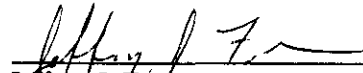


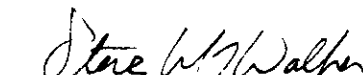
**Environmental Baseline Survey  
Monterey Institute For Research  
In Astronomy (MIRA) Parcel  
Former Fort Ord, California**

Prepared for

**Department of the Army  
Corps of Engineers**  
Sacramento District  
1325 J Street  
Sacramento, California 95814-2922

HLA Project No. 25894 0017713

  
\_\_\_\_\_  
Jeffery J. Fenton  
Project Geologist

  
\_\_\_\_\_  
Steven W.H. Walker, C.E.G. 1294  
Associate Geologist

Version 2

August 2, 1995



**Harding Lawson Associates**  
Engineering and Environmental Services  
105 Digital Drive, P.O. Box 6107  
Novato, California 94948 - (415) 883-0112

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**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
SRE	Screening Risk Evaluation
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 Monterey Institute for Research in Astronomy (MIRA) 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 Comprehensive Environmental Response, Compensation, and Liability Act (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 MIRA 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 MIRA. Health- or safety-related environmental conditions currently exist or are suspected to exist on the MIRA Parcel, including the suspected or known presence of asbestos, lead-based paint, and 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 Monterey Institute for Research in Astronomy (MIRA) 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 MIRA Parcel, should the U.S. Department of the Army (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 Realignment and Closure 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 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 reuse 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, P00120, P00130, P00223, and P00239.

### 1.1 Purpose and Objectives

Under current Department of Defense (DOD) and 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), and other such substances 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.
- 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 (DOD, 1994). A FOST should contain:

- Purpose
- Property description 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 legal description for the MIRA Parcel is included in Appendix B.

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

A FOST is expected to be a relatively brief document, only a few pages long. The BRAC Environmental Coordinator (BEC) prepares the FOST in conjunction with the BRAC Cleanup Team (BCT) to document certification of the suitability of a parcel for transfer, on the basis of information in the EBS and the specific certification criteria described in FOST guidance (Army, 1994; DOD, 1994). 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)

### **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 MIRA Parcel. Section 2.0 describes the Fort Ord setting and general characteristics of the MIRA Parcel, including parcel location and boundaries, current and historical land use, anticipated land use following transfer, and adjacent land use. Section 3.0 describes the specific activities conducted for the MIRA Parcel EBS and FOST. Section 4.0 presents the results of the EBS, describing available information about existing environmental conditions on the MIRA 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 a FOST for the MIRA Parcel. 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 described area.

## 2.0 PAR EL DES RIPTI N

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 that 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 proposed parcel be transferred to the Monterey Institute For Research In Astronomy (MIRA) for educational and research purposes.

### 2.3 MIRA Parcel Description

The MIRA 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 generally rectangular and approximately 300 feet wide east to west and 260 feet long north to south. The parcel is bordered to the north by Eighth Street, to the west by Second Avenue, and to the south and east by the former 1600 Block Motor Pool. The eastern and southern boundaries of the MIRA Parcel also bound the California State Universities, Monterey Bay, Parcel. The parcel contains four buildings surrounded by paved areas. Building 1638 was constructed by the Army in 1980; Building 1653 was constructed in 1974 and Buildings 1660 and 1661 were constructed in 1941 (*Temple, 1995c*). A

construction date of 1985 has also been given for Building 1661; however, a site-inspection indicated that the building appeared to be much older (circa 1941).

**2.4 Previous and Current Activities on Parcel**

According to available information, the land and structures present on the MIRA Parcel have been used as sites for:

- Building 1638            Moving Target Simulator
- Building 1653            General Storage (lumber/hardware)
- Building 1660            Training Aids Center/Storage
- Building 1661            Lavatory.

There are no current activities on this parcel (Temple, 1995c).

**2.5 Historical Uses on Adjacent Property**

The area surrounding the MIRA Parcel consists primarily of developed property. The developed properties near the MIRA Parcel boundaries include the following:

- Troop barracks to the north and west
- Military support/industrial areas, including motor pools, machine shops, and maintenance facilities to the south and east.

Several sites within 1 mile of the MIRA Parcel are actively being investigated as part of the RI/FS program at Fort Ord, including:

- Site 2: Main Garrison Sewage Treatment Plant - 0.5 mile west

- Site 3: Beach Trainfire Area - 0.5 mile west
- Site 4: Beach Stormwater Outfalls - 0.8 mile west
- Site 12: DOL Automotive & Cannibalization Yard - 0.3 mile northwest
- Site 13: Railroad Right-of-Way - 0.4 mile west
- Site 14: 707th Maintenance Facility - 0.7 mile southeast
- Site 15: DEH Yard - 0.7 mile southeast
- Site 16: DOL Maintenance Yard and Pete's Pond - 0.6 mile southeast
- Site 17: 1400 Block Motor Pool - 0.4 mile east
- Site 18: 1600 Block Motor Pool - southern parcel boundary
- Site 19: 2200 Block Facility - 50 feet north
- Site 20: South Parade Ground, 3800 & 519th Motor Pools - 0.6 mile south
- Site 23: 3700 Block Motor Pool - 0.8 mile southeast
- Site 24: Old DEH Yard - 0.8 mile southeast
- Site 25: Former DRMO Site - 0.4 mile east
- Site 28: Barracks and Main Garrison - 50 feet northwest
- Site 38: AAFES Dry Cleaners - 0.4 mile southeast.

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 APPROACH TO CONDUCTING ENVIRONMENTAL BASELINE SURVEYS

This section describes the activities performed for the MIRA 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 MIRA 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 MIRA 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, 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 MIRA 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 MIRA 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, obtained from the final CERFA report (*ADL, 1994*), 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.

### 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 MIRA 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 MIRA 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 MIRA 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 also reviewed. Other potentially relevant documents, including the HWMP, Hazardous Waste Facility Inventory Report, SPCC, 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 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 unexploded ordnance (UXO) and OEW issues.

### **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 MIRA 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 MIRA 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 MIRA 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 MIRA 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.

### **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, 1994b). The scopes of the investigations documented in these reports were developed in coordination with the relevant regulatory agencies.

The MIRA Parcel is included within IRP Site 18, which has been defined in the Draft Final RI/FS as a No Action site. Approximately 16 other IRP sites are located in the vicinity (within 1 mile) of the MIRA 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 the MIRA Parcel EBS. Information from other site investigation activities, including evaluation of potential soil contamination associated with USTs, was also included in the MIRA Parcel EBS.

## 4.0 RESULTS F ENVIRONMENTAL BASELINE SURVEY F R MIRA PARCEL

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

### 4.1 Environmental Conditions of Parcel

Four buildings are located on the MIRA Parcel: Buildings 1638, 1653, 1660, and 1661. The Army has conducted a survey for asbestos for these four buildings within the parcel. The surveys indicated that three buildings (1638, 1660, and 1661) contain ACM and based on date of construction the three buildings should be considered to contain LBP. One electrical transformer (located near Building 1638) is present on the MIRA Parcel. Radon gas studies completed at Fort Ord found no elevated levels of radon. No radiological survey activities have been conducted in the buildings on the parcel because no radioactive materials have been stored in them. One former UST (1638-1), removed in 1992, was located on the MIRA Parcel. No aboveground storage tanks (ASTs) or SWMUs are present on the parcel, and no studies associated with these potential activities have been conducted by the Army for this parcel. No emission sources requiring a state permit to operate exist within the MIRA Parcel. No emission credits are transferable or available to new owner(s). The MIRA Parcel is located within IRP Site 18. One groundwater monitoring well, installed as part of the Site 18 investigation, is present on the parcel. Site 18, which was investigated under the Fort Ord RI/FS program, was categorized as a No Action site. Under the RI/FS program, sampling for the Basewide Storm Drain and Sanitary Sewer Investigation occurred immediately adjacent to the parcel. No potential ordnance-related training areas are within or immediately adjacent to the MIRA Parcel and no OEW surveys have been conducted within the parcel.

### 4.2 Asbestos Management Program

The descriptions of the asbestos management program and its status are based on information that the U.S 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 Mr. Mark Reese, Directorate of Environmental and Natural Resource Management (DENR), 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" April 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
- Removal of ACM from a BRAC property if:
  - Protection of human health requires removal, such as for damaged friable ACM
  - It is intended to be used as a school (K-12) or child care facility
  - It is unsalable without removal or its removal prior to sale is cost-effective
  - It is intended by the Army for demolition 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*).

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 completed in July 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

All four structures within the MIRA Parcel have been surveyed for ACM. Available results are summarized in the table in Appendix C, which lists buildings within the MIRA 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, numerical condition assessment rating assigned. In those surveys possible 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 MIRA Parcel contain ACM with ratings 1 to 5 (repair/removal recommended); three buildings (1638, 1660, and 1661) contain ACM rated 10 to 13; and no ACM (rating 0) was found in one building (1653). Plate 4 indicates buildings within the MIRA Parcel in which (1) ACM with ratings 10 to 13 were identified and (2) no ACM (rating 0) was found. Information in Appendix C was provided 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, DENR, the LBP management program at Fort Ord is performed in accordance with the following DA 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, 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 abatement of LBP in housing constructed prior to 1960

- Taking steps to ensure that properties sold for residential habitation are free of immediate LBP hazards prior to residential habitation or, 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 any potential 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 to target resources to achieve acceptable environmental standards for individuals exposed to lead. The memorandum requires the following:

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

#### **4.3.1 Summary of Program**

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

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 MIRA Parcel had been scheduled as of the date of this report.

#### **4.3.2 Program Status and EBS Results**

LBP surveys at Fort Ord began in November 1993 and were completed by March 1994. No parcel-specific data are available, however, because no housing units are within the MIRA Parcel. Three buildings (1653, 1660, and 1661) were constructed before 1978 and should be considered to contain LBP. The other structure on the MIRA Parcel (1638) was constructed after 1978 and is not suspected of containing LBP. Plate 5 shows the LBP information for buildings within the MIRA 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 evaluate electrical transformers and other materials for 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. 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, 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 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**

No reported releases of PCBs are known to have occurred on the MIRA Parcel. One transformer (located near Building 1638) is present on the property. All transformers with PCBs between 50 and 500 ppm in the dielectric fluid 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 including such information for the transformer near Building 1638.

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 Petroleum Storage Tanks**

This section provides a summary of the underground storage tank (UST) management program and additional information regarding the status of aboveground storage tanks (ASTs) at Fort Ord. The current status of the program and the status of USTs and ASTs within the MIRA Parcel are based on data available through December 1994.

##### **4.5.1 Summary of Program**

This summary section describes the Army's UST program, regulatory compliance objectives, and the goals of the Fort Ord UST Management Plan (*HLA, 1991a*). The Army UST management program requires compliance with federal, state, and local requirements as outlined in AR 200-1 and the Fort Ord Hazardous Waste Management Plan (HWMP; *Fort Ord, 1990*). Army UST standards state that USTs permanently taken out of service will be removed from the ground. Any UST determined to be leaking is emptied immediately and taken out of service. The UST is then either removed from the ground or repaired and retested. Monterey County Department of Health (MCDOH) permits are obtained for all UST repairs and removals. According to Chapter 5-7 of AR 200-1, abandoned tanks were to be removed by 1992.

Work for Fort Ord's UST Management Plan (*HLA, 1991a*) located and mapped all known existing and former USTs at Fort Ord, documented their regulatory status so that recommendations for compliance with UST regulations could be developed, and identified their location, age, and capacity, the materials they stored, and whether they were in use. Based on information available at the time, some

of the identified USTs were also placed on one of the three following lists:

- Removal List - USTs designated for removal
- Phase II Vapor Recovery List - USTs designated for piping system upgrades with Phase II vapor recovery systems to reduce emissions into the atmosphere from gasoline-dispensing facilities
- Environmental Assessment List - USTs for which additional documentation or environmental assessments are necessary to properly close the UST locations.

The results of the field work, site plan development, and a regulatory review were evaluated to formulate recommendations to abandon, replace, or upgrade each UST on the above lists. USTs that were no longer in service (those on the "removal list" in the UST Management Plan) were removed during 1991. MCDOH permits were obtained for all of the UST removals.

Specific criteria such as age, construction, pressure test results, documentation of leaks or spills, and costs associated with upgrading were used to further categorize the USTs into groups:

- USTs that met current requirements
- USTs that were suitable for upgrading
- USTs that should be replaced
- USTs that were no longer in use and should be removed
- USTs whose purpose could be replaced by another facility or by an alternative energy source or system
- Hazardous waste (primarily waste oil) USTs that should be replaced or eliminated.

Each UST was assigned one of the above groups or lists. UST summary sheets and site plans were included as appendixes to the UST Management Plan (HLA, 1991a).

According to a list provided by DENR, approximately 39 ASTs are located at Fort Ord (Temple, 1994a). Their condition is unknown. In August 1993, the Environmental and Natural Resources Management Division, DEH (ENRD; now, DENR) registered one 210,000-gallon diesel AST at Fort Ord with the California Regional Water Quality Control Board, in accordance with applicable guidelines (Aboveground Petroleum Storage Act, 1989; see California Health and Safety Code, Division 20, Chapter 6.67). In that letter, ENRD stated that no changes, modifications, deletions, or additions had been made to the ASTs since its last storage statement on April 13, 1993.

HLA interviewed Ms. Claire Murdo, DENR, on January 4, 1994, requesting information about any known spills from ASTs on Fort Ord property. She was unaware of any reportable spills or leaks from the ASTs other than a 50-gallon diesel spill near Building 2722, which is outside of the MIRA Parcel.

#### 4.5.2 Program Status and EBS Results

This section summarizes the status of the UST management program at Fort Ord, including a listing of the number of tanks removed recently or that are in place, a description of site characterization activities, and a listing of the number of tanks anticipated for future removal. Information presented below was obtained from Fort Ord (Schmitt, 1994):

- There were 139 USTs removed from Fort Ord, primarily between 1991 to 1994
- Sixteen of the sites from which those 139 USTs were removed were found to be contaminated
- Site characterization studies are underway at the 16 contaminated sites to evaluate the vertical and horizontal extent of contamination
- Remediation at the 16 sites will likely include excavating, removing, and treating the contaminated soil

- There are 113 formerly used USTs remaining in place. The tanks were used for storage of heating fuel, vehicle and aircraft fuel, waste oil, or Stoddard solvent or as emergency storage reservoirs
- Of the remaining USTs, approximately 91 have been identified for removal due to base closure. USTs associated with operation of water wells, sewage lifts, or emergency facilities or that are in areas to be retained by the Army will be replaced with ASTs (*Schmitt, 1994*).

An inventory of existing and former USTs on the MIRA Parcel was compiled from various sources of information, including a database and a map of the parcel boundaries provided by the DENR and COE, respectively, the CERFA report (*ADL, 1994*), and the Underground Storage Tank Management Plan (*HLA, 1991a*).

One former UST is within the boundaries of the MIRA Parcel (Plate 6). UST 1638-1 was a 1,000-gallon diesel tank that was installed in 1978 and removed in March 1992 (Table 3). No release of petroleum hydrocarbons from this UST is known to have occurred. The MCDOH has granted closure for the tank removal (*Wong, 1994*). No ASTs are located within the MIRA Parcel.

#### **4.6 Environmental Restoration Program**

This section discusses two principal components of Fort Ord's overall environmental restoration program, the CERFA program and the RI/FS program. The CERFA program involves the identification of uncontaminated real property. The RI/FS program, which involves the characterization and cleanup of contaminated property, was formally initiated in 1991 following Fort Ord's 1990 listing on the NPL.

Investigations of Fort Ord soil and groundwater contamination began in 1984 at the FAAF Fire Drill Area (Operable Unit 1). The discussion below presents an overview of the CERFA and RI/FS programs, the locations of sites within and adjacent to the MIRA Parcel, the status of site investigation and remedial activities, and the overall strategy for completing the programs.

#### **4.6.1 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.

##### **4.6.1.1 Summary of CERFA 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 EPA concurs.

The second principal change provided by CERFA is in the clarification 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 administrator of EPA 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.

**4.6.1.2 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 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 EPA 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 7 presents information from the final CERFA report for areas surrounding and including the MIRA Parcel. The distribution of CERFA-defined parcels on Plate 7 (CERFA parcels, CERFA parcel with qualifiers, and CERFA disqualified parcels) is taken directly from the CERFA report. Table 4 defines the categories developed in the CERFA report.

Plate 7 shows that the MIRA Parcel has been primarily categorized as a CERFA disqualified parcel, as defined by CERFA. 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).

**4.6.2 Remedial Investigation/Feasibility Study (RI/FS)**

**4.6.2.1 Summary of RI/FS Program**

Fort Ord was added to the NPL of hazardous waste sites (55 Federal Register 6154) on February 21, 1990. A Federal Facilities Agreement (FFA) was signed by Fort Ord for the Army with the EPA, Region IX, the California Department of Health Services (DHS), and the California Regional Water Quality Control Board, Central Coast Region (RWQCB), in July 1990. Under the FFA, the Army is required to perform an RI/FS at Fort Ord.

To date, the Army and regulatory agencies have identified two RI/FS Operable Units (OUs) at Fort Ord:

- OU 1 Fritzsche Army Airfield Fire Drill Burn Pit
- OU 2 Main Garrison Landfill Areas.

The RI/FS includes basewide investigation programs and individual site characterizations. Five basewide studies have been conducted, as listed below:

- Background Soil and Groundwater Investigation
- Basewide Biological Inventory
- Basewide Hydrogeologic Characterization

- Basewide Surface Water Outfall Investigation
- Basewide Storm Drain and Sanitary Sewer System Investigation.

Forty-one sites at Fort Ord have been identified for inclusion in the RI/FS. Site characterization activities were designed to screen sites for contamination. The primary objective of the site characterizations was to assess the absence or presence and nature of contaminants at each site.

Based on the results of the investigations, the 41 sites have been characterized as follows:

- No Action sites: Sites where screening risk evaluations of collected samples indicate that the threat to human health or the environment, if any, is acceptably low. These sites will not require additional investigation or remediation. Nineteen sites have been assigned to this category.
- Interim Action sites: Sites where small areas of contamination have been delineated and remedial action can be implemented quickly by excavation. Thirteen sites have been assigned to this category.
- Remedial Investigation sites: Sites where soil and/or groundwater data indicated that a complete RI/FS will be necessary prior to remediation. Nine sites have been assigned to this category.

The 41 Fort Ord IRP sites and their assigned categories are summarized in Table 5. The assignment of sites to these categories is based on available information. The designation of a site will not be considered final until the appropriate decision document has been completed. Additional information on the RI/FS program is provided in the Basewide RI/FS (HLA, 1994a); Sampling and Analysis Plan (HLA, 1991b); Work Plan (HLA, 1991c); basewide study reports prepared by HLA; and individual site characterization reports prepared by HLA.

#### 4.6.2.2 Program Status and EBS Results

The MIRA Parcel is located within IRP Site 18 (Plate 6). Site characterization activities at Site 18 were conducted in 1990, 1991, and 1992 and included the analysis of 53 soil samples collected from 14 soil borings and the collection and analysis of 4 rounds of groundwater samples from 3 monitoring wells (HLA, 1995). One of the three monitoring wells at Site 18 (MW-18-02-180) is located within the MIRA Parcel boundary (Plate 6). Analytical results for the soil samples showed high-boiling-point hydrocarbons (HBPHCs), unknown hydrocarbons (in the TPH as diesel analysis) and metals at concentrations below preliminary remediation goals (PRGs). Nickel and TCE were detected in groundwater at concentrations above federal maximum contaminant levels (MCLs). However, TCE was not detected in samples collected from Well MW-18-02-180.

On the basis of the information in the draft final RI/FS, including field observations, chemical analytical results, and the screening risk evaluation (SRE), the potential risks to human health and groundwater posed by the chemicals detected in subsurface soil at Site 18 are acceptably low. In groundwater samples, elevated nickel concentrations (above MCLs) probably result from the use of stainless steel well screen as discussed in detail in the Draft Final Basewide Hydrogeologic Investigation, dated June 10, 1994. Nickel has not been detected in basewide wells constructed with PVC well screen. Site 18 was placed in the No Action category in the draft final RI/FS report. The three monitoring wells are recommended for inclusion in the Quarterly Monitoring Program. A "plug-in" No Action Record of Decision (NoAROD) for all No Action sites was signed by the regulatory agencies in the spring of 1995 (Army, 1995). Documentation that site-specific no action criteria has been met will be provided through the Approval Memoranda process. This process is referred to as the "plug-in" process, because the Approval Memoranda plug into the NoAROD. The No Action Approval Memorandum for Site 18 will be submitted for regulatory agency approval in the summer of 1995.



The basewide storm drain and sanitary sewer investigation assessed the integrity of the storm drain and sanitary sewer pipelines and evaluated the potential presence of contamination in soil beneath the storm drain and sanitary sewer systems (HLA, 1994a). Five representative 30-foot sections of pipeline (three storm drain and two sanitary sewer) were excavated, a visual inspection of pipe integrity was completed, samples were collected from the soil beneath pipe joints, and the trenches were backfilled.

One trench was excavated immediately adjacent to the MIRA Parcel (Plate 6). Trench 5 was excavated on the west end of the 1600 Block Motor Pool around an 18-inch-diameter concrete storm drain that was originally installed in the 1940s. Ten pipe joints were exposed in the trench and there was no evidence of pipe repairs or fractures.

1,2,3- and 1,2,4-trichlorobenzene were detected as tentatively identified compounds (TICs) in three of the 10 samples taken from Trench 5. 1,2,4-trichlorobenzene was detected in two samples at concentrations of 0.1 mg/kg and 0.27 mg/kg. 1,2,3-trichlorobenzene was detected in 1 sample at a concentration of 0.031 mg/kg. The SRE indicated that no adverse health or ecological effects are expected to be associated with the trichlorobenzene isomers detected in the trench soil samples. The evaluation of possible chemical migration to groundwater indicated that impacts to groundwater are not expected. No additional field investigation activities are proposed.

#### **4.7 Potential Impacts From Adjoining Properties**

This section summarizes potential environmental impacts from adjoining properties. Areas immediately adjacent to the MIRA Parcel are shown on Plates 4, 5, 6, and 7. 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 MIRA Parcel

(Weston, 1990 and DEI, 1993). Buildings near the MIRA Parcel are shown on Plate 4.

**Lead-Based Paint:** LBP surveys of excess 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 structures in the area adjacent to the MIRA Parcel are shown on Plate 5.

**Radon:** Radon testing for buildings within approximately 1 mile of the MIRA Parcel found no buildings with concentrations exceeding 4 pCi/L.

**Radiological Surveys:** Radiological survey activities have been conducted in buildings adjacent to the MIRA Parcel (Plate 6). However, no radiological hazards were found to be present in the buildings surveyed.

**Ordinance and Explosive Waste:** Twelve potential OEW areas exist in the vicinity of the MIRA Parcel (Table 6).

The Beach Trainfire Ranges (USAEDH Site 22), which are located between Highway 1 and Monterey Bay approximately 0.5 mile west, were used for small arms weapons training. This area, also known as IRP Site 3, was investigated for potential soil and groundwater contamination as part of the Fort Ord RI/FS program. Results of the investigation are presented in the Fort Ord Basewide RI/FS (HLA, 1994a). The Beach Trainfire Ranges were also identified by Army Engineering Division, Huntsville (USAEDH), as an area warranting investigation for potential OEW. USAEDH has completed random grid sampling and selective grid sampling of areas likely to contain OEW; small arms rounds and related items were located in the areas that were sampled (HFAI, 1994c). This site was not recommended for OEW removal action as part of USAEDH's program.

Pete's Pond (USAEDH Site 2; approximately 0.7 mile southeast) was investigated as part of the Fort Ord RI/FS program (RI Site 16/17) and as part of the USAEDH clearance program. Five bazooka (2.36-inch rocket) rounds and a buried empty drum with markings indicating a

mustard-type chemical agent were found by HLA during the 1993 site investigation. The 87th Explosive Ordnance Disposal (EOD) unit from Presidio of San Francisco removed the bazooka rounds. Tests performed on the drum and surrounding soil by the EOD personnel did not detect chemical agent. The results of the Site 16/17 RI are presented in the Fort Ord Basewide RI/FS (HLA, 1994a). USAEDH has completed random grid sampling and selective grid sampling of areas likely to contain OEW; no live OEW was found in the grids sampled during the USAEDH investigation at Pete's Pond (HFAI, 1994c). This site was not recommended for OEW removal action as part of USAEDH's program.

The other 10 OEW locations were identified during the Fort Ord RI/FS program (Site 39 investigation) as not warranting investigation for ordnance-related chemical hazards (HLA, 1994a). No live OEW was located in the grids sampled at Flame Thrower Range 1 and Mine and Booby Trap Area 1 (USAEDH Sites 1 and 6, respectively; HFAI, 1994c). These sites were not recommended for OEW removal actions as part of USAEDH's program. Mortar Squares 1, 2, and 3, Storage Yard Landmine, 75 mm Pack Howitzer Firing Area, and Machine Gun Squares 1 and 2, are being evaluated to determine the need for further investigation. Machine Gun Square 3 is not recommended for further OEW 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 MIRA Parcel.

Underground and Aboveground Storage Tanks: Approximately 125 existing and former USTs are located within approximately 1 mile of the MIRA Parcel. Of those 125 tanks, about 43 are currently in place, and 82 have been removed. The MCDOH has granted closure for 64 of the 82 removed USTs. One existing and five former USTs are located within approximately 1,000 feet of the MIRA Parcel (Plate 6). One former UST

was located within the MIRA Parcel. Approximately seven ASTs are located within 1 mile of the MIRA Parcel. According to information provided by the DENR, three of the ASTs are contained by a berm (Temple, 1994c). The condition of the other four ASTs is unknown.

Solid Waste Management Units: Twenty-five former or existing SWMUs were identified within about 1 mile of the MIRA Parcel. Four of the SWMUs (FTO-017, FTO-023, FTO-53, and FTO-058) are within 1,000 feet of the parcel (Plate 6, Table 6); however all four were recommended for no action (AEHA, 1988).

Remedial Investigation/Feasibility Study Program: Within 1 mile of the MIRA Parcel, 16 IRP sites are being investigated as part of the RI/FS program at Fort Ord (Table 6). Plate 6 shows IRP site locations in the immediate area. Investigations have been completed at six of the locations (Sites 4, 13, 19, 25, 28, and 38), and the sites have been placed in the No Action category. The remaining 10 locations in the study area, Sites 2, 3, 12, 14 through 17, 20, 23, and 24, have some level of documented soil and/or groundwater contamination and are currently undergoing or are slated for further site characterization or remediation.

#### 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 MIRA Parcel for transfer to MIRA. The draft FOST was prepared following DOD and Army guidance to include the elements listed in Section 1.3 of this EBS and is attached as Appendix A. The draft FOST concludes that the MIRA Parcel is suitable for transfer under CERCLA §120(h)(3) after regulatory agency approval of the proposed no remedial action at Site 18, which is expected in the summer of 1995. Plate 8 indicates the property that is proposed for transfer under CERCLA §120(h)(3).

## 5.0 FINDINGS AND CONCLUSIONS

### 5.1 Findings

This EBS presents an overview of current environmental conditions on the MIRA Parcel based on available information. Findings of the EBS for the MIRA 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.
- Asbestos surveys have been completed for all four structures on the MIRA Parcel. These surveys show that three structures contain nonfriable ACM and one structure contains no ACM. The presence of asbestos in these structures does not preclude their transfer. However, disclosure of these conditions is necessary at the time of transfer.
- Lead-based paint surveys of excess housing structures have been completed. However, no data specific to the MIRA are available because no housing structures or barracks are present on the MIRA Parcel. Three structures were constructed before 1978 and should be considered to contain LBP. The other structure on the MIRA Parcel (constructed after 1978), is not suspected of containing 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 potential of LBP existing 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 MIRA Parcel. One transformer (located near Building 1638) is present on the property.
- There was one former UST within the MIRA parcel near Building 1638. MCDOH has granted closure for this tank removal. No ASTs are located within the MIRA parcel.
- No potential ordnance-related training areas are within or immediately adjacent to the MIRA Parcel
- One groundwater monitoring well is present on the Property and will continue to be monitored.
- The final CERFA report identifies the MIRA Parcel as being within a CERFA disqualified parcel because of its inclusion within IRP Site 18. The "plug-in" No Action ROD for all No Action sites was signed by the regulatory agencies in the spring of 1995 (Army, 1995). Documentation that site-specific no action criteria has been met will be provided through the Approval Memoranda process. This process is referred to as the "plug-in" process, because the Approval Memoranda plug into the NoAROD. The No Action Approval Memorandum for Site 18 will be submitted for regulatory agency approval in the summer of 1995.
- In addition to the site-specific investigations noted above, the basewide storm drain and sanitary sewer investigation evaluated the integrity of the storm drain and sanitary sewer system. The sanitary sewer investigation also evaluated the possible presence of contaminants beneath sewer pipes. Soil samples collected from beneath a storm drain immediately adjacent to the MIRA parcel detected two isomers of trichlorobenzene. None of the detected concentrations exceeded human-health screening concentrations for exposure to surface soils or would be expected to cause groundwater concentrations to exceed screening concentrations.

**5.2 Conclusions**

On the basis of this EBS and the FOST guidance criteria, it may be concluded that the MIRA Parcel will be transferable by deed, under the provisions of CERCLA §120(h)(3), after the No Action ROD and subsequent approval memoranda for Site 18 have been signed by regulatory agencies. The "plug-in" No Action ROD for all No Action sites was signed by the regulatory agencies in the spring of 1995. Documentation that site-specific no action criteria has been met will be provided

through the Approval Memoranda process. This process is referred to as the "plug-in" process, because the Approval Memoranda plug into the NoAROD. The No Action Approval Memorandum for Site 18 will be submitted for regulatory agency approval in the summer of 1995. Appropriate covenants and use restrictions will be included in the transfer documents. A copy of the draft FOST and a legal description of the MIRA Parcel is attached as Appendix B. The final signed FOST is expected to be essentially similar to this document.

## 6.0 REFERENCES

AEHA. See U.S. Army Environmental Hygiene Agency.

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

COE. See U.S. Army Corps of Engineers.

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, 1990. *Hazardous Waste Management Plan*. September 4.

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 Basewide Remedial Investigation/Feasibility Study, Fort Ord, California*. December 5.

\_\_\_\_\_, 1995. *Draft Final Site Characterization, Site 18 - 1600 Block Facility, Fort Ord, California*. July 20.

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. *Final OEW Sampling and OEW Removal Action Report, Fort Ord*. 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.

Schmitt, Barbara, 1994. Fort Ord Directorate of Public Works, Environmental and Natural Resource Management Division. Registration of Aboveground Storage Tanks. Personal Communication to Steven M. Farley, Harding Lawson Associates. February.

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.

\_\_\_\_\_, 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.

\_\_\_\_\_, 1995c. Fort Ord Directorate of Environmental and Natural Resources Management. Update on Site History and Uses. Facsimile Transmission to Jeffery Fenton, Harding Lawson Associates. March 13.

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.

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

\_\_\_\_\_, 1990. *Army Regulation 200-1, Environmental Protection and Enhancement, Chapters 10 and 11*. April 23.

\_\_\_\_\_, 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.

\_\_\_\_\_, 1995. *No Action Plug-In Record of Decision*. February.

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.

\_\_\_\_\_, 1990. *Army Regulation 200-1, Environmental Protection and Enhancement, Chapters 10 and 11*. April 23.