Fort Ord was conducted by the U.S. Army Environmental Center (USAEC) on behalf of Fort Ord. On December 6, 1993, the draft CERFA report was issued to Fort Ord and the regulatory agencies. On January 28, 1994, a meeting was conducted to discuss preliminary comments on the draft CERFA report. The final CERFA report was released on April 8, 1994 (ADL, 1994). Concurrence on the Army's identification of CERFA clean parcels was received from USEPA and the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) on April 18 and 19, 1994, respectively.

The principal result of the CERFA assessment is a map showing the areas identified as uncontaminated. Plate 8 presents information from the final CERFA report for areas surrounding and including the PG&E Substation Parcel. The distribution of CERFA-defined parcels on Plate 8 (CERFA parcels, CERFA with qualifiers parcels, and CERFA disqualified parcels) is taken directly from the CERFA report. Table 3 defines the categories developed in the CERFA report.

Plate 8 shows that the PG&E Substation Parcel has been primarily categorized as CERFA Disqualified Parcel 36. Based on information developed for and considered in the CERFA report, CERFA disqualified parcels have a history

of storage of CERCLA-regulated hazardous substances, petroleum products, or petroleum derivatives for more than 1 year; release or disposal of CERCLA-regulated hazardous substances, petroleum, or petroleum derivatives; or threat of migration of such contamination from adjacent property (ADL, 1994). A bank of 24 2-volt lead-acid storage batteries used by PG&E as a backup power source are reportedly stored in Building 4429 (ADL, 1994; Dameron, 1995). The presence of the batteries is noted by the "HS" symbol on Plate 8. No release of hazardous materials from the batteries has been reported. A thin strip of land at the northern end of the parcel was categorized as part of CERFA with Qualifier Parcel 114 for ACM, LBP, radon, and radiological sources because of adjacent property categorization under the 1-acre grid system used for the CERFA Report. No contamination by these substances is known to exist on the PG&E Substation Parcel.

4.7 Potential Impacts From Adjoining Properties

This section summarizes potential environmental impacts from properties within approximately 1 mile of the PG&E Substation Parcel. Areas immediately adjacent to the PG&E Substation Parcel are shown on Plates 6, 7, and 8. Discussions in this section are based on review of documents furnished by the Army and reports pertaining to specific environmental concerns.

Asbestos: Asbestos surveys found both friable and nonfriable ACM in numerous troop housing buildings adjacent to the PG&E Substation Parcel (Weston, 1990 and DEI, 1993). Buildings near the PG&E Substation Parcel are shown on Plate 8 within adjacent CERFA with Qualifier Parcel 114.

Lead-Based Paint: LBP surveys of family housing structures at Fort Ord have been completed. Based on available information, pre-1978 structures are likely to contain LBP (ADL, 1994). Pre-1978 troop housing structures in the area adjacent to the PG&E Substation Parcel are shown on Plate 8.

Radon: Radon testing for buildings within approximately 1 mile of the PG&E Substation Parcel found three buildings, located north of the

parcel, with concentrations exceeding 4 pCi/l. One of these buildings, Building 4446, is located approximately 700 feet north of the parcel (Plate 8).

Radiological Decommissioning: No radiological survey activities have been conducted in buildings adjacent to the PG&E Substation Parcel. However, radiological survey activities have been conducted in 29 buildings located north and within 1 mile of the PG&E Substation Parcel. No radiological hazards were found to be present in the buildings surveyed.

Ordnance and Explosive Waste: Potential OEW areas in the vicinity of the PG&E Substation Parcel are listed below and in Table 4:

- Chemical, Biological, and Radioactive (CBR) Training Area 1
- CBR Training Area 2
- CBR Training Area 4
- Machine Gun Proficiency Training Area
- 100-Pound Bomb site
- Mine and Booby Trap Area 2
- Mine and Booby Trap Area 6
- Machine Gun Square 3
- Machine Gun Square 4
- Machine Gun Square 5
- Machine Gun Square 7
- Mortar Square 4
- Mortar Square 5
- Sinkhole Practice Mortar Range
- Officers Club Foxhole.

These locations were identified during the Site 39 investigation as not warranting investigation for ordnance-related chemical hazards (HLA, 1994b).

OEW has been found at the 100-Pound Bomb Site, Mine and Booby Trap Area 2, and the Sinkhole Practice Mortar Range; clearance of these areas is underway (Temple, 1994d). Limited quantities of small arms and expended training items were located in the grids sampled at CBR Training Areas 1 and 2 (USAEDH Site Nos. 4B and 4A, respectively) (HFAI, 1994c). These sites were not recommended for OEW removal actions as part of USAEDH's program. Machine Gun Squares 3 and 4 were not recommended for further OEW investigation. The remaining eight sites are being evaluated to determine the need for further investigation.

Polychlorinated Biphenyls: Transformers with concentrations of PCBs above 50 ppm reportedly have been removed from Fort Ord and replaced with non-PCB transformers. Transformers with PCB levels between 5 and 50 ppm are replaced with non-PCB transformers on an as-needed basis. There are no documented releases of transformer oil or PCB-containing materials within the area surrounding the PG&E Substation Parcel.

Underground and Aboveground Storage Tanks: Approximately 93 existing and former USTs are located within approximately 1 mile of the PG&E Substation Parcel. Of those 93 tanks, about 49 are currently in place, and 44 have been removed. Approximately 4 ASTs are located within 1 mile of the PG&E Substation Parcel. There are 2 existing and 2 former USTs and 1 AST are located within 1,000 feet of the PG&E Substation Parcel (Plate 6). The Monterey County Department of Health has granted closure to UST 4430, located 70 feet north of the PG&E Substation Parcel, and to UST 4440, located 550 feet northeast of the parcel. Two USTs (4385) at Hayes Army Hospital have been scheduled for removal. The condition of AST 4460, located 400 feet northwest of the parcel, is unknown.

Solid Waste Management Units: Seventeen former or existing SWMUs were identified within about 1 mile of the PG&E Substation Parcel. No SWMUs were identified within 1,000 feet of the parcel (Table 4).

Remedial Investigation/Feasibility Study Program: In the vicinity of the PG&E Substation Parcel, eight IRP sites are being investigated as part of the RI/FS at Fort Ord (Table 4). All but one have some level of documented soil and/or groundwater contamination and are currently undergoing or are slated for further site characterization or remediation. The closest IRP site, Interim Action Site 22 - 4400/4500 Block Motor Pool-West, is located 750 feet east of the parcel (Plate 6). Potential sources of soil and groundwater contamination at Site 22 include two former USTs, two oil/water separators, and a grease rack. Chemicals of concern at Site 22 include metals and petroleum hydrocarbons. Additional investigation is continuing (HLA, 1994b).

4.8 FOST Preparation

On the basis of the results of the EBS and the final CERFA Report for Fort Ord (ADL, 1994), a draft FOST has been prepared to document the environmental suitability of the PG&E Substation Parcel for transfer to PG&E. The draft FOST was prepared following DoD and Army guidance to include the elements listed in Section 1.3 of this EBS and regulatory agency comments, and it is attached as Appendix B. The FOST concludes that the PG&E Substation Parcel is suitable for transfer under CERCLA §120(h)(3). Plate 9 indicates the property that is proposed for transfer under CERCLA.

5.0 FINDINGS AND CONCLUSIONS

5.1 Findings

This EBS presents an overview of current environmental conditions on the PG&E Substation Parcel based on available information. Findings of the EBS for the PG&E Substation Parcel include:

- The parcel boundaries used in this study and shown on the plates in this report are approximate and based on information from the COE. Surveyed parcel boundaries are presented in Appendix B.
- An asbestos survey has been completed for one of three nonhousing structure on the PG&E Substation Parcel. This survey shows that Building 4429A contains nonfriable ACM. The presence of asbestos in this structure does not preclude its transfer. However, disclosure of the conditions is necessary at the time of transfer. The two other nonhousing buildings on the parcel were not surveyed for ACM.
- Lead-based paint surveys of housing structures have been completed. However, no data specific to the PG&E Substation are available because no housing structures or barracks are present on the PG&E Substation Parcel. Building 4428 was constructed by the Army in 1972 and should be considered to contain LBP. No construction dates were available for the two other nonhousing structures on the PG&E Substation Parcel, and these PG&E-owned structures should also be considered to contain LBP. Presently no other conclusions can be made about the condition of the LBP or whether it represents a health hazard. The possible presence of LBP in these units does not preclude their transfer; however, disclosure of the conditions is necessary at the time of transfer.
- Transformer dielectric fluids have been examined for PCBs in two basewide sampling programs encompassing approximately

1,000 transformers. Transformers with concentrations of PCBs above 50 ppm reportedly have been removed from Fort Ord and replaced with non-PCB transformers. There have been no reported releases of PCB-contaminated dielectric fluids within the PG&E Substation Parcel.

- During OEW sampling, small arms and expended training items were located in the grids sampled at nearby CBR Training Area 1. No OEW removal action was recommended for this site. Fourteen other potential ordnance training sites are within a 1-mile radius of the parcel.
- The final CERFA report identifies CERFA with qualifier and CERFA disqualified areas within the PG&E Substation Parcel boundary. The PG&E Substation Parcel has been primarily categorized as a CERFA disqualified parcel. A thin strip of land at the northern end of the parcel was categorized as a CERFA with qualifier parcel for ACM, LBP, radon, and radiological sources because of adjacent property categorization under the 1-acre grid system used in the CERFA report. No contamination by these substances is known to exist on the PG&E Substation Parcel. A bank of lead-acid storage batteries used by PG&E as a backup power source is reportedly stored on the parcel in Building 4429. No release of hazardous materials from the batteries has been reported.

5.2 Conclusions

On the basis of this EBS and the FOST guidance criteria, it may be concluded that the PG&E Substation Parcel is transferable now by deed under the provisions of CERCLA §120(h)(3). The parcel includes about 1.5 acres. It is proposed for transfer under CERCLA §120(h)(3) because it is a CERFA disqualified parcel due to hazardous materials (lead-acid batteries) present at the site. No release of hazardous materials from the batteries has been reported. Appropriate use

restrictions will be included in the transfer documents (deed). A copy of the draft FOST for the PG&E Substation Parcel is attached as Appendix B. The final, signed FOST is expected to be essentially similar to this document. The legal description of the parcel is also included in Appendix B.

6.0 REFERENCES

Arthur D. Little, Inc. (ADL), 1994. *Final Community Environmental Response Facilitation Act (CERFA) Report, Fort Ord, California*. April 8.

Dameron, Rich, 1995. Pacific Gas and Electric Company. List of Equipment. Facsimile transmission to Steve Walker, Harding Lawson Associates. February 8.

Department of the Army (Army), 1979. *Granting Use of Real Estate*. February.

_____, 1993a. Lead Based Paint Policy Guidance. U.S. Department of the Army Memorandum. April 28.

_____, 1993b. Army Radon Reduction Program Completion and Installation Status Update. U.S. Department of the Army Memorandum. September 24.

_____, 1993c. *Policy Guidance - Lead Based Paint and Asbestos in Army Properties Affected by Base Realignment and Closure*. Memorandum. November 15.

_____, 1993d. *Fort Ord, California, Disposal and Reuse Environmental Impact Statement Record of Decision*. December 23.

_____, 1994. *Finding of Suitability to Transfer (FOST) - Army Implementing Guidance*. November 10.

Department of Defense (DOD), 1994. *Guidance-Finding of Suitability to Transfer for BRAC Property*. June 1.

Diagnostic Environmental, Inc. (DEI), 1993. *Asbestos Survey Report of U.S. Army Corps of Engineers, Fort Ord Installation*. April 26.

Dynamac Corporation, 1993. *Spill Prevention, Control, and Countermeasure Plan for Fort Ord*. September.

Fort Ord Reuse Authority (FORA), 1994. *Fort Ord Base Reuse Plan*. October 14.

Fort Ord Reuse Group (FORG), 1993. *Initial Base Reuse Plan*. March 19.

Harding Lawson Associates, 1991a. *Underground Storage Tank Management Plan, COE Fort Ord Complex, California*. Prepared for Sacramento COE. October 30.

_____, 1991b. *Sampling and Analysis Plan, Remedial Investigation/Feasibility Study, Fort Ord, California*. Prepared for Sacramento COE.

_____, 1991c. *Work Plan, Remedial Investigation/Feasibility Study, Fort Ord, California*. Prepared for Sacramento COE. December 2.

_____, 1993. *Draft Verification of Solid Waste Management Units, Fort Ord, California*. August 16.

_____, 1994a. *Draft Final Data Summary and Work Plan, Site 39 - Inland Ranges, Fort Ord, California*. May 17.

_____, 1994b. *Draft Site Characterization, Site 22 - 4400/4450 Block Motor Pool, West, Fort Ord, California*. May 23.

_____, 1994c. *Draft Final Basewide Remedial Investigation/Feasibility Study, Fort Ord, California*. December.

Human Factors Applications Inc., 1993. *Fort Ord - Phase I Work Plan and Accident Prevention Plan*. Prepared for U.S. Army Corps of Engineers, Huntsville. December.

_____, 1994a. *Fort Ord Addendum, Phase II - Work Plan*. Prepared for U.S. Army Corps of Engineers, Huntsville. January.

_____, 1994b. *Fort Ord - Phase III Work Plan and Site Specific Safety and Health Plan*. Prepared

for U.S. Army Corps of Engineers, Huntsville. February.

_____, 1994c. *OEW Sampling and OEW Removal Action*. Fort Ord. Final Report. December 1.

Reese, Mark, 1994. Fort Ord, HQ 7th Infantry Division (Light), AFZW-DE-ERND. Letter or facsimile transmission to Cynthia Dahl. January 3, 20, 21, and 26 and February 1.

Temple, Linda, 1993a. Fort Ord Directorate of Engineering and Housing, Fort Ord, California. Memorandum to Steven M. Farley, Harding Lawson Associates. November 30.

_____, 1993b. Fort Ord Directorate of Engineering and Housing, Fort Ord, California. Letter to Steven M. Farley, Harding Lawson Associates. December 28.

_____, 1993c. Fort Ord Directorate of Engineering and Housing, Fort Ord, California. Table of Aboveground Storage Tanks. Personal communication to Steve Farley, Harding Lawson Associates. December 28.

_____, 1994a. Fort Ord Directorate of Engineering and Housing, Fort Ord, California. Site Update as of February 3, 1994. Facsimile transmission to Eric Williams and Steve Farley, Harding Lawson Associates. February 3.

_____, 1994b. Fort Ord Directorate of Engineering and Housing, Fort Ord, California. Telephone conversation with Gary Lieberman, Harding Lawson Associates. February 3.

_____, 1994c. Fort Ord Directorate of Environmental and Natural Resources Management. Data Transmitted to Tom Williams, Harding Lawson Associates. October 25.

_____, 1994d. Fort Ord Directorate of Environmental and Natural Resources Management. Update on OEW Site Clearance Facsimile transmission to Bruce Wilcer, Harding Lawson Associates. November 7.

_____, 1995a. Fort Ord Directorate of Environmental and Natural Resources Management. Update on OEW investigation,

telephone conversation with Bruce Wilcer, Harding Lawson Associates. January 18.

_____, 1995b. Fort Ord Directorate of Environmental and Natural Resources Management. Update on Site Description and Uses. Facsimile Transmission to Steve Walker, Harding Lawson Associates. February 2.

U.S. Army Corps of Engineers (COE), 1993. *Fort Ord Disposal and Reuse Environmental Impact Statement*. Final. June.

U.S. Army Corps of Engineers, Huntsville Division (USAEDH), 1993. *Archives Search Report*. Prepared by the COE, St. Louis District. December.

_____, 1994. Archives Search Report (Supplemental No. 1). Prepared by the COE, St. Louis District. November.

U.S. Army Environmental Hygiene Agency (AEHA), 1988. *Evaluation of Solid Waste Management Units, Fort Ord, California*. Interim final. September 18-22.

_____, 1994a. *Industrial Hygiene Survey No. 55-71-R25A-94, LBP Inspection in Military Housing, Fort Ord, California, November 1, 1993 - March 11, 1994*. June 6, 1994.

AEHA, 1994b. *Industrial Radiation Survey No. 27-43-E2HU-2-94; Facility Close-out and Termination Survey, Fort Ord, California, 10 January - 15 April 1994*. June 6.

_____, 1994c. *Industrial Radiation Survey No. 27-43-E2HU-3-94, Facility Close-out and Termination Survey, Fort Ord, California, 10 January - 15 April 1994*. September 7.

U.S. Environmental Protection Agency (EPA), 1994. Meeting of Mr. John Chesnutt and Ms. Deirdre Nurre of EPA with Mr. Stephen M. Farley, Harding Lawson Associates, during U.S. Army BRAC Cleanup Plan Meeting. February 2 and 3.

UXB International (UXB), 1994. Work Plan for OEW Phase II Removal Action, Fort Ord, California. Prepared for U.S. Army Corps of Engineers, Huntsville. June.

Wang, D., 1994. California Department of Toxic Substances Control. Letter to J. Anderson, U.S. EPA. *Comments on Final CERFA Document, Fort Ord*. April 18.

Weston, Roy F., Inc. (Weston), 1990. *Task Order II - Enhanced Preliminary Assessment for Fort Ord*. Prepared for U.S. Army Toxic and Hazardous Materials Agency. Aberdeen Proving Grounds, Maryland. December.

Wong, Walter, 1994. Monterey County Department of Health, Environmental Health. Letter to Chief, Environmental and Natural Resources Management Division, Directorate of Public Works, Fort Ord. List of UST Sites Granted Closure. April 6.