

**EPA Superfund  
Record of Decision:**

**CAMP PENDLETON MARINE CORPS BASE  
EPA ID: CA2170023533  
OU 02  
CAMP PENDLETON, CA  
09/30/1997**

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#### ABBREVIATIONS/ACRONYMS

AC/S,ES	Assistant Chief of Staff, Environmental Security (formerly ENRMO)
ACU	Assault Craft Unit
ANOVA	Analysis of Variance
AT&SF	Atchison, Topeka, and Santa Fe
AWQC	Ambient Water-Quality Criteria
BTEX	Benzene, Ethylbenzene, Toluene, and Xylenes
Cal/EPA	California Environmental Protection Agency
CAMU	Corrective Action Management Unit
CCR	California Code of Regulations
CDM	Camp Dresser & McKee, Inc.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
COC	Chemical of Concern
COPC	Chemical of Potential Concern
COPEC	Chemical of Potential Ecological Concern
CRDL	Contract-Required Detection Limit
DCA	Dichloroethane
DCE	Dichloroethene
DDD	Dichlorodiphenyldichloroethane
DDE	Dichlorodiphenyldichloroethene
DDT	Dichlorodiphenyltrichloroethene
DPDO	Defense Property Disposal Office
DRMO	Defense Reutilization and Marketing Office
DTSC	Department of Toxic Substances Control (Cal/EPA)
EcoRA	Ecological Risk Assessment
EE/CA	Engineering Evaluation/Cost Analysis
ENRMO	Environmental and Natural Resources Management Office (currently AC/S,ES)
EPA	U.S. Environmental Protection Agency
FFA	Federal Facility Agreement
FS	Feasibility Study
ft <sup>2</sup>	Square Feet
ft/ft	Feet per Foot
FY	Fiscal Year
HAR	Hydrogeologic Assessment Report
HEAST	Health Effects Assessment Summary Tables
HHRA	Human Health Risk Assessment
HI	Hazard Index
HQ	Hazard Quotient
IAS	Initial Assessment Study
IDL	Instrument Detection Limit
ILCR	Incremental Lifetime Cancer Risk
IRIS	Integrated Risk Information System
IRP	Installation Restoration Program

LCAC	Landing Craft Air Cushion
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCL	Maximum Contaminant Level
MEK	Methyl Ethyl Ketone
mg/kg	Milligrams per Kilogram
mg/kg-day	Milligrams per Kilogram per Day
mg/l	Milligrams per Liter
msl	Mean Sea Level
MWR	Morale, Welfare, and Recreation
NCP	National Contingency Plan
NEESA	Naval Energy and Environmental Support Activity (currently NFESC)
NFESC	Naval Facilities Engineering Service Center (formerly NEESA)
NOEC	No Observed Effect Concentration
NPL	National Priorities List
NRMC	Naval Regional Medical Center
OHM	OHM Remediation Services Corporation
OU	Operable Unit
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PCP	Pentachlorophenol
POL	Petroleum, Oil, and Lubricants
ppb	Parts per Billion
ppm	Parts per Million
PR	Preliminary Review
PRG	Preliminary Remediation Goal
RAGS	Risk Assessment Guidance for Superfund
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RfD	Reference Dose
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RME	Reasonable Maximum Exposure
ROD	Record of Decision
r-PRG	Risk-Based Preliminary Remediation Goal
RWQCB	California Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SF	Slope Factor
SI	Site Inspection
SV	Sampling Visit
SVOC	Semivolatile Organic Compound
SWDIV	Southwest Division Naval Facilities Engineering Command
SWRCB	California State Water Resources Control Board
TCA	Trichloroethane
TCE	Trichloroethene
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TPH-d	Total Petroleum Hydrocarbons as Diesel
TPH-g	Total Petroleum Hydrocarbons as Gasoline
TRPH	Total Recoverable Petroleum Hydrocarbons
UCL	Upper Confidence Limit
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOA	Volatile Organic Analysis
VOC	Volatile Organic Compound
µg/dl	Micrograms per Deciliter
µg/kg	Micrograms per Kilogram
µg/l	Micrograms per Liter
µmho/cm	Micromhos per Centimeter

## 1.0 DECLARATION

This Record of Decision (ROD) addresses 13 sites that constitute Operable Unit (OU) 2 at Marine Corps Base (MCB) Camp Pendleton, California.

### 1.1 Site Name and Location

MCB Camp Pendleton is located along the Pacific coast, about halfway between Los Angeles and San Diego (Figure 1-1). The vast majority of the base is within San Diego County, and a small portion of the northwest corner of the base is in Orange County.

Installation Restoration Program (IRP) sites at MCB Camp Pendleton were assigned to one of four groups (A, B, C, and D) according to potential impact to human health and the environment. Group A sites are believed to have the highest potential for such impact; Group D sites have the lowest. This ROD addresses the following 13 sites, which constitute OU2:

- Group A Sites: Site 3 soil, sediment, and groundwater, Site 5 soil and groundwater, Site 6 soil, sediment, and surface water
- Group B Sites: Site 8A sediment and surface water, Sites 19, 20, and 22 soil, sediment, groundwater, and surface water
- Group C Sites: Sites 2B and 31 soil; Sites 28 and 43 groundwater; Site 44 sediment and surface water, Site 45 soil, sediment, and groundwater.

The base is divided into 26 major area designations for location of base activities. The OU2 sites are located in various areas throughout the base, as shown in Figure 1-2. The site names and areas in which they are located are as follows:

- Site 3 - Pest Control Wash Rack - 26 Area
- Site 5 - Firefighter Drill Field - 23 Area
- Site 6 - Defense Property Disposal Office (DPDO) (Defense Reutilization and Marketing Office [DRM0]) Scrap Yard and Building 2243 Railroad Tracks - 22 Area
- Site 2B - Grease Disposal Pit - 32 Area
- Site 8A - Las Flores Creek - 43 Area
- Site 19 - 31 Area Assault Craft Unit (ACU-5) (Landing Craft Air Cushion [LCAC]) Two Surface Impoundments
- Site 20 - 43 Area Las Pulgas Vehicle Wash Rack
- Site 22 - 23 Area Unlined Surface Impoundment
- Site 28 - 26 Area Trash Haulers Maintenance Area
- Site 31 - Building 210801 Transformer - 21 Area
- Site 43 - Santa Margarita Basin Groundwater Study
- Site 44 - Santa Margarita Basin Surface-Water and Sediment Study
- Site 45 - Santa Margarita Coastal Wetland Study.

Several sites originally included in OU2 according to the Federal Facility Agreement (FFA) were either removed from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process or placed into another OU for the following reasons:

- Site 17 - 22 Area Building 22187 Marsh and Ditch (Soil), and Site 28 - 26 Area Trash Haulers Maintenance Area (Soil) - Only petroleum contamination was detected in soil at these sites; excluded based on the petroleum exclusion clause in CERCLA.
- Site 8 - Las Pulgas Landfill, and Site 14 - San Onofre Landfill - Agreement between the Marine Corps and the regulatory agencies was reached to remove these sites from OU2 and address them under the State's landfill program because they are both active landfills.
- Sites 4/4A, 6, 16, 17, and 27 - 22/23 Area Groundwater - Agreement between the Marine Corps and the regulatory agencies was reached at the January 1997 FFA meeting to continue further monitoring and to remove this groundwater area from the OU2 ROD and include it in OU4.

## 1.2 Statement of Basis and Purpose

This decision document sets forth the basis for the no remedial action decisions for Sites 2B, 3, 5, 6, 8A, 19, 20, 22, 28, 31, 43, 44, and 45. The decisions for each of these sites were made in accordance with CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and to the extent practicable, the National Contingency Plan (NCP), and are based on the information contained in the Administrative Record file for MCB Camp Pendleton. The administrative record index is presented as Appendix A. The primary documents used for the basis of the decisions are as follows:

- RI report for Group A sites, 15 October 1993 (Southwest Division Naval Facilities Engineering Command [SWDIV], 1993a)
- RI report for Group B sites, 17 March 1995 (SWDIV, 1995a)
- Technical to the RI report for Group B sites, 15 November 1996 (SWDIV, 1996a)
- RI report for Group C sites, 1 November 1996 (SWDIV, 1996b)
- Action memorandum for non-time-critical removal action, Site 5 - Firefighter Drill Field, 17 August 1994 (SWDIV, 1994a)
- Action memorandum for non-time-critical removal action, Site 6 - DPDO (DRMO) Scrap Yard, 22 April 1996 (SWDIV, 1996c)
- Action memorandum for non-time-critical removal action, Site 3 - Pest Control Wash Rack, 1 August 1996 (SWDIV, 1996d)
- Engineering evaluation/cost analysis (EE/CA) for Group A Site 3, Pest Control Wash Rack, and Site 6, DPDO (DRMO) Scrap Yard, 15 September 1995 (SWDIV, 1995b)
- Technical addendum to the draft final EE/CA for Group A Site 3, Pest Control Wash Rack, 15 February 1996 (SWDIV, 1996e)
- EE/CA for Group A Site 5 - Firefighter Drill Field, 27 May 1994 (SWDIV, 1994b)
- Site 3 - Pesticide "Washrack" and Site 6 - DRMO "Scrapyard," Project Note, 1 July 1996 (SWDIV, 1996f)
- Resource Conservation and Recovery Act (RCRA) facility assessment (RFA) report, 25 June 1993 (SWDIV, 1993b)
- Draft Final Site Closeout Report for Site 5, 20 September 1996 (OHM Remediation Services Corporation [OHM], 1996a)
- Quarterly Ground Water Monitoring Report for Site 5, 18 July 1996 (OHM, 1996b)
- Draft Remedial Investigation Report for Group D Sites, 14 February 1997 (SWDIV, 1997)
- Draft Site Closeout Report for Site 3, 6 March 1997 (OHM, 1997a)
- Draft Site Closeout Report for Site 6, 21 April 1997 (OHM, 1997b).

The U.S. Marine Corps, U.S. Department of the Navy, U.S. Environmental Protection Agency (EPA), California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC), and San Diego Regional Water Quality Control Board (RWQCB) concur with the no action remedies for each of the OU2 sites.

## 1.3 Assessment of Operable Unit 2 Sites

In accordance with the EPA's Interim Final Guidance on Preparing Superfund Decision Documents (EPA, 1989a), this section does not apply to sites requiring no further action.

#### **1.4 Description of the Selected Remedy**

RI sites at MCB Camp Pendleton were separated into groups (Groups A, B, C, and D) for investigation based on potential impact to health and the environment. Those sites determined to pose the highest threat were addressed first as Group A, and those that pose the least threat were addressed last as Group D. As investigations were completed, sites were grouped into OUs for selection of cleanup alternatives. The ROD for OU1 was signed in December 1995 and addresses the selected remedies for soil and groundwater at Site 9, soil at Site 4/4A, and groundwater at Site 24, all of which are Group A sites. This ROD addresses the remedies for OU2, which includes sites from Groups A, B, and C, as listed in Section 1.1.

The no action remedy was selected for Sites 2B and 31 soil; Sites 28 and 43 groundwater; Site 3 soil, sediment, and groundwater, Site 5 soil and groundwater; Sites 8A and 44 sediment and surface water; Sites 19, 20, and 22 soil, sediment, groundwater, and surface water; and Sites 6 and 45 soil, sediment, and surface water. MCB Camp Pendleton does not plan to take any further action to clean up these sites.

#### **1.5 Declaration Statement**

##### **1.5.1 No Action Necessary for Protection for Sites 2B, 8A, 19, 20, 22, 28, 31, 43, 44, and 45**

No unacceptable risks are presented by soil at Sites 2B and 31; groundwater at Sites 28 and 43; sediment and surface water at Sites 8A and 44; soil, sediment, groundwater, and surface water at Sites 19, 20, and 22; and soil, sediment and surface water at Site 45. No remedial action or 5-year review is necessary for these sites to ensure protection of human health and the environment.

##### **1.5.2 No Further Action Necessary for Sites 3, 5, and 6**

It has been determined that no further remedial action is necessary for soil, sediment, and groundwater at Site 3; soil and groundwater at Site 5; and soil, sediment, and surface water at Site 6. The soil removal actions completed at these sites eliminated the need to conduct additional remedial action.

The soil removal actions successfully removed hazardous substances from the sites to acceptable levels; therefore, the 5-year review will not apply to the no action decisions for Sites 3, 5, and 6.

<IMG SCR 97191C>

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<IMG SCR 97191E>

#### **2.0 DECISION SUMMARY**

General information about MCB Camp Pendleton and information common to each of the individual sites are presented first in this section, including a general site description, site history and enforcement activities, the scope and role of OU2, and the history of community participation, followed by information specific to each site.

##### **2.1 Site Name, Location, and Description**

MCB Camp Pendleton is the primary Marine Corps amphibious training center on the west coast. Located between the cities of Los Angeles and San Diego, California, MCB Camp Pendleton covers approximately 125,000 acres, almost entirely in San Diego County (Figure 1-1). Camp Talega, in the 64 Area near the northwestern border of the base, extends into Orange County. Surrounding communities include San Clemente to the northwest, Fallbrook to the east, and Oceanside to the south. The base is bordered on the west by the Pacific Ocean and encompasses 17 miles of coastal area; rolling hills and valleys stretch inland from the coast an average of 10 to 12 miles.

Construction of MCB Camp Pendleton started in March 1942, and the base was dedicated as a permanent base in October 1944. The base currently supports more than 36,000 military personnel and employs approximately 4,600 civilians (Innis-Tennebaum Architects, Inc., 1990).

On 15 November 1989, MCB Camp Pendleton was added to the National Priorities List (NPL), primarily because an herbicide was detected in two base drinking water production wells.

## **2.2 Highlights of Community Participation**

The proposed plan for OU2 was released to the public in April 1997. This document and supporting documents were made available to the public in the information repositories at the Base Library and the Oceanside Public Library. The public was also made aware of the availability of these documents in the Administrative Record file, which is maintained at the offices of the Assistant Chief of Staff, Environmental Security (AC/S,ES) at Camp Pendleton, as well as at Southwest Division offices in San Diego. The notice of availability for the proposed plan and supporting documents was published in the Blade-Citizen newspaper and in the South County News on 30 April 1997. A public comment period was held from 30 April through 30 May 1997. In addition, a public meeting was held on 22 May 1997. Base, EPA, California DTSC, San Diego RWQCB, and Southwest Division representatives attended the public meeting. Although one base resident and a member of the neighboring community attended the open house poster board session prior to the public meeting, no members of the public attended the public meeting. A verbatim transcript of the public meeting was prepared in compliance with CERCLA Section 117(a)(2) and is presented in Appendix B. No comments were received during the public comment period or the public meeting.

This decision document presents the selected remedial actions for sites in OU2. The remedial actions were chosen in accordance with CERCLA, as amended by SARA, and to the extent practicable, the NCP. The decisions for OU2 are based on information contained in the Administrative Record.

## **2.3 Scope and Role of Operable Unit 2**

For investigative purposes, the sites at MCB Camp Pendleton were assigned to groups based on their potential impact to human health and the environment. Those sites that pose the highest threat were addressed first and were designated Group A sites. OU1 consists of the following Group A sites:

- Sites 9 and 24 soil and groundwater
- Site 4/4A soil.

The draft final ROD (SWDIV, 1995c) for OU1 was signed on 12 December 1995.

Other sites with lesser degrees of potential threat were investigated as Groups B, C, or D. This OU2 ROD includes sites from Groups A, B, and C, as listed in Section 1.1. OU3 includes the remaining sites not included in OU1 or OU2, with the exception of groundwater at the 22/23 Area sites, which constitutes OU4. The draft ROD for OU3 is expected to be completed by October 1997; the schedule for OU4 has not yet been determined.

## **2.4 Site 3 - Pest Control Wash Rack - Soil, Sediment, and Groundwater**

Site 3 included a pest control wash rack, unlined drainage ditches in the vicinity of and downstream from the wash rack, and surrounding areas used to mix and dispose of pesticide solutions. A soil removal action (Section 2.4.5) was conducted at Site 3 based on an evaluation of the RI data.

### **2.4.1 Site Name, Location, and Description**

Site 3 - Pest Control Wash Rack, is located in the 26 Area (Figure 1-2). The concrete wash rack was adjacent to Atchison, Topeka, and Santa Fe (AT&SF) tracks, approximately 200 feet northwest of Vandegrift Boulevard and southwest of Building 2624. The wash rack drained to an approximate 10-foot-wide unlined ditch. The ditch cuts into the alluvium of the Santa Margarita Basin and follows a southwesterly course for about 1,000 feet before emptying into the floodplain of the Santa Margarita River (Naval Energy and Environmental Support Activity [NEESA], 1984). One

upgradient base water production well and one downgradient base water production well are located within ½ mile of Site 3.

The 26 Area is used primarily for industrial purposes. The following facilities are currently or were historically located near Site 3:

- Base laundry and dry cleaning facility (no longer operational)
- Automobile maintenance facility
- Sewage sludge composting yard (Site 10)
- Morale, Welfare, and Recreation (MWR) maintenance facility (Site 24)
- Concrete batch plant
- 26 Area trash haulers maintenance area (Site 28)
- Contractor laydown lots
- Miscellaneous storage yards and warehouses.

Drainages from these activities flow toward or through Site 3 and empty into the adjacent floodplain and river.

#### **2.4.2 Site History and Enforcement Activities**

From the early 1950s, the concrete wash rack reportedly was used for washing pest control vehicles, rinsing application tanks/equipment, mixing pesticide solutions, and disposing of leftover pesticide solutions. The base discontinued these activities and practices at Site 3 in early 1980. During site operations, an estimated 25,000 to 300,000 gallons of diluted pesticide solution reportedly was disposed of at the site (NEESA, 1984).

An initial assessment study (IAS) was completed in September 1984 and recommended that a site inspection (SI) be conducted for Site 3 (NEESA, 1984). The SI for Site 3, completed in 1988 (Camp Dresser & McKee, Inc. [CDM], 1988), recommended a remedial investigation (RI). The RI for Site 3 was conducted between 1992 and 1993 along with the Group A sites (SWDIV, 1993a). The RI recommended a removal action for Site 3 and an EE/CA was prepared. The results of a treatability study for the preferred alternative indicated that soil washing would not be cost effective. The draft final EE/CA selected capping as the removal action. However, after further evaluation, a soil stabilization alternative was added to the technical addendum to the EE/CA for Site 3 (SWDIV, 1996e) and was selected as the removal remedy, as documented in the action memorandum (SWDIV, 1996d). The removal action was conducted from May 1996 to January 1997.

#### **2.4.3 Summary of Site Characteristics**

This section provides a summary of the RI for soil, sediment, and groundwater at Site 3. The results of the RI for Site 3 soil, sediment, and groundwater are presented in the RI report for Group A sites (SWDIV, 1993a).

During the RI, 79 surface soil or sediment samples (0 to 12 inches deep) were collected from the Site 3 wash rack, ditches, and surrounding areas and 77 subsurface soil samples were collected from 29 borings. Earthworm samples were collected from one ditch location. Three rounds of groundwater samples were collected from nine site wells. Groundwater samples were also collected from base water production wells 10S/04W-07H02 (two samples) and 10S/04W-07R02 (one sample).

##### **2.4.3.1 Soil and Sediment**

Soil samples were analyzed for Contract Laboratory Program (CLP) metals, CLP volatile organic compounds (VOCs), CLP semivolatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) as diesel (TPH-d), TPH as gasoline (TPH-g), CLP pesticides, polychlorinated biphenyls (PCBs), and herbicides. In addition, surface soil/sediment samples were analyzed for dioxins and furans.

The predominant soil contaminants at Site 3 are arsenic, herbicides, and pesticides, including 4,4'-dichlorodiphenyldichloroethane (4,4'-DDD), 4,4'-dichlorodiphenyldichloroethene (4,4'-DDE), 4,4'-dichlorodiphenyltrichloroethene (4,4'-DDT), and chlordane. The highest concentrations of soil contaminants were generally detected at or near ground surface. Concentrations exceeding human health risk-based preliminary remediation goals (r-PRGs) were detected to depths of 10

feet and low concentrations below r-PRGs were detected to depths of 20 feet below ground surface. Maximum concentrations of pesticides were 1,280,000 micrograms per kilogram (Ig/kg) for 4,4'-DDD, 140,000 Ig/kg for 4,4'-DDT, and 91,000 Ig/kg for 4,4'-DDE. Of the several polycyclic aromatic hydrocarbons (PAHs) detected, benzo(a)pyrene exceeded the respective r-PRG at a maximum concentration of 420 Ig/kg and dioxin exceeded the r-PRG in one surface soil sample from within the pest control wash rack at a concentration of 5.2 Ig/kg. Several localized areas of pesticide and PAH contamination were identified outside the pest control wash rack area. Concentrations of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, chlordane (alpha and gamma), and benzo(a)pyrene were detected in the southwest-trending drainage ditch nearest the wash rack and the northwest-trending ditch farthest from the wash rack. The detected soil contaminants are generally immobile.

#### **2.4.3.2 Groundwater**

Groundwater samples were also analyzed for general inorganic chemistry. Groundwater samples were analyzed for the same analytes as the soil samples, with the exception of dioxins and furans. Groundwater analytical results were below available background and/or available maximum contaminant levels (MCLs). Several detected contaminants do not occur naturally and no MCLs are available. Further assessment was conducted based on potential human health and ecological risk potential (Section 2.4.4).

#### **2.4.4 Summary of Site Risks Prior to Removal Action**

RI data were used in the risk assessment for Site 3. The results of the baseline human health and ecological risk assessments for soil, sediment and groundwater at Site 3 are presented in detail in the RI report for Group A sites (SWDIV, 1993a). Further ecological risk evaluation was conducted to establish site-specific removal goals for the ecological receptors of concern. This section summarizes the risk assessment prior to the removal action.

##### **2.4.4.1 Baseline Risk Assessment Methodology**

###### **Human Health**

The environmental sampling data were collected according to knowledge-based, purposive sampling decision logic, with additional samples to provide data on areas of high, medium, and low contamination. All RI data were validated and evaluated in accordance with the EPA's Risk Assessment Guidance for Superfund (RAGS) (EPA, 1989b).

Exposure scenarios were developed based on available media at the site and current and future land use. The reasonable maximum exposure (RME) receptor was assumed to be present on site for all exposure scenarios.

Toxicity values for the chemicals of concern (COCs) were compiled from the Integrated Risk Information System (IRIS) (EPA, 1992a), Health Effects Assessment Summary Tables (HEAST) (EPA, 1992b), a Cal/EPA memorandum on criteria for carcinogens (Cal/EPA, 1992a), and tetrachloroethene (PCE) and trichloroethene (TCE) profiles from the Superfund Health Risk Technical Support Center (EPA, 1994). For the more recent risk assessments conducted after the EPA preliminary remediation goal (PRG) tables (EPA, 1995 and 1996) were developed, toxicity values were cited from the above sources, as well as from the National Center for Environmental Assessment and the DTSC's Preliminary Endangerment Assessment Guidance Manual, dated January 1994 (Cal/EPA, 1994).

Cancer slope factors (SFs) have been developed by the EPA for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. SF values, expressed in milligrams per kilogram per day (mg/kg-day) <sup>-1</sup>, are multiplied by the estimated intake of a potential carcinogen (expressed in mg/kg-day) to provide an upper-bound estimate of the excess lifetime cancer risk associated with exposure at that intake level. The term "upper bound" reflects the conservative estimate of the risks calculated from the SF. This approach makes underestimation of the actual cancer risk highly unlikely. Cancer SF values are derived from the results of human epidemiological studies or chronic animal bioassays using animal-to-human extrapolation and uncertainty factors.

Reference doses (RfDs) have been developed by the EPA to indicate the potential for adverse health effects from exposure to chemicals exhibiting noncarcinogenic effects. RfDs (expressed

in mg/kg-day) are estimates of lifetime daily exposure levels for humans, including sensitive individuals. Estimated intakes of chemicals from environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) can be compared with the RfD. RfDs are derived from human epidemiological studies or animal studies and incorporate uncertainty factors (e.g., to account for the use of animal data to predict effects on humans). These uncertainty factors help ensure that the RfDs will not underestimate the potential for adverse effects.

Excess lifetime cancer risks are determined by multiplying the intake level with the cancer SF value. These risks are probabilities that are generally expressed in scientific notation (e.g.,  $1 \times 10^{-6}$ ). An excess lifetime cancer risk of  $1 \times 10^{-6}$  indicates that, as a plausible upper bound, an individual has a one in one million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at a site.

Potential concern for noncarcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (HQ) (or the ratio of the estimated intake derived from the contaminant concentration in a given medium to the RfD for the contaminant). The hazard index (HI) can be derived by adding the HQs for all contaminants within a medium or across all media to which a given population could reasonably be exposed. The HI provides a useful reference point for gaging the potential significance of multiple contaminant exposures within a single medium or across media.

Lead was evaluated separately using both the Federal (EPA, 1991a) and State (Cal/EPA, 1992b) lead models. Evaluation of soil and groundwater lead concentrations using Federal and State blood lead models indicated that blood lead concentrations would meet health protection target criteria. The target criteria are less than 10 micrograms per deciliter ( $\mu\text{g}/\text{dl}$ ) for 95 percent of children (age range 0 to 6 years) using the Federal model and for 99 percent of children using the State model.

The EPA has developed a list of media-specific concentrations (PRGs) that represent a  $1 \times 10^{-6}$  risk level (EPA, 1995 and 1996). Soil and groundwater pathways were evaluated using the methodology described above for calculating excess lifetime cancer risk and noncarcinogenic effects. The target risk level of  $1 \times 10^{-6}$  and upper-bound intake parameters were used to calculate concentrations. Site concentrations were then compared against these concentrations to calculate risks and hazards. This method was used for some OU2 sites for baseline risk assessments conducted after the EPA developed the PRG tables. The pathways, assumptions, and input parameters for such sites matched those used in the PRG calculations.

The quantitative results of the baseline risk assessments were compared against target risk criteria. An RME excess lifetime cancer risk of  $10^{-6}$  is considered the point of departure above which risk management should be considered, according to Title 40, Code of Federal Regulations (CFR), Section 300.430(e)(2)(i)(A)(2). An excess lifetime cancer risk exceeding  $10^{-4}$  generally requires remediation. Risk management should also be considered for an RME exposure with an HI greater than 1.0.

Risks/hazards associated with chemicals of potential concern (COPCs) were evaluated using representative (average and 95 percent upper confidence limit [UCL]) concentrations for a residential land use exposure scenario.

#### Ecological Risk

The baseline ecological risk assessment (EcoRA) methodology is presented in detail in the RI reports and work plans for the sites included in this ROD (SWDIV, 1991, 1993a, 1993b, 1995a, and 1996a). This section summarizes the approach and methodology for the baseline EcoRA.

To address the EcoRA objectives, a phased approach is used, as suggested by the EPA (1992c). The phased approach consists of three phases: site characterization and screening, initial determination of ecological impact, and bioassessment.

- Phase I - Site Characterization and Screening, involves identifying the presence and concentrations of chemicals of potential ecological concern (COPECs) at the sites

and evaluating whether exposure pathways to ecological receptors exist.

- Phase II - Initial Determination of Ecological Impact, involves conducting ecological comparisons between potentially impacted and nonimpacted areas. The comparison can include parameters such as presence or absence of species, health of plants and animals, community structure, and contaminant concentrations in the tissues of plants and animals in order to assess potential food-chain exposure. This includes habitat and wildlife surveys and collection of biota to measure bioaccumulation in plants, terrestrial invertebrates, and small mammals.
- Phase III - Bioassessment, involves further laboratory studies to determine what COPEC concentrations result in measurable effects. Information collected as part of this phase is used to help make decisions about potential remediation.

Potential ecological risks were quantified using the HQ approach. An HQ was calculated for each preliminary COPEC (soil and biota) or sample location (sediment and surface water). The magnitude of the HQs indicates potential ecological effects but is not an exact estimation of risk. For example, the actual risk due to a chemical with an HQ of 70 could be less than that for a chemical with an HQ of 20 because of the uncertainties involved in selecting and deriving preliminary limits of exposure or other field conditions. For this reason, potential ecological risks are discussed in broad terms (i.e.,  $HQ < 1$  represents no or low risk, 1 to 10 represents low to medium risk, 10 to 100 represents medium to high risk, and  $> 100$  represents high to very high risk). This could result in an underestimation or overestimation of potential ecological risk.

A complete EcoRA requires several components. Although each is essential to the risk assessment, not all contribute equal weight to the development of conclusions. In addition, limitations and uncertainties are associated with each component. The conclusions of the EcoRA are based on an assessment of the following:

- Field surveys of receptor populations and habitats
- Home range of representative species
- Chemical concentrations in various media, including biota
- Potential toxicity to primary receptors, as determined through comparisons with reported and calculated affect levels (preliminary limits of exposure)
- Potential bioaccumulation of contaminants in primary receptors, as determined through accumulation measurements using site-collected plants, aquatic, and terrestrial invertebrates and comparison with concentrations measured in biota from reference locations
- Potential bioaccumulation of contaminants in aquatic invertebrates to secondary receptors, as determined through quantitative comparisons with preliminary limits of exposure for dietary intake.

Potential bioaccumulation of detected chemicals by primary and secondary receptors was also evaluated during the COPEC selection process. Bioaccumulation in primary receptors (terrestrial plants and aquatic and terrestrial invertebrates) was evaluated by comparing chemical concentrations detected in field-collected biota with concentrations detected in similar biota collected from several reference locations in the vicinity of the sites or at upstream locations. Bioaccumulation in secondary receptors (representative mammals and birds) was evaluated by calculating bioaccumulation factors from field-collected plants, terrestrial invertebrates, and mice. These bioaccumulation factors were combined with toxicity information and dietary composition to derive soil preliminary limits of exposure for mammals and birds. Bioaccumulation in secondary receptors was also evaluated by calculating dietary preliminary limits of exposure for mammalian ingestion of aquatic invertebrates.

Potential chemical migration and exposure pathways were evaluated for each site. Only current land use scenarios were used in the assessment. Results of the exposure assessment indicated that exposure to terrestrial plants and wildlife could occur through the following major

pathways:

- Ingestion of soil
- Ingestion of surface water
- Root absorption of chemicals in soil (plants).

Exposures to aquatic plants and organisms could occur through the following pathways:

- Ingestion of sediment
- Ingestion of surface water
- Inhalation (across gill surfaces) of dissolved chemicals in surface water
- Dermal absorption of chemicals in surface water or sediment
- Root absorption of chemicals in sediment or surface water (plants).

Results of the field surveys, COPEC selection process, exposure assessment, and ecological effects assessment were evaluated in the risk characterization to identify final COPECs for each site. The recommendations for no further action are based on both the quantitative and qualitative evaluations.

#### 2.4.4.2 Human Health Risk Characterization

Pathways for human exposure to surface water and sediment in the drainage ditches are incomplete because the ditches do not support chronic human exposure. The ditches are densely vegetated and contain only seasonal surface water. In addition, humans are not expected to be in the ditches on a regular basis. The soil pathway was determined to be complete for future exposure. Soil exposure was evaluated for ingestion, dermal contact, and inhalation of fugitive dust.

Groundwater was evaluated assuming a residential scenario for current and future land use because groundwater beneath the site is a potential drinking water source and base production wells are located within 112 mile of the site. The nearest downgradient base water production well is 10S/04W-07R02. The capture zone analysis for this well at a maximum pumping capacity indicated that groundwater in the site vicinity would become part of the base drinking water supply if the following conditions were met: the groundwater gradient experienced a clockwise rotation of 14 degrees, the production well was pumped for 5 years at its 1 year maximum pumping rate, and the transmissivity of the aquifer was underestimated by an order of magnitude (SWDIV, 1993a).

Antimony, nickel, and thallium were detected in groundwater samples at concentrations exceeding MCLs but within background levels. The common laboratory contaminant bis(2-ethylhexyl)phthalate was detected once in well 3W-30B; this compound was not detected in 3W-30B during previous or subsequent sampling events. Well 3W-30B is an upgradient well for Site 3. The only contributors to groundwater cancer risk are arsenic, chloroform, and bis(2-ethylhexyl)phthalate. Both chloroform and bis(2-ethylhexyl)phthalate are common laboratory contaminants. Arsenic was detected at a maximum concentration of 18.1 micrograms per liter (Ig/l), which is within background as determined using the analysis of variance (ANOVA) statistical comparison between upgradient and downgradient wells at the site (SWDIV, 1993a, Appendix O). The HI for groundwater was less than 1.0 for all routes of exposure (SWDIV, 1993a, Table 6-8). Therefore, groundwater at Site 3 is protective of human health.

The pathway for human receptors to the drainage ditches is incomplete and does not support a chronic exposure. Therefore, the HHRA focused on the wash rack area. The current scenario for the wash rack was very limited because the site was closed and fenced. However, a commercial/industrial scenario was assumed for the current scenario. The future scenarios identified for the site are residential, military, and commercial/industrial. The excess lifetime cancer risk for soil under the current AME commercial/industrial scenario was  $8 \times 10^{-4}$ . The excess lifetime cancer risk due to soil for the future RME residential scenario was  $1 \times 10^{-2}$ . The main contributors to the cancer risk were arsenic, aldrin, dieldrin, heptachlor, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dioxin, and chlordane.

The HI due to soil was 2.5 for the current RME commercial/industrial scenario and 83.2 for the future RME residential scenario. The main contributors were aldrin, dieldrin, chlordane, and 4,4'-DDT.

#### 2.4.4.3 Ecological Risk Assessment

All detected chemicals in soil and sediment samples were considered for potential adverse effects on ecological receptors at Site 3. Detected concentrations were compared with background levels, and those exceeding background were evaluated further. Most of the chemicals detected in soil at the site have low solubility in water, and the drainage ditches at the site contain water for only brief periods of time following storms. Therefore, exposure to surface water is not a complete pathway for chronic exposure to ecological receptors. The major routes of exposure would be through dermal contact and ingestion of soils/sediments. Exposure to soils was evaluated for the soil ingestion route. Quantitative evaluation of dermal exposure is highly uncertain and not well researched for terrestrial organisms and, thus, was not evaluated. Inhalation exposure could occur as a result of potential volatilization and fugitive dust but was not quantitatively evaluated.

Bioaccumulation can occur within foodchains (e.g., birds eating worms growing in contaminated soil). Earthworm samples were collected from the site to evaluate bioaccumulation directly. Earthworms were also exposed to site soils in the laboratory. Earthworms grown in the laboratory bioassay bioaccumulated metals and organochlorines (especially 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD), whereas field-collected earthworms bioaccumulated metals and a low concentration of 4,4'-DDE.

A bioassay was also conducted in the laboratory by growing lettuce in contaminated site soil. Results ranged from soil being directly toxic to simply exhibiting growth effects. Individual contaminants were not identified.

Several potential Federal- or State-listed and other special-status species could be receptors in riparian areas adjacent to the site, including greater mastiff bat, least Bell's vireo, black-shouldered kite, southwestern willow flycatcher, peregrine falcon, western yellow-billed cuckoo, southwestern pond turtle, and arroyo southwestern toad.

Inorganic compounds that exceeded background concentrations and elevated concentrations of certain organic compounds were associated with adverse effects on ecological receptors. The primary chemical contributors to ecological risk were arsenic, lead, herbicides (monuron, prometon, and simazine), 4,4'-DDT, 4,4'-DDE, 4,4'-DDD, dieldrin, chlordane, benzo(a)pyrene, and diesel.

#### 2.4.4.4 Conclusions

The human health and ecological risk assessments identified risks exceeding acceptable levels. The primary contributors to risk were arsenic, lead, herbicides, pesticides (especially 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD), PAHs, and dioxin. The site was recommended for a removal action based on these assessments.

#### 2.4.5 Removal Action

A soil removal action was recommended for Site 3 in the RI for Group A sites (SWDIV, 1993a). An EE/CA was drafted and soil washing was selected as the preferred alternative. However, a considerable delay occurred between the draft EE/CA and draft final EE/CA because a treatability study indicated that the preferred alternative (soil washing) would not meet the removal goals and was not a cost-effective technology.

Ecological risk was reevaluated using more recent information developed for Group C sites. The new information was used along with toxicological information from the risk assessment for Group A sites to develop the most realistic goals for receptors expected to feed at Site 3 (SWDIV, 1996f). The foraging area of the target species was also considered in relation to the areal extent of contamination at the site. After reevaluation of the site risk and additional removal alternatives, another alternative was added in the technical addendum to the EE/CA (SWDIV, 1996e). The new alternative, Alternative 4 - Excavation, Stabilization, and On-Site Disposal, was selected for implementation based on the following reasons: the greatest protection of human health and the environment would be achieved because all exposure pathways would be removed; the land would be fully restored for future use without the need for long-term monitoring or potential land use restrictions; long-term costs would be reduced even though the short-term costs would be slightly higher than for originally preferred Alternative 3. In

addition, Alternative 4 had the highest ranking for constructability, timeliness, and demonstrated performance. Evaluation of treatability study results indicated that Alternative 4 would successfully achieve the definition of inert waste in accordance with waste discharge requirements set forth in Title 23, California Code of Regulations (CCR), Division 3, Chapter 15.

The Navy's decision to undertake a non-time-critical removal action at Site 3 is documented in an action memorandum (SWDIV, 1996d). The selected alternative included excavation of contaminated soil, stabilization, and disposal at the Box Canyon landfill (Site 7). In addition, the alternative included excavation of dioxin-contaminated soils for disposal at an off-base facility. Figures 2-1 A through 2-1F show the areas of excavation. The soil removal action at Site 3 was completed in January 1997 and is documented in the site closure report prepared by the removal action contractor, dated 6 March 1997 (OHM, 1997a).

During the removal action, a burn layer area adjacent to Subsite 3D was discovered. This area has been designated Site 1111 - 26 Area Burn Layer. This new site will be addressed with Sites 21 and 33 and the 22/23 Area groundwater sites in OU4.

#### **2.4.6 Risk Characterization Postremoval Action**

The final removal action goals for Site 3 were based on human health and ecological risk-based levels and background concentrations (Table 2-1). Ecological risk-based goals were revised using more recent toxicity information and modeling, as discussed in the closeout report (OHM, 1997a). The wash rack area, Subsite 3A, was cleaned up to human health goals. The ditches, Subsites 3B, 3C, and 3D, were generally cleaned up to ecological risk goals because the pathway for human receptors was incomplete. Although residual contamination was detected in a few soil samples at Site 3 at concentration exceeding removal goals, the site has been determined to be protective of human health and the environment (OHM, 1997a). Residual contamination exceeding removal goals was generally detected in samples collected below the estimated exposure depth of concern for receptors. The pesticide 4,4'-DDT was detected in one sample at a concentration exceeding the removal goal within the exposure depth for humans at Subsite 3A; as a result, the area was covered with 3 feet of clean fill, thus limiting exposure. The pesticides 4,4'-DDT and 4,4'-DDE were each detected at concentrations exceeding removal goals within the exposure depth of concern for ecological receptors. However, based on the frequency of detection, the risk from residual contamination is considered acceptable.

#### **2.4.7 Description of the No Action Alternative**

The no action alternative for Site 3 soil, sediment, and groundwater includes no institutional or engineering controls and no containment, excavation, or treatment technologies. The soil removal action has been completed, as documented in the closeout report (OHM, 1997a).

Although a few residual contaminant concentrations exceeding removal goals remained after completion of the soil removal action, the residual risk was determined to be acceptable. The excavated areas have been backfilled with clean soil and reseeded. The burn layer area adjacent to Subsite 3D has been designated a new site and will be addressed in OU4.

The risk assessment indicated that site groundwater is protective of human health. Soil contaminants at Site 3 are generally immobile and do not pose a threat to groundwater quality. The soil contaminants have been removed, eliminating the potential threat to groundwater. Therefore, no action is required for groundwater at Site 3.

### **2.5 Site 5 - Firefighter Drill Field - Soil and Groundwater**

Site 5 includes soil and groundwater at the firefighter drill field. A soil removal action (Section 2.5.5) was conducted at Site 5 based on an evaluation of the RI data.

#### **2.5.1 Site Name, Location, and Description**

Site 5 - Firefighter Drill Field, is located in the middle of the Marine Corps Air Station (MCAS) in the 23 Area (Figure 1-2). The site includes a grassy, unlined circular burn pit, 60 to 70 feet in diameter, surrounded by a 1-foot-high earthen berm.

## 2.5.2 Site History and Enforcement Activities

From the late 1940s or 1950s to 1981, the firefighter drill field was used as a crash drill area to train firefighters in the suppression of fuel and oil fires. Training burns were conducted in a grassy, unlined, circular burn pit. As of 1981, the total volume of jet fuels, kerosene, gasoline, diesel fuel, oil, grease, hydraulic fluids, solvents (TCE, trichloroethane [TCA], methyl ethyl ketone [MEK], methyl isobutyl ketone, and stoddard), and paint thinners and strippers disposed of or burned at the site was estimated to be 280,000 to 850,000 gallons (NEESA, 1984).

Petroleum hydrocarbons reportedly were the primary liquids disposed of or burned in the pit. An aqueous fire fighting foam and a biodegradable protein foam were used to extinguish fires during drills. The training burns were discontinued in the spring of 1981, and the site was subsequently regraded to cover the burn pit (NEESA, 1984). Much of the flammable liquid may have been destroyed during the fire drills.

An IAS of Site 5 was completed in September 1984 (NEESA, 1984), and an SI was completed in 1988 (CDM, 1988). Fuel hydrocarbons were detected at a maximum concentration of 32,000 mg/kg at a depth of 4 feet below ground surface in the old burn pit. No fuel hydrocarbons or other volatile organics were detected in groundwater sampled during the SI. As a result of the SI, a remedial investigation/feasibility study (RI/FS) was recommended to characterize the site in greater detail and to define the lateral and vertical extent of contamination.

The RI for Site 5 was conducted during 1992 and 1993 with the Group A sites (SWDIV, 1993a). The RI recommended a soil removal action for Site 5 based on potential threat to groundwater from soil contaminants. An EE/CA was prepared (SWDIV, 1994b), and the selected alternative was documented in an action memorandum (SWDIV, 1994a). The selected removal action was soil excavation, treatment, and recycling or disposal off site or on base depending on the contaminant type and concentration. The removal action was completed in December 1995 and the cleanup goals were met (OHM, 1996a). None of the COCs for Site 5 were detected during three quarterly groundwater monitoring events conducted after completion of the soil excavation (OHM, 1996b).

## 2.5.3 Summary of Site Characteristics

The RI and associated data evaluation for Site 5 were conducted between February 1992 and April 1993. The RI involved collecting and analyzing 40 subsurface soil samples from 20 soil borings and 21 surface soil samples. Soil samples were analyzed for CLP metals, CLP VOCs, CLP SVOCs, TPH-d, TPH-g, CLP pesticides, and PCBs. In addition, surface soil samples were analyzed for dioxins and furans. A total of 15 groundwater monitoring wells were installed during the RI, and 56 groundwater samples were collected from new and existing wells. Groundwater samples were analyzed for CLP metals, Vocs, SVOCs, TPH-d, and TPH-g. Groundwater samples were also analyzed for general chemistry parameters to evaluate water quality. The complete RI for Site 5 is included in the RI report for Group A sites (SWDIV, 1993a). This section summarizes the results.

### 2.5.3.1 Soil

Soil contamination at Site 5 is primarily due to petroleum hydrocarbons. TPH, consisting primarily of diesel, was detected in soil at a maximum concentration of 15,000 milligrams per kilogram (mg/kg). The RI borings delineated two areas, each covering between 19,000 and 22,000 square feet (ft<sup>2</sup>), in which at least one sample from each boring exceeded a TPH concentration of 100 mg/kg. Soil samples were limited to a maximum depth of 7 feet below ground surface because shallow groundwater was encountered within 2 feet of the deepest Soil sample collected. TCE was detected only in one boring, at a maximum concentration of 17,000 µg/kg. No other contaminants exceeded background levels or human health r-PRGs.

### 2.5.3.2 Groundwater

No groundwater contaminants were detected in Site 5 wells during the first two quarters of RI sampling. Following severe flooding in January 1993, localized concentrations of benzene and 1,2-dichloroethane (1,2-DCA) were detected in well 5W-06A, the shallow downgradient monitoring well closest to the old burn pit. In March 1993, benzene and 1,2-DCA were detected at

concentrations of 4 and 3 Ig/l, respectively, which exceed the respective State MCLs of 1 and 0.5 Ig/l. During the next quarterly sampling, no benzene was detected but 1,2-DCA was detected at a concentration (0.6 Ig/l) slightly exceeding the MCL. By the October 1993 sampling event, neither benzene nor 1,2-DCA was detected. These contaminants were not detected in other Site 5 wells.

#### **2.5.4 Summary of Site Risks Prior to Removal Action**

Only validated data collected during the RI at Site 6 were used in the risk assessment. This section summarizes the results and conclusions of the risk assessment for Site 5 prior to the completion of the removal action.

##### **2.5.4.1 Human Health Risk Characterization**

A baseline risk assessment was conducted for Site 5 to evaluate potential risk to human health in accordance with RAGS (EPA, 1989b and 1991b) and NCP criteria for Superfund risk assessment (EPA, 1990). Details of the human health risk assessment (HHRA) are presented in the draft final RI report for Group A sites (SWDIV, 1993a). Although the HHRA indicated relatively little risk from the COPCs in site soil, migration of soil contaminants posed an apparent threat to groundwater.

Lead, silver, selenium, thallium, TPH, benzene, xylenes, TCE, acetone, and methylene chloride were evaluated as soil COPCs at Site 5. Potentially complete exposure pathways for human receptors at the site include exposure to soil via incidental ingestion and dermal absorption and exposure to groundwater via ingestion and inhalation.

Risk characterization of the site was performed using maximum detected concentrations and RME scenarios. A conservative estimate of potential risk to human receptors due to the COPCs was calculated for each media in a potentially complete exposure pathway. The risk characterization was based on a hypothetical residential exposure scenario and evaluated potential risks for critical human receptors (SWDIV, 1993a).

The risk characterization for the groundwater pathway was based on groundwater data from sampling conducted prior to abnormally high seasonal flooding. Higher concentrations of chemicals were detected in subsequent sampling. However, the contamination was very localized (limited to well 5W-06A) and concentrations exceeded State drinking water standards only slightly (no Federal standards were exceeded). Contaminants were not detected during subsequent sampling during October 1993. None of the COCs for Site 5 were detected during three quarterly groundwater monitoring events conducted after the completion of the removal action to evaluate whether additional action would be required (OHM, 1996b).

The risk characterization for the site resulted in estimated total site-related incremental lifetime cancer risk (ILCR) values of  $4 \times 10^{-9}$  for exposure to surface soil via ingestion,  $2 \times 10^{-7}$  for exposure to surface soil via dermal absorption, and less than  $10^{-7}$  for exposure to groundwater. Although these estimates were obtained using Federal toxicity values, the use of State values resulted in similar estimates. All of the calculated risks are less than the target ILCR of  $1 \times 10^{-6}$  (SWDIV, 1993a).

The risk characterization for Site 5 resulted in estimated site-related HI values of less than 0.1 for exposure to surface soil and 0.2 for exposure to groundwater, well below the target level of 1.0 (SWDIV, 1993a).

The risk characterization using maximum concentrations for Site 5 indicated no potential cancer risk or adverse health impact exceeding target criteria for critical receptors exposed to COPCs in surface soil or groundwater. However, site-specific criteria indicated a relatively high potential for contaminants to migrate to and degrade groundwater.

##### **2.5.4.2 Ecological Risk Assessment**

Inorganic compounds exceeding background levels and/or potential adverse effect levels for sensitive plants or animals at Site 5 included aluminum, barium, iron, lead, thallium, and vanadium. Although inorganics in site soils could pose a risk to terrestrial invertebrates, plants, and vertebrate animals, the concentrations were near background levels. TPH and its

constituents could also pose a risk to exposed organisms. The potential for bioaccumulation of detected metals and organics could be a source of potential risk to higher trophic organisms. Some of the metals detected could be magnified or accumulated through the terrestrial food chain. In contrast, the physical and chemical characteristics of the organic chemicals detected would minimize their bioaccumulation potential. However, results of the site characterization indicated that Site 5 likely contains only a limited habitat for terrestrial organisms because of site activities and disturbance. In addition, significant exposure pathways are not likely complete (SWDIV, 1993a).

No aquatic habitat is located in the immediate vicinity of Site 5. Downgradient aquatic habitat was assessed during the RI as part of Site 4. The emphasis of the ecological risk assessment at Site 5 was potential risk to terrestrial organisms. Exposure to volatile chemicals in soil via the inhalation route was not assessed because few of the chemicals detected in surface soil had volatile characteristics and the risk from inhalation was considered low.

Based on the information gathered from the assessment, the exposure of terrestrial receptors to soil via ingestion appears to contribute most of the potential risk to these organisms. However, as discussed with the parties to the FFA and resource agencies, significant exposure pathways at Site 5 were not likely complete, the risk to ecological receptors was not significant, and Site 5 was expected to be paved as part of the base realignment construction.

#### **2.5.4.3 Conclusions**

The results of the risk assessment indicated that risks to human health and the environment were within acceptable levels. The ILCR for humans using maximum concentrations at the site was below the target level of  $10^{-6}$ , and the noncarcinogenic HI was less than 1.0. The threat to ecological receptors was due primarily to metals concentrations near calculated background levels, and the assumed exposure pathways were not likely complete. However, soil contaminants posed a threat to groundwater. Therefore, further action was recommended for site soil to mitigate the threat to shallow groundwater from soil contamination.

#### **2.5.5 Removal Action**

A soil removal action was conducted at Site 5 because of the high potential for contaminants to migrate to shallow groundwater and degrade nearby drinking water wells. The decision for a non-time-critical soil removal action and the selected action are presented in the action memorandum (SWDIV, 1994a). The selected action at Site 5 included excavation of contaminated soil, treatment of the soil at an off-site bioremediation facility, recycling or disposal off base, and disposal on base at the Las Pulgas landfill. TPH, the main contaminant of concern for migration to groundwater, was cleaned up to a level of 100 mg/kg. A small area potentially contaminated with TCE was also removed to nondetect levels. Further sampling during the removal action to delineate contamination in greater detail redefined the removal action area. The actual area of excavation is shown in Figure 2-2.

#### **2.5.6 Risk Characterization Postremoval Action**

The soil removal action at Site 5 has been completed, and no further action is required, as documented in the site closeout report (OHM, 1996a), because the site is protective of human health and the environment. The removal action removed the threat to groundwater. None of the site COCs were detected during three quarterly groundwater monitoring events conducted after completion of the soil excavation (OHM, 1996b).

#### **2.5.7 Description of the No Action Alternative**

The no action alternative for Site 5 soil and groundwater includes no institutional or engineering controls and no containment, excavation, or treatment technologies. The soil removal action has been completed, as documented in the closeout report (OHM, 1996a). Site 5 is considered protective of human health and the environment for the following reasons:

- The risks to human health at Site 5 are less than  $1 \times 10^{-6}$  ILCR and less than 1.0 HI.

- No action is required for groundwater because the soil removal action eliminated the potential source of groundwater contamination and no groundwater impacts have been detected.
- Site 5 poses no significant ecological risk because the soil removal action eliminated the potential source of contamination.

## **2.6 Site 6 - DPDO (DRMO) Scrap Yard and Building 2243 Railroad Tracks - Soil, Sediment, and Surface Water**

Site 6 includes the scrap yard, an area near the scrap yard used for disposal of waste oil and solvents, and the drainage ditches along the site where seasonal surface water, soil, and sediments were evaluated. This ROD includes the soil, sediment, and surface water at Site 6. A soil removal action (Section 2.6.5) was conducted at Site 6 based on evaluation of the RI data. Groundwater at Site 6 will be included in OU4.

### **2.6.1 Site Name, Location, and Description**

Site 6 - DPDO (DRMO) Scrap Yard, is located at the extreme Southwestern end of the 22 Area in the Santa Margarita Basin (Figure 1-2). The site includes the current paved scrap yard operated by the DRMO (formerly DPDO), an unpaved, low-lying area approximately 300 feet south of Building 2241, drainage ditches running along and through the site, and an area near the Building 2243 railroad tracks. The site is within the 100-year floodplain. The Santa Margarita River runs within 1,000 feet of the southwestern end of the site.

### **2.6.2 Site History and Enforcement Activities**

The scrap yard operated from the early 1950s to 1979 as a storage, processing, and disposal area for scrap metals, salvage items, hazardous materials, and PCB transformer fluids. The yard was divided into the following four areas, listed in order from west to east: PCB spreading area, wood burning area, battery electrolyte disposal area, and hazardous waste drum storage area. Approximately 1,000 to 2,000 gallons of dielectric fluid from transformers reportedly was spread in the PCB spreading area for dust control. To the east, in the wood burning area, flammable liquids such as fuels, solvents, and paint thinners were used as igniter fluids for burning wood debris during the 1950s and 1960s. Farther to the east, the battery electrolyte disposal area received an estimated 50 to 2,000 gallons of battery electrolyte solution. The hazardous waste drum storage area was located at the eastern end of the site, and improperly sealed and damaged drums reportedly leaked wastes such as petroleum, oil, and lubricants (POLs), solvents, hydraulic fluids, paint wastes and thinners, strippers, and chemical cleaners into the soil. In 1979, the drums were removed from the site, along with soil from an approximate 10,000 -ft<sup>2</sup> area to a depth of 6 inches, and the area was backfilled with decomposed granite (NEESA, 1984).

The area near the Building 2243 railroad tracks was identified as another potential source of the chlorinated groundwater contamination during the Phase 1 RI sampling of Site 6. According to Navy personnel, waste oil and solvents from locomotives were drained into small holes or ditches dug along the northwestern side of the railroad tracks. This area is approximately 70 feet long and 35 feet wide.

An IAS was conducted in September 1984 and recommended that an SI be conducted for Site 6 (NEESA, 1984). The SI for Site 6, completed in 1988 (CDM, 1988), recommended an RI.

The RI at Site 6 was conducted during 1992 and 1993 along with the Group A sites (SWDIV, 1993a). A removal action for Site 6 soil at the scrap yard area was recommended based on RI results presented in the technical memorandum for Group A sites (SWDIV, 1993c). An EE/CA was prepared (SWDIV, 1995b), and a treatability study for the preferred alternative, soil washing, was conducted. The results of the treatability study indicated that soil washing would not be cost effective. The draft final EE/CA selected soil stabilization as the removal action for Site 6 soil. The selected removal action was documented in the action memorandum (SWDIV, 1996c). The removal action was completed and successfully met the removal action goals, as documented in the site closeout report (OHM, 1997b).

### **2.6.3 Summary of Site Characteristics**

This section provides a summary of the RI of soil, sediment, and surface water at Site 6. The results are presented in detail in the technical addendum to the RI report for Group B sites (SWDIV, 1996a).

A total of 8 surface-water and sediment locations and 37 soil borings, were sampled during the RI. Two aquatic invertebrate and fish samples were also collected from the drainage ditch for whole-body tissue analysis.

#### **2.6.3.1 Soil and Sediment**

Soil and sediment samples were analyzed for CLP metals (target analyte list and molybdenum), CLP VOCs, CLP SVOCs, TPH-g, and TPH-d. The samples collected from the scrap yard were also analyzed for CLP pesticides, PCBs, and herbicides. The samples from suspected burn areas were also analyzed for dioxins and furans. The predominant contaminants and maximum concentrations detected in soil and sediment at the scrap yard area were as follows: antimony (31.1 mg/kg), arsenic (6.2 mg/kg), beryllium (1.1 mg/kg), chromium (121 mg/kg), zinc (3,740 mg/kg), 4,4'-DDT and its metabolites (12 to 380 mg/kg), Aroclor-1260 (380 mg/kg), PAHs (380 mg/kg), and OCDD (dioxin) (0.01 mg/kg). The maximum concentrations were detected in surface soils, and concentrations generally decreased substantially with depth.

The analytical results for soil samples collected from the Building 2243 area indicated that TPH concentrations exceeded screening levels and some metals concentrations exceeded background levels and screening levels. Other detected organic compounds were below screening levels and were detected only infrequently (1 to 4 times out of 25 samples).

#### **2.6.3.2 Surface Water**

Surface-water samples were analyzed for CLP metals, CLP VOCs, CLP SVOCs, TPH-d, TPH-g, herbicides, and general chemistry. Aluminum was the only chemical detected in surface water at a maximum concentration (1.0 milligram per liter [mg/l]) exceeding the respective screening level (0.75 mg/l).

#### **2.6.4 Summary of Site Risks Prior to Removal Action**

RI data were used in the risk assessment for Site 6. The results of the baseline human health and ecological risk assessments for soil, sediment, and surface water at Site 6 are presented in detail in the technical addendum to the RI report for Group B sites (SWDIV, 1996a). This section summarizes the results and conclusions of the risk assessment for Site 6 prior to the completion of the removal action.

##### **2.6.4.1 Human Health Risk Characterization**

The baseline HHRA was conducted using the same methodology discussed in Section 2.4.4.1, except as otherwise noted. Site 6 was evaluated as two separate areas, the scrap yard and the area near Building 2243 railroad tracks, because of the distance between the two areas and the difference in suspected contaminants. No pesticides, PCBs, herbicides, or dioxins were suspected at the Building 2243 area.

Pathways to surface water and sediment in the drainage ditches were determined to be incomplete because the ditches do not support a chronic human exposure. The ditches are densely vegetated and contain only seasonal surface water. In addition, humans are not expected to be in the ditches on a regular basis. The soil pathway was determined to be complete for future exposure.

The risk assessment for the Building 2243 area was based on analytical results from 25 soil samples collected from six borings. Maximum detected soil concentrations were compared against EPA Region IX PRGs (EPA, 1995) and background concentrations. Potential contributors to carcinogenic risk and noncarcinogenic hazard were identified. Potential risk/hazard contributors were further evaluated using representative concentrations (average and 95 percent UCL concentrations). Metals were identified as potential risk/hazard contributors. Detected organic chemicals contributed insignificantly to the risk/hazard using maximum concentrations (less than  $1 \times 10^{-7}$  ILCR and 0.1 HI) and did not contribute to the representative risk. Representative metals concentrations were below background levels. TPH was detected at concentrations exceeding 100 mg/kg. The most mobile and hazardous constituents of TPH (benzene, ethylbenzene,

toluene, and xylenes [BTEX]) were included in the soil sample analysis and the risk assessment. Building 2243 area is protective of human health and the environment.

For the risk assessment for the scrap yard area, maximum detected soil concentrations were compared against EPA Region IX PRGs (EPA, 1995) and background concentrations, resulting in an ILCR of  $7 \times 10^{-3}$  and an HI of 22.5. This was sufficient for the risk managers to make a decision to pursue a removal action for the site, and no further evaluation of human health risk was conducted. The main contributors to risk were Aroclor-1260 (a PCB), total chromium (assumed to be Cr VI), 4,4'-DDD, 4,4'-DDT, dioxin (as 2,3,7,8-TCDD), and PAHs.

#### **2.6.4.2 Ecological Risk Assessment**

The ecological risk assessment evaluated contaminant concentrations in surface water and sediment in the drainage ditch and contaminant concentrations in biota collected from the ditch. Surface water at Site 6 was screened against freshwater chronic water-quality criteria for the protection of aquatic organisms or literature toxicity information. Only aluminum exceeded screening levels. Sediment toxicity was determined using a combination of literature toxicity information, sediment criteria, and sediment screening levels (no observed effect concentrations [NOECs]) developed as part of the Site 6 sediment bioassays for nutsedge (aquatic plant) and amphipods (aquatic invertebrate) (SWDIV, 1993a, Appendix U). The following chemicals in Site 6 drainage ditch sediments exceeded screening levels: cadmium, copper, zinc, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT.

The assessment of potential soil toxicity to plants indicated that 16 PAHs, Aroclor-1260, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, diesel, and 9 metals could pose a risk to plants. The results of the assessment of potential soil toxicity to terrestrial invertebrates were similar to those for plant screening. PAHs, 4,4'-DDT and its degradation products, diesel, and metals could contribute most of the risk to invertebrates based on available literature toxic effect levels and earthworm bioassay results. The assessment of potential soil toxicity to terrestrial vertebrates indicated that 4,4'-DDT and its degradation products, as well as heavy metals, posed the greatest risk.

Soil samples were used to measure the effects of bioaccumulation via lettuce germination and earthworm bioassay tests. Potential bioaccumulation of chemicals in soil from Site 6 and the Group B sites was evaluated for those metals considered to have the greatest potential for bioaccumulation (i.e., arsenic, lead, mercury, and zinc). Because bioaccumulation can occur at concentrations at or below background, the maximum detected concentrations of these metals were screened against derived soil criteria based on potential bioaccumulation from soil to earthworms and then to birds. Bioaccumulation in birds can lead to high concentrations in eggshells or behavioral problems in offspring. Lead, mercury, and 4,4'-DDT compounds exceeded bioaccumulation criteria at the Site 6 scrap yard.

Aquatic invertebrates and fish were sampled from the Site 6 drainage ditch, and animal tissues were analyzed for metals and organochlorine pesticides. In addition to probable dietary effects to birds, fish tissue concentrations were compared against elevated tissue concentrations reported by the National Freshwater Fish Contaminant Biomonitoring Program. Site 6 fish samples exceeded the national data base 85th percentile concentrations for copper, lead, mercury, selenium, and zinc.

The assessment of potential toxicity to terrestrial and aquatic receptors indicated that risks at Site 6 were due to contamination in surface soil and sediment. Contaminants that posed the most significant risk in each media consisted primarily of PAHs, pesticides, diesel, and metals.

The entire topographic depression within Site 6 has been classified as a wetland and is dominated by wetland riparian vegetation (Biosystems Analysis, Inc., 1993); the wetland vegetation showed no evidence of toxicological effects (SWDIV, 1995b).

#### **2.6.4.3 Conclusions**

Results of the human health and ecological risk assessments indicated that remediation was required at the unpaved Site 6 scrap yard area. The area near Building 2243 is already protective of human health and the environment, although some petroleum contamination is present in the soil. The petroleum contamination is not included under CERCLA. Therefore, no further

action is required under CERCLA for the Building 2243 area.

### **2.6.5 Removal Action**

A draft final EE/CA was prepared for Site 6 in 1995 (SWDIV, 1995b), and a draft final action memorandum was prepared in 1996 (SWDIV, 1996c). Considerable delay occurred between the draft EE/CA and the draft final EE/CA because the results of the treatability test for the initial treatment technology indicated that soil washing was not a cost-effective technology. The action memorandum documents the Navy's decision to undertake a non-time-critical removal action at the Site 6 scrap yard. The selected alternative for the removal action was excavation of the contaminated soil, stabilization, and disposal at the Box Canyon landfill, a designated corrective action management unit (CAMU). Soil in areas known to contain dioxin and PCBs was to be disposed of at an off-base facility. Removal of dioxins and PCBs would reduce risk from  $7 \times 10^{-3}$  to  $3 \times 10^{-4}$ .

The depth and areal extent of the proposed excavation was revised subsequent to issuance of the draft final EE/CA for public review. Numerous problems were encountered when attempting to implement the selected alternative. A project note was issued by the Navy to document the problems, present the reevaluation of human health and ecological risk, and document changes to the remediation goals and the extent of the removal action (SWDIV, 1996f). As presented in the draft final EE/CA (SWDIV, 1995b), the removal action would have destroyed more than 4 acres of desirable ecological habitat and would have a serious impact on base traffic due to transportation of the considerable volume of soil to Site 7. In addition, the EE/CA proposed allowing the site to revegetate naturally, with no backfilling. However, groundwater levels in certain areas of the site had risen to 3 to 4 feet below ground surface subsequent to issuance of the EE/CA. Site groundwater contains chlorinated solvents and, thus, excavated areas had to be backfilled to preclude an exposure pathway for ecological receptors to contaminated groundwater. Revegetation of excavated areas with native plants and implementation of an exotic weed management plan for 3 years may also be required.

The ecological risk was reevaluated using more recent information developed for Group C sites. The new information was used, along with toxicological information from the risk assessment for Group A sites, to develop the most realistic goals for receptors expected to feed at Site 6 (SWDIV, 1996f). The revised remediation goals resulted in a reduction in the volume of soil to be excavated. Figure 2-3 shows the revised excavation area. Site 6 contains no dwellings, and the receptors of concern at the site are ecological rather than human.

The soil removal action at Site 6 was completed in early 1997 and is documented in the site closure report prepared by the removal action contractor (OHM, 1997b). Soil, sediment, and surface water at Site 6 are protective of human health and the environment, and no further action is required for these media.

### **2.6.6 Risk Characterization Postremoval Action**

The removal action goals for Site 6 are presented in Table 2-2. The Site 6 soil removal action resulted in residual contamination exceeding removal goals in isolated locations at the site. The residual contamination was left in place because protected habitat restricted further excavation and the depth to groundwater restricted the depth of the excavation. Although several individual residual sample detections exceed removal goals, the 95 percent UCL value of the mean of confirmation samples for each COC is below the corresponding removal goal. The ecological risk to the target ecological species for the main pesticide contributors is based on foraging area, and the affected area has been reduced by the soil excavation. The potential for exposure was further reduced by backfilling the excavation with nonimpacted fill material. Details of the residual risk characterization are provided in the Site 6 closeout report (OHM, 1997b).

### **2.6.7 Description of No Action Alternative**

The no action alternative for Site 6 soil, surface water, and sediment includes no institutional or engineering controls and no containment, excavation, or treatment technologies. The soil removal action has been completed, as documented in the closeout report (OHM, 1997b). Although residual contaminant concentrations remain at isolated locations, the 95 percent UCL is below removal action goals for each residual contaminant and the highest concentrations of residual contamination are covered with clean soil, which reduces potential exposure. Therefore, the risk

managers consider Site 6 protective of human health and the environment.

## **2.7 Site 28 - Grease Disposal Pit In 32 Area - Soil**

Site 2B consists of a grease disposal pit in 32 Area.

### **2.7.1 Site Name, Location, and Description**

Site 2B - Grease Disposal Pit in 32 Area, is located along MACS, Road, approximately 0.75 mile northwest of Stuart Mesa Road (Figure 1-2). The grease pit boundary is approximately 80 feet long and 60 feet wide, as delineated through field reconnaissance and aerial photographs. No clay was encountered in the boring through the pit, indicating that the pit is probably not lined. The site is bordered on the east by MACS Road and an open, unpaved pullout area and on the north, west, and south by open ground with light to moderate vegetation. Site 2B slopes gently to the west and eventually drains into a stream-cut canyon adjacent to Site 1E. The area surrounding the site is characterized by low rolling hills. Site 1E is southwest of Site 2B.

No perennial surface water is present in the vicinity of the grease pit. However, surface-water flow is present in the lagoon downgradient from the site. The tributary canyon derives some of its water from runoff originating from the grease pit during winter months. Ephemeral water from this canyon flows to an effluent lagoon and ultimately reaches the Santa Margarita River, approximately 3,000 feet from Site 213. During significant rainfall events, surface water percolates into the subsurface, evaporates, or runs off the site and discharges into the Santa Margarita River.

### **2.7.2 Site History and Enforcement Activities**

Grease pits were used for disposal of mess hall grease materials from 1942 to 1980. The pit in 32 Area was unmonitored, and no information is available on the specific years of operation or the amount of grease disposed of at this location. Although there are no confirmed reports of hazardous waste disposal at this Site, the potential for such disposal practices could not be discounted because the pits were not monitored. No evidence of environmental contamination was observed on the ground surface at Site 213. Potential contaminants include grease, POLs, and metals. No investigations were conducted at Site 2B prior to the RI.

The grease pit is no longer in operation, and military and civilian personnel are on site only occasionally. The undeveloped area surrounding the site is classified as a maneuver area. The nearest family housing, Stuart Mesa Housing, is approximately 1 mile northwest of the site. No existing troop housing is located within several miles of the site and none is planned.

Future land use plans indicate that use of this site will not change. The likelihood of future residential land use is considered low given current development plans and current WA use in the vicinity of the site.

No base production wells are located within a 1-mile radius of Site 2B. Future use of groundwater at the site is considered possible, although unlikely.

### **2.7.3 Summary of Site Characteristics**

This section summarizes the analytical results from soil sampling at Site 2B. Figure 2-4 shows sample locations at Site 2B and summarizes soil analytical results that exceeded r-PRGs. One boring was completed to a depth of 2 feet at Site 213, and three surface soil samples (to 6 inches) were collected.

Table 2-3 lists concentrations of organics detected in soil at Site 2B by depth. No organic compounds were detected at concentrations exceeding r-PRGs.

Acetone was detected at a concentration of 13 Ig/kg in soil boring 2BB-01, and TCA was detected at a concentration of 2 Ig/kg in surface sample 2BSS002. Benzoic acid and pentachlorophenol (PCP) were detected in 2BSS002 at maximum concentrations of 230 and 530 Ig/kg, respectively. Phthalates were detected in 2BSS001, 2BSS002, 2BSS003, and 2BB-01. Chlorinated pesticides 4,4'-DDE and 4,4'-DDT were detected in soil boring 2BB-01 at maximum concentrations of 8.3 and 24 Ig/kg, respectively.

TPH-d was detected in two surface soil samples. The highest concentration, 42 mg/kg, was detected in 2BSS003.

Table 2-4 lists concentrations of inorganics detected in soil at Site 2B. Of the 13 metals detected, only arsenic, beryllium, and chromium exceeded r-PRGs. Beryllium exceeded both the r-PRG and background in 2BSS001 and 2BSS002.

#### 2.7.4 Summary of Site Risks

Human health and ecological risk assessments were conducted for Site 2B using data collecting during the RI. The human health and ecological risk assessment methodologies are summarized in Section 2.4.4.1. Conclusions related to Site 2B are presented in this section in support of the decision for no action.

##### 2.7.4.1 Human Health Risk Characterization

Metals (inorganics), SVOCs, VOCs, pesticides, and petroleum hydrocarbons were detected at Site 2B soil, as summarized in Tables 2-3 and 2-4. The soil risk/hazard screening for Site 2B soil indicated that the following were the primary contributors to risk:

Analyte	Risk (ILCR)	Hazard (HQ)	Background
Aluminum	--	0.2	within
Arsenic	2x10 <sup>-6</sup>	<0.1	within
Beryllium	1x10 <sup>-5</sup>	<0.1	above
Chromium (as Cr VI)	1x10 <sup>-4</sup>	0.1	within
Lead	--	0.1	within
Manganese	--	0.1	within
Nickel	1x10 <sup>-7</sup>	<.1	within
Vanadium	--	0.1	within
PCP	2x10 <sup>-7</sup>	<0.1	none

The total site-related risk/hazard of 4x10<sup>-6</sup> ILCR/<0.1 HI warranted further evaluation using representative concentrations.

Table 2-5 presents the worksheet for representative soil concentrations in a residential exposure scenario. The site-related RME risk/hazard was 2x10<sup>-6</sup> ILCR/<0.1 HI, which meets the NCP criteria for acceptable exposure. Table 2-6 presents the worksheet for representative soil concentrations in a commercial/industrial scenario. The site-related risk/hazard for an industrial scenario was <1x10<sup>-6</sup> ILCR/<0.1 HI. The ILCR and HI are less than the NCP criteria for acceptable exposure.

##### 2.7.4.2 Ecological Risk Assessment

The habitat at Site 2B generally consists of annual grassland with coastal scrub. Target species selected for this site include wild oat, terrestrial invertebrates, California mouse, California quail, and California gnatcatcher.

Soil samples collected during the RI were used for the ecological risk assessment. Toxicity screening of chemical concentrations in soil indicated elevated concentrations of beryllium, mercury, and PCP. Beryllium (invertebrates), mercury (mammals and birds), and PCP (plants) exceeded preliminary limits of exposure and were considered final COPECs for Site 2B. The HQs were between 1 and 10, with the exception of mercury in mammals (120) and PCP in plants (14).

Evaluation of potential ecological risks from exposure to soil indicated that concentrations of final COPECs will not likely pose a risk to ecological receptors. With one exception, HQs for the final COPECs were less than 15, indicating low to medium potential ecological risk. The HQ for mercury was 120, indicating very high potential ecological risk. However, this value was determined from only one detection of mercury at the site. This single detection is not likely to pose a threat to ecological receptors because the receptors subject to mercury risk are mobile (mammals and birds) and will not be continuously exposed to high mercury concentrations.

In addition, the size of the site is small, and receptors would not likely be on site for a significant length of time.

#### **2.7.5 Description of the No Action Alternative**

The no action alternative selected for Site 2B includes no institutional controls and no containment, excavation, or treatment technologies. Site 2B is considered protective of human health and the environment for the following reasons:

- The RME residential exposure scenario resulted in an ILCR of  $2 \times 10^{-6}$ , which was considered acceptable by the parties to the FFA. The grease pit is no longer in operation, and military and civilian personnel are on site only occasionally. Future land use plans indicate that the use of this site will not change. The likelihood of future residential use is considered low given current development plans and current land use in the vicinity of the site. The RME for the industrial scenario resulted in an ILCR of less than  $1 \times 10^{-6}$ . Both scenarios resulted in an HI of less than 1.0.
- Evaluation of potential ecological risks from exposure to soil indicated that the site will not likely pose a risk to ecological receptors, with the exception of mercury. However, the single detection of mercury is not likely to pose a threat to ecological receptors because the receptors subject to mercury risk are mobile (mammals and birds) and will not be continuously exposed to mercury concentrations. Receptors are not expected to be on site for a significant amount of time because of the small size of the site.

#### **2.8 Site 8A - Las Flores Creek - Sediment and Surface Water**

Site 8A consists of a portion of the Las Flores Creek in 43 Area.

##### **2.8.1 Site Name, Location, and Description**

The basin study area designated Site 8A - Las Flores Creek (Figure 1-2), is an ephemeral stream channel in a canyon floor on the east side of the Las Pulgas landfill. This drainage area is downstream from the landfill and, over part of its length, forms a meandering gully with steep sides ranging from 4 to 20 feet high. Vegetation surrounding the drainage is riparian, with minimal disturbance above the development in 43 Area. Extending below Building 43600 (a vehicle maintenance area that drains directly into the drainage) to the intersection of Las Pulgas and Basilone Roads (Figure 1-2), the drainage cuts more deeply into the alluvium and is bordered by significant development. The drainage terminates at its confluence with the Las Flores Creek. The nearest downgradient base production wells are more than 5 miles from the site.

Camp Las Pulgas, the nearest developed area, is located south-southwest of Site 8A (Figure 2-5) and contains troop housing, administrative buildings, vehicle maintenance areas, and recreation areas. Site 8A includes drainage from the developed areas. Base personnel cross the site only infrequently because the vegetation is typically dense and the drainage is often steep in undeveloped areas. The drainage is covered in some developed areas and crossed by walkways.

##### **2.8.2 Site History and Enforcement Activities**

No information is available on the types or quantities of contaminants received by the creek. The site was investigated because of changes in electrical conductivity detected in the stream during surface-water sampling in 1984 (NEESA, 1984).

Surface-water sampling of Site 8A was conducted in 1984 as part of the IAS preliminary assessment (PA). The IAS report stated that the conductivity of water in the upper Las Flores Creek more than doubled and the flow decreased by half over a 1-mile portion of the creek approximately 2 miles downstream from the Las Pulgas landfill (NEESA, 1984). The electrical conductivity increased from 386 to 935 micromhos, per centimeter ( $\mu\text{mho/cm}$ ) in this section of the creek. To evaluate whether the reported change in electrical conductivity represents a significant change in water quality, the total dissolved solids (TDS) concentration was approximated using the following equation (Hem, 1970):

$$\text{TDS} = \text{A} \times \text{C}$$

Where:           A = Conversion factor between 0.55 and 0.75  
                  (an average value of 0.65 was used)  
                  C = Specific conductance in  $\mu\text{mho}/\text{cm}$ .

According to this approximation, a TDS change from 250 to 600 parts per million (ppm) may have occurred. This change over a 1-mile section of the creek could be naturally occurring or could indicate potential contamination of surface water.

### 2.8.3 Summary of Site Characteristics

Analytical results for Site 8A are summarized in the following sections. Sampling locations are shown in Figure 2-5.

#### 2.8.3.1 Surface Water and Sediments

A total of 29 surface-water samples, including duplicates, were collected to characterize surface water at Site 8A. The surface-water samples generally contained low concentrations of potential contaminants, below State and Federal surface-water standards (California State Water Resources Control Board [SWRCB], 1993; EPA, 1992c). No organic compounds detected at Site 8A exceeded surface-water quality standards.

The following organic compounds were detected in at least one surface-water sample at the maximum concentrations specified:

- 8ASW011193 - Acetone - 6.1  $\mu\text{g}/\text{l}$
- 8ASW013293 - Benzene - 1  $\mu\text{g}/\text{l}$
- 8ASW04194 - Benzoic acid - 44  $\mu\text{g}/\text{l}$
- 8ASW010193 - bis(2-Ethylhexyl)phthalate - 20  $\mu\text{g}/\text{l}$
- 8ASW013193 - Chloromethane - 2.1  $\mu\text{g}/\text{l}$
- 8ASW014194 - Diesel - 450  $\mu\text{g}/\text{l}$
- 8ASW014194 - di-n-Butylphthalate - 0.6  $\mu\text{g}/\text{l}$
- 8ASW014293 - n-Nitrophenol - 63  $\mu\text{g}/\text{l}$ .

Metals detected in Site 8A surface-water samples at concentrations exceeding State and Federal standards are aluminum, cadmium, and iron. Metals were detected at concentrations exceeding State and/or Federal standards only during the first round of surface-water sampling (first quarter 1993). Other metals were detected at this site, but at maximum concentrations below State and Federal standards. Although aluminum, cadmium, and iron exceeded standards, the risk assessment indicated that detected concentrations should not pose significant risk. No background data are available for surface water, but aluminum, cadmium, and iron are naturally occurring in background soil and are also likely naturally occurring in surface water. The 95th percentile Las Flores Basin soil background data for aluminum, cadmium, and iron are 40,000, 1.2, and 37,000  $\text{mg}/\text{kg}$ , respectively.

Aluminum was detected in samples 8ASW003194, 8ASW010193, 8ASW012193, and 8ASW014193 at concentrations ranging from 158 to 2,280  $\mu\text{g}/\text{l}$ . Sample location 12 (sample 8SW012193) was dry during subsequent sampling rounds and, thus, was not sampled. However, sampling locations 11 (sample 8ASW011193) and 13 (sample 8ASW013193) adjacent to and downstream from sample location 12, respectively, showed no detectable contamination during the initial sampling round. Aluminum was not detected during subsequent rounds of sampling at sample location 14. The State and Federal standards for aluminum are 750 and 87  $\mu\text{g}/\text{l}$  for acute and chronic criteria, respectively.

Cadmium was detected at a concentration of 5.7  $\mu\text{g}/\text{l}$  in surface-water sample 8ASW006193 but was not detected in the subsequent sample at this location. State and Federal standards for cadmium are 3.0 and 16.1  $\mu\text{g}/\text{l}$  for chronic and acute criteria, respectively.

Iron was detected at a concentration of 1,430  $\mu\text{g}/\text{l}$  at sample location 14 (sample 8ASW014193) during the initial round of sampling but was not detected during subsequent sampling rounds at this location. The chronic standard for iron is 1,000  $\text{mg}/\text{l}$ ; no acute standard exists.

Sediment samples were collected and analyzed from 14 sampling locations, as shown in Figure 2-5. Chromium (total) was detected in the background soil sample (8ABG001) and several sediment samples at concentrations ranging from 2.8 to 64.8 mg/kg. A total chromium concentration of 34.6 mg/kg was detected in the background soil sample (8ABG001).

Toluene and bis(2-ethylhexyl)phthalate were the only organic compounds detected in sediment samples collected during the Phase 1 RI. The concentration of bis(2-ethylhexyl)phthalate in the background sample collected outside the Site 8A drainage was 230 Ig/kg. Concentrations of this compound ranged from nondetect to 330 Ig/kg in sample 8ASD008, which is the only sample with a concentration greater than the background sample. Toluene was detected in sample 8ASD012 at a concentration of 17 Ig/kg. Relatively low concentrations of PAH compounds (up to 230 Ig/kg) were detected in one duplicate sample but not in the associated environmental sample.

During supplemental sediment sampling conducted in September 1993 to support the ecological risk assessment, diethylphthalate was detected at a maximum concentration of 29 Ig/kg (in sample 8ASD013-E), but bis(2-ethylhexyl)phthalate was not detected. No other organic compounds were detected during the supplemental sampling.

#### **2.8.3.2 Biota**

Watercress was the only plant collected from the wet stream margins at sampling locations 8A-010 and 8A-013 (Figure 2-5). Concentrations of several metals were higher in plant samples from location 8A-013 (downstream, receiving drainage from Sites 8 and 8A) than in the samples from location 8A-010 (upgradient from Sites 8 and 8A).

#### **2.8.4 Summary of Site Risks**

An HHRA was not conducted at Site 8A because no likely exposure pathways exist. An ecological assessment was conducted and the results are summarized in this section in support of the decision for no action at Site 8A. The complete assessment is presented in the RI report for Group B sites (SWDIV, 1995a). The methodology is briefly described in Section 2.4.4.1.

##### **2.6.4.1 Health Risk Characterization**

No complete human health exposure pathways exist for sediments and surface water at Site 8A based on the unlikelihood that humans would be in the creekbed on a regular basis.

##### **2.8.4.2 Ecological Risk Assessment**

Site 8A is downstream from the Las Pulgas landfill, and both current and future land use plans indicate that it will be left in its natural state for use as a drainage ditch/creek (Joy, 1993).

Plants and wildlife, both terrestrial and aquatic, are abundant along Las Flores Creek and the tributary from the landfill area. Impacts from chemicals in sediment and surface water were not observed in the biota; similar species were present both upstream and downstream within the creek.

The following chemicals exceeded effect levels and calculated criteria in sediment and were retained as final COPECs: aluminum, chromium, manganese, vanadium, fluoranthene, and toluene. Aluminum and iron exceeded effect levels and established criteria for surface-water aquatic organisms. In addition to manganese, other inorganics detected in surface water and sediment (i.e., arsenic, barium, beryllium, cobalt, lead, nickel, and zinc) could potentially bioaccumulate in aquatic plants and organisms.

Remediation of Las Flores Creek is not recommended even though several chemicals exceeded potential effect levels and criteria. Substantial uncertainties are inherent in the estimations of calculated criteria and effect levels for the Group B sites. Exposure and risk to plants and consumers, although potentially present, were not evident in the biologically rich riparian habitat at this site. Wetland characteristics at the site were evaluated qualitatively, and no evidence was found of impairment (such as plant stress) associated with riparian areas. The potential toxicity to consumers exhibited by bioaccumulation in plants of metals in the stream was at the low end of effect levels for vertebrate diets, and widely ranging vertebrate

consumers would not likely accumulate toxic levels of these elements as a result of natural foraging. In addition, no obvious reservoir of toxic metals is present in the drainage sediments. Remediation of this site would likely cause more harm to receptors through destruction of riparian habitat than would leaving the existing levels of contamination in place.

#### **2.8.5 Description of the No Action Alternative**

The no action alternative selected for Site 8A includes no institutional or engineering controls and no containment, excavation, or treatment technologies. Site 8A is considered protective of human health and the environment for the following reasons:

- There are no likely exposure pathways to humans.
- Even though several chemicals exceeded potential effect levels and criteria, cleanup of this site would likely cause more harm to receptors due to destruction of riparian habitats than would leaving contaminants in place.
- Wetland characteristics were evaluated qualitatively, and no evidence was found of impairment associated with riparian areas.
- The potential toxicity to consumers exhibited by bioaccumulation in plants of metals in the stream was at the low end of the effect levels for vertebrate diets, and widely ranging vertebrate consumers would not likely accumulate toxic levels of these elements as a result of natural foraging.

#### **2.9 Site 19 - 31 Area ACU-5 (LCAC) Two Surface Impoundments - Soil, Sediment, Groundwater, and Surface Water**

Site 19 consists of two surface impoundments at the ACU-5 complex in 31 Area.

##### **2.9.1 Site Name, Location, and Description**

Site 19 - ACU-5 (LCAC) Two Surface Impoundments, is located in the 31 Area, between Interstate 5 and the Pacific Ocean (Figure 1-2). This complex provides training and maintenance facilities for LCAC amphibious vehicles.

The site consists of two synthetically lined impoundments that received water from a concrete vehicle operations apron used for washing and performing minor maintenance on LCAC amphibious vehicles. The impoundments are located south of the concrete apron, approximately 15 feet apart, and contain both submerged and emergent aquatic vegetation.

The larger impoundment (retention pond) is approximately 168 feet long, 166 feet wide, and 13 feet deep. This impoundment is currently uncovered; in the past, it was covered with a floatable roof to reduce evaporation and contamination from dust and sand (Almgren and Koptionak, Inc., 1989). The roof is now submerged in the pond.

The smaller pond (surge pond) is approximately 128 feet long, 127 feet wide, and 14 feet deep. This pond has remained uncovered since its construction.

The site is surrounded by a chain-link fence on the west, south, and east sides. A drainage channel runs west of the ponds and could receive runoff during the rainy season. This channel eventually discharges into the Pacific Ocean. The unpaved area in the immediate vicinity of the ponds is graded and contains no natural vegetative cover. The surrounding areas beyond the fence are covered by natural vegetation and native soils.

No base production wells are located downgradient from Site 19. The site is located in a nonbeneficial groundwater zone, as designated in the Water Quality Control Plan for the San Diego Basin (SWRCB, 1975). Groundwater is encountered at a depth of approximately 25 feet below ground surface.

##### **2.9.2 Site History and Enforcement Activities**

The impoundments received runoff from the concrete apron maintenance operations prior to construction of a separate washing facility in the mid-1980s. Operations, maintenance, and cleaning products could have been spilled or washed onto the apron and into the two lined ponds. The concrete apron currently serves as a parking area for LCAC amphibious vehicles.

The surge pond previously was part of a water recycling system and received water from the adjacent concrete apron. The water flowed from the surge pond, through an oil/water separator, and into the retention pond, where it was stored for future use (Almgren and Koptionak, Inc., 1989). Potential contaminants at Site 19 include battery acid, acetone, anticorrosive compounds, cleaning fluids, aliphatic solvents, hydraulic fluid, fuel oils, and MEK. No information is available on the quantities of contaminants received by the surface impoundments.

At one time, a cross-connection linked the holding ponds/oil-water separator system at Site 19 with the storm-water conveyance system. However, no such connection exists at present. No information is available on when it was disconnected.

The current military construction project to upgrade and expand the ACU-5 complex has diverted water that flowed into Site 19 to the upgraded wastewater collection and treatment system; as such, Site 19 is no longer in use. The impoundments are expected to be drained, the sludge and liners removed, the ponds backfilled, and the impoundments closed in accordance with applicable regulations.

### Results of Previous Investigations

Previous investigations of Site 19 are limited to an investigation by Almgren and Koptionak, Inc., in 1989, in support of hydrogeologic assessment report (HAR) requirements. Sludge samples collected from the impoundments contained a total recoverable petroleum hydrocarbons (TRPH) concentration of 3,630 ppm, a bis(2-ethylhexyl)phthalate concentration of 32,700 parts per billion (ppb), a phenanthrene concentration of 3,070 ppb, a methyl-naphthalene concentration of 535 ppb, and a naphthalene concentration of 52 ppb. Liquid within the impoundments contained a maximum TRPH concentration of 5,430 ppm, 1,1,1-TCA at 75.3 ppb, acenaphthene at 4.5 ppb, anthracene at 6.75 ppb, di-n-butylphthalate at 13.3 ppb, fluoranthene at 69.3 ppb, phenanthrene at 77.7 ppb, pyrene at 84.3 ppb, and lead at 11.3 ppm (Almgren and Koptionak, Inc., 1989). These analytical results indicate that free petroleum product was likely present in the impoundments in the past.

### 2.9.3 Summary of Site Characteristics

Phase 1 RI work at Site 19 was conducted in 1993 and involved investigating potential soil and groundwater contamination due to leakage from the two surface impoundments. Sediment, surface-water, and aquatic plant samples were collected from the impoundments. Sampling locations are shown in Figure 2-6.

One surface-water sample and one composite sediment sample were collected from each surface impoundment at Site 19. Two dry sediment samples were collected from site drainages: one sample was collected near the impoundments, and the other was collected from a drainage near the ocean.

Four soil borings and one surface soil location were sampled. The borings were located in areas surrounding and between the surface impoundments to evaluate the potential for soil contamination from the impoundments. Two borings were inclined to extend beneath the surface impoundments.

Three shallow monitoring wells were installed at Site 19 to assess potential groundwater contamination due to the impoundments. The wells are screened across the water table.

Field meter readings of electrical conductivity, pH, and temperature were collected from both ponds, along with water, aquatic plant, and sediment samples. Location 1 (surge pond) is the pond that receives primary LCAC drainage. Location 2 (retention pond) is the pond that receives drainage from the surge pond. Wet pond sediment was collected from four locations within each pond using a Teflon™ scoop. These samples were composited and homogenized and then placed into sample containers. Water was collected in grab samples. One aquatic plant sample was collected by hand from each impoundment for CLP metals analysis.

Dry sediment was collected in two sediment accumulation areas in the drainage between the impoundments and the ocean. Location 3 was just outside the fence in the LCAC overflow drainage and just upstream from the confluence with the main drainage. Location 4 was in the seasonal wetland area (dry at the time of collection), at the upstream edge of the rock dam a few hundred yards downstream in the main drainage.

The volume of water in the surge pond increased over the summer of 1993. Submerged aquatic plants (probably pondweed) that were abundant in June were dead in September. Bermuda grass was the only submerged green plant observed (and sampled), indicating that the pond margins had recently been dry.

The retention pond was considerably more biologically active than the surge pond. Cattail stands were growing in three areas and dense, green stands of pondweed covered the sediments. The pondweed was chosen for plant tissue sampling. Numerous aquatic mites and insects were observed swimming in the water but were not abundant enough for effective sampling.

Phase 2 RI was conducted at Site 19 in 1995 and included sediment sampling to assess potential risks associated with allowing the impoundment sediments to remain dry for an extended period of time prior to closure. Four surface sediment samples and four core samples were collected from the surge pond. Because the sediment depth on the floating cover of the retention pond was shallow (less than 6 inches at all sample locations), sampling was limited to four surface samples. Sediment sample locations are shown in Figure 2-7.

The analytical results from these sampling events are summarized in the following sections.

#### **2.9.3.1 Soil**

Soil analytical results are summarized below:

- Beryllium and total chromium were detected in every soil boring at Site 19, including a boring located to characterize background concentrations. Maximum concentrations were 0.76 mg/kg for beryllium in sample 19SD004-E and 144 mg/kg for chromium in sample 19SD002E. Beryllium concentrations are well within the range of background values for marine terrace deposits and were determined to be part of the background at Site 19. All detected beryllium concentrations are qualified as being less than the contract-required detection limit (CRDL) but greater than the instrument detection limit (IDL).
- Acetone was detected in several samples, with a maximum concentration of 52 Ig/kg in sample 19SB003-01.
- Several organic compounds were detected at low concentrations in site soil.
- Diethylphthalate concentrations ranged from 190 Ig/kg in a duplicate sample collected from 3 to 4 feet below ground surface in boring 19B-03 (not detected in the first sample from that depth) to 1,700 Ig/kg at 26 to 27 feet below ground surface in boring 19B-06.
- Diesel was detected at low concentrations in several borings, with a maximum concentration of 4.5 mg/kg in sample 19SB006-09.
- Toluene was detected in two samples, with a maximum concentration of 5 Ig/kg in sample 19SD004-E.

#### **2.9.3.2 Surface Water and Sediments**

Surface water in each impoundment was sampled during September 1993 in support of the ecological risk assessment. Surface-water samples contained low concentrations of potential contaminants, typically below State and Federal surface-water standards (SWRCB, 1993; EPA, 1992c).

Surface-water quality standards have not been established for the organic compounds detected at Site 19; however, organic concentrations are considered low. Diethylphthalate and 2-butanone

were detected in sample 19EW001393, collected from the surge pond, at concentrations of 0.6 and 13 Ig/l, respectively. Diesel, benzoic acid, and 4-methylphenol were detected in sample 19EW002393, collected from the retention pond, at concentrations of 0.5, 2, and 0.5 Ig/l, respectively.

Aluminum was the only metal detected in Site 19 surface water at a concentration exceeding State and Federal standards (87 Ig/l for chronic criteria). Aluminum was detected at a concentration of 199 Ig/l in sample 19EW001393, but the surface-water sample collected from the adjacent pond, sample 19EW002393, contained no detectable concentration of aluminum. The detected concentration is less than the CRDL but greater than or equal to the IDL. Given that the aluminum concentration is low and the site history does not indicate that aluminum should be a site contaminant, aluminum may not be site related.

Sediment sampling was conducted within the impoundments during the Phase 1 RI in September 1993 to support the ecological risk assessment. Additional sediment sampling was conducted in 1995. Sediment analytical results showed relatively low concentrations of contaminants.

Composite sample 19SD001-E was collected within the surge pond and composite sample 19SD002-E was collected within the retention pond during Phase 1 RI. Gasoline (modified EPA Method 8015), bis(2-ethylhexyl)phthalate, phenanthrene, and pyrene were detected in sample 19SD001-E at concentrations of 4,900, 3,300, 450, and 450 Ig/kg, respectively. Fluoranthene, phenanthrene, and pyrene were detected in sample 19SD002-E at concentrations of 58, 90, and 63 Ig/kg, respectively. No other organic compounds were detected in sediment collected from either impoundment.

The results of Phase 2 RI sediment sampling are presented in Table 2-7.

The LCAC surge pond was sampled for both deep and shallow sediments. Concentrations of arsenic, cadmium, total chromium, copper, iron, lead, and zinc exceeded area background in individual shallow sediment samples (3 inches). Mean concentrations of arsenic, cadmium, and zinc exceeded average background. The deeper sediment cores generally had higher concentrations of most constituents than the shallow sediments. Mean concentrations from the surge pond cores exceeded area background soil 95th percentile concentrations for aluminum, arsenic, cadmium, chromium, copper, iron, magnesium, nickel, vanadium, and zinc.

The following organic chemicals were detected in shallow and deep cores from the LCAC surge pond at the maximum concentrations indicated (with the exception of di-n-octylphthalate and xylenes, maximum concentrations are from the deeper sediment cores):

- 2-Methylnaphthalene - 150 Ig/kg
- bis(2-Ethylhexyl)phthalate - 4,200 Ig/kg
- Chrysene - 110 Ig/kg
- di-n-Butylphthalate - 860 Ig/kg
- di-n-Octylphthlate - 130 Ig/kg
- Fluoranthene - 370 Ig/kg
- Fluorene - 140 Ig/kg
- Phenanthrene - 990 Ig/kg
- Pyrene - 340 Ig/kg
- 2-Butanone - 49 Ig/kg
- Acetone - 230 Ig/kg
- Xylenes - 5 Ig/kg
- Diesel - 2,000 mg/kg.

The LCAC retention pond sediment was relatively thin, and sampling was limited to surface (shallow) sediment. No core samples were collected. In addition, any sediment that could be present under the floating cover (at the true bottom of the impoundment) was not accessible without removal of the cover and, therefore, was not sampled. The LCAC retention pond sediment chemistry data reported in the draft final RI report for Group B sites (SWDIV, 1995a) and in the technical addendum to the RI report for Group B sites (SWDIV, 1996a) are representative of sediments washed onto the top of the floating cover, probably primarily from the area immediately surrounding the ponds. The chemistry of the sediment under the floating cover, representative of overflow from the surge pond, has not been evaluated. The accumulation of sediments in the retention pond is expected be relatively small because most sediment would have

been deposited in the surge pond, and retention pond sediments would not be exposed to ecological receptors while the cover remains in place.

All constituents occurred at lower concentrations in the retention pond (on the floating cover) than in sediments from the surge pond. Individual samples (but not means) exceeded area soil background 95th percentile concentrations for aluminum, arsenic, cobalt, lead, magnesium, nickel, and zinc. The following are maximum concentrations of detected organic chemicals:

- bis(2-Ethylhexyl)phthalate - 340 Ig/kg
- Phenol - 220 Ig/kg
- 2-Butanone - 3 Ig/kg
- Acetone - 40 Ig/kg.

#### **2.9.3.3 Groundwater**

With the exception of metals, no contaminants were detected at concentrations exceeding MCLs. Groundwater analytical results for the three rounds of sampling are summarized below:

- Antimony and nickel were detected in upgradient and downgradient wells. Maximum upgradient and downgradient antimony concentrations of 33.9 to 34.9 Ig/l, respectively, were detected during the second quarter 1993. Antimony was not detected during subsequent sampling quarters. Maximum upgradient and downgradient nickel concentrations were 1,100 and 10,100 Ig/l, respectively. The maximum nickel concentration (10,100 Ig/l) was detected in well 19W-05 during the third quarter 1993. Nickel concentrations of 1,430 and 4,290 Ig/l were detected in this well during the other sampling events. MCLs are 6.0 Ig/l for antimony and 100 Ig/l for nickel.
- Selenium exceeded the MCL in wells 19W-05 and 19W-07 (upgradient) at maximum concentrations of 11.5 and 12.1 Ig/l, respectively, during one sampling quarter. The MCL for selenium is 10.0 Ig/l.
- Total chromium was detected in well 19W-02 at a concentration of 132 Ig/l during the second quarter 1993 and in well 19W-05 at a maximum concentration of 1,510 Ig/l during the third quarter 1993. Chromium concentrations did not exceed the MCL during any other sampling quarters or in any other Site 19 wells. State and Federal MCLs for chromium are 50 and 100 Ig/l, respectively.

Based on the results of the statistical evaluation of metals concentrations in groundwater and because upgradient wells often exceeded MCLs, the antimony, nickel, and selenium concentrations detected in groundwater samples from Site 19 wells are not considered site related.

#### **2.9.3.4 Biota**

A submerged sample of bermuda grass, which typically grows in terrestrial habitats, was collected from the surge pond (Pond 1) and pondweed was collected from the retention pond (Pond 2) (Figure 2-6).

#### **2.9.4 Summary of Site Risks**

Human health and ecological risk assessments were performed for Site 19 using the methodology described in Section 2.4.4.1. The results are summarized in this section in support of the conclusion for no action at Site 19.

##### **2.9.4.1 Human Health Risk Characterization**

The results of the exposure assessment for human health indicated that soil provides the only complete pathway for a residential exposure scenario. The groundwater pathway is incomplete because the site is located in a nonbeneficial use zone, as designated in the Comprehensive Water Quality Control Plan for the San Diego Basin (SWRCB, 1975). The sediments in the surface impoundment provide a potential exposure pathway only under an industrial/commercial exposure scenario because the impoundments would be removed before any residential housing could be built. The site-related ILCR and HI for the residential scenario were  $2 \times 10^{-7}$  and 1.0,

respectively. Both of these values meet the EPAs acceptable limits.

The commercial/industrial scenario was used for Site 19 sediment because, although the impoundments contain sediment under water and are slated for closure and removal, they could be allowed to dry and lie fallow for several years pending removal and development. Under such circumstances, exposure to contaminants in the sediment could occur and intake rates could be unacceptable. However, the impoundments could not plausibly be part of a residential exposure scenario. If the base installation were converted into a residential setting, the impoundments would be removed as part of that development.

The site-related RME for the commercial/industrial scenario resulted in an ILCR of  $1 \times 10^{-6}$ . The HI was below 1.0 using maximum concentrations. The ILCR and HI are within the NCP criteria for acceptable exposure.

#### **2.9.4.2 Ecological Risk Assessment**

COPECs that could pose a risk to ecological receptors were detected in soil, sediment, and surface water at Site 19. However, soil COPECs were very close to background or ecological effect levels used to evaluate toxicity. Sediment and surface-water COPECs could pose a potential risk, primarily to aquatic invertebrates and plants and their consumers. Because of the conservative assumptions used in the risk assessment and the uncertainties associated therewith, the risks to ecological receptors are considered low. Ecological risk for sediment is considered low due to the buried nature of the contaminants. The sediment contaminants were mostly covered with a noncontaminated layer of sediments. Ecological risk is also considered low because special-status species are unlikely to be resident in the impoundments. The surface impoundments at Site 19 pose no significant threat to the environment.

#### **2.9.5 Description of the No Action Alternative**

The no action alternative selected for Site 19 soil, sediment, and groundwater includes no institutional or engineering controls and no containment, excavation, or treatment technologies. Site 19 is considered protective of human health and the environment for the following reasons:

- The calculated ILCR and HI for human health for soil under the residential exposure scenario and sediment under the commercial industrial exposure scenario meet the NCP criteria acceptable exposures.
- There is no complete exposure pathway to groundwater and only minimal threat of groundwater degradation.
- Potential ecological risks from sediments, soils, and surface water are insignificant. The contaminants are found mostly in sediments at depth, and special-status species do not reside in the impoundments.
- Future Land use plans include demolishing the existing Site 19 surface impoundments and allowing the site to revert to its natural vegetative state. No structures or buildings are planned for this site.

#### **2.10 Site 20 - 43 Area Las Pulgas Vehicle Wash Rack - Soil, Sediment, Groundwater, and Surface Water**

Site 20 includes a concrete-lined surface impoundment, an oil/water separator (clarifier), a washing apron, and adjacent paved and unpaved areas.

##### **2.10.1 Site Name, Location, and Description**

Site 20 - 43 Area Las Pulgas Vehicle Wash Rack, is located approximately 100 feet north of Basilone Road, immediately east of its intersection with Las Pulgas Road (Figure 1-2). The impoundment is approximately 106 feet long and 36 feet wide and receives runoff from the vehicle washing area. Wash water from the impoundment drains into the oil/water separator before discharging to a shallow ephemeral drainage ditch that intersects Las Flores Creek. The site is bordered on the northeast side by a concrete and asphalt paved area, on the southeast by moderate to dense vegetation, on the west by light vegetation and Basilone Road, and on the

north by light vegetation and an unpaved access road. Group D Sites 1F and 2D are located northeast of the wash rack. The site slopes gently to the southeast and eventually drains into Las Flores Creek, approximately 400 feet southeast of the wash rack. The area surrounding the site generally consists of low rolling hills. Base production wells are located about 5 miles downgradient from Site 20.

### **2.10.2 Site History and Enforcement Activities**

According to AC/S,ES MCB Camp Pendleton office personnel, the Las Pulgas vehicle wash rack was constructed in 1986 and operated as a vehicle washing area until at least 1988 and possibly until 1990. The impoundment overflowed in the past, and hydrocarbon-stained soil has been observed along its edges. The MCB Camp Pendleton AC/S,ES office indicated that samples were not collected when the impoundment overflowed, and no additional information is available on the chemistry, extent, or date of the overflows.

Potential contaminants introduced into the impoundment include POLs, solvents, detergents, and corrosives. No information is available on the quantities of contaminants received by this site. The base expects to drain the impoundment, remove the sludge, backfill the impoundment, and close the site in accordance with applicable regulations.

Previous investigations of Site 20 are limited to sampling conducted in 1990 in support of HAR requirements. Analytical results indicated that sludge in the impoundment contained TRPH at 7,200 ppm, toluene at 12,700 ppb, and organic lead at 0.12 ppm. Liquids collected from the impoundment contained bromoform at 3 ppb, TDS at 710 ppm, and no detectable TRPH (Dames and Moore, 1990).

### **2.10.3 Summary of Site Characteristics**

Phase 1 RI work at Site 20 was conducted in 1993 and involved sampling soil borings, surface-water, sediment, and groundwater to investigate potential contamination from the impoundment (Figure 2-8). Analytical results are summarized in this section and presented in Table 2-7.

One surface-water sample and one composite sediment samples were collected from the surface impoundment at Site 20.

Five soil boring locations and one background surface soil location were sampled to characterize the area around Site 20. Two of the five boreholes were located immediately adjacent to and downslope from the surface impoundment and oil/water separator to detect possible leakage. One boring was located along Las Flores Creek, upstream from the wash rack but downstream from Sites 2D and 1F to help differentiate between contaminant contribution from the wash rack and contaminant runoff from the Site 2D grease disposal pit and the Site 1F refuse burning ground. The background surface soil sample was located upstream from the impoundment. Sample locations are shown in Figure 2-8. A total of 31 soil samples, including 1 background sample, were collected.

No submerged or emergent aquatic plants were observed in the concrete impoundment at Site 20; thus, ecological sampling was limited to field meter readings and water and wet sediment sampling on 8 September 1993. Soft, black sediment was scooped from the surface at three locations around the edge of the pond using a Teflon TM cup at the end of an 8-foot pole. The sediment was composited and homogenized in a stainless steel pan and then placed into sample containers. Duplicate water and sediment samples were collected, along with an equipment rinsate sample.

Additional sediment sampling was conducted at Site 20 in 1995 to assess potential risks associated with allowing the impoundment sediments to remain dry for an extended period of time prior to closure. These additional sediment sample locations are shown in Figure 2-9.

A groundwater sample was collected from a temporary well at Site 20 during the RI for Group D sites in 1996 to determine whether groundwater has been impacted by past practices at the site.

#### **2.10.3.1 Soil**

The only organic compound detected in soil samples from Site 20 was bis(2-ethylhexyl)phthalate at concentrations of 110 and 150 Ig/kg in two samples collected from more than 10 feet below ground surface.

No soil concentrations exceeded the acceptable risk range of  $10^{-6}$  to  $10^{-4}$  ILCR. The maximum total HI was 1.1, with manganese and arsenic as the primary contributors to the HI, each with an HQ of less than 1.0. Within the upper 2 feet of soil, manganese concentrations ranged from 158 to 789 mg/kg and arsenic concentrations ranged from 1.75 to 4.66 mg/kg.

#### **2.10.3.2 Surface Water and Sediments**

Sediment and surface water within the vehicle wash rack area were sampled during September 1993 to support the ecological risk assessment. Analytical results for sediment sampling showed relatively low concentrations of contaminants. Toluene was detected at a concentration of 11 Ig/kg in sample 20SD001-E.

An additional three sediment samples were collected at Site 20 during the Phase 2 RI. The sediment was not thick enough to collect core samples, and one of the four surface sample locations did not contain enough sediment for sampling. The following inorganics exceeded background in mean and individual samples: cadmium, copper, lead, and zinc. Maximum concentrations of organics detected in sediment samples are as follows:

- bis(2-Ethylhexyl)phthalate - 340 Ig/kg
- 2-Butanone - 43 Ig/kg
- Acetone - 120 Ig/kg
- Diesel - 73 Ig/kg.

Concentrations of inorganics detected in surface-water samples from Site 20 were generally below State and Federal surface-water standards (SWRCB, 1993; EPA, 1992c). Surface-water quality standards have not been established for the organic compounds detected at Site 20. The only organic compounds detected in Site 20 surface water were 2-butanone at a concentration of 21 Ig/l and vinyl acetate at a concentration of 8 Ig/l in sample 20EW001393. These compounds were not detected in the duplicate surface-water sample (20ZW001393).

Maximum concentrations of aluminum, cadmium, copper, and lead in surface water at Site 20 exceeded State and Federal standards. However, the risk assessment indicated that the concentrations detected should not pose significant risk.

Aluminum was detected in duplicate surface-water sample 20ZW001393 at a concentration of 170 Ig/l. This sample is a duplicate for sample 20EW001393, which contained an aluminum concentration of 125 Ig/l. No other samples contained detectable aluminum concentrations. The State and Federal standards for aluminum are 750 and 87 Ig/l for acute and chronic criteria, respectively.

Cadmium was detected in surface-water sample 20EW001393 at a concentration of 5.0A Ig/l. A duplicate for this sample, 20ZW001393, contained no detectable cadmium. Cadmium was not detected in any other sample from this site. The State and Federal standards for cadmium are 2.3 and 0.8 Ig/l for acute and chronic criteria, respectively.

Lead was detected in surface-water sample 20EW001393 and its duplicate sample 20ZW001393 at concentrations of 2.7 and 2.5 Ig/l, respectively. These samples were collected from within the concrete-lined surface impoundment. No other samples contained maximum concentrations of lead exceeding the State and Federal standards of 1.7 Ig/l for chronic criteria. Results of the ecological risk assessment indicated that no analytes in surface water or sediments at Site 20 pose a significant risk to the environment.

#### **2.10.3.3 Biota**

Biota could not be collected in great enough abundance to yield an adequate tissue sample from the impoundment at Site 20.

#### **2.10.3.4 Groundwater**

One groundwater sample was collected from a temporary well at Site 20 during the Group D RI in 1996. The sample was analyzed for VOCs, SVOCs, and metals. No organics were detected. Mercury was detected at a concentration (24 Ig/l) exceeding both the State and Federal MCL (2 Ig/l); barium was detected at a concentration (1,700 Ig/l) exceeding the State MCL (1,000 Ig/l) but not the Federal MCL (2,000 Ig/l). Neither barium nor mercury are suspected contaminants of concern based on the history of operations at Site 20.

#### 2.10.4 Summary of Site Risks

Human health and ecological risk assessments were performed for Site 20 using the methodology described in Section 2.4.4.1. The results are summarized in this section in support of the conclusion for no action at Site 20.

##### 2.10.4.1 Human Health Risk Characterization

The maximum concentration risk characterization for the residential land use scenario for soil resulted in an ILCR of  $9 \times 10^{-6}$ , solely from arsenic. The HI was estimated to be 1.1, but did not exceed 1.0 for target organs.

The commercial/industrial scenario was used for Site 20 sediment because, although the impoundment contains sediment under water and is slated for closure and removal, it could be allowed to dry and lie fallow for several years pending removal and development. Under such circumstances, exposure to contaminants in the sediment could occur and intake rates could be unacceptable. However, the impoundment could not plausibly be part of a residential exposure scenario. If the base installation were converted into a residential setting, the impoundment would be removed as part of the development.

The results of risk-based screening using maximum detected concentration under the commercial/industrial scenario are as follows:

##### Results of Risk-Based Screening Evaluation of Site 20 Impoundment Sediment

Analyte Concentrations	Risk/Hazard	ILCR	HI
Maximum (Upper Bound)	Summed	$2 \times 10^{-7}$	0.1
	Background	$2 \times 10^{-7}$	0.1
	Site-Related	$1 \times 10^{-7}$	0.1

These results are below the NCP risk criteria for acceptable exposure.

The future pathway for exposure to groundwater was evaluated during groundwater sampling at Site 20 as part of the Group D RI. No carcinogens were detected. The HI was less than 1.0 for each target organ identified (SWDIV, 1997).

##### 2.10.4.2 Ecological Risk Assessment

The most important ecological habitat in the Site 20 area is the surface drainage that extends from the site toward Las Flores Creek. This area was overgrown with vegetation and appeared to be a biologically rich riparian habitat. A variety of mammals and birds were observed in the immediate area of the site. However, vertebrate exposure to contaminants at this site would be limited by the small, confined nature of the impoundment.

Surface soil contaminants include four metals and one organic compound. Concentrations of cobalt and manganese could be toxic to invertebrates, vertebrates, and plants. However, these elements are relatively immobile in soil, and the riparian drainage area showed no obvious ecological impairment. These metals are not elevated in the impoundment sediment and, therefore, are not indicative of leaching from the impoundment, but rather of localized contamination of surface soils.

The impoundment itself exhibited potential toxicity to aquatic organisms, although no chemicals were detected in the pond at concentrations considered toxic to vertebrate consumers. The pond sediments are the greatest potential source of toxicity and bioaccumulation, with potentially toxic concentrations of four metals.

However, exposure is limited by the lack of emergent plants, which would preclude dietary exposure to consumers in the area.

Site 20 sediment was compared against local area background soil concentrations for inorganic chemicals. Only cadmium, copper, lead, and zinc exceeded background concentrations.

No inorganic chemicals in the Site 20 sediment exceeded toxicity screening levels for plants, invertebrates, mammals, or birds, with the exception of cadmium, iron, and zinc for mammals.

The following organic chemicals at Site 20 exceeded toxicity screening levels for soil exposure to at least one taxonomic group:

- Acetone (invertebrates)
- 2-Butanone (invertebrates and plants)
- bis(2-Ethylhexyl)phthalate (plants).

Potential bioaccumulation in vertebrates from chemicals in surface soil (dried sediment) was evaluated for arsenic, lead, and zinc. Lead concentrations in the sediment at Site 20 exceeded the low end of the calculated soil criteria range, and zinc exceeded all calculated criteria for bioaccumulation effects.

Cadmium, zinc, 2-butanone, and bis(2-ethylhexyl)phthalate in sediment exceeded potential effect levels for invertebrates, plants, or mammals. No chemicals exceeded calculated effect levels for birds.

Site 20 sediments are relatively uncontaminated and shallow. Ecological risk is insignificant given the minimal quantity of sediment and small area of the impoundment. Thus, no significant exposure of special-status species or other wildlife is expected.

#### **2.10.5 Description of the No Action Alternative**

The no action alternative selected for Site 20 includes no institutional or engineering controls and no containment, excavation, or treatment technologies. Site 20 is considered protective of human health and the environment for the following reasons:

- The calculated ILCR and HI for human health for soil under the residential exposure scenario meet the NCP criteria for acceptable exposure. The likelihood for future residential land use is low.
- The calculated ILCR and HI for human health for sediments under the commercial/industrial scenario are less than the NCP criteria for acceptable exposure.
- Ecological risk is insignificant given the minimal quantity of sediment and small area of the surface impoundment.
- Future land use plans include drying and demolishing the surface impoundment and allowing it to revert to a natural vegetative state.
- No carcinogens were detected in groundwater, and the HI was less than 1.0 for each identified target organ.
- Although mercury and barium were detected at concentrations just exceeding MCLs, neither one is suspected as a site contaminant based on the history of operations at Site 20.

#### **2.11 Site 22 - 23 Area Unlined Surface Impoundment - Soil, Sediment, Groundwater, and Surface Water**

Site 22 consists of an approximate 90- by 95-foot unlined surface impoundment.

##### **2.11.1 Site Name, Location, and Description**

Site 22 - 23 Area Unlined Surface Impoundment, is located at the MCAS, approximately 60 feet southeast of Papa Taxiway (Figure 1-2). This site is noted as Building 2388 on MCB Camp Pendleton general development maps. Numerous water-level fluctuations have been observed in the impoundment since 1991. The nearest downgradient base drinking water production well is approximately 2 miles from Site 22.

### **2.11.2 Site History and Enforcement Activities**

Fuel bladders were stored in this impoundment in 1985. According to site plans provided by the AC/S, ES MCB Camp Pendleton office, the hangar deluge system (for fire suppression) from Buildings 2386, 2396, and 2397, as well as possible other buildings, have emptied into this impoundment. Potential contaminants include fuels, solvents, cleaners, and fire suppressant. No information is available on the quantities of contaminants that could have been received by this impoundment. The impoundment is no longer in use and is typically dry during the dry season but contains water during seasonal rains. The impoundment is expected to be drained, the sludge (and liner, if present) removed, the pond backfilled, and the impoundment closed in accordance with applicable regulations in fiscal year (FY) 98.

Previous investigations of Site 22 were limited to sediment and surface-water sampling of the impoundment during July 1990 in support of HAR requirements and subsequent Phase 1 RI sampling to characterize groundwater quality and determine the extent of soil contamination within the impoundment. The sludge collected from the impoundment contained TRPH at 68 ppm, chloroform at 8 ppb, and acetone at 7,300 ppm; the liquid contained TRPH and TDS at 2 and 1,100 ppm, respectively (Dames and Moore, 1990).

MCB Camp Pendleton sampled the impoundment water most recently in March 1994. Samples were analyzed for TPH by EPA Method 418.1 and volatile organics by EPA Method 8240. TPH was detected at a concentration of 7.1 mg/l; no volatiles were detected.

### **2.11.3 Summary of Site Characteristics**

The RI for Site 22 is reported in detail in the RI report for Group B sites (SWDIV, 1995a) and the technical addendum to the RI report for Group B sites (SWDIV, 1996a).

RI work at Site 22 involved investigation of potential soil and groundwater contamination due to leakage from the surface impoundment. Sediment, surface-water, and aquatic plant samples were also collected from within the impoundment.

One surface-water sample and one composite sediment sample were collected from the unlined surface impoundment in 1993. Sediment was collected from several locations around the pond and composited to yield a sample and a duplicate. The pond is small, and the sediment composite was considered adequate to evaluate any obvious sources of contamination. In addition, a nutsedge sample was collected from the pond as part of a phased approach to characterize the site for potential ecological exposure. Sample locations are shown in Figure 2-10. Phase 2 RI work at Site 22 involved sediment sampling to assess the potential ecological risk associated with allowing the impoundment to remain dry for an extended period of time prior to closure. Sediment samples were collected from within the impoundment in 1995 at the locations shown in Figure 2-11.

The Site 22 impoundment was divided into four quadrants. One randomly selected location was sampled within each quadrant. Four surface samples (top 3 inches) and four sediment cores (total depth of sediment) were collected from the impoundment, for a total of eight sediment samples. The sediment samples were analyzed for CLP metals, VOCs, SVOCs, TPH-d, and TPH-g. The nutsedge stems and leaves were analyzed for CLP metals.

The surface-water sample was analyzed for general chemistry as well as the same parameters analyzed for sediment.

Four soil boring locations and one surface soil (1 to 2 feet below ground surface) location were sampled to characterize potential soil contamination in the vicinity of the unlined surface impoundment at Site 22. One of the borings was inclined 34 degrees from vertical to extend under the impoundment. A total of 13 soil samples, including the surface soil sample, were collected. Sample locations are shown in Figure 2-10. The soil samples were analyzed using the

same methods used for the sediment samples.

Three shallow groundwater monitoring wells were installed around the surface impoundment to assess potential groundwater contamination due to leakage from the impoundment. The wells are screened across the water table. Groundwater samples were analyzed using the same methods used for the surface-water samples.

Site 22 is in the central portion of the Santa Margarita River floodplain. The geology of the floodplain consists of Holocene alluvium, deposited by the Santa Margarita River, overlying bedrock of the Eocene La Jolla Group. The alluvium at Site 22 consists of fine-to coarse-grained, rounded sand and silty sand interbedded with discontinuous lenses of silt, clay, and clayey sand. No borings were advanced to bedrock at Site 22; however, borings at Group A Sites 4 and 5 in the Santa Margarita River floodplain and within 1 mile of Site 22 encountered the La Jolla Group at depths ranging from about 93 to 133 feet below ground surface (SWDIV, 1993a). Similar geologic conditions were expected at Site 22.

Water levels measured between 28 June and 12 November 1993 at Site 22 are consistent with water levels measured at adjacent Group A Sites 3, 4, 5, and 6 (SWDIV, 1993a), all of which are within the Santa Margarita Basin. Groundwater was encountered at depths of 5 to 8 feet below ground surface. Shallow groundwater in the immediate vicinity of the surface impoundment flows to the south, at a relatively small gradient ranging from 0.0026 to 0.0035 foot per foot (ft/ft). The hydrogeology of the site is discussed in greater detail in the draft final RI report for Group B sites (SWDIV, 1995a).

Land use in the vicinity of Site 22 consists of activities associated with MCAS operations. Structures in the area include aircraft storage and maintenance hangars, utility storage facilities, hazardous materials storage buildings, and administrative and training buildings. Military and civilian personnel are present in the immediate vicinity of the impoundment on a daily basis. The nearest designated troop housing area is the Chappo Area (22 Area), across Vandegrift Boulevard, approximately 1 mile from Site 22. The nearest family housing is the Ranch House, approximately 0.5 mile northeast of the site. Residents and nonmilitary industrial workers do not have access to the site and are not present in the immediate site vicinity.

Future plans for Site 22 are to close and backfill the impoundment and construct an asphalt parking lot over the site (Joy, 1993). Future activities in the area are expected to be consistent with current MCAS operations.

Groundwater in the immediate vicinity of the site is not currently used as a source of drinking water. However, the site is located in the Santa Margarita Basin, and base drinking water production wells are located approximately 1,000 feet cross-gradient and approximately 1 mile downgradient from the site.

The Site 22 impoundment is now dry and has been colonized by terrestrial plants and invertebrates. These food-chain organisms could represent a new route of exposure for terrestrial birds or mammals that visit the site. In addition, the dried sediments offer the potential for direct ingestion or dermal exposure to ecological receptors.

The results of the analytical sampling are summarized in the following sections.

#### **2.11.3.1 Soil**

Metals, including beryllium concentrations, did not exceed background. A few organic compounds were detected at low concentrations in Site 22 soil. Analytical results are summarized below:

- Methylene chloride was detected at a concentration of 3 Ig/kg in one sample collected from 1 to 2 feet below ground surface (22SB004-02).
- Diethylphthalate was detected at concentrations of 190 and 400 Ig/kg in one sample (22SB001-07) and its duplicate (22SB201-07), respectively, collected from 6 to 7 feet below ground surface.
- Diesel was detected in three borings, with a maximum concentration of 24 mg/kg in borings 22B-01 (duplicate 22SB201-07; nondetect in the other sample from this depth)

and 22B-04 (22SB004-QC). The maximum diesel concentration within the upper 5 feet (evaluated in the risk assessment) was 11 mg/kg in sample 22SB004-02 collected from 1 to 2 feet below ground surface.

- Toluene was detected in one sample, 22SB001-01, at a concentration of 6 Ig/kg.
- Benzo(g,h,i)perylene was detected in one sample (duplicate 22SB201-07) at a concentration of 630 Ig/kg but was not detected in the other sample from the same depth.

#### 2.11.3.2 Surface Water

Surface-water samples collected from the unlined surface impoundment at Site 22 generally contained low concentrations of potential contaminants, below State and Federal surface-water standards (SWRCB, 1993; EPA, 1992c).

Aluminum was the only metal detected in surface water at a concentration exceeding State and Federal standards. The aluminum concentration of 329 Ig/l in sample 22EW001393 exceeded the standard of 87 Ig/l for chronic criteria.

Carbon disulfide, diesel, and styrene were the only organic compounds detected in the impoundment surface water, at concentrations of 1 Ig/l for carbon disulfide, 0.69 Ig/l for diesel, and 2 Ig/l for styrene in sample 22EW001393-LABQC.

#### 2.11.3.3 Sediments

The shallow sediments contained relatively higher concentrations than the deeper sediments for most constituents. The following inorganic chemicals exceeded area background in shallow sediment samples: aluminum, arsenic, barium, cadmium, chromium, cobalt, copper, iron, molybdenum, vanadium, and zinc for individual samples and aluminum, cobalt, copper, iron, molybdenum, and vanadium for pond means. Deeper sediment samples exceeded area background concentrations for cobalt, iron, and vanadium in individual samples but not for pond means.

Sediment samples contained relatively low concentrations of contaminants (Table 2-7). Maximum concentrations of detected organic chemicals from the impoundment sediment (all depths) (maximum concentrations are from surface sediments) are as follows:

- bis(2-Ethylhexyl)phthalate - 640 Ig/kg
- 2-Butanone - 16 Ig/kg
- Diesel - 210 mg/kg.
- 4-Methylphenol - 430 Ig/kg
- Diethylphthalate - 1,000 Ig/kg
- Ethylbenzene - 5 Ig/kg
- N-nitrosodiphenylamine - 58 Ig/kg
- Toluene - 63 Ig/kg
- Total xylenes - 7 Ig/kg.

#### 2.11.3.4 Groundwater

Three groundwater monitoring wells were sampled to characterize groundwater quality at Site 22 (Figure 2-10). With the exception of nickel, no contaminants were detected at concentrations exceeding MCLs. Nickel was detected in well 22W-06 at a maximum concentration of 173 Ig/l, which exceeds the MCL of 100 Ig/l. By the first quarter 1994 sampling, the nickel concentration in well 22W-06 had decreased to 100 Ig/l.

#### 2.11.4 Summary of Site Risks

An HHRA was conducted for Site 22 using data collected during the RI. The human health and ecological risk methodologies are summarized in Section 2.4.4.1. The conclusions for Site 22 are presented here in support of the decision for no action.

##### 2.11.4.1 Human Health Risk Characterization

Site 22 is approximately 1,000 feet cross-gradient from one drinking water supply well and approximately 1 mile upgradient from three other drinking water supply wells. Therefore, groundwater at Site 22 is a potential source of drinking water and was evaluated for the most conservative residential scenario. Even though no residences are located on site, groundwater beneath the site could be pumped to residences.

The ILCR calculated for the residential scenario for groundwater was  $4 \times 10^{-7}$  using RME parameters and concentrations and Federal toxicity factors and  $9 \times 10^{-5}$  using State toxicity factors. The sole contributor to the ILCR above  $10^{-6}$  was total chromium, assumed to be chromium (VI) (SWDIV, 1995a). The HI calculated for the RME residential scenario is 0.4. The risk from groundwater is de minimis using the Federal toxicity values and within the management risk range ( $10^{-6}$  to  $10^{-4}$ ) using State toxicity values.

The maximum concentrations detected in soil were used to characterize risk at Site 22 because of the small number of samples and the purposive basis of selecting sample locations. The results are considered conservative because maximum concentrations were used. Site 22 will most likely not be used for residential purposes in the future. However, the residential scenario was evaluated as the most conservative scenario (worst case). The calculated ILCR for the RME residential scenario was less than  $10^{-6}$  using Federal toxicity values and  $2 \times 10^{-5}$  using State toxicity values. The sole contributor to the risk was total chromium, assumed to be chromium (VI). The State toxicity value for chromium VI is much more stringent than the Federal value. Because chromium is typically encountered in environmental media as chromium (0) or chromium (III), the assumption of total chromium as chromium (VI) is conservative. The HI calculated for the RME residential scenario for soil is less than 1.0. The risk for soil is de minimis using Federal toxicity values and within the management risk range ( $10^{-6}$  to  $10^{-4}$ ) using State toxicity values.

Surface water and sediment do not provide a complete exposure pathway to humans and do not support a chronic exposure. However, sediment was evaluated for the commercial/industrial scenario as a conservative estimate for construction workers removing the surface impoundment in the future. The sediment inside the surface impoundment was evaluated by comparing the detected concentrations with risk-based concentrations for the commercial/industrial scenario. The results are below the risk screening criteria ( $10^{-6}$  ILCR and 1.0 HI).

#### **2.11.4.2 Ecological Risk Assessment**

Surface soils surrounding the pond contained elevated concentrations of aluminum, as was common for all Group B locations. Elevated aluminum concentrations were also detected in Site 22 pond sediment. It is unclear whether leaching has occurred from the pond. However, because no natural habitat surrounds the pond, soil contamination from this source would not likely affect local receptors.

Drying of the Site 22 surface impoundment, expected as part of closure activities, will result in potential exposure of terrestrial birds and mammals to dried sediment and to plants and invertebrate diet sources living in the dried sediment. To calculate toxicity values related to vertebrate ingestion requires information on toxicity, receptor ingestion, and body size, as well as assumptions for daily intake rates of dried sediment, plant material, and invertebrates. Chemical concentrations for each of these food categories are based on site sediment and the measured bioaccumulation factor for each chemical in plant or invertebrate tissue. In the case of the Group B impoundments, sediment chemistry was measured and Group C terrestrial invertebrate and plant chemistry were used to estimate bioaccumulation factors appropriate for evaluation of the impoundment environments.

Eight inorganic chemicals and 2-butanone, bis(2-ethylhexyl)phthalate, and diesel exceeded potential toxicological thresholds in Site 22 sediment. The Site 22 impoundment generally was more contaminated in the surface sediments than in the deeper core samples. However, ecological risk is minimal because the site is small and is surrounded by paved areas, thus preventing extensive exposure by most mammals or birds. No special-status species are expected to spend enough time at Site 22 to experience significant toxicity from dried sediment exposure.

#### **2.11.5 Description of the No Action Alternative**

The no action alternative for Site 22 soil, sediment, surface water, and groundwater includes no

institutional or engineering controls and no containment, excavation, or treatment technologies. Site 22 is considered protective of human health and the environment for the following reasons:

- The ILCR and the HI for the groundwater pathway under the residential exposure scenario are within the NCP criteria for acceptable exposure, and the threat of groundwater degradation is minimal.
- The ILCR and the HI for the soil pathway under the residential exposure scenario meet the NCP criteria for acceptable exposure.
- The ILCR and the HI for sediment under the commercial/industrial exposure scenario are within the NCP criteria for acceptable exposure.
- Future land use plans include backfilling and paving the impoundment.
- The potential risk to ecological receptors, including special-status species, is considered low because the site is small, surrounded by paved areas, and animals are not expected to spend sufficient time at the site to experience negative effects.

## **2.12 Site 28 - 26 Area Trash Haulers Maintenance Area - Groundwater**

Site 28 is a level, open, unpaved facility where vehicle maintenance was performed within the confines of the 26 Area maintenance yard.

### **2.12.1 Site Name, Location, and Description**

Site 28 - 26 Area Trash Haulers Maintenance Area, is located in 26 Area, approximately 1,800 feet southwest of the intersection of Vandegrift Boulevard and Santa Margarita Road (Figure 1-2). The site is surrounded by a chain-link fence, with an entryway on the east. The unpaved area is graded and contains a small concrete pad, 55 feet long by 15 feet wide, and no natural vegetation. The area west of the fence contains natural vegetation and native soil. An unpaved road runs adjacent to the fence and outside the maintenance yard. The Santa Margarita River is approximately 2,000 feet west of the site. Site 24 is northeast and Site 3 is south of the maintenance area. Site 28 slopes gently to the southwest, parallel to the Santa Margarita River, and eventually drains to the river farther downstream. Ridges to the east rise 300 feet above Site 28.

Land use in the vicinity of Site 28 consists of activities associated with facility maintenance operations. Structures in the area include maintenance, administration, heavy equipment, and communications/electronics buildings. Military and civilian personnel are present in the immediate vicinity of the site on a daily basis. O'Neill Lake is about 2,000 feet north of the site. East of the site is an undeveloped hill that is classified as a maneuver area. The hill slopes steeply and is covered by natural vegetation (Innis-Tennebaum Architects, Inc., 1990). The nearest designated troop housing areas are Vado Del Rio (25 Area) and 24 Area, approximately 1.5 miles northwest of the site. The Ranch House, about 1.75 miles southwest of the site, is the nearest family housing.

Future land use plans indicate that use of this site will remain the same in the near future. However, MCB Camp Pendleton has considered removing the maintenance yards and allowing the area to revert to its natural state.

The nearest base production well is approximately 1,600 feet slightly upgradient from Site 28. Future use of groundwater at the site is possible.

### **2.12.2 Site History and Enforcement Activities**

Operations at the 26 Area trash haulers maintenance area began in the 1970s and ended in the late 1980s. The facility was operated by a contractor. Operations were primarily performed on unpaved ground. Aboveground storage tanks were located along the southern perimeter of the site, and hydrocarbon-stained soil has been observed in this area. Potential contaminants include petroleum, oil, POLs, and solvents.

Site 28 was recommended for the RI during the preliminary review (PR) phase of the RFA and, thus, no sampling was conducted as part of the RFA. Following the RFA, in February 1993, two borings, were advanced adjacent to the pad and samples were collected for analysis. Maximum concentrations of contaminants detected in these soil samples are as follows:

- Ethylbenzene - 680 Ig/kg
- 1,1,4-TCA - 9,800 Ig/kg
- 1,1,2,2-Tetrachloroethane - 270 Ig/kg
- Dimethylphthalate - 110 Ig/kg
- Total lead - 25.6 mg/kg.

### **2.12.3 Summary of Site Characteristics**

RI work at Site 28 included sampling of surface and subsurface soil, groundwater, and biota. This ROD includes the action selected for groundwater only; therefore, only groundwater results are presented. A two-well cluster (shallow and intermediate depth) was installed near the concrete pad at Site 28 (Figure 2-12) to evaluate the potential for and vertical extent of groundwater contamination.

#### **2.12.3.1 Organic Compounds**

Table 2-8 lists concentrations of organics detected in groundwater at Site 28. Monitoring well 28W-01A contained 1,2-DCE at a concentration of 0.8 Ig/l during the fourth quarter 1994. TCE was detected at a maximum concentration of 2 Ig/l in 28W-01A during the fourth quarter 1994; this concentration exceeds the tap-water r-PRG but not the MCL. In addition, bis(2-ethylhexyl)phthalate and di-n-butylphthalate were detected during the fourth quarter 1994 at maximum concentrations of 2 and 9 Ig/l, respectively. None of the organic compounds detected exceeded MCLs. Furthermore, TCE and 1,2-DCE were not detected in the Site 3 monitoring wells that surround 28W-01A (3MW-02, 3MW-03, 3W-30A, 3W-29A, 3W-29B, and 3W-35A) (SWDIV, 1993a) or in the deeper well (28W-013) at the same location as 28W-01A.

#### **2.12.3.2 Inorganic Compounds**

Table 2-9 lists concentrations of inorganics detected in groundwater at Site 28. Of the 11 metals detected, only beryllium, chromium, and manganese exceeded r-PRGs. None of the inorganic compounds detected exceeded background or MCLS.

### **2.12.4 Summary of Site Risks**

An HHRA was conducted for Site 28 groundwater using data collected during the RI. The human health risk methodology is summarized in Section 2.4.4.1. The conclusions for Site 28 groundwater are presented here in support of the decision for no action. An ecological risk assessment was not performed because there are no complete ecological pathways to groundwater at this site.

#### **2.12.4.1 Human Health Risk Characterization**

Based on the human health screening for maximum detected concentrations in groundwater, the summed site-related risk/hazard was  $1 \times 10^{-6}$  ILCR/ $<1.0$  HI, which warranted further evaluation using representative concentrations.

The site-related risk/hazard using RME concentrations was  $1 \times 10^{-6}$  ILCR/ $<0.1$  HI for the residential exposure scenario. The ILCR and the HI meet the NCP criteria for acceptable exposure.

#### **2.12.4.2 Ecological Risk Assessment**

An ecological risk assessment was not performed for Site 28 groundwater because no complete ecological exposure pathways exist at the site.

### **2.12.5 Description of the No Action Alternative**

The no action alternative selected for Site 28 groundwater includes no institutional or engineering controls and no containment, excavation, or treatment technologies.

Site 28 groundwater is considered protective of human health and the environment for the following reasons:

- The calculated ILCR for an RME under the residential exposure scenario is  $1 \times 10^{-6}$ , which meets the NCP criteria for acceptable exposure.
- The calculated HI is less than 1.0 for the residential exposure scenario.
- No chemicals were detected at concentrations exceeding MCLs.
- There are no complete exposure pathways for ecological receptors.

### **2.13 Site 31-Building 210801 Transformer - Soil**

Site 31 consists of a transformer mounted on a pad (No. T-21) adjacent to Building 210801.

#### **2.13.1 Site Name, Location, and Description**

Site 31 - Building 210801 Transformer, is located in 21 Area, at the intersection of 13th Street and "C" Street (Figures 1-2 and 2-13). The transformer previously held fluid containing PCBs.

#### **2.13.2 Site History And Enforcement Activities**

Building 210801 was constructed in 1961 and was used primarily for administrative purposes. A survey conducted in 1990 noted fluid seeping around the drain valve and moisture around a rusty transformer base. No base production wells are located downgradient from Site 31. No information is available on the date of installation or the volume of hazardous wastes that may have leaked from the transformer. Potential contaminants include PCBs.

#### **Previous Investigations**

Site 31 was investigated in 1991 and 1992 as part of the RFA sampling visit (SV) for Site 79. Two surface and six subsurface soil samples were collected from two hand-augered soil borings advanced next to the transformer. RFA sampling locations are shown in Figure 2-13. Site 31 was designated Site 79 for the RFA SV. No groundwater samples were collected. The following organics were detected in the surface soil sample at boring SV79B2 (SWDIV, 1993b):

- Aroclor-1260 - 576 Ig/kg
- 4,4'-DDE - 30.5 Ig/kg
- 4,4'-DDD - 6.42 Ig/kg
- Dieldrin - 4.29 Ig/kg
- Endrin aldehyde - 30.5 Ig/kg
- Methoxyclor - 32.8 Ig/kg.

No contaminants were detected in the remaining samples.

#### **2.13.3 Summary of Site Characteristics and Site Risks**

RI work was not conducted at Site 31 because PCB concentrations detected in soil during the 1991 and 1992 investigations were below Federal and State cleanup levels (SWDIV, 1993c and 1993d). Because of this, human health and ecological risk assessments were not performed for the site.

Although the PCB Aroclor-1260 was detected in one soil sample at a concentration of 576 Ig/kg in the 0- to 1-foot depth interval, this compound was not detected in three samples collected at the same location at depths of 1.5 to 2.5, 2.5 to 3.5, and 4 to 5 feet or in four samples collected from another boring at the site. The residential soil r-PRG for PCBs is 66 Ig/kg (EPA, 1996). The ILCR using the maximum concentration and dividing by the r-PRG is within the NCP risk management decision range. A risk management decision was made for no further action at Site 31, with concurrence by the parties to the FFA (SWDIV, 1993d and 1993e), because the maximum concentration detected is within the Federal and State cleanup level of 1 mg/kg for

PCBs. In addition, the transformer containing PCBs has been removed, eliminating the source of contamination (SWDIV, 1993b).

#### **2.13.4 Description of the No Action Alternative**

The no action alternative for Site 31 soil includes no institutional or engineering controls and no containment, excavation, or treatment technologies. Site 31 is considered protective of human health and the environment for the following reasons:

- Soil contamination was detected in only one surface soil sample, and the risk estimated for that concentration is within the EPA's range for risk management evaluation.
- The maximum site concentration is within State and Federal cleanup levels.
- The source (transformer) was removed from the site.

#### **2.14 Site 43 - Santa Margarita Basin Groundwater Study**

The objectives of the Santa Margarita Basin groundwater study were to determine whether groundwater quality throughout the Santa Margarita Basin has been affected by developed areas on MCB Camp Pendleton; to determine whether groundwater draining from the Naval Ordnance Center, Pacific Decision, Fallbrook Detachment, to the base had been affected; and to determine whether any contamination, if present, would migrate off base.

##### **2.14.1 Site Name, Location, and Description**

Site 43 - Santa Margarita Basin Groundwater Study, is not an individual site, but rather a study area consisting of groundwater in the Santa Margarita Basin, which extends along the Santa Margarita River (Figure 1-2). The Santa Margarita Basin is the major portion of the base where IR sites could potentially affect the overall quality of groundwater. The Santa Margarita River is a perennial, free-flowing river that is subject to flooding during peak rainfall events and drains an area of about 740 square miles in San Diego and Riverside Counties. MCB Camp Pendleton occupies 61 square miles of the lower end of the basin. The Site 43 study includes only those monitoring wells installed under CERCLA investigations even though the Santa Margarita Basin contains other monitoring wells. This study was originally basewide; however, because most of the potential groundwater problems are within the Santa Margarita Basin, the basewide study was divided into two subset studies: inside and outside the Santa Margarita Basin. The studies outside the basin are not part of this ROD.

Site 43 is divided into the Upper, Chappo, and Ysidora subbasins. Vegetation ranges from sparse to dense throughout the basin. Figures 2-14 and 2-15 show the base areas that could have contributed to any contamination along the river. Each area contains a variety of facilities, ranging from MCAS operations to welding shops. Base drinking water production wells are located throughout the Santa Margarita Basin-, groundwater is the sole water supply for the base.

##### **2.14.2 Site History and Enforcement Activities**

The base obtains all of its domestic and agricultural water supply from groundwater. The Santa Margarita Basin is the most important source of drinking water on the base. O'Neill Lake is a 1,200-acre-foot reservoir on Fallbrook Creek, a minor tributary of the Santa Margarita River along the Upper subbasin. Most of the water stored in the lake is diverted from the nearby Santa Margarita River and is currently being used for recreation, training purposes, and groundwater recharge (Leedshill-Herkenhoff, Inc., 1988). The elevation of the river ranges from sea level to 110 feet above mean sea level (msl).

No information is available on the quantities of contaminants received by groundwater in the Santa Margarita Basin. Most types of contaminants found on MCB Camp Pendleton could be potentially found in groundwater. Potential sources of contaminants included those upgradient from base water production wells and those that could affect groundwater in alluvial aquifers and potentially migrate off base. However, the boundaries of MCB Camp Pendleton extend to the Pacific Ocean.

Many reports have been prepared on the water supply and water facilities at MCB Camp Pendleton, including the occurrence, quality, institutional aspects, and plans for development of water in the Santa Margarita Basin (U.S. Geological Survey [USGS], 1953 and 1954; Shlemon, 1979; Leedshill-Herkenhoff, Inc., 1988; Law/Crandall, Inc., 1995; SWDIV, 1993a and 1995a). These reports were reviewed for the RI of Group C sites, are included in the Administrative Record, and are referenced herein as appropriate.

### **2.14.3 Summary of Site Characteristics**

Group A, Group B, and Group C site wells, Site 23 wells, and base drinking water wells in the Santa Margarita Basin were sampled to investigate potential contamination of groundwater along the Santa Margarita River for the Site 43 study.

No monitoring wells were installed specifically for the Site 43 study. The study includes data collected from 135 groundwater monitoring wells installed within the basin as part of the RI of Group A, Group B, and Group C sites, including 6 Site 23 wells; 9 wells installed during previous investigations; 11 base drinking water production wells; and 6 hydropunch-type sample locations. RI sites in the study area include Sites 1D, 3, 4, 4A, 5, 6, 7, 10, 16, 17, 22, 23, 24, 27, 28, 29, 30, and 35. The wells installed as part of the CERCLA investigations include 31 two-well clusters (shallow and intermediate) and 20 three-well clusters (shallow, intermediate, and deep). The single wells are shallow and are screened across the water table. Monitoring wells base production wells, and hydropunch-type sample locations are shown in Figures 2-14 and 2-15.

#### **2.14.3.1 Hydrogeology**

The aquifer of the Santa Margarita Basin consists of saturated, unconsolidated, alluvial valley-fill sediments. Local perched or confined aquifers could occur in the basin or subbasins. The unconsolidated valley-fill sequence is composed of sediments deposited by streams and rivers within the confines of a valley. The alluvial deposits fill a channel that was eroded into bedrock strata. The deposits directly overlie the bedrock floor and are bounded laterally by the bedrock walls of the valley. The alluvial valley-fill sequence, which is absent near the edge of the valley, is more than 200 feet thick in the center of the valley. The water table throughout the valley floor is approximately 5 to 15 feet below ground surface.

The Santa Margarita Basin is divided by topographic constrictions into three subbasins. The Upper subbasin has a surface area of approximately 860 acres, the Chappo subbasin has a surface area of approximately 2,640 acres, and the Ysidora subbasin has a surface area of approximately 1,020 acres.

Potentiometric surface contours for the water table throughout the Santa Margarita Basin are presented in Figures 2-14 and 2-15, which are separated into upper and lower Santa Margarita Basins for clarity. The maps cover a large area, portions of which contain few if any wells. Groundwater contours in areas with few or no wells are based on general hydrogeologic principles and extrapolation of trends from documented areas. Groundwater flow is perpendicular to groundwater elevation contours.

Aquifer hydraulic characteristics vary throughout the basin. Site-specific aquifer test data are discussed in detail in the individual site descriptions in the draft final RI reports for Group A, Group B, and Group C sites (SWDIV, 1993a, 1995a, and 1996b). The grain size of strata in the center of the basin is generally coarser relative to strata on the edges of the basin. The edges of the basin contain more interbeds of silt and clay strata than the center of the basin. The greater proportion of fine-grained strata near the basin edges corresponds to lower hydraulic conductivities near the basin edges than in the center of the basin.

During the RI for Sites 4, 4A, 6, 16, 17, and 27, solvents were detected in groundwater at concentrations that, although low, exceed MCLs for drinking water. These sites are all located in the same geographic area and are collectively referred to as the 22/23 Area groundwater project. Computer modeling was performed to evaluate a no action scenario and several remedial alternatives for this groundwater area. The USGS three-dimensional, finite-difference MODFLOW model was used to simulate groundwater flow in the Chappo subbasin, with a finer grid in the 22/23 Area portion of the subbasin. The MT3D model was used to evaluate solute transport of the COCs. Both of these numerical models are described in detail in Appendix C of the feasibility

study (FS) report for OU2, including the model calibration parameters and results of the sensitivity analysis (SWDIV, 1996g).

A two-layer model was selected and displays two distinct zones of conductivity. The upper zone is an unconfined aquifer, and the lower zone is an unconfined/semiconfined aquifer. Figure 2-16 shows the area modeled in relation to Site 43. The flow model was calibrated to match an estimated water budget of recharge and discharge elements (Leedshill-Herkenoff, Inc., 1988). MCB Camp Pendleton and the Navy have been provided with disks of the basic calibrated flow model and the MT3D program.

The models, when used by a qualified person skilled in hydrogeology and in numerical modeling techniques, can be used to evaluate changes in flow patterns in the basin resulting from changes in the pumping rates of the various base drinking water production wells, changes to capture zones resulting from changes in pumping rates, and the fate and transport of any future releases of contaminants into groundwater in that portion of the basin.

#### 2.14.3.2 Nature and Extent of Contamination

This section summarizes the analytical results from multiple rounds of groundwater sampling at the individual sites included in the Santa Margarita Basin groundwater study. Assessment of the data indicates no regional pattern of contamination throughout the Santa Margarita Basin. Groundwater contamination is localized within specific portions of the basin, as related to specific sites. Detailed results for sites within the basin are presented in the documents indicated below:

Site	Document
4/4A, 6,16,17,27	FS for OU2 (SWDIV, 1996g)
1D	Group C RI report (SWDIV, 1996b)
3	Group A RI report (SWDIV, 1993a)
5	Group A RI report (SWDIV, 1993a)
7	Group B RI report and technical addendum (SWDIV, 1995a and 1996a)
10	Group C HHRA work plan (SWDIV, 1995d)
22	Group B RI report and technical addendum (SWDIV, 1995a and 1996a)
23	Group C RI report (SWDIV, 1996b)
24	Group A RI report (SWDIV, 1993a)
28	Group C RI report (SWDIV, 1996b)
30	Group C RI report (SWDIV, 1996b)

Figure 2-16 shows the extent of contamination. Table 2-10 lists the COPCs for the Site 43 study, as determined from the HHRA. No background values were calculated as part of the Site 43 study; however, site-specific background values are presented in the appropriate RI reports.

VOCs are the only COCs detected in the Santa Margarita Basin, primarily in the 22/23 Area. The FS for OU4 will address chloromethane, 1,1-DCA, 1,1-dichloroethene (1,1-DCE), 1,2-DCA, 1,2-DCE (total), 1,2-dichloropropane, TCE, and vinyl chloride in 22/23 Area groundwater and evaluate remedial alternatives that could be implemented to remove these constituents from groundwater.

#### 2.14.4 Summary of Site Risks

HHRAs were conducted for the individual IR sites located within the Santa Margarita Basin study area; the results are summarized herein. EcoRAs were not required because there are no known pathways for exposure of ecological receptors to groundwater. The results are presented here in support of a decision for no further study at Site 44.

##### 2.14.4.1 Human Health Risk Characterization

Groundwater within the Santa Margarita Basin is either currently used or could be used for drinking water according to the Water Quality Control Plan for the San Diego Basin (RWQCB, 1994). In accordance with RAGS, Volume 1, Part B (EPA, 1991 b), the risk/hazard associated with groundwater was evaluated for a residential exposure. This scenario includes ingestion of

drinking water, inhalation during cooking or showering, and dermal absorption during showering.

The ILCR and the systemic toxicity HI were calculated for groundwater at each site. Both the maximum concentration risk screening and the representative risk screening using RME concentrations were evaluated for the residential scenario. Results for the maximum risk screening are presented for sites where representative concentrations were not evaluated. Results using RME concentrations are presented for sites that were evaluated using representative concentrations. Table 2-11 presents the results of the HHRA for the RI sites included in Site 43.

The results indicate that most of the groundwater within Site 43 is within the criteria for acceptable exposure established in the NCP (EPA, 1990). However, risk is elevated for groundwater within the boundary of the 22123 Area groundwater plume.

#### **2.14.4.2 Ecological Risk Assessment**

An ecological assessment was not performed for the Santa Margarita Basin groundwater study because there are no known pathways to ecological receptors.

#### **2.14.5 Description of the No Action Alternative**

No further action in the form of a basinwide study is required for Site 43. Groundwater remediation, if warranted, is addressed individually for the sites that constitute the basinwide study.

### **2.15 Site 44 -Santa Margarita Basin Surface-Water and Sediment Study**

The objectives of the Santa Margarita Basin surface-water and sediment study were to evaluate surface-water and sediment quality upstream and downstream from developed areas along the Santa Margarita River, assess environmental impacts of any contaminants, determine ecological risk, and formulate possible recommendations for remedial action.

#### **2.15.1 Site Name, Location, and Description**

Site 44 - Santa Margarita Basin Surface-Water and Sediment Study, is located along the Santa Margarita River (Figure 1-2) and consists of areas upstream and downstream from developed areas. The Santa Margarita River is subject to flooding during peak rainfall events. As with Site 43, this is not an individual site, but rather is an area of study.

#### **2.15.2 Site History and Enforcement Activities**

The base diverts surface water from the Santa Margarita River to fill O'Neill Lake and recharge groundwater, but none of the surface water directly enters the base domestic and agricultural water-supply systems (Leedshill-Herkenhoff, Inc., 1988). Potential wastes include POLs from motor pool maintenance areas, solvents from armories, battery acid and solvents from maintenance shops, diesel and gasoline from vehicle fuel stations, and metals from firing ranges.

Previous ecological investigations have been conducted at O'Neill Lake and the Santa Margarita River (Hunsaker, 1992; Cates and Shaw, 1993). The water-supply and water facilities at the base, including the occurrence, quality, institutional aspects, and plans for development of water in the Santa Margarita Basin, have also been studied by previous investigators (Leedshill-Herkenhoff, 1988; Law/Crandall, Inc., 1995) and documented in the RI reports for Group A and Group B sites (SWDIV, 1993a and 1995a). Previous studies of sediment in the Santa Margarita Basin are limited to investigations of individual sites reported in the Group A and Group B RI reports (SWDIV, 1993a and 1995a).

#### **2.15.3 Summary of Site Characteristics**

Sampling at Site 44 included surface water, sediment, and biota upstream and downstream along the river. Surface-water and sediment samples were collected from five locations along the Santa Margarita River specifically for the Site 44 study. Sample locations are shown in Figure 1-2. Sample locations are numbered 25J through 25N. The rationale for each sample location is described below:

- 25J, Santa Margarita River, upstream from 27 Area and the Naval Regional Medical Center (NRMC); downstream from the Naval Ordnance Center, Pacific Division, Fallbrook Detachment
- 25K, drainage to O'Neill Lake above Santa Margarita River, same as 25J, different drainage
- 25L, Santa Margarita River, downstream from 26 and 27 Areas; upstream from 22, 23, 24, 25, and 33 Areas
- 25M, Santa Margarita River, downstream from 22, 23, and 33 Areas and Sewage Treatment Plant No. 3 in 22 Area; upstream from Box Canyon landfill, Range 401, Sewage Treatment Plant No. 13 in 20 Area, and Santa Margarita coastal wetland
- 25N, Santa Margarita River, downstream from Box Canyon landfill, Range 401, and Sewage Treatment Plant No. 13; upstream from Santa Margarita coastal wetland.

In addition, data from Site 29 (25 Area) surface-water and sediment samples were used for the Site 44 study. Site 29 samples were not analyzed for organic compounds.

Site 44 surface-water samples were analyzed for CLP metals, VOCs, SVOCs, and general chemistry. Site 44 sediment samples were analyzed for CLP metals, VOCs, and SVOCs.

Habitat characteristics for terrestrial habitats were determined from the MCB Camp Pendleton habitat maps. More detailed mapping was not conducted because the levels of contaminants indicated little risk for terrestrial receptors. Habitat types are presented in Figure 2-17.

During October 1995, biological samples were collected at sample locations 25J and 25L for the Site 44 study. One aquatic invertebrate sample and one fish sample were collected at each site. Samples were analyzed for CLP metals.

Information from earlier ecological investigations of the Santa Margarita River and O'Neill Lake (Hunsaker, 1992; Cates and Shaw, 1993) was reviewed for use in the ecological risk assessment.

The following sections describe the physical characteristics of Site 44, including surface features, surface-water hydrology, geology and soils, hydrogeology, demography and land use, and ecology, and summarize analytical results for surface-water, sediment, and biota sampling.

#### **2.15.3.1 Physical Characteristics**

Site 44 is located along the Santa Margarita River. The basin contains light to dense vegetation throughout. The on-base portion of the basin is bordered by O'Neill Lake on the east and by the Pacific Ocean on the west. Surrounding the basin are low rolling hills, canyons, and mountains.

The Santa Margarita River is a perennial braided stream that flows southwesterly and eventually discharges into the Pacific Ocean. The banks of the river range from 1 to 20 feet high and, in some areas, are artificially maintained by riprap. Four bridges (Basilone Road, Rifle Range Road, Stuart Mesa Road, and Interstate 5) cross the river but typically do not restrict surface flow in the channel. Although surface water at the base is not used for consumption, it is important for groundwater recharge and for maintaining water levels in O'Neill Lake.

The geology of Site 44 consists primarily of stream-deposited younger Quaternary alluvium. The alluvium consists of interbedded, fine- to coarse-grained, unconsolidated sand, silt, and sand, interspersed with clay lenses.

Land use throughout the basin consists of a variety of activities and operations, including warehousing, administration, training, recreation, mess, troop housing, single- and multiple-family housing, vehicle maintenance, the MCAS, utility storage facilities, and hazardous materials storage buildings. Military and civilian personnel are present in the immediate vicinity of these activities on a daily basis. The designated troop housing areas within the basin include Headquarters Area, Del Mar (21) Area, Chappo (22) Area, 24 Area, Vado Del Rio (25) Area, and Margarita (33) Area. Single- and multiple-family housing within the basin include the Ranch House, De Luz Housing, Stuart Mesa Housing, and Wire Mountain Housing.

Surface-water runoff can play a role in the transport of surface contaminants into the Santa Margarita River, particularly from the more industrialized areas of the base, such as the 22 and 23 Areas. The surface topography provides for surface-water discharge points into the Santa Margarita River. These points have not been mapped by the base, and such an effort was beyond the scope of the RI. The surface-water and sediment study was designed to identify any existing source areas, such as the MCAS, by collecting upstream and downstream samples, particularly in the industrialized areas.

Future land use plans indicate that use of this site will not change (Innis-Tennebaum Architects, Inc., 1990). Some developed areas are adjacent to the river and within the 100-year floodplain. Future residential land use adjacent to the river is considered improbable given current development plans and current land use.

Base production wells are located throughout the Santa Margarita Basin. Because groundwater represents the entire water supply on base, future use of groundwater throughout the basin is likely to continue.

The lacustrine/riverine habitat of Site 44 consists of O'Neill Lake and the Santa Margarita River, running from its confluence with DeLuz Creek downstream to the Santa Margarita estuary (Site 45). These habitats are considered warm-water fisheries and aquatic life habitats.

O'Neill Lake receives water from Fallbrook Creek, a diversion ditch from the Santa Margarita River, and from small local drainages. The bottom of the lake is flat and consists of fine-grained sediment (Cates and Shaw, 1993). During March 1995, the upper half of the lake shoreline was dominated by cattail and bulrush stands. O'Neill Lake fish species caught by gill net in March 1995 include brown bullheads (average 12 inches long), black crappies (average 7.4 inches), golden shiners (average 4.3 inches), and a largemouth bass (13.5 inches) (Table 2-12). Fish captured from the lake in January 1992 as part of a previous study include all of these species, plus channel catfish, bluegill, and green sunfish (Cates and Shaw, 1993).

Fallbrook Creek, at the inlet to O'Neill Lake, is a sandy-bottomed stream with intermittent stands of bulrush. Spawning and young bluegill and largemouth bass, bullfrogs, and unidentified toad species were observed in the stream during March 1995. The stream invertebrates observed are typical of fresh, warm-water environments and include crayfish and various aquatic insects.

During the March 1995 surveys, the main stem of the Santa Margarita River was sampled for fish and aquatic invertebrates at sample locations 25J, 25M, 25L, and 25N; below Site 29; near Site 30; and at the upper end of the estuary (Site 45). Samples were also collected from some of these locations in October 1995. The river sites were uniformly characterized as shallow, shifting sand bottoms, with limited habitat for fish and invertebrates, adjacent to stream-edge riparian vegetation and brush clumps. Fish species and invertebrates are limited in diversity and very similar at all river sites. Arroyo chub, carp, and brown bullhead are the dominant fish species. These same species were identified as dominant species for the lower river in extensive surveys by Hunsaker (1992). Bullfrog tadpoles were observed at most river sites.

At some locations, the river is dry at certain times of the year and must be recolonized by animals when the locations are rewetted. For example, the stretch of river that includes locations 25M and 25N contained approximately 1 foot of water but was devoid of fish (as determined from 100-meter electrofishing effort at both locations) during March 1995. The upstream location (25M) was also dry in mid December and apparently was not recolonized during the intervening months. Location 25N may have been dry for a short period between December and March as well. In addition to such intermittent, local extinctions, the wide, shallow, sandy habitat offers no feeding or cover areas for aquatic organisms, even when wet. The fish and invertebrates cluster along the stream margins in the cover of overhanging riparian vegetation.

Figure 2-17 illustrates the habitats found within the Santa Margarita Basin, as derived from maps developed by the base in 1987. The ecological evaluation focused on sample locations 25J, 25K, and 25L (Figure 2-17). Valley-foothill riparian habitat is the predominant habitat for all three sample locations. Dominant plant species include cottonwood, willow, tree tobacco, and giant reed. Understory plant species include poison oak, wild rose, and stinging nettle. Bird species observed at these sample locations include northern harrier, ruby-crowned kinglet, California towhee, and yellow-breasted chat. Small mammal species trapped within the basin during March 1995 include deer mice, brush mice, San Diego pocket mice, and California mice. No

amphibians or reptiles were observed during the surveys.

#### **2.15.3.2 Surface Water**

Surface-water samples were collected during the first and fourth quarters 1994 and the first quarter 1995.

##### **Organic Compounds**

Benzoic acid, bis(2-ethylhexyl)phthalate, and N-nitrosodiphenylamine were the only organics detected; concentrations were within ecological screening levels.

##### **Inorganic Compound**

Of the eight inorganics detected, only lead and mercury exceeded ecological screening levels. Lead was detected only once, at a concentration of 12 **I**g/l in sample 25SW01N during the fourth quarter 1994. Mercury was detected during the fourth quarter 1994 at concentrations ranging from 0.21 to 0.35 **I**g/l in samples 29SW003, 29SW005, and 29SW006.

#### **2.15.3.3 Sediment**

##### **Organic Compounds**

No organic compounds were detected at concentrations exceeding ecological screening levels. Toluene and xylene were detected in 25SD01M at concentrations ranging from 6 to 7 **I**g/kg. Benzoic acid and phthalates were detected at several sampling locations but at concentrations below preliminary limits of exposure. Styrene and PCE were detected in the duplicate sample from sample location 25M at a concentration of 1 **I**g/kg each, but neither was detected in the original sample. No preliminary limits of exposure are available for styrene or PCE. No other organics were detected in sediment at Site 44 at concentrations exceeding preliminary limits of exposure.

##### **Inorganic Compounds**

Of the 11 inorganics detected, only barium and manganese exceeded ecological screening levels. The maximum concentrations detected were 146 mg/kg for barium and 502 mg/kg for manganese. No metals were detected at concentrations exceeding background.

#### **2.15.3.4 Biota**

Table 2-13 lists maximum concentrations of inorganic chemicals detected in biota samples collected from the Santa Margarita River at Site 44 sample locations. Aquatic invertebrate samples consisting of crayfish and mixed invertebrates were collected at sample locations 25J and 25L. The aquatic invertebrate samples from location 25J contained detectable concentrations of aluminum, arsenic, barium, cadmium, copper, iron, lead, manganese, mercury, nickel, selenium, and zinc. The samples from location 25L contained aluminum, arsenic, barium, copper, iron, lead, manganese, mercury, nickel, vanadium, and zinc.

Fish samples were also collected at sample locations 25J and 25L (Table 2-13). Chub and mosquitofish samples from location 25J contained detectable concentrations of aluminum, barium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc. The samples from location 25L contained aluminum, barium, copper, iron, lead, manganese, mercury, selenium, and zinc.

#### **2.15.4 Summary of Site Risks**

An HHRA was not conducted at Site 44, but an EcoRA was. The results are summarized in this section in support of the conclusion for no action at Site 44.

##### **2.15.4.1 Human Health Risk Characterization**

The pathways for human receptors to surface water and sediment in the Santa Margarita Basin are not complete because surface water is present only seasonally, in densely vegetated areas that do not support achronic exposure to humans.

#### 2.15.4.2 Ecological Risk Assessment

The baseline EcoRA evaluated potential threats to the environment in the absence of any remedial action (the no action alternative) and characterized the toxicity of COPECs, possible exposure pathways, potential ecological receptors, assessment and measurement endpoints, and the upper boundary on potential risks under conditions defined for the site.

The routes of exposure quantified for the Santa Margarita River in this EcoRA were ingestion of surface water by terrestrial mammals and birds, ingestion of and direct contact with sediments and surface waters by aquatic organisms, and ingestion of aquatic organisms from the Santa Margarita River by terrestrial mammals and birds.

The Santa Margarita River has an aquatic habitat, with fringe terrestrial and wetland habitats. The assessment endpoints selected include impacts to terrestrial, wetland, and aquatic habitats and the plant and wildlife species associated with these habitats. Potential impacts were measured using the following methods:

- Comparison of preliminary COPECs in sediment and surface water with preliminary limits of exposure for sediment and surface water
- Collection of aquatic organisms species for tissue testing
- Comparison of aquatic communities (or factors that could affect them) with reference locations.

The ecological conceptual site model for the Santa Margarita River is presented in Figure 2-18. The habitats along the Santa Margarita River include desert riparian, coastal scrub, annual grassland, and lacustrine/riverine. Ecological receptors that could be exposed include terrestrial and aquatic species. Preliminary COPECs identified in sediment and surface water in the Santa Margarita River include metals, pesticides, and other organic chemicals.

To assess risks in the Santa Margarita River, exposure point concentrations were selected on a sample-location-specific basis for sediment and surface water and for the entire site for biota. The maximum detected concentration of each preliminary COPEC in sediment or surface water at each sample location was chosen as the exposure point concentration for that medium and sample location. By selecting an exposure point concentration for each sample location, potential ecological risks could be evaluated in an upstream-to-downstream fashion.

The maximum detected concentration of each COPEC in each type of biota (i.e., aquatic invertebrates or fish) collected throughout Site 44 was selected as the exposure point concentration for the site. Target species would not likely feed exclusively at one point along the Santa Margarita River, therefore, risks due to ingestion of biota were evaluated for the entire site in contrast to risks due to sediment and surface water, which were evaluated on a sample-location-specific basis.

Quantitative comparisons were conducted on a sample-location-specific basis and final COPECs were selected for each medium and exposure pathway using the following guidelines:

- $HQ < 1$ : Potential risk was considered low and the chemical was not retained as a final COPEC.
- $HQ > 1$ : Potential risk was considered low to high, depending on the magnitude of the HQ, and the chemical was retained as a final COPEC.

Toxicity screening for sediment was conducted on a sample-location-specific basis. One time detections of volatile organics without preliminary limits of exposure (PCE and styrene) are not considered a risk to ecological receptors because of the low concentrations detected (1 Ig/kg), the lack of an upstream source, and the uncertainty in the detection given that the volatiles were detected only in the duplicate sample, not in the original sample. The final COPECs for sediments in the Santa Margarita River were barium and manganese.

HQs for the final COPECs for sediments were less than 5, with the exception of barium, which had an HQ of 7.3. This range indicates that potential risks to ecological receptors exposed to sediment are low to medium and that concentrations could reflect naturally occurring levels for the Santa Margarita River because sediment concentrations are within the background range for soils for the Santa Margarita Basin.

Toxicity screening for surface water was also conducted on a sample-location-specific basis. All final COPECs for surface water in the Santa Margarita River were based on aquatic organism exposure to surface water; there are no potential risks to terrestrial organisms ingesting surface water. The final COPECs for surface water were mercury and chloride, with HQ values ranging from 18 to 32 and 1.8 to 50, respectively.

These COPECs exceeded chronic preliminary limits of exposure; chloride also exceeded acute preliminary limits of exposure. The HQs for mercury were similar for upstream and downstream sample locations, indicating that Site 29 is not a source of mercury in the Santa Margarita River. In addition, sample the potential risks to aquatic organisms exposed to surface water in the Santa Margarita River are medium.

Toxicity screening for chemicals detected in aquatic biota indicated that metals could be present in aquatic invertebrates and fish at levels potentially harmful to secondary receptors (raccoons and great blue herons) feeding on them.

The HQs for the upstream sampling location were similar to those for the downstream (potentially affected) locations, indicating that the inorganic concentrations could reflect naturally occurring levels for the Santa Margarita River. The HQs for ingestion of aquatic biota were all less than 60 and did not change significantly from upstream to downstream locations. In addition, potential risks to great blue herons were less than those for raccoons. The overall potential risk to wildlife feeding exclusively on aquatic invertebrates and fish in the Santa Margarita River is low to medium.

Aquatic invertebrates collected in the river were compared against reference values. HQs for all chemicals detected in aquatic invertebrates were less than 10, indicating that bioaccumulation of metals in invertebrates living in the Santa Margarita River is not significantly different from bioaccumulation in unimpacted reference areas.

The final COPECs in sediment were barium and manganese. Background concentrations were not available for sediments in the Santa Margarita River, but the concentrations observed could be within naturally occurring concentrations. In addition, the highest concentrations of barium and manganese were detected at the northern end of the Santa Margarita coastal estuary (Site 45). The concentration of barium at this location (146 mg/kg) was only slightly higher than the background concentration for Site 45 (142 mg/kg). The concentration of manganese was only slightly higher than the sediment preliminary limit of exposure (HQ of 1.1) and could reflect marine influences.

Potential risks from ingestion of biota were evaluated using raccoon and great blue heron as target species. The great blue heron is the primary species of concern for the Santa Margarita River, and the estimated risks for this receptor are low (HQs near 1). The risk estimates indicated that cadmium and mercury levels could be potentially harmful to raccoons. The raccoon tends to be a more sensitive species based on the risk model used and the results may not accurately reflect actual conditions, resulting in an overestimation of the potential risks.

Sediment and surface water at Site 44 (Santa Margarita River) are not recommended for further ecological action. The risks identified appear to reflect naturally occurring conditions rather than site-related basewide activities.

#### **2.15.5 Description of the No Action Alternative**

The no action alternative selected for Site 44 surface water and sediment includes no institutional or engineering controls and no containment excavation, or treatment technologies. Site 44 is considered protective of human health and the environment for the following reasons:

- No complete pathway was identified for human exposure to surface water and sediment in the Santa Margarita Basin.
- The chemicals identified as potential contributors to ecological risk are most likely within naturally occurring concentrations for the Santa Margarita River.
- Concentrations and HQs for final COPECs in surface water are similar for upstream and downstream locations. In addition, estimated risks associated with chloride could have been overestimated because of marine water influence, which could account for the increased levels of chloride.
- Estimated ecological risk to secondary receptors feeding on fish and aquatic invertebrates are very low (HQs near 1).

## **2.16 Site 45 - Santa Margarita Coastal Wetland Study**

The objectives of the Site 45 study were to evaluate whether developed areas upstream/upgradient from the site have contaminated coastal wetlands; assess the environmental impacts of contamination, if present; perform an EcoRA; and formulate possible recommendations for remedial action (Figure 1-2).

Site 45 includes Horno Canyon, which was used as background for the wetland study because it is in the middle of the large coastal drainage area of MCB Camp Pendleton and probably has experienced only minor (if any) impact from base operations. Horno Canyon is not part of the four wetlands located within base boundaries. Surface soil, surface-water, sediment, and biota samples were collected from the Santa Margarita coastal wetland and background sediment samples were collected from Horno Canyon as part of the Site 45 study.

### **2.16.1 Site Name, Location, and Description**

Site 45 - Santa Margarita Coastal Wetland Study, is located at the mouth of the Santa Margarita River and is the largest of four coastal wetlands on MCB Camp Pendleton (Figure 1-2). Site 45 covers an area of approximately 420 acres and occupies most of the floodplain from the coast to more than 0.5 mile inland of Interstate 5. The area is bordered on the north by a plateau that rises 100 feet above the wetland, on the south and southeast by Camp Del Mar, and on the west by the Pacific Ocean. Stuart Mesa Road and Interstate 5 traverse the wetland. No base production wells are located near the Santa Margarita coastal wetland or Horno Canyon.

### **2.16.2 Site History and Enforcement Activities**

The coastal areas of MCB Camp Pendleton historically have been used for training. The wetlands on base have been protected throughout much of the base's history. Personnel are restricted from intruding on any sensitive ecological habitats. The site includes a wide variety of flora and fauna species (Figure 2-19) and is subject to flooding during peak rainfall events. Several potential upstream sources of contamination include RI Sites 1D, 2B, 7, and 30, 21 Area; the 20 Area sewage treatment plant; Range 401; 11 other RI sites; a small portion of an impact area; and the 22, 23, 24, 25, 26, 27, and 33 Areas (farther up the Santa Margarita River). Potential contaminants include metals, VOCs, SVOCs, various hydrocarbons, and pesticides and herbicides.

No known previous investigations of potential contamination have been performed at Site 45. However, ecological studies have been conducted in the estuary (e.g., Salata, 1981; Hollis et al., 1988), and the resulting reports were reviewed for the Site 45 study.

### **2.16.3 Summary of Site Characteristics**

RI work at Site 45 involved surface soil, surface-water, sediment and biological sampling to investigate potential contamination of the Santa Margarita coastal wetland due to various base areas located along the Santa Margarita River.

Surface-water and sediment samples were collected from eight locations in the Site 45 wetland. Streambed sediment samples were collected where the stream enters and leaves the wetland; the remaining sediment samples were collected between these two points. Six sediment samples and eight surface soil samples were to be collected from Horno Canyon to determine background

concentrations. However, sediment samples could not be collected because no surface water was present; as a result, 14 surface soil samples were instead collected for background. No background surface-water samples were collected from the canyon because no surface water was present.

Surface-water samples were analyzed for CLP metals, VOCs and SVOCs, TPH-d, TPH-g, pesticides and PCBs, chlorinated herbicides, and general chemistry.

With the exception of general chemistry parameters, sediment samples were analyzed for the same parameters as surface water.

A total of 23 soil samples were collected randomly throughout the wetland from 15 surface soil and 8 background surface soil locations to characterize potential soil contamination in the coastal wetland at Site 45. Background surface soil samples were collected from Horno Canyon and were analyzed using the same methods as for the sediment samples.

Invertebrate and fish samples were collected during June 1995. The invertebrate samples consisted of three composites plus one duplicate composite: two terrestrial composites and one aquatic composite, plus one aquatic composite in duplicate. The composite samples consisted of subsamples collected at and around the areas where the highest chemical concentrations were detected and in the wetland areas closer to the beach. The fish samples consisted of three composites. Each sample was composited from subsamples collected from the estuary between the beach and Interstate 5. Samples were analyzed for CLP metals, pesticides, and PCBs.

Perennial surface-water bodies in the vicinity of Site 45 are the Pacific Ocean and the Santa Margarita River, which runs through the site. Water is often visible in pools on site during winter months. Excess surface water from significant rainfall events percolates into the subsurface, evaporates, or runs off the site and discharges into the Santa Margarita River or the Pacific Ocean.

The Site 45 coastal wetland is the area where the Santa Margarita Basin meets the Pacific Ocean. The geology of the wetland consists of stream-deposited and wave-reworked younger Quaternary beach deposits. The deposits consist primarily of fine- to coarse-grained, unconsolidated, well-rounded sand interspersed with minor silt, clay, and gravel. Coastal sands are predominantly quartz-rich, with occasional heavy mineral lags.

The Santa Margarita coastal wetland is off limits to personnel, although AC/S, ES MCB Camp Pendleton personnel visit the site occasionally. Land use in the vicinity of the site consists of agricultural farmland to the north and Camp Del Mar to the south. The nearest designated hoop housing area is located in Camp Del Mar. The nearest family housing area is Stuart Mesa Housing, approximately 1.5 miles northeast of the site.

Future land use plans indicate that use of this site will not change. The likelihood of future residential land use is considered low because the area is a wetland.

No base production wells are located downgradient from the coastal wetland. Saltwater intrusion into the groundwater-bearing aquifer makes future use of groundwater highly unlikely.

The Santa Margarita estuary (Site 45) is a broad, shallow, sandy-bottomed area of tidal influence containing river outwash woody debris and occasional high freshwater flows. As such, the estuary contains a variety of freshwater and estuarine/saltwater fish and invertebrate species. In addition to the limited sampling of fish in June 1995 and invertebrates in March and June 1995 for the RI, extensive surveys of the estuary were conducted by previous investigators (Salata, 1981; Hollis et al., 1988; Hunsaker, 1992).

Freshwater, marine, and estuarine fish species previously cataloged from the estuary are listed in Table 2-14. In addition, California killifish, striped mullet, and gray smoothhound were observed in June 1995 during limited siting in the middle portion of the estuary. A total of 23 fish species have been identified in the estuary, including the threatened tidewater goby, which was observed in the upper estuary in low numbers (Hunsaker, 1992).

Aquatic invertebrate species abundance and diversity in the estuary are highly influenced by regular tidal flushing (Salata, 1981; Hollis et al., 1988). Diversity in the Santa Margarita

estuary has been influenced at various times by the availability of a conduit from the estuary to the ocean. The estuary is now open to the ocean but has been closed off by sandbars during previous years (Hollis et al., 1988). Invertebrates previously sampled from the estuary include a wide variety of estuarine and marine species (Table 2-15). In addition, striped and yellow shore crabs were collected from the middle estuary in June 1995.

The dominant habitats at Site 45 are estuarine and coastal dune (Figure 2-19). The estuarine habitat consists of both salt marsh and coastal brackish marsh. Plant species in these habitats include pickleweed, willow, and coyote brush. No mammals, reptiles, or amphibians were observed on site.

#### **2.16.3.1 Surface Water**

Surface-water samples were collected during the fourth quarter 1994 and the first and second quarters 1995.

##### Organic Compounds

The only organic compound detected in surface-water samples from Site 45 at a concentration exceeding ecological screening levels was 4,4'-DDT during the fourth quarter 1994. In addition, TCE, DCE, 2-butanone, and acetone were detected in surface water at Site 45. Benzoic acid and bis(2-ethylhexyl)phthalate were each detected at a maximum concentration of 1 Ig/l. Endrin ketone, 4,4'-DDT, and beta-BHC were detected during the fourth quarter 1994 at concentrations of 0.034, 0.32, and 0.13 Ig/l, respectively. The maximum concentration of TPH-d was 920 Ig/l during the second quarter 1995. No other organic analytes were detected at Site 45.

##### Inorganic Compounds

Of the 11 inorganics detected, only aluminum, cyanide, lead, and manganese exceeded ecological screening levels. No background concentrations are available for comparison with surface-water samples.

#### **2.16.3.2 Sediment**

##### Organic Compounds

Several volatiles (2-butanone, acetone, and methylene chloride), PAHs (benzo[k]fluoranthene, fluoranthene, naphthalene, and pyrene), and semivolatiles (benzoic acid, carbon disulfide, N-nitroso-di-n-propylamine, and phthalates) were detected in sediment samples from Site 45.

Chlorinated pesticides (4,4'-DDD, 4,4'-DDE, and 4,4'-DDT) were detected in several samples; the maximum concentration was 220 Ig/kg. Most of the sediment samples contained both 4,4'-DDE and 4,4'-DDT.

TPH-d was detected in most sediment samples; the maximum concentration was 80 Ig/kg.

##### Inorganic Compounds

Of the 12 inorganics detected, concentrations of the following exceeded background:

- Aluminum
- Arsenic
- Barium
- Beryllium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Vanadium
- Zinc.

### 2.16.3.3 Surface Soil

#### Organic Compounds

Several volatiles (2-butanone, methylene chloride, and toluene) and semivolatiles (benzoic acid, carbon disulfide, and phthalates) were detected in surface soil samples from Site 45.

Chlorinated pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin) were detected in several samples; the maximum concentration was 27 **Ig/kg**. Most of the surface soil samples contained both 4,4'-DDE and 4,4'-DDT.

TPH-d was detected in most surface soil samples; the maximum concentration was 110 **Ig/kg**.

#### Inorganic Compounds

Of the 14 inorganics detected, concentrations of the following exceeded background:

- Aluminum
- Barium
- Beryllium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Molybdenum
- Selenium
- Zinc.

### 2.16.3.4 Biota

Mixed invertebrate samples collected from the terrestrial portions of the site contained detectable concentrations of aluminum, barium, cadmium, copper, iron, lead, manganese, mercury, nickel, and zinc.

Aquatic invertebrate samples consisted of crabs collected from the Santa Margarita River. These samples contained detectable concentrations of aluminum, arsenic, barium, copper, iron, lead, manganese, mercury, nickel, and zinc, as well as 4,4'-DDE, endrin aldehyde, and methoxychlor at concentrations of 91, 28, and 87 **Ig/kg**, respectively.

Fish samples from the river contained detectable concentrations of aluminum, arsenic, barium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, and zinc. Killifish samples also contained 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT at concentrations of 77, 720, and 57 **Ig/kg**, respectively.

### 2.16.4 Summary of Site Risks

The routes of ecological exposure quantified for the Santa Margarita coastal wetland are direct contact and ingestion of soil contaminants by terrestrial invertebrates, root uptake of soil contaminants by plants, ingestion of soil by terrestrial mammals and birds, ingestion of surface water by terrestrial mammals and birds, ingestion of and direct contact with sediments and surface water by aquatic organisms, and ingestion of aquatic organisms from the wetland by terrestrial mammals and birds.

The Santa Margarita coastal wetland contains estuarine habitat and fringe terrestrial and wetland habitats. The assessment endpoints selected include impacts to terrestrial, wetland, and aquatic habitats and the plant and wildlife species associated therewith. Potential impacts were measured by the following methods:

- Comparisons of preliminary COPECs in soil, sediment, and surface water with preliminary limits of exposure for soil, sediment, and surface water
- Collection of invertebrates and fish for tissue analysis
- Comparison of aquatic communities (or factors that may affect them) with reference locations.

The ecological conceptual site model for the Santa Margarita coastal wetland is presented in Figure 2-20. The habitats along the Santa Margarita coastal wetland include salt marsh and coastal brackish marsh. Ecological receptors that could be exposed include terrestrial and aquatic species. Preliminary COPECs identified in soil, sediment, and surface water in the Santa Margarita coastal wetland included metals, pesticides, and other organic chemicals.

To assess risks in the Santa Margarita River, exposure point concentrations were selected for the entire site for soil and biota and on a sample-location-specific basis for sediment and surface water.

The maximum detected concentration of each COPEC for all soil sampling locations and in each type of biota (i.e., aquatic invertebrates, terrestrial invertebrates, or fish) collected throughout Site 45 was selected as the exposure point concentration for that medium at the site. The evaluation of biota was conducted for the entire site because target species would not likely feed exclusively at any one point in the Santa Margarita coastal wetland.

The maximum detected concentration of each preliminary COPEC in sediment or surface water at each sampled location was chosen as the exposure point concentration for that medium and sample location. By selecting an exposure point concentration for each sample location, potential ecological risks could be evaluated in an upstream-to-downstream fashion.

The ecological effects assessment focused on the relationship between concentrations of preliminary COPECs and adverse effects in ecological receptors. The components used to establish a relationship included chemical toxicity, identification and derivation of preliminary limits of exposure for target receptors, assessment of bioaccumulation potential, and comparison of site-related chemicals detected in various media against levels found in reference areas.

To evaluate the potential for bioaccumulation, secondary receptors feeding on aquatic invertebrates and fish were identified and tissue levels in aquatic and terrestrial invertebrates were compared with reference values.

Quantitative comparisons were conducted on a sample-location-specific basis and final COPECs were selected for each medium and exposure pathway using the following guidelines:

- HQ<1: Potential risk was considered low and chemical was not retained as a final COPEC.
- HQ>1: Potential risk was considered low to high, depending on magnitude of the HQ, and chemical was retained as a final COPEC.

The magnitude of the HQ was used as an indication of the potential risks to ecological receptors. The potential risk to ecological receptors was considered low to medium for final COPECs with HQs between 1 and 10, medium to high for HQs between 10 and 100, and high to very high for HQs greater than 100.

Toxicity screening of chemical concentrations in soil indicated that concentrations of the following metals could be potentially harmful to plants and wildlife:

- Aluminum (plants, invertebrates, and mammals)
- Barium (invertebrates and mammals)
- Beryllium (invertebrates)
- Boron (plants)
- Chromium (plants and mammals)
- Cobalt (mammals)
- Iron (plants, invertebrates, and mammals)
- Lead (mammals)
- Manganese (invertebrates)
- Vanadium (mammals)
- Zinc (mammals).

These chemicals were considered final COPECs for soil. HQs for most of the final COPECs were between 1 and 10. HQs were between 10 and 100 for beryllium (11) for invertebrates and for aluminum (13 to 79), chromium (3.1 to 12), cobalt (34 to 63), and zinc (16 to 23) for mammals. HQs were greater than 100 for boron in plants (260). Except for boron in plants, HQs for these COPECs were similar to those at the reference site.

Toxicity screening for sediment was conducted on a sampling-location-specific basis. The final COPECs for sediments in the Santa Margarita coastal wetland were arsenic, barium, copper, iron, lead, manganese, zinc, 4,4'-DDE, 4,4'-DDT, acetone, and benzoic acid. HQs for these chemicals were between 1 and 10, except as listed below:

- Location 2: barium (11) and 4,4'-DDE (100)
- Location 3: 4,4'-DDE (27)
- Location 5: 4,4'-DDE (12) and 4,4'-DDT (28)
- Location 8: barium (15).

The distribution of total DDT (4,4'-DDD, 4,4'-DDE, and 4,4'-DDT) in the estuary is shown in Figure 2-21. The locations with the highest concentrations and HQs are along the north side of the estuary and are downgradient from agricultural areas.

Toxicity screening for surface water was also conducted on a sampling-location-specific basis. The final COPECs for surface water in the Santa Margarita coastal wetland were cyanide, lead, manganese, and 4,4'-DDT. HQs for all final COPECs were between 1 and 10, except as listed below:

- Location 3: manganese (acute - 30)
- Location 5: cyanide (chronic - 16), 4,4'-DDT (chronic - 320), and endrin ketone (chronic -14).

Toxicity screening for manganese was limited to acute preliminary limits of exposure (ambient water-quality criteria [AWQC] and toxicity information) because chronic preliminary limits of exposure were not available for marine life. In addition, because preliminary limits of exposure were not available for endrin ketone, screening was conducted using preliminary limits of exposure for endrin. The toxicity of endrin ketone could be less than that of endrin.

Toxicity screening for chemicals detected in aquatic biota indicated that concentrations of aluminum, mercury, and zinc in aquatic invertebrates and fish could be potentially harmful to wildlife. Ingestion of aquatic invertebrates and fish by raccoons resulted in HI values of 1.6 for aluminum, 150 for mercury, and 2.2 for zinc. Ingestion of aquatic invertebrates and fish by least tern and snowy plover indicated little or no potential risk; HI values were less than 1.0.

Comparisons of field-collected aquatic and terrestrial invertebrates indicated that concentrations of aluminum, arsenic, copper, and lead in aquatic invertebrates exceeded reference values, but all HQs were less than 10. For terrestrial invertebrates, concentrations of cadmium and mercury exceeded reference values, but HQs for both constituents were less than 10.

The final COPECs in soil were limited to metals. Background values used to assess these metals were collected from Horno Canyon. Horno Canyon is a small canyon north of the estuary, at the mouth of a much smaller drainage system than the Santa Margarita River, and may not be subject

to the same rates of deposition as Site 45. Therefore, background concentrations of inorganics at Site 45 would likely be greater than those found in Horno Canyon, resulting in an underestimation of the background concentrations at Site 45. In addition, soil preliminary limits of exposure used to evaluate potential ecological risks were less than background concentrations for aluminum, beryllium, chromium, cobalt, vanadium, and zinc. Because HQs were calculated based on the comparison with preliminary limits of exposure rather than background, the potential risks may have been overestimated.

Potential ecological risks associated with surface water were assessed using chronic marine AWQC and toxicity information (preliminary limits of exposure) where available. The following chemicals were screened using values other than chronic marine preliminary limits of exposure:

- Chronic marine Preliminary limits of exposure were not available for manganese, and acute marine preliminary limits of exposure were used instead.
- Marine preliminary limits of exposure (either chronic or acute) were not available for endrin ketone. Preliminary limits of exposure for endrin were used instead. The toxicity of endrin ketone could be less than that of endrin, which could result in an overestimation of potential risks.
- Marine preliminary limits of exposure (either chronic or acute) were not available for barium, iron, molybdenum, vanadium, acetone, BHC-beta, 2-butanone, and diesel. Freshwater preliminary limits of exposure were used to assess potential risks from these chemicals. The freshwater preliminary limits of exposure could be either overprotective or underprotective of marine species, which could result in an overestimation or underestimation of potential ecological risks.

Organochlorine pesticides (4,4'-DDE and 4,4'-DDT) were detected in sediments and surface waters along the north shore of the estuary. Sediment sampling locations 2, 3, and 5 had the highest concentrations and potential ecological risks. The pesticide 4,4'-DDT was detected in surface water at location 5. These locations could be subject to runoff from adjacent agricultural areas, and the organochlorine pesticides could be due to agricultural activities rather than military activities associated with MCB Camp Pendleton. Concentrations of 4,4'-DDT in sediments were highest along the north shore, downgradient from agricultural activities. In addition, 4,4'-DDT was detected in only one of more than 20 surface-water samples collected from the estuary. Given the conservative assumptions used in this ecological risk assessment, the potential ecological risk due to 4,4'-DDT in surface water is considered an overestimation.

Potential risks from ingestion of biota were evaluated using raccoon, least tern, and snowy plover as target species. The least tern and snowy plover were the primary species of concern for the estuary. The estimated risks for these two receptors were low (HQs less than 1). Mercury levels could be potentially harmful for raccoons, but the actual exposure to raccoons in the estuary is probably much lower than that modeled, leading to an overestimation of potential risks.

## Conclusions

Evaluation of potential ecological risks from soil indicated that several metals concentrations exceeded background values and preliminary limits of exposure for soil. The HQs for most of these metals ranged from 1 to 10, indicating that risks were low to medium. Final COPECs with HQs greater than 10 were aluminum, chromium, cobalt, and zinc for mammals; beryllium for invertebrates; and boron for plants. The HQs for these COPECs were generally less than 50. Comparisons of tissue levels in terrestrial invertebrates with reference values indicated that a few COPECs had slightly higher concentrations. Overall, the potential risks to plants and wildlife exposed to soils at Site 45 were considered low to medium. The uncertainties associated with the evaluation of potential risks to soil are discussed in the RI report for Group C sites (SWDIV, 1996b) and indicate that potential risks could have been overestimated.

Evaluation of potential ecological risks from sediment indicated that concentrations of several metals, two organochlorine pesticides, and two organic compounds exceeded preliminary limits of exposure for sediment. Most of the HQs were less than 30, indicating that risks were low to medium. However, the HQ for 4,4'-DDE exceeded 100 at location 2. Evaluation of potential risks to secondary receptors feeding on aquatic organisms from the estuary indicated that

concentrations of mercury in aquatic invertebrates and fish could be potentially harmful to certain receptors (for example, raccoons). Potential risks to birds (least tern and snowy plover) were very low (HQs less than 1.0). Overall, the potential risks to aquatic organisms exposed to sediments in the estuary were low to medium, with the exception of location 2, where the potential risks were medium to high. However, location 2 is along the north shore of the estuary and is probably subject to runoff from the agricultural fields on the bluffs overlooking this location. In addition, the locations with the highest concentrations of organochlorine pesticides are all on the north shore and are probably subject to agricultural runoff.

Evaluation of potential ecological risks from surface water indicated that concentrations of cyanide, lead, manganese, 4,4'-DDT, and endrin ketone exceeded surface-water preliminary limits of exposure for wildlife. HQs for final surface-water COPECs were less than 30, indicating that potential risks were low to medium, with the exception of 4,4'-DDT at location 5, which had an HQ of 320 based on chronic AWQC. However, this risk estimate was based on a single detection of 4,4'-DDT during the fourth quarter 1994; 4,4'-DDT was not detected during two subsequent sampling rounds.

Soil, sediment, and surface water at Site 45 (Santa Margarita coastal estuary) are not recommended for further ecological action.

#### **2.16.5 Description of the No Action Alternative**

The no action alternative selected for Site 45 soil, sediment, and surface water includes no institutional or engineering controls and is considered protective of human health and the environment for the following reasons:

- The chemicals identified as potential contributors to ecological risk in soil are probably within background concentrations for a depositional system.
- The chemicals identified as potential contributors to ecological risk in sediment are likely the result of adjacent agricultural activities rather than military activities.
- The chemicals identified as potential contributors to ecological risk in surface water are likely the result of agricultural runoff and were not detected on a consistent basis.
- The agricultural leases near the Santa Margarita coastal wetlands have already implemented drainage controls to prevent surface-water and sediment runoff from the farms.
- Estimated ecological risks to secondary receptors (snowy plover and least tern) feeding on fish and aquatic invertebrates are very low (HQs less than 1).
- No complete exposure pathways were identified for human receptors.

**TABLE 2-1**  
**Finalized Soil Removal Goals for**  
**Alternative 4 Removal Action at Site 3**  
**MCB Camp Pendleton**

Finalized Soil Removal Goals  
(mg/kg)

Chemical of Concern	3A	Modified 3B	Modified 3D	Arsenic
Arsenic	4.6	4.6	4.6	
Benzo(a)pyrene	0.088	0.088	0.088	
Chlordane(alpha)	0.49	0.49	0.49	
Chlordane(gamma)	0.49	0.49	0.49	
4,4'-Dichlorodiphenyldichloroethane	1.0	2.2	8.8	
4,4'-Dichlorodiphenyldichloroethene	1.0	0.02	0.08	
4,4'-Dichlorodiphenyltrichloroethane	1.0	0.39	1.56	
Dieldrin	0.04	0.1	0.4	
Heptachlor	0.11	0.11	0.11	
Total Petroleum Hydrocarbons as Diesel	100	100	100	
Octachlorodibenzo-p-dioxin	0.0043 a	0.0043	0.0043	

a This removal goal was also used for a similar "hot spot" removed from Subsite 3C.

MCB - Marine Corps Base.

mg/kg - Milligrams per kilogram.

**TABLE 2-2**  
**Removal Goals for the Excavation at**  
**Site 6 - DPDO (DRMO) Scrap Yard**  
**MCB Camp Pendleton**  
**(Sheet 1 of 2)**

Chemical of Concern	Removal Goal for Soil (mg/kg)
Antimony	17.0 a
Arsenic	7.8 a
Barium	255 b
Beryllium	10.0 a
Cadmium	1.5 b
Chromium (as Cr VI)	30 a
Cobalt	11.3 b
Copper	35 c
Lead	28 c
Manganese	542 b
Mercury	0.1 c
Nickel	50 c
Zinc	1,110 a
Acenaphthene	25 c
Anthracene	0.098 c,d
Aroclor- 1260	0.9 a
Benz(a)anthracene	0.015 c,d
Benzo(g,h,i)perylene	0.006 c,d
Benzo(a)pyrene	0.02 c,d
Benzo(b)fluoranthene	0.015 c,d
Benzo(k)fluoranthene	0.015 c,d
Butylbenzylphthalate	0.016 c,d
di-n-Butylphthalate	0.011 c,d
Chrysene	0.021 c,d
4-4'-DDD	8.8 a
4-4'-DDE	0.08 a
4-4'-DDT	1.56 a

**TABLE 2-2**  
**Removal Goals for the Excavation at**  
**Site 6 - DPDO (DRMO) Scrap Yard**  
**MCB Camp Pendleton**  
**(Sheet 2 of 2)**

Chemical of Concern	Removal Goal for Soil (mg/kg)
OCDD (dioxin)	0.0043 e
Dibenz(a,h)anthracene	0.080 c,d
Dibenzofuran	13 c
bis(2-Ethylhexyl)phthalate	0.242 c,d
Fluoranthene	0.056 c,d
Indeno(1,2,3-c,d)pyrene	0.007 c,d
Naphthalene	0.1 c,d
PAHs 1	0.09 e
Phenanthrene	0.060 c,d
Pyrene	4.5 to 528 a
TPH (diesel)	275 a

Specified removal goals were identified by the MCB Camp Pendleton risk managers. For inorganics, this goal is the higher of the background concentration in the Santa Margarita Basin or the more stringent of the human health r-PRG or ecological preliminary limit of exposure. For organics, this goal is the lower of the human health r-PRG or ecological preliminary limit of exposure. Soil must be removed from the excavation until only these concentrations remain, as feasible given achievable analytical laboratory detection limits.

a Based on reevaluation incorporating recent information for Group C sites and modeling to develop realistic goals (SWDIV, 1996f).

b Based on 95 percent upper confidence limit of background data.

c Based on the ecological risk assessment.

d Removal goals for those chemicals are lower than the detection limits for the analytical tests used. For these chemicals, a removal goal of "nondetect" will be used to confirm that contaminated soil has been excavated.

e Based on human health risk assessment.

f Includes benz(a)anthracene, benzo(b)fluoranthene, benzo(j)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)acridine, dibenz(a,j)acridine, dibenz(a,h)anthracene, 7H-dibenzo(c,g)carbazole, dibenzo(a,e)pyrene, dibenzo(a,h)pyrene, dibenzo(a,i)pyrene, dibenzo(a,l)pyrene, indeno(1,2,3-cd)pyrene, and 5-methylchrysene. The remediation goal is the sum of these PAHs.

DDD - Dichlorodiphenyldichloroethane.

DDE - Dichlorodiphenyldichloroethene.

DDT - Dichlorodiphenyltrichloroethane.

MCB - Marine Corps Base.

mg/kg - Milligrams per kilogram.

PAHs - Polycyclic aromatic hydrocarbons.

r-PRG - Risk-based preliminary remediation goal.

SWDIV - Southwest Division Naval Facilities Engineering Command.

TPH - Total petroleum hydrocarbons.

<IMG SRC 97191C1>

<IMG SRC 97191C2>

<IMG SRC 97191C3>

<IMG SRC 97191C4>

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<IMG SRC 97191C7>

**TABLE 2-7**  
**Extent of Sediment Contamination**  
**Group B Impoundments a**  
**MCB Camp Pendleton**  
**(Sheet 4 of 6)**

Site	Depth	Test Group	Parameter	Geometric Mean b	standard Deviation	Maximum	Minimum	Units
19 Retention	shallow	CLP Metals	Zinc	59	36.1	110	33	mg/kg
19 Retention	shallow	CLP Semi-VOAs	bis(2-Ethylhexyl)phthalate	184	101.1	340	99	Ig/kg
19 Retention	shallow	CLP Semi-VOAs	Phenol			220	220	Ig/kg
19 Retention	shallow	CLP TOC	Total Organic Carbon	25,978	9,368.2	36,000	14,700	mg/kg
19 Retention	shallow	CLP VOAs	2-Butanone			3	3	Ig/kg
19 Retention	shallow	CLP VOAs	Acetone			40	40	Ig/kg
19 Retention	shallow	GEN-CHEM	pH	7	0.3	7	7	units
20	shallow	CLP Metals	Aluminum	5,232	1,711.2	6,580	4,160	mg/kg
20	shallow	CLP Metals	Barium	64	12.7	74	56	mg/kg
20	shallow	CLP Metals	Cadmium	10	0.8	11	10	mg/kg
20	shallow	CLP Metals	Calcium	10,963	3,132.5	13,400	8,970	mg/kg
20	shallow	CLP Metals	Chromium			13	12.6	mg/kg
20	shallow	CLP Metals	Copper	36	11.2	45	29	mg/kg
20	shallow	CLP Metals	Iron	9,255	2,630.4	11,300	7,580	mg/kg
20	shallow	CLP Metals	Lead	23	12.9	34	16	mg/kg
20	shallow	CLP Metals	Magnesium	3,639	1,159.7	4,550	2,910	mg/kg
20	shallow	CLP Metals	Manganese	143	43.1	177	116	mg/kg
20	shallow	CLP Metals	Potassium			2,210	2,210	mg/kg
20	shallow	CLP Metals	Vanadium	23	5.4	28	20	mg/kg
20	shallow	CLP Metals	Zinc	178	55.9	222	143	mg/kg
20	shallow	CLP Semi-VOAs	bis(2-Ethylhexyl)phthalate	297	56.6	340	260	Ig/kg
20	shallow	CLP Semi-VOAs	bis(2-Ethylhexyl)phthalate			340	340	Ig/kg
20	shallow	CLP TOC	Total Organic Carbon	47,814	20,435.4	64,400	35,500	mg/kg
20	shallow	CLP VOAs	2-Butanone	32	9.3	43	26	Ig/kg
20	shallow	CLP VOAs	Acetone	106	19.1	120	93	Ig/kg
20	shallow	GEN-CHEM	pH	7	0.2	7	7	units
20	shallow	MOD 8015	Diesel	57	19.8	73	45	mg/kg
22	shallow	CLP Metals	Aluminum	23,629	7,356.8	32,700	15,400	mg/kg

**TABLE 2-7**  
**Extent of Sediment Contamination**  
**Group B Impoundments a**  
**MCB Camp Pendleton**  
**(Sheet 5 of 6)**

Site	Depth	Test Group	Parameter	Geometric Mean b	standard Deviation	Maximum	Minimum	Units
22	shallow	CLP Metals	Arsenic	3	0.5	4	2	mg/kg
22	shallow	CLP Metals	Barium	238	53.2	292	160	mg/kg
22	shallow	CLP Metals	Beryllium	0	0.2	1	0	mg/kg
22	shallow	CLP Metals	Boron	8	0.5	8	8	mg/kg
22	shallow	CLP Metals	Cadmium	1	0.6	2	1	mg/kg
22	shallow	CLP Metals	Calcium	5,937	2,219.2	9,090	3,460	mg/kg
22	shallow	CLP Metals	Chromium	34	8.2	44	23	mg/kg
22	shallow	CLP Metals	Cobalt	11	2.9	14	7	mg/kg
22	shallow	CLP Metals	Copper	31	16.5	54	17	mg/kg
22	shallow	CLP Metals	Iron	30,478	6,771.0	38,900	21,200	mg/kg
22	shallow	CLP Metals	Lead	6	2.9	11	4	mg/kg
22	shallow	CLP Metals	Magnesium	8,740	1,911.0	11,000	5,910	mg/kg
22	shallow	CLP Metals	Manganese	359	70.9	462	266	mg/kg
22	shallow	CLP Metals	Molybdenum	35	19.6	60	15	mg/kg
22	shallow	CLP Metals	Nickel	13	2.7	16	9	mg/kg
22	shallow	CLP Metals	Potassium	7,767	1,469.3	9,110	5,480	mg/kg
22	shallow	CLP Metals	Sodium			871	871	mg/kg
22	shallow	CLP Metals	Vanadium	84	18.1	106	59	mg/kg
22	shallow	CLP Metals	Zinc	97	35.3	151	58	mg/kg
22	shallow	CLP Semi-VOAs	bis(2-Ethylhexyl)phthalate	487	149.3	640	260	Ig/kg
22	shallow	CLP TOC	Total Organic Carbon	13,175	5,298.8	18,800	7,120	mg/kg
22	shallow	CLP VOAs	2-Butanone			16	16	Ig/kg
22	shallow	GEN-CHEM	pH	6	0.7	7	6	units
22	shallow	MOD 8015	Diesel	145	77.8	210	100	mg/kg
22	deep	CLP Metals	Aluminum	16,359	5,446.1	21,200	9,170	mg/kg
22	deep	CLP Metals	Arsenic	2	0.6	3	1	mg/kg
22	deep	CLP Metals	Barium	194	14.9	213	178	mg/kg
22	deep	CLP Meals	Beryllium	0	0.1	0	0	mg/kg

TABLE 2-7  
Extent of Sediment Contamination  
Group B Impoundments a  
MCB Camp Pendleton  
(Sheet 6 of 6)

Site	Depth	Test Group	Parameter	Geometric Mean b	standard Deviation	Maximum	Minimum	Units
22	deep	CLP Metals	Cadmium			1	1.2	mg/kg
22	deep	CLP Metals	Calcium	4,318	1,383.1	5,990	2,920	mg/kg
22	deep	CLP Metals	Chromium	23	7.7	32	14	mg/kg
22	deep	CLP Metals	Cobalt	9	1.0	11	8	mg/kg
22	deep	CLP Metals	Copper	18	3.5	22	14	mg/kg
22	deep	CLP Metals	Iron	23,006	4,949.4	27,900	16,400	mg/kg
22	deep	CLP Metals	Lead	4	1.6	6	2	mg/kg
22	deep	CLP Metals	Magnesium	6,835	1,045.2	8,000	5,530	mg/kg
22	deep	CLP Metals	Manganese	313	56.9	386	268	mg/kg
22	deep	CLP Metals	Molybdenum			2	1.8	mg/kg
22	deep	CLP Metals	Nickel	9	2.1	12	7	mg/kg
22	deep	CLP Metals	Potassium	5,910	920.2	6,770	4,710	mg/kg
22	deep	CLP Metals	Vanadium	64	12.0	77	49	mg/kg
22	deep	CLP Metals	Zinc	65	10.6	75	51	mg/kg
22	deep	CLP Semi-VOAs	bis(2-Ethylhexyl)phthalate	81	45.6	150	44	Ig/kg
22	deep	CLP TOC	Total Organic Carbon	6,988	5,769.6	16,500	2,830	mg/kg
22	deep	GEN-CHEM	pH	6	1.0	7	5	units
22	deep	MOD 8015	Diesel	53	29.2	97	30	mg/kg

a June 1995 ecological risk assessment; detected parameters only.

b Geometric mean calculated only for those cases where more than 50 percent of values at site exceeded method detection limit.

CLP - Contract Laboratory Program.

MCB - Marine Corps Base.

mg/kg - Milligrams per kilogram.

TOC - Total organic carbon.

VOA - Volatile organic analysis

Ig/kg - Micrograms per kilogram.

TABLE 2-8  
 Site 28 - 26 Area Trash Haulers Maintenance Area  
 Detected Organic Concentrations In Groundwater  
 MCB Camp Pendleton

Analyte	Detected Concentrations	Monitoring Well Locations	Quarter Detected	Tap-Water r-PRG	MCL
Volatile Organics ( <b>I</b> g/l)					
1,2-Dichloroethene (total)	0.8	28W-01A	4-94	55	6 a
Trichloroethene	1 - 2	28W-01A	2-94,3-94,4-94	1.6	5 a,b
Semivolatile Organics ( <b>I</b> g/l)					
di-n-Butylphthalate	6 - 9	28W-01A, 01B	4-94	3,700	---
bis(2-Ethylhexyl)phthalate	0.6 - 2	28W-01A, 01B	4-94	4.8	4 a

Underlining indicates those locations where maximum concentrations were detected, and large bold type indicates those locations where concentrations exceed tap-water r-PRG or MCL values and the quarter detected.

a California MCL (EPA, 1695).  
 b EPA MCL (EPA, 1995).

EPA - U.S. Environmental Protection Agency.  
 r-PRG - Risk-based preliminary remediation goal.  
 MCB - Marine Corps Base.  
 MCL - Maximum contaminant level.  
 W - Monitoring well.  
**I**g/l - Micrograms per liter.

-- No MCL has been established.

TABLE 2-9  
 Site 28 - 26 Area Trash Haulers Maintenance Area  
 Detected Organic Concentrations In Groundwater  
 MCB Camp Pendleton

Analyte	Detected Concentrations	Monitoring Well Locations	Quarter Detected	Tap-Water r-PRG	MCL	95th Percentile Background Concentration a
Metals Total (Ig/l)						
Arsenic	6.5 - 8.0	28W-01B	2-94, 3-94, 4-94	0.045	50 b,c	13.2
Beryllium	2.1	28W-01A	3-94	0.016	4 bc	2.5
Chromium	6.4 - 14.1	28W-01A, 01B	2-94, 4-94	0.16	50 b	22.3
Cyanide	8.2	28W-01B	2-94	730	200 bc	5
Lead	3.7	28W-01B	3-94	4	50 b	1.5
Manganese	90.6-716	28W-01A, 01B	2-94, 3-94, 4-94	180	--	1,580
Molybdenum	16-18.8	28W-01A	3-94, 4-94	180	--	38.1
Nickel	29.4	28W-01A	2-94	730	100 b,c	99.1
Selenium	2.1	28W-01A	2-94	180	5 b,c	5
Vanadium	17.4	28W-01A	4-94	260	--	32.4
Zinc	18.4	MW-01A	4-94	11,000	--	244

Underlining indicates those locations where maximum concentrations were detected, and large bold type indicates those locations where concentrations exceed tap-water r-PRG or MCL values and the quarter detected.

a Calculated from Site 28 upgradient well data.

b California MCL (EPA, 1995).

c EPA MCL (EPA, 1995).

EPA - U.S. Environmental Protection Agency.

MCB - Marine Corps Base.

MCL - Maximum contaminant level.

r-PRG - Risk-based preliminary remediation goal.

W - Monitoring well.

Ig/l - Micrograms per liter.

-- No MCL has been established.

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 <IMG SRC 97191G>  
 <IMG SRC 97191H>  
 <IMG SRC 97191I>

**TABLE 2-11**  
**Site 43 - Santa Margarita Basin Groundwater Study**  
**Human Health Risk Assessment Results**  
**MCB Camp Pendleton**

Site	Using RME Concentrations		Using Maximum Concentrations	
	ILCR	HI	ILCR	HI
1 D a	4E-05	2.2	--	--
3 b	<1E-06	<1.0	--	--
5 b	--	--	<1E-06	0.2
7 c	1E-05	3.2	--	--
22 c	9E-05 (State)	0.4	--	--
	4E-07 (Federal)			
24 b	--	--	<1E-06	0.1
28 a	2E-06	<1.0	--	--
30 a	--	--	<1E-06	15.0
4/4A, 6, 16, 17,27	4E-04	1.4	--	--

(22/23 Area Site) d

- a Draft final RI report for Group C sites (SWDIV, 1996 b).
- b Draft final RI report for Group A sites (SWDIV, 1993 a).
- c Draft final RI report for Group B sites (SWDIV, 1995 a).
- d Draft final 22/23 Area RI report for groundwater presented in the FS for OU2 (SWDIV, 1996g),

FS - Feasibility study.

ICLR - Incremental lifetime cancer risk.

HI - Hazard Index.

MCB - Marine Corps Bass.

OU - Operable unit.

SWDIV - Southwest Division Naval Facilities Engineering Command.

**TABLE 2-12**  
**Fish and Aquatic Invertebrate Summary**  
**MCB Camp Pendleton**

Species/ Taxonomic Group	Location							
	25J (SMR)	25K (Fallbrook Creek)	25L	25M (SMR)	25N (SMR)	29 (SMR)	30 (SMR)	O'Neill Lake a
<b>Fish b</b>								
Green sunfish	7			1		1		
Bluegill		3						
Black crappie								3
Largemouth bass		1		1				1
Mosquito fish				3		1		
Brown bullhead	3					1		4
Arroyo chub	14			14		14		
Golden shiner								7
Carp	7			1		4		
<b>Aquatic Invertebrates</b>								
Crayfish		C		R				A
Trichoptera				R	R	R		
Belostomatidae	A			A		R		
Naucoridae	R			R		R	C	
Ephemeroptera		C		R	R	A		R
Damselfies		C		C		R		
Dragonflies					C	R		
Coleoptera	C	C		C	A	C	A	
Tendipedidae					R			R
Amphipoda						R		

Survey and samples collected during March and October 1995.

a 100-foot gill net set.

b Number/100-meter samples.

A - Abundant.

C - Common.

MCB - Marine Corps Base.

R - Rare.

SMR - Santa Margarita River.

TABLE 2-13

## Site 44 - Santa Margarita Basin Surface-Water and Sediment Study

## Maximum Detected Concentrations in Biota

## MCB Camp Pendleton

(Sheet 1 of 2)

Site	Sample Composition	Chemical	Maximum Detected Value (mg/kg)
Aquatic Invertebrates			
J a	Crayfish, mixed invertebrates	Aluminum	234
J	Crayfish, mixed invertebrates	Arsenic	2
J	Crayfish, mixed invertebrates	Barium	48.4
J	Crayfish, mixed invertebrates	Cadmium	4.4
J	Crayfish, mixed invertebrates	Copper	59.3
J	Crayfish, mixed invertebrates	Iron	492
J	Crayfish, mixed invertebrates	Lead	1.9
J	Crayfish, mixed invertebrates	Manganese	242
J	Crayfish, mixed invertebrates	Mercury	1.1
J	Crayfish, mixed invertebrates	Nickel	45.9
J	Crayfish, mixed invertebrates	Selenium	4.1
J	Crayfish, mixed invertebrates	Zinc	244
L b	Crayfish, mixed invertebrates	Aluminum	94.4
L	Crayfish, mixed invertebrates	Arsenic	2.8
L	Crayfish, mixed invertebrates	Barium	124
L	Crayfish, mixed invertebrates	Copper	75.8
L	Crayfish, mixed invertebrates	Iron	2,010
L	Crayfish, mixed invertebrates	Lead	2
L	Crayfish, mixed invertebrates	Manganese	1,540
L	Crayfish, mixed invertebrates	Mercury	0.98
L	Crayfish, mixed invertebrates	Nickel	14
L	Crayfish, mixed invertebrates	Vanadium	3.6
L	Crayfish, mixed invertebrates	Zinc	178
Fish			
J	Chub and mosquitofish	Aluminum	307
J	Chub and mosquitofish	Barium	23.2
J	Chub and mosquitofish	Chromium	4.2
J	Chub and mosquitofish	Copper	11
J	Chub and mosquitofish	Iron	568
J	Chub and mosquitofish	Lead	2.6
J	Chub and mosquitofish	Manganese	79.4
J	Chub and mosquitofish	Mercury	0.86

**TABLE 2-13**  
**Site 44 - Santa Margarita Basin Surface-Water and Sediment Study**  
**Maximum Detected Concentrations in Biota**  
**MCB Camp Pendleton**  
**(Sheet 2 of 2)**

Site	Sample Composition	Chemical	Maximum Detected Value (mg/kg)
J	Chub and mosquitofish	Nickel	42.5
J	Chub and mosquitofish	Zinc	153
L	Chub and mosquitofish	Aluminum	37.5
L	Chub and mosquitofish	Barium	13.8
L	Chub and mosquitofish	Copper	27.7
L	Chub and mosquitofish	Iron	198
L	Chub and mosquitofish	Lead	4
L	Chub and mosquitofish	Manganese	43.1
L	Chub and mosquitofish	Mercury	1
L	Chub and mosquitofish	Selenium	6.7
L	Chub and mosquitofish	Zinc	191

Site code refers to specific portions of the site as follows:

a J - Sampling Station J (formerly 25J).

b L - Sampling Station L (formerly 25L).

MCB - Marine Corps Base.

mg/kg - Milligrams per kilogram.

**TABLE 2-14**  
**Santa Margarita River Estuary Fish Species**  
**MCB Camp Pendleton**  
**(Sheet 1 of 2)**

		Source		
Family/Common Name	Scientific Name	A	B	C
Family Carcharhinidae				
Gray smoothhound	<i>Mustelus californicus</i>	X		
Family Myliobatididae				
Bat ray	<i>Myliobatis californica</i>	X		
Family Engraulididae				
Northern anchovy	<i>Engraulis mordax</i>		X	
Deepbody anchovy	<i>Anchoa compressa</i>		X	
Family Salmonidae				
Silver salmon	<i>Oncorhynchus kisutch</i>			X a
Family Cyprinodontidae				
California killifish	<i>Fundulus parvipinnis</i>	X	X	
Family Atherinidae				
Topsmeft	<i>Atherinops affinis</i>	X	X	
Family Syngnathidae				
Bay pipefish	<i>Syngnathus leptorhynchus</i>	X		
Family Cottidae				
Staghorn sculpin	<i>Leptocottus armatus</i>	X	X	
Family Serranidae				
Striped bass	<i>Roccus saxatilis</i>	X		
Spotted sand bass	<i>Paralabrax maculatofasciatus</i>		X	
Family Sciaenidae				
California corbina	<i>Menticirrhus undulatus</i>	X	X	
Spotfin croaker	<i>Roncador steamsii</i>		X	
Family Girellidae				
Opaleye	<i>Girella nigricans</i>	X	X	
Family Embiotocidae				
Barred surfperch	<i>Amphistichus argenteus</i>		X	
Walleye surfperch	<i>Hyperprosopon argenteum</i>		X	
Dwarf surfperch	<i>Micometrus minimus</i>			X b
Family Mugilidae				
Striped mullet	<i>Mugil cephalus</i>	X	X	
Family Gobiidae				
Longjaw mudsucker	<i>Gillichthys mirabilis</i>	X		
Arrow goby	<i>Clevelandia ios</i>	X		
Family Cynoglossidae				
California tonguefish	<i>Symphurus atricauda</i>	X		
Family Bothidae				
California halibut	<i>Paralichthys californicus</i>	X	X	
Family Pleuronectidae				
Diamond turbot	<i>Hypsopsetta guttulata</i>	X	X	
Starry flounder	<i>Platichthys stellatus</i>	X		

a Released in the estuary by the California Department of Fish and Game in 1974 and 1975. Not recorded in Salata's 1981 report or collected by U.S. Fish and Wildlife Service (USFWS) in 1986 and 1987 (Hollis et al., 1988).

b Species reported by other investigators in 1982 but not captured by Salata (1981) or USFWS in 1986 and 1987 (Hollis et al., 1988).

A - Salata (1981).

B - Hollis et al. (1988).

C - Documented by other agencies or reports.

MCB - Marine Corps Base.

**TABLE 2-15**  
**Santa Margarita River Estuary Aquatic Invertebrates**  
**MCB Camp Pendleton**

Phylum/Class/Common Name	Scientific Name
Phylum Nemertea	
Class Anopla	
Ribbon worm	Cerebratulus sp.
Phylum Annelida	
Class Polychaeta	
Nereid worm	Nereis sp.
Proboscis worm	Glycera sp.
Lumbrinerid worm	Lumbrineris sp.
Parchment tube worm	Chaetopterus sp.
Capitellid worm	Capitella capitata
Capitellid worm	Notomastus tenuis
Lugworm	Arenicola sp.
Phylum Mollusca	
Class Gastropoda	
California horn snail	Cerithidea californica
Festive rock shell	Pteropurpura festivus
Purple olive	Olivella biplicata
Cloudy bubble snail	Bulla gouldiana
Striped sea hare	Navanax inermis
Class Pelecypoda	
Banded cockle	Chione californiensis
Wavy cockle	Chione undatella
California mactra	Mactra californica
Bent-nose clam	Macoma nasuta
California jack-knife clam	Tagelus californianus
Phylum Arthropoda	
Class Crustacea	
Brine shrimp	Artemia salina
Red ghost shrimp	Callinassa californiensis
Kelp crab	Pugettia producta
Rock crab	Cancer antennarius
Yellow shore-crab	Hemigrapsus oregonensis
Striped shore-crab	Pachygrapsus crassipes
Fiddler crab	Uca crenulata
Class Insecta	
Water boatman	Trichocorixa sp.

Source: Hollis et al. (1988).

MCB - Marine Corps Base.

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<IMG SRC 97191J2>  
<IMG SRC 97191J3>  
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<IMG SRC 97191K6>  
<IMG SRC 97191K7>

Camp Pendleton Marine Corps Base, Camp Pendleton, California

Please contact Region 9 for copy of the following figures:

Figure 2-14 - Site 43 - Santa Margarita Basin Groundwater Study - Upper Basin well  
Locations and Potentiometric Surface Contours of First Encountered Acquiifer

Figure 2-15 - Site 43 - Santa Margarita Basin Groundwater Study - Lower Basin Well  
Locations and Potentiometric Surface Contours of First-Encountered Acquiifer

<IMG SRC 97191K8>  
<IMG SRC 97191K9>  
<IMG SRC 97191L>  
<IMG SRC 97191L1>  
<IMG SRC 97191L2>  
<IMG SRC 97191L3>

### 3.0 RESPONSIVENESS SUMMARY

No public comments were received during the public comment period or public meeting for OU2.

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## APPENDIX A

### ADMINISTRATIVE RECORD INDEX

(Document Control No. CLE-IO1-01F301-B15-0001)

This appendix contains a copy of the Administrative Record (AR) Index for Marine Corps Base (MCB) Camp Pendleton. The index includes those documents that form the basis for selection of a response action. This set of documents is also used for any judicial review of issues concerning the adequacy of a response action, and serves as a vehicle for public participation in the selection of a response action.

The documents are listed in order of date prepared. The records and documents listed in the index are maintained at the offices of the Assistant Chief of Staff, Environmental Security at Camp Pendleton, as well as at Southwest Division offices in San Diego. In addition, information repositories are maintained at the base library and the Oceanside Public Library. A User's Guide is available at each of these locations to assist in the use and understanding of information presented in the index.

The Administrative Record Index is periodically updated and does not contain all documents pertinent to OU2 in the latest update that is attached. However, the following documents are included in the Administrative Record and will be included in the next update of the Administrative Record Index.

SWDIV, 1997, Response to Agency Comments on the Draft Group D Remedial Investigation, MCB Camp Pendleton, Project Note, Robin Smith, 17 July.

Cal/EPA DTSC, 1997, Letter from Isaac Hirbawi to Davis Mangold at SWDIV, enclosed DTSC and RWQCB comments on draft Group D RI report, 16 April.

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Cal/EPA San Diego RWQCB, 1997, Letter from John Anderson to Davis Mangold at SWDIV, comments on draft Site 3 Closeout Report, 9 May.

Cal/EPA DTSC, 1997, Letter from Isaac Hirbawi to Davis Mangold at SWDIV, enclosed comments on Draft Closure Report for Group A Site 3, 21 May.

U.S. Environmental Protection Agency Region IX, 1997, Letter from Sheryl Lauth to Davis Mangold at SWDIV, enclosed comments on draft Site 3 Closure Plan, 13 May.

U.S. Environmental Protection Agency Region IX, 1997, Letter from Sheryl Lauth to Davis Mangold at SWDIV, enclosed comments on draft Closeout Report for Site 6, 10 June.

U.S. Environmental Protection Agency Region IX, 1997, Letter from Sheryl Lauth to Davis Mangold at SWDIV, enclosed comments on draft OU2 Record of Decision, 23 June.

Cal/EPA DTSC, 1997, Letter from Isaac Hirbawi to Davis Mangold at SWDIV, enclosed comments on draft Record of Decision for OU2, 17 June.

Cal/EPA San Diego RWQCB, 1997, Letter from John Anderson to Davis Mangold at SWDIV, comments on Record of Decision, Operable Unit 2, Draft, 12 June.

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OHM Remediation Services Corp., 1997, Site Closeout Report, Non-Time-Critical Removal Action, Installation Restoration Program, Site 6, DPDO (DRMO) Scrap Yard, Marines Corps Air Station, Camp Pendleton, California, 12 September.

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0002	01.1		JOHN ANDERSON					
M00681	002188	06/30/94	JOHN R. ODERMATT	MAGAZINE ARTICLE: GROUND WATER PROTECTION THROUGH ENVIRONMENT MANAGEMENT: U.S. MARINE CORPS BASE AT CAMP PENDLETON, CALIFORNIA.	ADMIN RECORD	PIM		SOUTHWEST DIVISION
MISC					INFO REPOSITORY			MCB CAMP PENDLETON
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0004	10.6							
M00681	002764	01/18/95		DRAFT RCRA FACILITY ASSESSMENT PRELIMINARY REVIEW REPORT COMMENTS	ADMIN RECORD	COMMENTS RCRA		BASE LIBRARY SOUTHWEST DIVISION
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			R. BLANK	REVISION TO TECHNICAL ATTACHMENT C LANGUAGE FOR THE	INFO REPOSITORY			MCB CAMP PENDLETON
			SOUTHWEST DIVISION	CAMP PENDLETON FFA (DUP. COPY W/ORIG)				
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M00681	003324	08/26/97		TRANSMITTAL OP DRAFT FINAL ACTION MEMORANDUM FOR	ADMIN RECORD	ACTMEMO	6	SOUTHWEST DIVISION
			E. MINUGH	REMOVAL ACTION AT SITE 6, DPDO SCRAP YARD,	INFO REPOSITORY	REMOVAL		MCB CAMP PENDLETON
			VARIOUS AGENCIES	INCORPORATING COMMENTS. W/OUT ENCLOSURE OF DOCUMENT	DPDO			
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			J.E. JOY	PENDLETON, & MEETING MINUTES OF 15 APRIL 1996 TO AID	INFO REPOSITORY	EVALUATION		MCB CAMP PENDLETON
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		08/01/80	E. C. BARNES	BENEFICIAL SUGGESTION		REMOVAL(3)	GROUP A	
		00000	ASSISTANT CHIEF	PESTICIDE CONTAMINATION (SEE DOC. NO. 001419)			OUI	
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M00681 LTR 000000000000000 0006	001374	06/20/94 05/20/82 00000 00.0	DEPT OF ARMY P.W. TAYLOR SOUTHWEST DIVISION V. OZOLS	DRAFT PERMIT AUTHORIZING REPAIR OF EXISTING DIVERSION STRUCTURE IN SANTA MARGARITAN RIVER, SAN DIEGO COUNTY	ADMIN RECORD	PERMIT		SOUTHWEST DIVISION
M00681 MEMO 000000000000000 0002	001384	06/20/94 10/18/02 00000 01.1	SOUTHWEST DIVISION V. JEPSON MCB CAMP PENDLETON	GROUNDWATER BASIN HYDROLOGIC/WATER QUALITY STUDY FOR MCB CAMP PENDLETON	ADMIN RECORD	GW WATER	43,OU2 GROUP C	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0007	001385	06/20/94 11/01/82 00000 01.1	MCB CAMP PENDLETON N.G. RICKER, JR SOUTHWEST DIVISION	GROUNDWATER BASIN HYDROLOGIC/WATER QUALITY STUDY FOR MCB CAMP PENDLETON	ADMIN RECORD	GW	OU2 GROUP C 43	SOUTHWEST DIVISION
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M00681 RPT 000000000000000 0030	001428	06/20/94 06/01/84 00000 09.3	NESSA SOUTHWEST DIVISION	DRAFT INITIAL ASSESSMENT STUDY OF MARINE CORPS BASE, CAMP PENDLETON CALIFORNIA	ADMIN RECORD	IAS REMOVAL(3) REMOVAL(6)	1,2,3,4,5, 6,7,8, OU1,OU2	SOUTHWEST DIVISION
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M00681 RPT 000000000000000 0240	002832	05/02/95 09/01/84 00000 01.3	NEESA FORT HUENEME W.L. NELSON SOUTHWEST DIVISION	INITIAL ASSESSMENT STUDY NEESA 13-057	ADMIN RECORD	IAS REMOVAL(3) REMOVAL(6)	1,2,3,4,5, 6,7,8 OU1,OU2	SOUTHWEST DIVISION
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0018		00.0	NICHOLAS MORGAN					
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N6247485C5629		00000	CAMP DRESSER & MCKEE			RI		
0001		06.0	WESLY H. BLOOD					
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M00681	001570	06/21/94	CAMP DRESSER & MCKEE	DRAFT VERIFICATION STEP/CONFIRMATION STUDY REPORT	ADMIN RECORD	FS	3,4,5,6,8	SOUTHWEST DIVISION
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N6247485C5629		00000	SOUTHWEST DIVISION			REMOVAL(6)	GROUP B	
0002		04.2	HENRY SHANKS				OU1,OU2	
M00681	002814	05/02/95	MITTELHAUSER CORP.	BOX CANYON LANDFILL GAS MIGRATION ASSESSMENT AND	ADMIN RECORD	FS	7	SOUTHWEST DIVISION
RPT		03/01/88		FEASIBILITY STUDY		OU3		
000000000000000		00000	PWC CAMP PENDLETON			GROUP B		
0159		01.1						
M00681	000090	03/11/94	ARGONNE NATIONAL	6 POTENTIALLY CONTAMINATED SITES FOR THE DRAFT HAZARD	ADMIN RECORD	AR INDEX		SOUTHWEST DIVISION
LTR		03/21/88	S.Y. TSAI	RANKING SYSTEM SCORES		RI		
N6871189D9296		00012	SOUTHWEST DIVISION			FS		
0001		01.1	H. SHANKS					
M00681	002857	05/02/95	ARGONNE NATIONAL	DRAFT HAZARD RANKING SCORES	ADMIN RECORD	REMOVAL(3)	4,8,3,5,6	SOUTHWEST DIVISION
LTR		03/21/88	S.Y. TSAI			REMOVAL(6)	9	
000000000000000		00000	SOUTHWEST DIVISION				OU2,OU1	
0001		01.6	H. SHANKS					
							GROUP A	
							GROUP B	
M00681	001573	06/21/94	SOUTHWEST DIVISION	TECHNICAL REVIEW COMMITTEE	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		03/30/88	S.S. SUNDERLAND					
000000000000000		00000	MCB CAMP PENDLETON					
0002		07.7						

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M00681	003350	08/27/97	GEOCON INCORPORATED	FINAL REPORT OF ENVIRONMENTAL INVESTIGATION FOR	ADMIN RECORD	INVESTIGATION	P-554	SOUTHWEST DIVISION
RPT		06/01/88	J. LIKIUS	TACTICAL SUPPORT VAN PADS(P-554) TEST CELL PROJECT	INFO REPOSITORY		P-525	
0000000000000000		00000	BURKETT & WONG	(P-525)				
0150		03.4	S. WONG					
M00681	002948	06/12/95	CAMP DRESSER & MCKEE	FINAL DRAFT WORK PLAN FOR RI/FS	ADMIN RECORD	RI	3,4,5,6,8	SOUTHWEST DIVISION
LTR		06/06/88				FS	9, GROUP A	
N6247485C5629		00000	SOUTHWEST DIVISION			REMOVAL(3)	GROUP B	
0050		03.3						
M00681	002815	05/02/95	MITTELHAUSER CORP.	BOX CANYON LANDFILL TEST PROTOCOL	ADMIN RECORD	REMOVAL(6)	OU1,OU2	SOUTHWEST DIVISION
RPT		07/01/88				LF	7	
0000000000000000		00000	PWC CAMP PENDLETON				OU3	
0075		01.1					GROUP B	
M00681	002816	05/02/95	MITTELHAUSER CORP.	LAS PULGAS LANDFILL TEST PROTOCOL	ADMIN RECORD	LF	8	SOUTHWEST DIVISION
RPT		07/01/88					OU2	
0000000000000000		00000	PWC CAMP PENDLETON				GROUP B	
0056		01.1						
M00681	002817	05/02/95	MITTELHAUSER CORP.	SAN ONOFRE LANDFILL TEST PROTOCOL	ADMIN RECORD	LF	14	SOUTHWEST DIVISION
RPT		07/01/88						
OU2		00000	PWC CAMP PENDLETON					
0000000000000000			GROUP B					
0056		01.1						
M00681	001579	06/21/94	SOUTHWEST DIVISION	TECHNICAL AND ENVIRONMENTAL REVIEW OF PEST MANAGEMENT	ADMIN RECORD	EA		
LTR		07/08/88	T.H. LAURET	SOUTHWEST DIVISION				
0000000000000000		00000	MCB CAMP PENDLETON	OPERATIONS AT MARINE CORPS BASE, CAMP PENDLETON				
0023		01.1						
M00681	002222	07/06/94	CAMP DRESSER/MCKEE	FINAL WORK PLAN FOR REMEDIAL INVESTIGATIONS/FEASIBILITY	ADMIN RECORD	RI	3,4,5,6,8	SOUTHWEST DIVISION
RPT		07/22/88		TY STUDIES.		FS	9, OU1	
N6247485C5629		00000	MCB CAMP PENDLETON			REMOVAL(3)	GROUP A	
0133		03.3						
						REMOVAL(6)	GROUP B	

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M00681	002222	continued					OU2	
M00681	002818	05/02/95	MITTELHAUSER CORP.	FINAL WORK PLAN FOR RI/FS	ADMIN RECORD	RI	3,4,5,6,8 9 OU2,OU1	SOUTHWEST DIVISION
PLAN		07/22/88						
0000000000000000		00000	PWC CAMP PENDLETON					
0128		01.1					GROUP A	
M00681	002849	05/02/95	CAMP DRESSER & MCKEE	SITE INVESTIGATION REPORT, ANALYTICAL DATA VOL. I	ADMIN RECORD	SI	3,6,9	SOUTHWEST DIVISION
RPT		07/22/88				REMOVAL(3)	GROUP A	
0000000000000000		00000	MCB CAMP PENDLETON			REMOVAL(6)	OU1,OU2	
0430		01.4						
M00681	002850	05/02/95	CAMP DRESSER & MCKEE	SITE INVESTIGATION REPORT	ADMIN RECORD	SI	3,4,5,6,8 OU2	SOUTHWEST DIVISION
RPT		07/22/88					GROUP A	
N6247485C5629		00000	MCB CAMP PENDLETON					
0300		01.4					GROUP B	
M00681	002851	05/02/95	CAMP DRESSER & MCKEE	SITE INVESTIGATION REPORT, ANALYTICAL DATA VOL. 2	ADMIN RECORD	SI	3,4,5,6,8	SOUTHWEST DIVISION
RPT		07/22/88				REMOVAL(3)	OU1,OU2	
0000000000000000		00000	MCB CAMP PENDLETON			REMOVAL(6)	GROUP A	
0430		01.4					GROUP B	
M00681	002852	05/02/95	CAMP DRESSER & MCKEE	SITE INVESTIGATION REPORT, ANALYTICAL DATA VOL. 3	ADMIN RECORD	SI	3,4,5,6,8	SOUTHWEST DIVISION
RPT		07/22/88				REMOVAL(3)	GROUP A	
0000000000000000		00000	MCB CAMP PENDLETON			REMOVAL(6)	GROUP B	
0430		01.4					OU1,OU2	
M00681	002853	05/02/95	CAMP DRESSER & MCKEE	SITE INVESTIGATION REPORT, ANALYTICAL DATA VOL. 4	ADMIN RECORD	SI	3,4,5,6,8	SOUTHWEST DIVISION
RPT		07/22/88				REMOVAL(3)	GROUP A	
0000000000000000		00000	MCB CAMP PENDLETON			REMOVAL(6)	GROUP B	
0430		01.4					OU1,OU2	
M00681	002997	09/25/95		NATIONAL PRIORITIES LIST MCB CAMP PENDLETON	ADMIN RECORD	NPL		SOUTHWEST DIVISION
LTR		09/21/88						
0000000000000000		00000	MCB CAMP PENDLETON					
0034		01.6						

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M00681	001588	06/22/94	EPA	WARNING LETTER FROM U.S. ENVIRONMENTAL PROTECTION	ADMIN RECORD	HAZ WASTE		SOUTHWEST DIVISION
LTR		09/26/88	KARIN SCHWINN	AGENCY TO CAMP PENDLETON.				
000000000000000		00000	BASE COMMANDER					
0006		07.7						
M00681	000087	03/11/94	MITTELHAUSER	SOLID WASTE ASSESSMENT TEST (SWAT) REPORT FOR LAS	ADMIN RECORD	SWAT	8,OU2	SOUTHWEST DIVISION
RPT		11/01/88		PULGAS LANDFILL				
N6871189D9296		00012	MCB CAMP PENDLETON					
0200		01.1						
M00681	002819	05/02/95	MITTELHAUSER CORP.	SWAT REPORT FOR BOX CANYON LANDFILL (AIR SWAT)	ADMIN RECORD	SWAT	7	SOUTHWEST DIVISION
RPT		11/01/88					OU3	
000000000000000		00000	PWC CAMP PENDLETON				GROUP B	
0118		01.1						
M00681	002820	05/02/95	MITTELHAUSER CORP.	SWAT REPORT FOR LAS PULGAS LAND FILL (AIR SWAT)	ADMIN RECORD	SWAT	8	SOUTHWEST DIVISION
RPT		11/01/88					OU2	
000000000000000		00000	PWC CAMP PENDLETON				GROUP B	
0109		01.1						
M00681	002821	05/02/95	MITTELHAUSER CORP.	SWAT REPORT FOR SAN ONOFRE LANDFILL (AIR SWAT)	ADMIN RECORD	SWAT	14	SOUTHWEST DIVISION
RPT		11/01/88					OU2	
000000000000000		00000	PWC CAMP PENDLETON				GROUP B	
0107		01.1						
M00681	003032	10/11/95	MITTELHAUSER	SOLID WASTE ASSESSMENT TEST (SWAT) REPORT FOR SAN	ADMIN RECORD	SWAT	14	SOUTHWEST DIVISION
RPT		11/01/88		ONOFRE LANDFILL				
N6871189D9296		00012	MCB CAMP PENDLETON					
0200		01.1						
M00681	002822	05/02/95	ENRMO WATER BRANCH	CAMP PENDLETON ANNUAL WATER QUALITY REPORT	ADMIN RECORD	WATER	45,8,14,	SOUTHWEST DIVISION
RPT	01/01/89			MARGARITA BASIN, LAS FLORES BASIN, SAN ONOFRE BASIN,			OU2	
000000000000000		00000	NONE SPECIFIED	SAN MATEO BASIN			GROUP B	
0002		01.1					GROUP C	
M00681	003033	10/11/95		ANNUAL WATER QUALITY REPORT 1989	ADMIN RECORD	WATER		SOUTHWEST DIVISION
RPT		01/01/89						
N6871189D9296		00012	MCB CAMP PENDLETON					
0002		01.1						

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M00681	002868	05/02/95	SOUTHWEST DIVISION	ENVIRONMENTAL COMPLIANCE EVALUATION MCAS	ADMIN RECORD	ECE		SOUTHWEST DIVISION
MEMO		06/21/89		CAMP PENDLETON				
000000000000000		00000	CMC WASHINGTON DC					
0014		01.6						
M00681	003023	10/11/95	SOUTHWEST DIVISION	ENVIRONMENTAL COMPLIANCE EVALUATION MCB CAMP PENDLETON	ADMIN RECORD	ECE		SOUTHWEST DIVISION
LTR		06/21/89	A.B. FREEMAN					
000000000000000		00000	CMC WASHINGTON DC					
0014		01.1						
M00681	002859	05/02/95	SOUTHWEST DIVISION	ENVIRONMENTAL COMPLIANCE EVALUATION MCAS	ADMIN RECORD	ECE		SOUTHWEST DIVISION
MEMO		07/03/89		CAMP PENDLETON				
000000000000000		00000	CMC WASHINGTON DC					
0012		01.6						
M00681	003024	10/11/95	SOUTHWEST DIVISION	ENVIRONMENTAL COMPLIANCE EVALUATION MCB CAMP PENDLETON	ADMIN RECORD	ECE		SOUTHWEST DIVISION
LTR		07/03/89						
000000000000000		00000	CMC WASHINGTON DC					
0012		01.1	HOMC-LFL					
M00681	000120	03/11/94	SAN DIEGO UNION	NEWSPAPER ARTICLE "PENDLETON MAY BE FIRST COUNTY SITE	ADMIN RECORD	HAZ WASTE		SOUTHWEST DIVISION
LTR		07/04/99		ON SUPERFUND TOXIC WASTE RISK LIST" MCB CAMP PENDLETON	INFO REPOSITORY	WELLS		MCB CAMP PENDLETON
000000000000000		00000				WATER		OCEANSIDE LIBRARY
0001		10.6						
						PUBNOT		BASE LIBRARY
M00681	000121	03/11/94		NEWSPAPER ARTICLE "BASE WATER 'SAFE'" GROUNDWATER	ADMIN RECORD	GW		SOUTHWEST DIVISION
LTR		07/05/89		CONTAMINATION MCB CAMP PENDLETON	INFO REPOSITORY	WATER		MCB CAMP PENDLETON
000000000000000		00000						OCEANSIDE LIBRARY
0001		10.6						
								BASE LIBRARY
M00681	001608	06/22/94	SOUTHWEST DIVISION	TECHNICAL AND ENVIRONMENTAL REVIEW OF PEST MANAGEMENT	ADMIN RECORD	TRC		SOUTHWEST DIVISION
RPT		07/06/89	A. CHRISTOPHERSO	OPERATIONS AT MARINE CORPS BASE, CAMP PENDLETON.				
			MCB CAMP PENDLETON					
0016		11.4						
M00681	002860	05/02/95	MITTELHAUSER CORP	LATES LABORATORY ANALYSIS RESULTS FOR GROUNDWATER AT	ADMIN RECORD	GW	8	SOUTHWEST DIVISION
LTR		07/10/89	E. TERRY	LAS PULGAS LANDFILL			OU2	
000000000000000		00000	PWC CAMP PENDLETON				GROUP B	
0004		01.6						

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M00681 LTR 000000000000000 0004	003025	10/11/95 07/10/89 00000 02.2	MITTELHAUSER CORP. B.T. JENSEN MCB CAMP PENDLETON J.E. JOY	LATEST LABORATORY ANALYSIS RESULTS FOR GROUNDWATER AT LAS PULGAS LANDFILL	ADMIN RECORD	GW DATA		SOUTHWEST DIVISION
M00681 RPT 000000000000000 0049	002623	05/02/95 08/01/89 00000 01.1	MITTELHAUSER CORP. PWC CAMP PENDLETON	SWAT WATER QUALITY PROPOSAL FOR BOX CANYON LANDFILL	ADMIN RECORD	SWAT	7 OU3 GROUP B	SOUTHWEST DIVISION
M00681 RPT 000000000000000 0043	002824	05/02/95 08/01/89 00000 01.1	MITTELHAUSER CORP. PWC CAMP PENDLETON	SWAT WATER QUALITY PROPOSAL FOR LAS PULGAS LANDFILL	ADMIN RECORD	SWAT	8 OU2 GROUP B	SOUTHWEST DIVISION
M00681 RPT 000000000000000 0044	002825	05/02/95 08/02/89 00000 01.1	MITTELHAUSER CORP. PWC CAMP PENDLETON	SWAT WATER QUALITY PROPOSAL FOR LAS ONOFRE LANDFILL	ADMIN RECORD	SWAT	14 OU2 GROUP B	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0200	003034	10/11/95 08/01/89 00022 01.1	MITTELHAUSER MCB CAMP PENDLETON	SWAT WATER QUALITY PROPOSAL FOR CAMP PENDLETON BOX CANYON LANDFILL	ADMIN RECORD	SWAT	7	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0200	003035	10/11/95 08/01/89 00012 01.1	MITTELHAUSER MCB CAMP PENDLETON	SWAT WATER QUALITY PROPOSAL FOR CAMP PENDLETON LAS PULGAS LANDFILL	ADMIN RECORD	SWAT	8	SOUTHWEST DIVISION

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M00681 RPT N6871189D9296 0200	003036	10/11/95 08/01/89	MITTELHAUSER MCB CAMP PENDLETON	SWAT WATER QUALITY PROPOSAL FOR CAMP PENDLETON SAN ONOFRE LANDFILL	ADMIN RECORD	SWAT	14	SOUTHWEST DIVISION
M00681 LTR  0002	001611	06/22/94 08/09/29	SOUTHWEST DIVISION ALAN B. FREEMAN MCB CAMP PENDLETON	PREPARATION OF RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)	ADMIN RECORD	HAZ WASTE		SOUTHWEST DIVISION
M00681 RPT N6247488D8734 0075	001612	06/22/94 09/01/89	ALMGREN & KOPTIONAK MCB CAMP PENDLETON	CONTAMINATION INVESTIGATION AT THE LGAC WATER RECYCLING FACILITY FOR MARINE CORPS BASE CAMP PENDLETON, CA.	ADMIN RECORD	WATER	OU2 GROUP B 19	SOUTHWEST DIVISION
M00681 RPT N6247488D8734 0100	003037	10/11/95 10/01/89	ALMGREN & KOPTIONAK MCB CAMP PENDLETON	CONTAMINATION INVESTIGATION AT THE LGAC WATER RECYCLING FACILITY	ADMIN RECORD	WATER	19	SOUTHWEST DIVISION
M00681 RPT N6871188D2616 0250	002926	06/12/95 11/01/89	IT CORPORATION SOUTHWEST DIVISION	DRAFT RCRA PERMIT APPLICATION RANGE 401 OPEN BURNING/ OPEN DETONATION SITE	ADMIN RECORD	RCRA PERMIT		SOUTHWEST DIVISION
M00681 TEL 0000000000000000 0001	002046	06/29/94 11/22/89	ED DIAS ED DIAS LEN ALLEN	(NPL) RESPONSE TO EPA'S REQUEST FOR EXTENSION FOR MCB CAMP PENDLETON	ADMIN RECORD	NPL		SOUTHWEST DIVISION
M00681 RPT 0000000000000000 0017	002826	05/02/95 12/01/89	MITTELHAUSER CORP. MCB CAMP PENDLETON	OFF-SITE GAS MIGRATION ASSESSMENT REPORT LAS PULGAS LANDFILL	ADMIN RECORD	LF	8 OU2 GROUP B	SOUTHWEST DIVISION
M00681 RPT 0000000000000000 0040	003038	10/11/95 12/01/89	MITTELHAUSER CORP. MCB CAMP PENDLETON	OFF-SITE GAS MIGRATION ASSESSMENT REPORT LAS PULGAS LANDFILL	ADMIN RECORD	LF	8	SOUTHWEST DIVISION
M00681 TEL  0001	002049	06/29/94 12/20/89	SOUTHWEST DIVISION EDWARD K DIAS EPA ROBERTA BLANK	CAMP PENDLETON NPL SITE, DISCUSSED IMPLEMENTATION PLAN FOR TASK ORDER 0012.	ADMIN RECORD	NPL		SOUTHWEST DIVISION

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M00681	000210	03/15/94	EPA SAN FRANCISCO	COMMENTS ON RI\FS PLANNING PHASE	ADMIN RECORD	RI FS COMMENTS		SOUTHWEST DIVISION
LTR		01/10/90	R. BLANK					
000000000000000		00000	SOUTHWEST DIVISION					
0004		01.6	E. DIAS					
M00681	000125	03/11/94	EPA	RCRA RFA IDENTIFIED IN SITES	ADMIN RECORD	RCRA RFA IR		SOUTHWEST DIVISION
MEMO		01/29/90	ROBERTA BLANK					
000000000000000		00000	SOUTHWEST DIVISION					
0001		01.6	ED DIAS					
M00681	001621	06/22/94	EPA	FAX CONCERNING RCRA RFA GUIDANCE.	ADMIN RECORD	RFA		SOUTHWEST DIVISION
FAX		02/02/90	ROBERTA BLANK					
000000000000000		00000	LEN ALLEN					
0002		01.1						
M00681	002927	05/02/95	HYDRO-FLUENT, INC.	SITE INVESTIGATION AIR STATION 23 AREA	ADMIN RECORD	SI	22 OU2 GROUP B	SOUTHWEST DIVISION
RPT		02/02/90						
000000000000000		00000	PWC CAMP PENDLETON					
0029		01.1						
M00681	003039	10/11/95	HYDRO-FLUENT, INC.	SITE INVESTIGATION AIR STATION 23 AREA (PROJECT NO. 1660-01)	ADMIN RECORD	SI	22	SOUTHWEST DIVISION
RPT		02/02/90						
000000000000000		00000	MCB CAMP PENDLETON					
0050		01.2						
M00681	000126	03/11/94	CRWQCB	DRAFT LIST OF RECOMMENDED SITES AT MCB CAMP PENDLETON FOR THE RI\FS UNDER THE SUPERFUND	ADMIN RECORD	RI FS	7,8,14,4, 5,3,1,2,6 GROUP A	SOUTHWEST DIVISION
LTR		02/05/90	MARGO BOODAKIAN					
000000000000000		00000	SOUTHWEST DIVISION					
0002		01.6	ED DIAS				GROUP B OU1,OU2	
M00681	000205	03/14/94	CRWQCB	DRAFT LIST OF SITES AT MCB CAMP PENDLETON RECOMMENDED FOR RI\FS WORK UNDER SUPERFUND	ADMIN RECORD	RI FS		SOUTHWEST DIVISION
LTR		02/05/90	MARGO BOODAKIAN					
000000000000000		00000	SOUTHWEST DIVISION					
0003		01.6	EDWARD DIAS					
M00681	002056	06/29/94	SOUTHWEST DIVISION	SOLICITING TECHNICAL MEMBERSHIP TO THE TRC FOR THE IRP	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		02/07/90	ALAN B. FREEMAN					
000000000000000		00000	MCB CAMP PENDLETON					
0003		01.6						

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M00681	000119	03/11/94	LOS ANGELES TIME	NEWSPAPER ARTICLE "EDWARDS, PENDLETON BASES PROPOSED FOR ADDITION TO LIST OF TOXIC CLEANUP CAMP PENDLETON SITES	ADMIN RECORD INFO REPOSITORY	PUBNOT GW PCB  FUEL		SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
LTR		02/23/90						
0000000000000000		00000						
0001		10.6						
M00681	000017	03/09/94	JACOBS/IT/CH2MHILL	NAVY CLEAN PROGRAM SUMMARY REPORT CTO 0012 INSTAL- ATION RESTORATION (IR) PROGRAM - DRAFT #CLE-101-01F0012-S2-1	ADMIN RECORD	IRP REMOVAL(3) REMOVAL(6)	1,2,3,4,5, 6,7,8,9,10 11,12,13	SOUTHWEST DIVISION
RPT		03/01/90	STASSI, PHILLIP					
N6871189D9626		00012	SOUTHWESTDIV					
0250		01.1	PADRO, HERB				14,15 GROUP A GROUP B GROUP C OU1,OU2 OU3	
M00681	000198	03/14/94	MCB CAMP PENDLETON	TRC MEMBERSHIP BEING SOUGHT	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		03/01/90	TOM ZUGSAY					
0000000000000000		00000	SOUTHWEST DIVISION					
0002		03.6	ALAN FREEMAN					
M00681	000128	03/14/94	CRWQCB	SITES AT CAMP PENDLETON DESIGNATED FOR RI\FS UNDER SUPERFUND (09C - MARGINALIA)	ADMIN RECORD	RI FS		SOUTHWEST DIVISION
LTR		03/02/90	ROBERT W. MORRIS					
0000000000000000		00000	SOUTHWEST DIVISION					
0002		01.6	EDWARD DIAS					
M00681	002760	01/18/95	MCB CAMP PENDLETON	SOLICITATION LETTER FOR TRC MEMBERS	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		03/07/90	A.J. PACK					
0000000000000000		00000	DISTRIBUTION					
0002		10.0						
M00681	002875	05/02/95	EPA SAN FRANCISCO	IDENTIFICATION TRC REPRESENTATIVE FOR EPA SAN FRANCISCO	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		03/15/90	J. KEMMERER					
0000000000000000		00000	MCB CAMP PENDLETON					
0001		01.6	T. ZUGSAY					
M00681	002941	06/12/95	EPA SAN FRANCISCO	SPA REPRESENTATIVE FOR THE TRC	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		03/19/90	J. KEMMERER					
0000000000000000		00000	MCB CAMP PENDLETON					
0001		01.6	T. ZUGSAY					

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M00681	002940	06/12/95	CRWQCB SAN DIEGO	CRWQCB REPRESENTATIVE FOR THE TRC	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		03/19/90	R.W. MORRIS					
000000000000000		00000	SOUTHWEST DIVISION					
0001		01.6	T. ZUGSAY					
M00681	000200	03/14/94	CRWQCB SAN DIEGO	MCB CAMP PENDLETON TPCA LCAC-5 AREA 33 FACILITY	ADMIN RECORD	TPCA	19	SOUTHWEST DIVISION
LTR		03/23/90	L.H. DELANEY	VISUAL INSPECTION CONDUCTED ONLY				
000000000000000		00000	MCB CAMP PENDLETON					
0004		01.6	CG					
M00681	003026	10/11/95	CRWQCB SAN DIEGO	TOXIC PITS CLEANUP ACT OF 1984 LCAC-5 AREA 33 FACILITY	ADMIN RECORD	TPCA	19	SOUTHWEST DIVISION
LTR		03/23/90	L.H. DELANEY	SITE INSPECTION OF TWO SURFACE IMPOUNDMENTS		SI		
000000000000000		00000	MCB CAMP PENDLETON					
0004		01.6						
M00681	000201	03/14/94	CRWQCB SAN DIEGO	AREA 33, LCAC-5 FACILITY TPCA	ADMIN RECORD	TPCA	19	SOUTHWEST DIVISION
LTR		04/10/90	A.L. COE	LCAC WATER RECYCLING FACILITY		WATER		
000000000000000		00000	MCB CAMP PENDLETON			SLUDGE		
0002		01.6				RECYCLING		
						SOIL		
M00681	003027	10/11/95	CRWQCB SAN DIEGO	COMMENTS ON THE CONTAMINATION INVESTIGATION AT THE	ADMIN RECORD	TPCA	19	SOUTHWEST DIVISION
LTR		04/10/90	A.L. COE	LCAC WATER RECYCLING FACILITY WERE FOUND TO BE UNDER				
000000000000000		00000	MCB CAMP PENDLETON	THE TPCA				
0002		01.6						
M00681	002942	06/12/95	SOUTHWEST DIVISION	SOUTHWEST DIVISION REPRESENTATIVE FOR THE TRC	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		04/11/90	D.N. SAKAMOTO					
000000000000000		00000	MCB CAMP PENDLETON					
0001		01.6						

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M00681	001642	06/22/94	CAMP PENDLETON	INSTALLATION RESTORATION PROGRAM STATUS REPORT FOR	ADMIN RECORD	IAS	3,4,5,6,8	SOUTHWEST DIVISION
RPT		05/01/90		MARINE CORPS BASE CAMP PENDLETON.		REMOVAL(3)	GROUP A	
			CAMP PENDLETON			REMOVAL(6)	GROUP B	
0004		00.0					GROUP C	
							OU1,OU2	
							9,OU3	
							1	
							2	
							4a	
							8a	
							10	
							11	
							12	
							13	
							14	
							15	
							16	
							17	
							18	
							19	
							20	
							20	
							21	
							22	
M00681	002925	06/12/95	IT CORPORATION	RCRA PERMIT APPLICATION RANGE 401 OPEN BURNING/OPEN	ADMIN RECORD	PERMIT		SOUTHWEST DIVISION
RPT		05/01/90	T.M. PAN	DETONATION SITE				
N6871188D2616		DO 14	SOUTHWEST DIVISION					
0150		01.1						
M00681	000191	03/14/94	CRWQCB	POTENTIAL TPCA MCB CAMP PENDLETON SITES PRELIMINARY	ADMIN RECORD	SI	21,11	SOUTHWEST DIVISION
LTR		05/11/90	ARTHUR L. COE	SITE INSPECTION		TPCA	OU3,OU2	
0000000000000000		00000	MCB CAMP PENDLETON			SOIL	GROUP B	
0002		01.6	CG					
						WATER		
M00681	002667	01/09/95	JACOBS ENGINEERING	DRAFT HYDROGEOLOGIC ASSESSMENT REPORT (HAR) DRAFT	ADMIN RECORD	HAR	GROUP A	SOUTHWEST DIVISION
RPT		05/11/90		WORK PLAN FOR THE DEFENSE PROPERTY DISPOSAL OFFICE			6	
N6871189D9296		00012	SOUTHWEST DIVISION	SCRAP YARD MCB CAMP PENDLETON				
0200		03.3						

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M00681 RPT N6871189D9296 0150	002688	01/10/95 05/11/90	JACOBS ENGINEERING	DRAFT HYDROGEOLOGIC ASSESSMENT REPORT DRAFT WORK PLAN FOR THE 41 AREA WASTE STABILIZATION POND MCB CAMP PENDLETON	ADMIN RECORD	HAR	9	SOUTHWEST DIVISION
M00681 FAX 0000000000000000 0002	000193	03/14/94 05/17/90	CRWQCB SAN DIEGO M. J. BOODAKIAN	IDENTIFIED BY EPA IN THE DRAFT IAG SITES TO BE CONSIDERED FOR INCLUSION IN THE RI\FS	ADMIN RECORD	IAG RI SLUDGE	18 19 20	SOUTHWEST DIVISION
		00.0	EDWARD DIAS			WATER FS	21	
M00681 LTR 0000000000000000 0003	003367	09/02/97 06/11/90	MCB CAMP PENDLETON J. JOY	LETTER PROVIDING THE OCEANSIDE UNIFIED SCHOOL DISTRICT DOCUMENTATION ADDRESSING POTENTIAL IMPACT OF SOIL AND GASS EMISSIONS RELEVANT TO BOX CANYON LANDFILL	ADMIN RECORD INFO REPOSITORY	TREATMENT SOIL EMISSION  LANDFILL	BOX CANYON LANDFILL	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 RPT 0000000000000000 0004	002828	05/02/95 06/18/90	MCB CAMP PENDLETON	INVESTIGATION OF MWR MAINTENANCE COMPLEX, 26 AREA	ADMIN RECORD		28 OU2 GROUP C	SOUTHWEST DIVISION
		01.1	NONE SPECIFIED					
M00681 LTR 0000000000000000 0005	003040	10/11/95 06/18/90	MCB CAMP PENDLETON D.A. HETTERVIK	INVESTIGATION OF UNLAWFUL DISPOSAL OF HAZARDOUS WASTE/MATERIALS	ADMIN RECORD CONFIDENTIAL DOC	DISPOSAL HAZ WASTE		
		01.6	CHIEF OF STAFF					
M00681 LTR 0000000000000000 0011	003028	10/11/95 06/19/90	CRWQCB SAN DIEGO A.L. COE	VISUAL SITE INSPECTION OF AREA 14, FUEL DOCK FACILITY THE SURFACE IMPOUNDMENTS APPEARED TO BE SUBJECT TO THE TPCA	ADMIN RECORD	TPCA SI	21	SOUTHWEST DIVISION
		01.6	MCB CAMP PENDLETON					
M00681 PLAN N647488C50946 0350	002664	01/09/95 08/01/90	NFEC PORT HUENEME	MASTER PLAN VOLUME 1 & 2 BASE WIDE ANALYSIS MCB CAMP PENDLETON	ADMIN RECORD			SOUTHWEST DIVISION
		01.1	MCB CAMP PENDLETON					
M00681 LTR 0000000000000000 0002	002677	01/09/95 08/03/90	MCB CAMP PENDLETON E.J. TURSE	DEVELOPMENT OF WORK PLANS FOR REMOVAL AND DISPOSAL OF LIQUIDS & SLUDGES, ETC. MCB CAMP PENDLETON	ADMIN RECORD	REMOVAL DISPOSAL	19	SOUTHWEST DIVISION
		06.0	CRWQCB SAN DIEGO A. COE					

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M00681 LTR N6871189D2001 0003	002024	06/29/94 08/09/90	DAMES & MOORE TIM HEIRONIMUS SOUTHWEST DIVISION LYNN HORNECKER	SLUDGE AND WATER SAMPLING, CAMP PENDLETON ENGINEERING SERVICES FOR VARIOUS PROJECTS IN THE SOUTHWEST AREA.	ADMIN RECORD	WATER AAL		
M00681 RPT N6871189D9626 0400	000022	03/09/94 08/15/90	JACOBS SOUTHWESTDIV	HYDROGEOLOGIC ASSESSMENT REPORT - CTO #0012 - FINAL WORK PLAN ON THE DEFENSE PROPERTY DISPOSAL OFFICE SCRAP YARD - DOC CNTRL #CLE-101-01F102-B7-0002	ADMIN RECORD	HAR	6,OU1 GROUP A	SOUTHWEST DIVISION
M00681 RPT N6871189D9626 0400	000023	03/09/94 08/15/90	JACOBS/IT/CH2MHILL SOUTHWESTDIV	HYDROGEOLOGIC ASSESSMENT REPORT - CTO #0012 - FINAL WORK PLAN FOR THE 41 AREA WASTE STABILIZATION POND DOC CNTRL #CLE-101-01F102-B7-0003	ADMIN RECORD	HAR	9,OU1 GROUP A	SOUTHWEST DIVISION
M00681 RPT N6871189D2001 150	000024	03/09/94 08/20/90	DAMES & MOORE BARTEL, THOMAS SOUTHWEST DIV HORNECKER, LYNN	DRAFT WORK PLAN FOR CLOSURE OF SURFACE IMPOUNDMENTS - ENGINEERING SERVICES FOR VARIOUS PROJECTS IN THE SOUTHWEST AREA, SAN DIEGO, CALIF. DELIVERY ORDER 0017	ADMIN RECORD	SMP	21,22 GROUP B	SOUTHWEST DIVISION
M00681 RPT N6871189D2001 0075	001992	06/28/94 08/20/90	DAMES & MOORE THOMAS J. BARTEL SOUTHWEST DIVISION	DRAFT WORK PLAN FOR CLOSURE OF SURFACE IMPOUNDMENTS. ENGINEERING SERVICES FOR VARIOUS PROJECTS IN THE SOUTHWEST AREA.	ADMIN RECORD	DDP		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	002675	01/09/95 06/21/90	MCB CAMP PENDLETON D.A. HETTERVIK CREQCB SAN DIEGO A.L. COE	COMMENTS ON CRWQCB LTR OF JUNE 19, 1990 TO REVIEW WORK PLAN FOR LCAC AND FUEL DOCK SURFACE IMPOUNDMENTS (LTR W/O WP FOR LCAC AND FUEL DOCK SURFACE IMPOUND.)	ADMIN RECORD	COMMENTS	19,20,22	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0175	002665	01/09/95 08/30/90	JACOBS ENGINEERING SOUTHWEST DIVISION	PRE-DRAFT COMMUNITY RELATIONS PLAN FOR MCB CAMP PENDLETON	ADMIN RECORD	CRP		SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0075	000025	03/09/94 09/11/90	JACOBS SOUTHWESTDIV	DRAFT SITE MANAGEMENT PLAN - MARINE CORPS BASE, CAMP PENDLETON, CALIFORNIA - DOCUMENT CONTROL NUMBER CLE-101-01F012-S1-0002	ADMIN RECORD	SMP	GROUP A OU1 3,4,5,6,8	SOUTHWEST DIVISION
M00681 RPT 0005	001661	06/22/94 10/09/90	CAMP PENDLETON CAMP PENDLETON	INSTALLATION RESTORATION PROGRAM STATUS REPORT FOR MARINE CORPS BASE CAMP PENDLETON.	ADMIN RECORD	IAS SI RI		

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M00681	002674	01/09/95	CRWQCB SAN DIEGO	MCAS AREA 22 FUEL DOCK AREA 14, & LAS PULGAS VEHICLE	ADMIN RECORD	COMMENTS	19,20,22	SOUTHWEST DIVISION
LTR		10/11/90	A. L. COE	WASH RACK AREA 43 COMMENTS MCB CAMP PENDLETON				
0000000000000000		00000	MCB CAMP PENDLETON					
0003		06.0	CG					
M00681	002039	06/29/94	ACCULAB ENVIRON SERV	LABORATORY RESULTS DONE BY ACCULAB FOR DAMES AND MOORE	ADMIN RECORD	LAB	6,9,19	SOUTHWEST DIVISION
RPT		10/12/90	DAMES & MOORE	FOR MCB CAMP PENDLETON.			GROUP A	
12912024035		00000	MCB CAMP PENDLETON				GROUP B	
0027		02.2					OU1,OU2	
M00681	002040	06/29/94	ACCULAB ENVIRON SERV	LABORATORY RESULTS DONE BY ACCULAB FOR DAMES AND MOORE	ADMIN RECORD	LAB	6,9,19	SOUTHWEST DIVISION
RPT		10/12/90	DAMES & MOORE	FOR MCB CAMP PENDLETON.			GROUP A	
12912024035		00000	MCB CAMP PENDLETON				GROUP B	
0016		02.2					OU1,OU2	
M00681	002041	06/29/94	ACCULAB ENVIRON SERV	LABORATORY RESULTS DONE BY ACCULAB FOR DAMES AND MOORE	ADMIN RECORD	LAB	6,9,19	SOUTHWEST DIVISION
RPT		10/12/90	DAMES & MOORE	FOR MCB CAMP PENDLETON.			GROUP A	
12912024035		00000	MCB CAMP PENDLETON				GROUP B	
0027		02.2						
M00681	002679	01/09/95	SOUTHWEST DIVISION	ANALYTICAL DATA SUBMITTAL (DELIVERABLE) AND STATUS	ADMIN RECORD	DATA	19,20,22	SOUTHWEST DIVISION
MEMO		10/25/90	CODE 1811.LH	REPORT FOR MCB CAMP PENDLETON				
N6871189D2001		00017	SOUTHWEST DIVISION					
0001		01.1	CODE 0213					
M00681	002629	05/02/95	MITTELHAUSER CORP.	REPORT ON FIRST AND SECOND ROUND GROUNDWATER SAMPLING	ADMIN RECORD	GW	7	SOUTHWEST DIVISION
RPT		11/06/90		AT BOX CANYON LANDFILL			OU3	
0000000000000000		00000	MCB CAMP PENDLETON				GROUP B	
0004		01.1						
M00681	001687	06/23/94	SOUTHWEST DIVISION	FEDERAL FACILITIES AGREEMENT (FFA) FOR MARINE CORPS	ADMIN RECORD	FFA		
LTR		11/13/90	DANA K. SAKAMOTO	BASE (MCB), CAMP PENDLETON, CA.				
0003		06.0	U.S. DEP OF THE INT WILLIAM ALLAN					
M00681	001688	06/23/94	SOUTHWEST DIVISION	FEDERAL FACILITIES AGREEMENT (FFA) FOR MARINE CORPS	ADMIN RECORD	FFA		
LTR		11/13/90	DANA N. SAKAMOTO	BASE (MCB), CAMP PENDLETON, CA.				
0003		06.0	DEPT OF COMMERCE CHIP DEMAREST					

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M00681 LTR 0000000000000000 0003	002673 11/28/90 00000 06.0	01/09/95 A.L. COE MCB CAMP PENDLETON D.A. HETTERVIK	CRWQCB SAN DIEGO	DRAFT WORK PLAN FOR CLOSURE OF THE LCAC AND AREA 14, FUEL DOCK SURFACE IMPOUNDMENTS COMMENTS MCB CAMP PENDLETON	ADMIN RECORD	CLOSURE COMMENTS	19	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0040	000108 12/07/90 00000 04.1	03/11/94 L. MILLER SOUTHWEST DIVISION E. DIAS	DHS LONG BEACH	POTENTIAL ARAR's FOR MCAS CAMP PENDLETON	ADMIN RECORD	ARAR		SOUTHWEST DIVISION
M00681 RPT N6871189D9626 0300	000030 12/14/90 00012 10.2	03/09/94 MARK, DAVE SOUTHWESTDIV	JACOBS	DRAFT COMMUNITY RELATIONS PLAN	ADMIN RECORD	CRP REMOVAL(3) REMOVAL(6)	1,2,3,4,5 6,7,8,9,10 11,12,13	SOUTHWEST DIVISION
							14,15,16, 17,18,19, 20,21,22 GROUP A GROUP B GROUP C OU1,OU2	
M00681 LTR 0000000000000000 0004	003197 12/19/90 00000 01.6	01/27/97 L. MILLER SOUTHWEST DIVISION E. DIAS	DHS LONG BEACH	LETTER IN RESPONSE TO THE DRAFT IMPLEMENTATION PLAN FOR THE RCRA FACILITY ASSESSMENT DATED NOVEMBER 9, 1990	ADMIN RECORD INFO REPOSITORY	RESPONSE RCRA ASSESSMENT		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR N6871189D9296 0001	001736 12/21/90 00071 01.1	06/23/94 ROBIN L. GREEN JACOBS	SOUTHWEST DIVISION	MCB CAMP PENDLETON SITE ASSESSMENT AND REMEDIAL ACTION PLAN POSTPONE FIELD WORK	ADMIN RECORD	RA		

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M00681	000031	03/09/94	JACOBS	DRAFT HEALTH AND SAFETY PLAN	ADMIN RECORD	H&SP	1,2,3,4,5,	SOUTHWEST DIVISION
PLAN		12/27/90	MARK, DAVID L.			RI	6,7,8,9,10	
N6871189D9296		00012	SOUTHWESTDIV			FS	11,12,13	
0050		00.0					14,15,16	
							17,18,19	
							20,21,22	
M00681	002663	01/09/95	JACOBS ENGINEERING	DRAFT SAP FOR RI/FS MCB CAMP PENDLETON	ADMIN RECORD	SAP	1,2,3,4,4A	SOUTHWEST DIVISION
PLAN		12/27/90	E.B. LUECKER			RI	5,6,7,8,8A	
N6871189D9296		00012	SOUTHWEST DIVISION			FS	11,12,13	
0350		02.1						
						REMOVAL(3)	13,14,15	
						REMOVAL(6)	16,17,18	
							19,20,21	
							22	
							GROUP A	
							GROUP B	
							GROUP C	
							OU1,OU2	
							OU3	
M00681	002669	01/09/95	JACOBS ENGINEERING	DRAFT RI/FS WORK PLAN MCB CAMP PENDLETON	ADMIN RECORD	RI	1,2,3,4,4A	SOUTHWEST DIVISION
PLAN		12/27/90	E.B. LUECKER			FS	5,6,7,8,8A	
N6871189D9296		00012	SOUTHWEST DIVISION			REMOVAL(3)	9,10,11,12	
0250		03.1						
						REMOVAL(6)	13,14,15	
							16,17,18	
							19,20,21	
							22	
							GROUP A	
							GROUP B	
							GROUP C	
							OU1,OU2	
							OU3	
M00681	00209	03/15/94		NEWSPAPER ARTICLE "PENDLETON ON TOXICS CHECKLIST"	ADMIN RECORD	PUBNOT		SOUTHWEST DIVISION
MISC		01/01/91		(OCCUPANTS OF CAMP AREA IN NO DANGER BASE OFFICIALS	INFO REPOSITORY	WATER		MCB CAMP PENDLETON
00000000000000		00000		SAY)		NPL		OCEANSIDE LIBRARY
0001		10.6						BASE LIBRARY

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M00681	003196	01/27/97	EPA SAN FRANCISCO	REVIEW OF DRAFT RFA QUESTIONNAIRE FOR MCB CAMP	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		01/02/91	R. BLANK	PENDLETON AND FOLLOWING POINTS TO MAKE REGARDING ARE	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION	STATED				
0002		01.6	E. DIAS					
M00681	000228	03/15/94	CRWQCB SAN DIEGO	PROPOSED BYPASS FROM PLANT NO. 11 SAN ONOFRE PLANT	ADMIN RECORD	WATER	14,OU2	SOUTHWEST DIVISION
LTR		01/03/91	A. COE	WASTEWATER FLOWS			GROUP B	
0000000000000000		00000	MCB CAMP PENDLETON					
0004		01.6	JOHN A. BOWMAN					
M00681	002775	01/27/95	EPA SAN FRANCISCO	NOTIFICATION THAT THE FFA SHALL BECOME EFFECTIVE ON	ADMIN RECORD	FFA		SOUTHWEST DIVISION
LTR		01/18/91	A. STRAUSS	DATA YOU RECEIVE LETTER NO COMMENTS RECEIVED DURING		COMMENTS		
0000000000000000		00000	MCB CAMP PENDLETON	THE FFA PUBLIC COMMENT PERIOD				
0001		07.1	D.A. HETTERVIK					
M00681	000206	03/14/94	TSC PROGRAM	MCB CAMP PENDLETON CRP REVIEW AND COMMENTS	ADMIN RECORD	CRP		SOUTHWEST DIVISION
LTR		01/29/91	KRISTING STULTZ					
0000000000000000		00000	HAZMAT SPECIALIST					
0005		10.2	LEN MILLER					
M00681	001706	06/23/94	EPA	DRAFT COMMUNITY RELATIONS PLAN THAT IS TO BE REVISED.	ADMIN RECORD	CRP		
LTR		01/31/91	ROBERTA BLANK					
0037		10.2	SOUTHWEST DIVISION ED DIAS					
M00681	001707	06/23/94	EPA	COMMENTS ON THE DRAFT OF A COMMUNITY RELATIONS PLAN.	ADMIN RECORD	CRP		SOUTHWEST DIVISION
LTR		01/31/91	ROBERTA BLANK					
0003		10.4	SOUTHWEST DIVISION ED DIAS					
M00681	003096	09/07/96	CRWQCB SAN DIEGO	COMMENTS & CONCERNS ON THE DRAFT SAP FOR RI/FS, OF	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		02/28/91	J. ANDERSON	JANUARY 24, 1991				
0000000000000000		00000	MCB CAMP PENDLETON					
0004		03.6	T. ZUGSAY					
M00681	003097	08/07/96	CRWQCB SAN DIEGO	COMMENTS & CONCERNS ON THE RI/FS WORK PLAN OF JANUARY	ADMIN RECORD	COMMENTS	2,9,1,7	SOUTHWEST DIVISION
LTR		02/28/91	J. ANDERSON	24, 1991		RI	22 AREA	
0000000000000000		00000	MCB CAMP PENDLETON			FS	23 AREA	
0005		03.6	T. ZUGSAY					
						WORK PLAN		
M00681	002855	05/02/95	EPA, CDHS, SDRWQCB	REGULATORY AGENCY COMMENTS ON DRAFT RI/FS WORK PLAN	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		03/05/91		DRAFT H&SP, DRAFT SAP				
N6871189D9296		00012	SOUTHWEST DIVISION					
0063		03.6						

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M00681	000109	03/11/94	CRWQCB	SOLID WASTE ASSESSMENT TEST INVESTIGATION, SAN ONOFRE	ADMIN RECORD	SWAT	14	SOUTHWEST DIVISION
LTR		03/06/91	ARTHUR L. COE	LANDFILL		LF	OU2	
0000000000000000		00000	MCB CAMP PENDLETON				GROUP B	
0015		00.0	CHRISA MITCHELL					
M00681	000207	03/15/94	CRWQCB SAN DIEGO	MCB CAMP PENDLETON SWAT SAN ONOFRE LANDFILL	ADMIN RECORD	LF	14,OU2	SOUTHWEST DIVISION
LTR		03/06/91	A.L. COE			SWAT	GROUP B	
0000000000000000		00000	MCB CAMP PENDLETON			GW		
0002		01.6	CHRISA MITCHELL					
M00681	000208	03/15/94	CRWQCB SAN DIEGO	MCB CAMP PENDLETON WORKPLAN FOR REMOVING THE WATER	ADMIN RECORD	REMOVAL	19,OU2	SOUTHWEST DIVISION
LTR		03/07/91	J. ANDERSON	FROM THE LCAC FACILITY SURGE POND		WATER	GROUP B	
0000000000000000		00000	MCB CAMP PENDLETON			SW		
0002		01.6	E.J. TURSE					
M00681	002802	02/06/95	SOUTHWEST DIVISION	MINUTES OF PROJECT MANAGER MEETINGS 1 & 1B OF 1991	ADMIN RECORD	MTG MINS	14,4	SOUTHWEST DIVISION
XMTL		03/07/91	E. DIAS				OU2	
0000000000000000		00000	EPA SAN FRANCISCO				GROUP A	
0013		01.1	R. BLANK				GROUP B	
M00681	003098	08/07/96	CRWQCB SAN DIEGO	COMMENTS ON WORK PLAN OF FEBRUARY 13, 1991, FOR	ADMIN RECORD	WORK PLAN		SOUTHWEST DIVISION
LTR		03/07/91	J. ANDERSON	REMOVING WATER FROM THE LCAC FACILITY SURGE		REMOVAL		
0000000000000000		00000	MCB CAMP PENDLETON	POND				
0002		03.6	E.J. TURSE					
M00681	002742	01/18/95	SOUTHWEST DIVISION	REVISED 1991 #1B MINUTES FROM THE FEB 6, 1991 PROJECT	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		03/12/91	E.K. DIAS	MANAGERS MEETING AND MEETING MINUTES OF FEB 6, 1991				
0000000000000000		00000	DISTRIBUTION					
0004		01.1						
M00681	003030	10/11/95	JACOBS ENGINEERING	MEETING MINUTES OF ECOLOGICAL ASSESSMENT GROUP MEETING	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		03/18/91		TO THE RI/FS				
N6871189D9296		00012	SOUTHWEST DIVISION					
0005		01.6						
M00681	003029	10/11/95	JACOBS ENGINEERING	MINUTES OF PROJECT MANAGERS' MEETING TO DISCUSS REVIEW	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		03/19/91		COMMENTS ON THE DRAFT RI/FS WORK PLAN & SAP &		RI		
N6871189D9296		00012	SOUTHWEST DIVISION	SPECIFICALLY THE NAVY'S RESPONSE TO THOSE COMMENTS		FS		
0014		01.6						
						COMMENTS		

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M00681	002861	05/02/95	IT CORPORATION	MINUTES OF ECOLOGICAL ASSESSMENT GROUP MEETING	ADMIN RECORD	MTG MINS	1	SOUTHWEST DIVISION
MISC		03/26/91	D.L. MARK					
N6871189D9296		00012	VARIOUS					
0005		01.6						
M00681	001638	06/22/94	CAMP PENDLETON	INSTALLATION RESTORATION PROGRAM STATUS REPORT FOR	ADMIN RECORD	RI	3,4,5,6,8	SOUTHWEST DIVISION
RPT		03/27/91		MARINE CORPS BASE CAMP PENDLETON.		FS	9,1,2,4A	
0000000000000000		00000	CAMP PENDLETON			REMOVAL(3)	7,8A,10,11	
0005		01.1				REMOVAL(6)	12,13,14, 15,16,17 18,19,20, 21,22,23 24,25,26 GROUP A GROUP B GROUP C OU1,OU2, OU3	
M00681	002745	01/18/95	SOUTHWEST DIVISION	TRC MTG MINUTES AND TRC COMMENTS FROM ENRMO MCB CAMP	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		04/03/91	E.K. DIAS	PENDLETON OR FEB 6, 1991	INFO REPOSITORY			MCB CAMP PENDLETON OCEANSIDE LIBRARY
0000000000000000		00000	DISTRIBUTION					BASE LIBRARY
0006		10.0						
M00681	002746	01/18/95	SOUTHWEST DIVISION	PROJECT NOTES FROM THE ECOLOGICAL ASSESSMENT GROUP	ADMIN RECORD	RI	1	SOUTHWEST DIVISION
XMTL		04/08/91	E.K. DIAS	MEETING RI/FS		FS		
0000000000000000		00000	DISTRIBUTION					
0006		10.0						
M00681	001733	06/23/94	MCB CAMP PENDLETON	MCB CAMP PENDLETON IS NOT PROCEEDING WITH FORMAL	ADMIN RECORD	LF	7,OU3	SOUTHWEST DIVISION
LTR		04/23/91	W.G. ASHLEY	CLOSURE OF THE BOX CANYON LANDFILL			GROUP B	
0000000000000000		00000	CRWQCB					
0001		10.0	ART COE					
M00681	001743	06/24/94	SOUTHWEST DIVISION	NOTIFICATION OF INVOKING A THIRTY-DAY EXTENSION FOR	ADMIN RECORD	RI		
LTR		04/26/91	T.C. CRANE	RI/FS STUDY ON CAMP PENDLETON.		FS		
			RWQCB					
0003		03.0	JOHN ANDERSON					

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M00681	002862	05/02/95	IT CORPORATION	RECOMMENDED APPLICATION OF NEW SUBMERSIBLE PUMP	ADMIN RECORD			SOUTHWEST DIVISION
MISC		05/03/91	D.L. MARK					
0000000000000000		00000	EPA SAN FRANCISCO					
0001		01.6	R. BLANK					
M00681	003031	10/11/95	IT CORPORATION	RECOMMENDED APPLICATION OF NEW SUBMERSIBLE PUMP TO	ADMIN RECORD	RI		SOUTHWEST DIVISION
MEMO		05/03/91	D. MARK	MCB CAMP PENDLETON RI				
N6871189D9296		00000	EPA SAN FRANCISCO					
0001		01.6	R. BLANK					
M00681	002740	01/18/95	SOUTHWEST DIVISION	MINUTES OF PROJECT MANAGERS MEETING #2 DISCUSS REVIEW	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
XMTL		05/06/91	E.K. DIAS	COMMENTS ON THE DRAFT RI/FS WORK PLAN AND SAP, AND		RI		
0000000000000000		00000	EPA SAN FRANCISCO	NAVY'S RESPONSES TO THOSE COMMENTS		FS		
0015		10.0	R. BLANK			SAP		
M00681	000010	03/09/94	SOUTHWESTDIV	DRAFT RCRA FACILITY ASSESSMENT PRELIMINARY REVIEW	ADMIN RECORD	RCRA	1,2,3,4,4A	SOUTHWEST DIVISION
RPT		05/13/91	MATHUR, JAGDISH	REPORT		RFA	5,6,7,8,8A	
N6871189D9296		00101	USEPA			REMOVAL(3)	9,10,11,12	
500		01.1				REMOVAL(6)	13,14,15, 16,17,18, 19,20,21, 22,23,24, 25,26,OU3 OU1,OU2 GROUP A GROUP C GROUP B	
M00681	001649	06/22/94	AF/CEV-WR	OUTLINE OF ELEMENTS FOR INCLUSION IN DRAFT FINAL RI/FS	ADMIN RECORD	RI		SOUTHWEST DIVISION
FAX		05/17/91	PHILLIP LAMMI	WORKPLAN.		FS		
0005		01.1	JIM FARRIS					

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M00681	001045	05/23/94	JACOBS ENGINEERING	MCB CAMP PENDLETON FINAL HEALTH AND SAFETY PLAN FOR	ADMIN RECORD	H&SP	GROUP A	SOUTHWEST DIVISION
RPT		05/24/91		RI\FS	INFO REPOSITORY	RI	GROUP B	MCB CAMP PENDLETON
N6871189D9296		00012	SOUTHWEST DIVISION			FS	OU1,OU2,	OCEANSIDE LIBRARY
0100		08.0					OU3	BASE LIBRARY
							3,4,5,6,7,	
							8,9,19,20,	
							21,22,24	
							1,2,8A,25,	
							26	
M00681	001046	05/23/94	JACOBS ENGINEERING	DRAFT FINAL COMMUNITY RELATIONS PLAN	ADMIN RECORD	CRP	GROUP A	SOUTHWEST DIVISION
RPT		05/24/91			INFO REPOSITORY		GROUP B	MCB CAMP PENDLETON
N6872289D9296		00012	SOUTHWEST DIVISION				GROUP C	OCEANSIDE LIBRARY
0100		10.2					GROUP D	BASE LIBRARY
							OU1,OU2	
							OU3	
							1,2,3,4,5	
							6,7,8,8A,	
							9,10,11,22	
							13,14,15,	
							16,17,18,	
							19,20,21	
							22,23,24	
							25,26	
M00681	001353	06/15/94	JACOBS	DRAFT FINAL SAMPLING AND ANALYSIS PLAN (SAP) RI/FS	ADMIN RECORD	RI	1,2,3,4,5,	SOUTHWEST DIVISION
RPT		05/24/91	DAVID L. MARK		INFO REPOSITORY	FS	6,7,8,8A,	MCB CAMP PENDLETON
N6871189D9296		00012	SOUTHWEST DIVISION			SAP	9,10,11,12	OCEANSIDE LIBRARY
1500		02.1					13,14,15,	BASE LIBRARY
							16,17,18,	
							19,20,21,	
							22,23,24,	
							25,26	
							OU1,OU2,	
							OU3	
							GROUP A	
							GROUP B	
							GROUP C	

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M00681	002854	05/02/95	JACOBS ENGINEERING	DRAFT FINAL WORK PLAN RI/FS	ADMIN RECORD	RI	1,2,3,4,5	SOUTHWEST DIVISION
PLAN		05/24/91				REMOVAL(3)	6,7,9,9,10	
N6871189D9296		00012	SOUTHWEST DIVISION			REMOVAL(6)	11,12,13	
0377		03.3					14,15,16	
							17,18,19	
							20,21,22	
							23,24,25,	
							26	
							GROUP A	
							GROUP B	
M00681	002854	continued					OU1,OU2	
M00681	002830	05/02/95	MITTELHAUSER CORP.	FINAL CAMP PENDLETON SWAT INVESTIGATION REPORT	ADMIN RECORD	SWAT	14	SOUTHWEST DIVISION
RPT		06/01/91		SAN ONOFRE LANDFILL			OU2	
0000000000000000		00000	MCB CAMP PENDLETON				GROUP B	
0312		01.1						
M00681	001754	06/24/94	EPA	REVIEW OF DRAFT RCRA FACILITY ASSESSMENT PRELIMINARY	ADMIN RECORD	RCRA		
LTR		06/13/91	ROBERTA BLANK	REVIEW REPORT.				
			SOUTHWEST DIVISION					
0003		11.1	ED DIAS					
M00681	003099	08/07/96	CRWQCB SAN DIEGO	COMMENTS ON THE DRAFT RCRA (RFA), PRELIMINARY REVIEW	ADMIN RECORD	COMMENTS	16,27,34,	SOUTHWEST DIVISION
LTR		06/18/91	A. COE	REPORT OF MAY 31, 1991		RFA	36,39,51	
0000000000000000		00000	SOUTHWEST DIVISION			HAZ WASTE	53,66,124	
0003		03.6	E. DIAS			AAL	17,23,127	
							261,315,	
							316,33,226	
							272,146,	
							164,170,	
							221,232	
							291,308	
							313	
M00681	001756	06/24/94	CITY OF OCEANSIDE	RESPONSE TO THE FINAL DRAFT OF THE RI/FS WORK PLAN,	ADMIN RECORD	RI		
LTR		06/26/91	ESTER R. BEATTY	HEALTH PLAN, SAFETY PLAN, COMMUNITY RELATIONS PLAN,		FS		
			SOUTHWEST DIVISION	AND THE SAMPLING ANALYSIS PLAN.				
0002		10.1	ED DIAS					

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M00681	003223	01/31/97	MCB CAMP PENDLETON	WORK PLAN FOR DRAINING THE LCAC FACILITY SURGE POND	ADMIN RECORD	WORK PLAN		SOUTHWEST DIVISION
LTR		06/29/91	E.J. TURSE	THAT PROPOSES TO REMOVE THE NON-CONTAMINATED LIQUID	INFO REPOSITORY	LEAK		MCB
CAMP PENDLETON								
0000000000000000	00000		RWQCB SAN DIEGO	TO REDUCE PRESSURE OF LEAKAGE				
0002	01.6		J. ANDERSON					
M00681	001757	06/24/94	EPA	COMMENTS ON RI/FS DRAFT, FINAL WORK PLAN, DRAFT FINAL	ADMIN RECORD	RI		
LTR		07/01/91	ROBERTA BLANK	SAMPLING AND ANALYSIS PLAN AND DRAFT FINAL COMMUNITY		FS		
			SOUTHWEST DIVISION	RELATIONS PLAN.		SAP		
0006	11.1		ED DIAS					
						CRP		
M00681	002763	01/18/95	EPA SAN FRANCISCO	COMMENTS ON THE RI/FS DRAFT FINAL WORK PLAN, DRAFT	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		07/01/91	R. BLANK	FINAL SAP AND DRAFT FINAL CRP ALL OF MAY 24, 1991				
0000000000000000	00000		SOUTHWEST DIVISION	(ONE PACKET VARIOUS COMMENTS FROM SEVERAL SOURCES)				
0020	06.0		E.K. DIAS					
M00681	001768	06/27/94	CRWQCB	DISPOSAL OF BIOREMEDIATED SOLIDS. RESPONSE LETTER	ADMIN RECORD	DISPOSAL	8, OU2	SOUTHWEST DIVISION
LTR		07/02/91	ARTHUR L. COE	FOR GUIDELINES.		POL	GROUP B	
0000000000000000	00000		MCB CAMP PENDLETON					
0003	07.7		JOHN BOWMAN					
M00681	001769	06/27/94	CRWQCB	DRAFT FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	RI		
LTR		07/03/91	ARTHUR L. COE	WORKPLAN AND SAMPLING AND ANALYSIS PLAN, MCB CAMP		FS		
			SOUTHWEST DIVISION	PENDLETON.		SAP		
0003	03.1		ED DIAS					
M00681	000005	03/09/94	IT CORP/JACOBS ENG	RCRA FACILITY ASSESSMENT - TECHNICAL MEMORANDUM FOR	ADMIN RECORD	RFA		SOUTHWEST DIVISION
RPT		07/15/91	MATHUR, JAGDISH	DRAFT FINAL PRELIMINARY REVIEW REPORT				
N6871189D9296	00101		USEPA					
7	01.1							

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M00681	000012	03/09/94	SOUTHWESTDIV	RCRA FACILITY ASSESSMENT - SAMPLING VISIT WORK PLAN	ADMIN RECORD	RCRA	GROUP A	SOUTHWEST DIVISION
RPT		07/26/91	MATHUR, JAGDISH	DRAFT		RFA	GROUP B	
N6871189D9296		00101	USEPA				GROUP C	
0500		01.1					OU1,OU2	
							1,2,3,4,4A	
							5,6,7,8,8A	
							9,10,11,12	
							13,14,15,	
							16,17,18	
							19,20,21	
							22,23,24	
							25,26	
M00681	002747	01/18/95		NO COMMENTS ON THE WORK PLANS FOR THE RI/FS	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		09/13/91	G.D. GODFREY					
0000000000000000		00000	SOUTHWEST DIVISION					
0001		06.0	E.K. DIAS					
M00681	002749	01/18/95	JACOBS ENGINEERING	COMMUNITY RELATIONS KICK-OFF MEETING FOR RI AT	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
MM		09/18/91		MCB CAMP PENDLETON				
0000000000000000		00166	DISTRIBUTION					
0002		10.0						
M00681	002748	01/18/95	MCB CAMP PENDLETON	NEXT TRC MEETING SCHEDULE FOR OCT. 18, 1991	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		10/04/91	D.A. HETTERVIK					
0000000000000000		00000	SOUTHWEST DIVISION					
0001		10.0	E.K. DIAS					
M00681	000008	03/09/94	IT CORP/JACOBS ENG	RCRA FACILITY ASSESSMENT - TECHNICAL MEMORANDUM ON	ADMIN RECORD	RFA		SOUTHWEST DIVISION
MEMO		10/10/91	MATHUR, JAGDISH	DRAFT FINAL SAMPLING VISIT WORK PLAN		RCRA		
N6871189D9296		00101	USEPA			TECH MEMO		
40		01.1						
M00681	003272	08/22/97	MCB CAMP PENDLETON	OCTOBER 18, 1991 MEETING MINUTES OF TECHNICAL REVIEW	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
MM		10/18/91		COMMITTEE (INCLUDES AGENDA, LIST OF MEETING ATTENDEES,	INFO REPOSITORY	CRP		MCB, CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	EXAMPLE OF TRC CHARTER)		RFA		
0011		01.6	ATTENDEES					

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M00681	002751	01/18/95	SOUTHWEST DIVISION	TRC MEETING MINUTES OF FEB 6, 1991	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		10/23/91	E.K. DIAS		INFO REPOSITORY	TRC		MCB CAMP PENDLETON
000000000000000		00000	EPA SAN FRANCISCO					OCEANSIDE LIBRARY
0005		10.4	R. BLANK					BASE LIBRARY
M00681	002752	01/18/95	DTSC LONG BEACH	TRC COMMITTEE MEETING OF OCT 18, 1991 PROPOSED AGENDA	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		10/23/91	C. BEST					
000000000000000		00000	SOUTHWEST DIVISION					
0004		10.0	E.K. DIAS					
M00681	002834	05/02/95	SOUTHWEST DIVISION	RFA AND RI SCHEDULE EXTENSION	ADMIN RECORD	SI	OU3	SOUTHWEST DIVISION
LTR		11/05/91	CDR TOWER			RI	7,16,18,	SOUTHWEST DIVISION
000000000000000		00000	EPA SAN FRANCISCO				1002,1003,	
0006		03.6	R. BLANK				1004,1005	
							1006,1007,	
							1008,32,33	
							34,36,37,	
							38,39,40	
							41,42,46	
							47,48,2000	
							2001,2002	
							2003,2004	
							GROUP D	
							GROUP B	
							GROUP C	
M00681	002835	05/02/95	SOUTHWEST DIVISION	RFA AND RI SCHEDULE EXTENSION	ADMIN RECORD	RI	OU3	SOUTHWEST DIVISION
LTR		11/05/91	CDR TOWER					
000000000000000		00000	CA EPA					
0006		03.6	J. BRODERICK					
M00681	002754	01/18/95	EPA SAN FRANCISCO	COMMENTS ON THE PROPOSED KICK-OFF FACT SHEET	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
FAX		11/13/91	R. BLANK					
000000000000000		00000						
0016		06.0						
M00681	001803	06/27/94	EPA	REVIEW OF REQUEST FOR AND EXTENSION.	ADMIN RECORD	RI		
LTR		11/15/91	JULIE ANDERSON			RCRA		
			SOUTHWEST DIVISION			RFA		
0002		11.1	S.E. TOWER					

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M00681	001806	06/27/94	DTBC	FFA DEADLINE EXTENSION REQUEST, RCRA FACILITY	ADMIN RECORD	RCRA		
LTR		11/15/91	JOHN BRODERICK	FACILITY ASSESSMENT REPORT AND DRAFT REMEDIAL		RFA		
			SOUTHWEST DIVISION	INVESTIGATION WORKPLAN.		RI		
0002		01.1	S.E. TOWER					
M00681	002836	05/02/95	EPA SAN FRANCISCO	RFA AND RI SCHEDULE EXTENSION	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		11/15/91	A. ANDERSON					
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0002		03.6	CDR TOWER					
M00681	002837	05/02/95	DTSC LONG BEACH	RESPONSE TO RFA AND RI SCHEDULE EXTENSION	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		11/15/91	J. BRODERICK					
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0002		03.6	CDR TOWER					
M00681	002756	01/18/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT TRC CHARTER	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		11/26/91	C. BEST					
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0002		06.0	E.K. DIAS					
M00681	002757	01/18/95	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT TRC CHARTER	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		12/02/91	R. BLANK					
0000000000000000	00000	00000	MCB CAMP PENDLETON					
0005		06.0	T.J. EVANS					
M00681	002758	01/18/95	BLADE CITIZEN	NEWSPAPER ARTICLE "SIX SITES ADDED TO CAMP PENDLETON	ADMIN RECORD	PUBNOT		SOUTHWEST DIVISION
MISC		12/05/91	P. DIEHL	TOXIC CLEANUP"	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000	00000	00000	DISTRIBUTION					OCEANSIDE LIBRARY
0001		10.6						BASE LIBRARY
M00681	003150	08/13/96	SOUTHWEST DIVISION	NOTIFICATION THAT THE FOLLOWING REGULATORY & NAVY REPS	ADMIN RECORD	MTG MINS	14,OU1	SOUTHWEST DIVISION
LTR		01/03/92	J. PAWLISCH	MET TO DISCUSS WHAT CRITERIA SHOULD BE USED TO		DERA		
0000000000000000	00000	00000	MCB CAMP PENDLETON	PRIORITIZE DERA PROJECTS. (W/ENCL.)		RI		
0008		01.6				FS		
						FUEL		

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M00681	003352	08/27/97	JACOBS ENGINEERING	RCRA FACILITY ASSESSMENT GROUNDWATER SAMPLING	ADMIN RECORD	RCRA	32	SOUTHWEST DIVISION
RPT		01/24/92	J. MATHUR	PERMITS APPLICATIONS	INFO REPOSITORY	ASSESSMENT	42	MCB CAMP PENDLETON
N6871189D9296		00178	MCB CAMP PENDLETON			GW	45	
0027		01.1						
						SA	112	
						PERMIT	158	
							184	
							209	
							219	
							228	
							228	
M00681	002831	05/02/95	JACOBS ENGINEERING	GROUNDWATER SAMPLING USING A VARIABLE SPEED SUBMERSIBLE	ADMIN RECORD	GW		SOUTHWEST DIVISION
RPT		02/01/92		PUMP				
0000000000000000		00000	SOUTHWEST DIVISION					
0005		01.1						
M00681	003330	08/26/97	MCB CAMP PENDLETON	LETTER ENCLOSING RESULTS OF SURVEY TO LOCATE	ADMIN RECORD	RESULTS	1	SOUTHWEST DIVISION
LTR		02/03/92	L. ARMAS	RI SITES 1 & 2 AS PART OF MCB CAMP PENDLETON'S IRP.	INFO REPOSITORY	RI	2	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	REQUEST REVIEW AND PROVIDE COMMENT W/O ENCLS		IRP		
0004		01.6						
						REQUEST		
						COMMENTS		
M00681	001816	06/27/94	SOUTHWEST DIVISION	LETTER OF RESPONSE TO A REQUEST FOR EXTENSION FOR	ADMIN RECORD	RI	OU1,OU2,	SOUTHWEST DIVISION
LTR		02/07/92	S.E. TOWER	RI/FS WORKPLAN.		FS	OU3	
0000000000000000		00000	EPA SAN FRANCISCO					
0012		06.0	JULIE ANDERSON					
M00681	002838	05/02/95	SOUTHWEST DIVISION	RESPONSE TO REQUEST RFA AND RI SCHEDULE EXTENSION	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		02/07/92	CDR TOWER					
0000000000000000		00000	CA EPA					
0010		03.6	J. BRODERICK					
M00681	003100	08/07/96	SOUTHWEST DIVISION	RESPONSE TO REQUEST FOR AN EXTENSION FOR THE DRAFT	ADMIN RECORD	RI	OU1,OU2	SOUTHWEST DIVISION
LTR		02/07/92	S.E. TOWER	RI/FS WORKPLAN FOR THE RCRA (RFA) REPORT, DTD NOV.		FS		
0000000000000000		00000	DTSC	15, 1991, MCB CAMP PENDLETON.		RESPONSE		
0012		03.6	J. BRODERICK					
M00681	001820	06/27/94	SOUTHWEST DIVISION	CAMP PENDLETON MCB ECOLOGICAL RISK ASSESSMENT	ADMIN RECORD	RISK		
RPT		02/14/92	EDWARD K. DIAS	PROTOCOL, AN OVERVIEW.				
			ENV. CONTAM SPECIALI					
0012		09.3	DAN AUDET					

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M00681	002839	05/02/95	SOUTHWEST DIVISION	SCHEDULE EXTENSION REQUEST	ADMIN RECORD			SOUTHWEST DIVISION
LTR		02/14/92	CDR TOWER					
000000000000000		00000	EPA SAN FRANCISCO					
0001		03.6	J. ANDERSON					
M00681	002840	05/02/95	SOUTHWEST DIVISION	RESPONSE TO RFA AND RI SCHEDULE EXTENSIONS	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		02/14/92	CDR TOWER					
000000000000000		00000	EPA SAN FRANCISCO					
0001		03.6	J. ANDERSON					
M00681	001821	06/27/94	DTSC	SCHEDULE EXTENSION REQUEST TO THE FEDERAL FACILITY	ADMIN RECORD	FFA		SOUTHWEST DIVISION
LTR		02/21/92	JOHN SCANDURA	AGREEMENT FOR MARINE CORPS BASE, CAMP PENDLETON.				
000000000000000		00000	SOUTHWEST DIVISION					
0004		00.0	S.E. TOWER					
M00681	001822	06/27/94	SOUTHWEST DIVISION	RESPONSE TO LETTER REQUESTING ADDITIONAL TIME FOR AN	ADMIN RECORD	RCRA		
LTR		02/21/92	LEE SIMON	INVESTIGATION.				
000000000000000		00000	EPA SAN FRANCISCO					
0003		06.0	J. ANDERSON					
M00681	002841	05/02/95	SOUTHWEST DIVISION	RFA AND RI SCHEDULE EXTENSIONS	ADMIN RECORD	RFA	OU3	SOUTHWEST DIVISION
LTR		02/21/92	J. PAWLISCH				OU1	
000000000000000		00000	EPA SAN FRANCISCO					
0001		03.6	J. ANDERSON					
M00681	002842	05/02/95	SOUTHWEST DIVISION	RFA AND RI SCHEDULE EXTENSIONS	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		02/21/92	J. PAWLISCH					
000000000000000		00000	EPA SAN FRANCISCO					
0001		03.6	J. SCANDURA					

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M00681	002843	05/02/95	CA EPA	SCHEDULE EXTENSION REQUEST	ADMIN RECORD			SOUTHWEST DIVISION
LTR		02/21/92	J. SCANDURA					
0000000000000000		00000	SOUTHWEST DIVISION					
0002		03.6	CDR TOWER					
M00681	003074	03/28/96	EPA SAN FRANCISCO	RESPONSE TO EXTENSION REQUEST OF FEBRUARY 7, 1992	ADMIN RECORD	RESPONSE	OUI	SOUTHWEST DIVISION
LTR		02/21/92	J. ANDERSON	CONCERNING RFA DRAFT RI WORK PLAN TO STAY ON SCHEDULE		REMOVAL(3)	GROUP A	
0000000000000000		00000	SOUTHWEST DIVISION	FOR SITES OF GREATEST RISK AT THE SUPERFUND SITE		REMOVAL(6)	3,4,5,6,9,	
0002		01.6	S.E. TOWER				24	
M00681	002844	05/02/95	CA EPA	RESPONSE CORRECTION, SCHEDULE EXTENSION REQUEST	ADMIN RECORD			SOUTHWEST DIVISION
LTR		02/25/92	ARELLANO					
0000000000000000		00000	SOUTHWEST DIVISION					
0002		03.6	E. DIAS					
M00681	003101	08/07/96	DTSC LONG BEACH	RESPONSE CORRECTION FOR PRIOR SCHEDULED EXTENSION	ADMIN RECORD	RESPONSE		SOUTHWEST DIVISION
LTR		02/25/92	A. ARELLANO, JR.	REQUEST TO THE FFA, DTD FEBRUARY 21, 1992, MCB		RCRA		
0000000000000000		00000	SOUTHWEST DIVISION	CAMP PENDLETON.		FFA		
0002		03.6	E. DIAS					
M00681	003022	10/11/95	JACOBS ENGINEERING	SITE INVESTIGATION REPORT APPENDIX A-2 ANALYTICAL DATA	ADMIN RECORD	SI		SOUTHWEST DIVISION
RPT		02/27/92		VOLUME 1, VOLUME 2, VOLUME 3 & VOLUME 4		DATA		
N6871189D9296		00166	SOUTHWEST DIVISION					
0550		02.2						

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M00681	003353	08/27/97	JACOBS ENGINEERING	FINAL GENERAL DEVELOPMENT MAPS REMEDIAL INVESTIGATION/	ADMIN RECORD	RI	1	SOUTHWEST DIVISION
RPT		02/27/92	D. MARK	FEASIBILITY STUDY	INFO REPOSITORY	FS	2	
N6871189D9296		00012	MCB CAMP PENDLETON				3	
0047		03.4						
							10	
							15	
							4	
							4A	
							5	
							6	
							7	
							8	
							8A	
							9	
							11	
							12	
							13	
							14	
							16	
							17	
							18	
							19	
							20	
							21	
							22	
							23	
							24	
M00681	002765	01/20/95	MCB CAMP PENDLETON	FACT SHEET NO. 1 INSTALLATION RESTORATION PROGRAM	ADMIN RECORD	REMOVAL(3)	1,2,3,4,5	SOUTHWEST DIVISION
MISC		03/01/92		FOR MCB CAMP PENDLETON	INFO REPOSITORY	REMOVAL(6)	6,7,6,9,10	MCB CAMP PENDLETON
0000000000000000		00000	DISTRIBUTION				11,12,13,	OCEANSIDE LIBRARY
0004		10.6						
							14,15,16	BASE LIBRARY
							17,18,19	
							20,21,22	
							23,24,25	
							26,OU1,OU2	
							OU3	
							GROUP A	
							GROUP B	
							GROUP C	

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M00681	000081	03/11/94	JACOBS ENGINEERING	MEETING MINUTES FOR MCB CAMP PENDLETON FEDERAL FACILITY (FFA) PROJECT MANAGERS' MEETING	ADMIN RECORD	MTG MINS FFA		SOUTHWEST DIVISION
XMTL		03/10/92						
N6871189D9296		00166	SOUTHWEST DIVISION					
0007		01.6						
M00681	001826	06/27/94	SOUTHWEST DIVISION	MINUTES FOR MCB CAMP PENDLETON FEDERAL FACILITY AGREEMENT (FFA) THIRD PROJECT MANAGERS' MEETING.	ADMIN RECORD	FFA		
MISC		03/10/92	EDWARD K. DIAS					
			U.S. EPA					
0018		10.4	GEORGE NAUGLES					
M00681	002732	01/18/95	SOUTHWEST DIVISION	3RD FFA PROJECT MANAGERS MEETING MINUTES FACT SHEETS, PUBLIC MEETING, ETC.	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		03/10/92	E.K. DIAS					
0000000000000000		00000	DTSC LONG BEACH					
0016		01.1	J. BRODERICK					
M00681	002871	05/02/95	IT CORPORATION	MINUTES FOR MCB CAMP PENDLETON FFA PROJECT MANAGERS' MEETING	ADMIN RECORD	FFA		SOUTHWEST DIVISION
LTR		03/10/92	D. MARK					
0000000000000000		00000	VARIOUS					
0007		01.6						
M00681	003349	09/27/97	JACOBS ENG. SERVICES	PUBLIC'S ROLE IN SUPERFUND SITE DECISIONS	ADMIN RECORD	PUB. PARTICIPATI INFO REPOSITORY SUPERFUND		SOUTHWEST DIVISION MCB CAMP PENDLETON
MISC		03/12/92	E. DIAS					
0000000000000000		00000						
0003		10.0						
M00681	001829	06/27/94	SOUTHWEST DIVISION	COMMENTS OF REQUEST FOR EXTENSION FOR MCB CAMP PENDLETON.	ADMIN RECORD	RCRA		SOUTHWEST DIVISION
LTR		03/13/92	S.E. TOWER					
0000000000000000		00000	U.S. EPA					
0002		06.0	JULIE ANDERSON					
M00681	002733	01/18/95	MCB CAMP PENDLETON	COMMUNITY RELATIONS MEETING TO BE HELD ON MARCH 25, 1993	ADMIN RECORD			SOUTHWEST DIVISION
LTR		03/17/92	F.C. PECK					
0000000000000000		00000	SOUTHWEST DIVISION					
0001		10.0	E. DIAS					
M00681	002863	05/02/95	B&V WASTE SCIENCE	DRAFT FINAL FIELD AUDIT REPORT OF SUBSURFACE SOIL SAMPLING AND MONITORING WELL INSTALLATION FOR RI/FS	ADMIN RECORD	MONITORING	20,3,4,5, 23 OU2	SOUTHWEST DIVISION
LTR		03/18/92						
0000000000000000		00000	US EPA					
0020		03.6						

GROUP A  
GROUP B

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M00681	002744	01/18/95	THE SCOUT	NEWSPAPER ARTICLE "POLLUTION CONCERNS PROMPT MEETING"	ADMIN RECORD	PUBNOT		SOUTHWEST DIVISION
MISC		03/19/92	L.L. CHINN	MEETING PLANNED TO INFORM RESIDENTS OF INVESTIGATION	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	DISTRIBUTION	OF POTENTIAL GROUNDWATER CONTAMINATION				OCEANSIDE LIBRARY
0001		10.6						BASE LIBRARY
M00681	002848	05/02/95	THE CITIZEN BLADE	NEWSPAPER ARTICLE "MEETINGS SET FOR PENDLETON TOXIC	ADMIN RECORD			SOUTHWEST DIVISION
MISC		03/22/92		CLEANUP"				
0000000000000000		00000	COMMUNITY MEMBERS					
0001		10.6						
M00681	002734	01/18/95	SOUTHWEST DIVISION	MTG MINUTES OF 4TH FFA PROJECT MANAGERS MEETING	ADMIN RECORD	FFA	21	SOUTHWEST DIVISION
XMTL		03/31/92	E.K. DIAS	KEY TOPICS RI/FS SITE 21, RFA, PUBLIC MTG, FACT SHEETS				
0000000000000000		00000	DTSC LONG BEACH	ETC.				
0006		10.0	J. BRODERICK					
M00681	000080	03/11/94	JACOBS ENGINEERING	REMEDIAL INVESTIGATION\FEASIBILITY STUDY TECHNICAL	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
RPT		04/02/92	DAVID MARK	MEMORANDUM ADDRESSING COMMENTS ON DRAFT FINAL RI\FS		TECH MEMO	3,4,4A,5,	
N6871189D9296		00166	SOUTHWEST DIVISION	PLANNING DOCUMENTS		FS	6,9,24	
0350		03.1						
M00681	001834	06/27/94	MCB CAMP PENDLETON	RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)	ADMIN RECORD	RCRA		
LTR		04/06/92	S.P. BOVEE	FACILITY ASSESSMENT (FA) SITE NUMBER 201.				
			SOUTHWEST DIVISION					
0002		01.1						
M00681	002856	05/02/95	SDRWQCBHS, SDRWQCB	FIRST AND SECOND ROUND GROUNDWATER SAMPLING AT THE	ADMIN RECORD	GW	7	SOUTHWEST DIVISION
LTR		04/06/92	A.L. COE	BOX CANYON LANDFILL			OU3	
0000000000000000		00000	CG CAMP PENDLETON				GROUP B	
0001		06.3						
M00681	002881	05/02/95	DTSC LONG BEACH	UPDATE PROPOSED STATE ARARs FOR MCB CAMP PENDLETON	ADMIN RECORD	ARAR		SOUTHWEST DIVISION
LTR		04/06/92	A.A. ARELLANO					
0000000000000000		00000	SOUTHWEST DIVISION					
0007		06.1	E. DIAS					
M00681	001835	06/27/94	MCB CAMP PENDLETON	PE216R RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)	ADMIN RECORD	RCRA	143	
LTR		04/07/92	S.P. BOVEE	ASSESSMENT (RFA) SITE NUMBER 143.		RFA		
			SOUTHWEST DIVISION					
0003		01.1						

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M00681 LTR	001841	06/27/94 04/12/92	DTSC A.A. ARELLANO, JR SOUTHWEST DIVISION	UPDATE PROPOSED STATE APPLICABLE, RELEVANT, AND APPROPRIATE REQUIREMENTS FOR MCB CAMP PENDLETON.	ADMIN RECORD	ARAR		SOUTHWEST DIVISION
0007		04.1	EDWARD DIVISION					
M00681 FAX	001843	06/27/94 04/22/92	U.S. EPA JULIE ANDERSON SOUTHWEST DIVISION	RESPONSE TO AN EXTENSION REQUEST FOR THE RFA DRAFT REMEDIAL INVESTIGATION WORK PLAN.	ADMIN RECORD	RFA RI		
0001		03.0	S.E. TOWER					
M00681 PLAN N6871189D9296 0380	002833	05/02/95 04/24/92	JACOBS ENGINEERING SOUTHWEST DIVISION	DRAFT DATA MANAGEMENT PLAN RI/FS	ADMIN RECORD	SI DMP		SOUTHWEST DIVISION
0000000000000000 0030	000117	03/11/94 05/01/92	SOUTHWEST DIVISION S. E. TOWER EPA	SCHEDULE EXTENSION FOR MCB CAMP PENDLETON RI\FS WORKPLAN	ADMIN RECORD	OU FS RI	OU1,OU2 OU3 3,4,5,6,9, 24,	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0004	001845	06/27/94 05/01/92	MCB CAMP PENDLETON S.E. TOWER U.S. EPA	RESPONSE TO A EXTENSION REQUEST FOR RI/FS, RFA.	ADMIN RECORD	RI FS		SOUTHWEST DIVISION
0004		06.0	JULIE ANDERSON					
M00681 LTR	001850	06/27/94 05/02/92	SOUTHWEST DIVISION EDWARD DIAS DTSC	PROPOSED FORMAT FOR THE RCRA FACILITY ASSESSMENT REPORT THAT WILL BE PREPARED FOR MCB CAMP PENDLETON.	ADMIN RECORD	RCRA RFA		
0009		01.1	JOHN BRODERICK					
M00681 MEMO 0000000000000000 0001	001846	06/27/94 05/04/92	1811 0232	DATA MANAGEMENT, U.S. MARINE CORPS BASE CAMP PENDLETON REMEDIAL INVESTIGATION/FEASIBILITY STUDY.	ADMIN RECORD	FS RI		SOUTHWEST DIVISION
0001		03.2						
M00681 MEMO	001848	06/27/94 05/04/92	SOUTHWEST DIVISION EDWARD K. DIAS MCB CAMP PENDLETON	U.S. MARINE CORPS BASE CAMP PENDLETON REMEDIAL INVESTIGATION/FEASIBILITY STUDY KICKOFF COMMUNITY MEETING OF MARCH 26, 1992.	ADMIN RECORD	RI FS		
0001		10.3	DAVE MARK					

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M00681	000099	03/11/94	IT CORPORATION	MEETING MINUTES ON HEALTH RISK ASSESSMENT APPROACH	ADMIN RECORD	HRA	3,OU1	SOUTHWEST DIVISION
MM		05/05/92	LARRY PROEBE			REMOVAL(3)	4,4A,5,6,	
0000000000000000		00166	SOUTHWEST DIVISION			REMOVAL(6)	9,24,	
0030		01.6	ED DIAS					
							GROUP A	
							GROUP B	
							OU2	
M00681	003200	01/29/97	DTSC LONG BEACH	COMMENT ON PROPOSED FORMAT FOR THE RFA REPORT	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		05/20/92	A. ARELLANO		INFO REPOSITORY	RFA		MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION					
0001		01.6	E. DIAS					
M00681	000147	03/14/94	CRWQCB SAN DIEGO	RFA SITES ADDED TO THE DRAFT WORK	ADMIN RECORD	RFA	19,OU2	SOUTHWEST DIVISION
LTR		05/26/92	A.L. COE	PLAN			GROUP B	
N6871189D9296		00178	MCB CAMP PENDLETON					
0002		01.6	CG					
M00681	002872	05/02/95	IT CORPORATION	MCB CAMP PENDLETON RFA SITES	ADMIN RECORD	RFA		SOUTHWEST DIVISION
LTR		05/26/92	M. PARKER					
0000000000000000		00000	SOUTHWEST DIVISION					
0002		01.6						
M00681	002946	06/12/95	EPA SAN FRANCISCO	COMMENTS ON DRAFT ROD FOR OU1 SITE 9 AND GROUP A	ADMIN RECORD	COMMENTS	OU1	SOUTHWEST DIVISION
LTR		05/31/92	S. LAUTH	NO ACTION SITES		ROD	9,GROUP A	
0000000000000000		00000	SOUTHWEST DIVISION			REMOVAL(3)	3,4,5,6,24	
0010		05.4	E. DIAS					
						REMOVAL(6)		
M00681	002947	06/12/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT ROD FOR OU1 SITE 9 GROUP A	ADMIN RECORD	COMMENTS	OU1	SOUTHWEST DIVISION
LTR		05/31/92	M.C. GASLAN	NO ACTION SITES		ROD	9,GROUP A	
0000000000000000		00000	SOUTHWEST DIVISION			REMOVAL(3)	3,4,5,6,24	
0005		05.4	E. DIAS					
						REMOVAL(6)		
M00681	003338	08/27/97	MCB CAMP PENDLETON	LETTER AGREEING TO INCLUDE US EPA ON AGENDA AND THANKS	ADMIN RECORD	IRP		SOUTHWEST DIVISION
LTR		06/11/92	C. MYERS	FOR INTEREST/SUPPORT OF IRP AT MCB CAMP PENDLETON	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	DTSC LONG BEACH					
0001		01.6	C. BEST					

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M00681	002755	01/18/95	SAN DIEGO UNION	NEWSPAPER ARTICLE "MARINES AGREE TO FOLLOW WASTE RULES	ADMIN RECORD	PUBNOT		SOUTHWEST DIVISION
MISC		06/25/92	K. BALINT	SIGNING OF A COMPLIANCE AGREEMENT	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000						OCEANSIDE LIBRARY
0001		10.6						BASE LIBRARY
M00681	002845	05/02/95	EPA	REGULATORY AGENCY COMMENTS ON DRAFT DATA MANAGEMENT	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		07/06/92		PLAN				
0000000000000000		00000	SOUTHWEST DIVISION					
0006		03.6						
M00681	003201	01/29/97	CRWQCB SAN DIEGO	COMMENTS ON PRELIMINARY DRAFT REMEDIAL INVESTIGATION	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		07/13/92	D. BARKER	FEASIBILITY STUDY (RI/FS) WASTE MANAGEMENT PLAN	INFO REPOSITORY	RI		MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION			FS		
0003		01.6	E. DIAS					
M00681	001871	06/27/94	SOUTHWEST DIVISION	LETTER CONCERNING MCB CAMP PENDLETONS DATA MANAGEMENT	ADMIN RECORD	WMP		
LTR		07/14/92	EDWARD DIAS	PLAN, AN WASTE MANAGEMENT PLAN.				
0002		01.1	JANE DIAMOND					
M00681	001872	06/27/94	SOUTHWEST DIVISION	REQUEST A SCHEDULE EXTENSION TO A FFA DEADLINE FOR THE	ADMIN RECORD	FFA		
RPT		07/15/92	S.E. TOWER	MCB.		RI		
0017		03.0	R. SERAYDARIAN					
M00681	001041	05/23/94	JACOBS ENGINEERING	MCB CAMP RESPONSE TO COMMENTS RI\FS OU#1 HUMAN HEALTH	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
RPT		07/27/92		RISK ASSESSMENT DRAFT WORK PLAN OF 27 JULY 1992		RA	3,4,5,6,9,	
0000000000000000		00166	SOUTHWEST DIVISION			COMMENTS	24,OU1,OU2	
0016		06.0						
						OU1	GROUP A	
M00681	001042	05/23/94	JACOBS ENGINEERING	MCB CAMP RESPONSE TO COMMENTS RI\FS OU#1 HUMAN HEALTH	ADMIN RECORD	OU	OU 1	SOUTHWEST DIVISION
RPT		07/27/92		RISK ASSESSMENT DRAFT WORK PLAN		RA	GROUP A	
N6871189D9296		00166	SOUTHWEST DIVISION			OU1	5,6,9,24	
0150		08.0						
M00681	001876	06/27/94	MCB CAMP PENDLETON	EXTENSION REQUEST FOR DRAFT REMEDIAL INVESTIGATION	ADMIN RECORD	RI		
RPT		07/31/92	S.E. TOWER	REPORT FOR OPERABLE UNIT #1 MARINE CORPS BASE CAMP				
0006		03.0	JULIE ANDERSON	PENDLETON.				

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M00681	003199	01/29/97	EPA SAN FRANCISCO	COMMENTS (NO SPECIFIC) REGARDING THE RFA DRAFT WASTE	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		07/31/92	R. SERAYDARIAN	MANAGEMENT PLAN	INFO REPOSITORY	RFA		MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION					
0001		01.6	E. DIAS					
M00681	002846	05/02/95	EPA	REGULATORY AGENCY COMMENTS ON DRAFT WASTE MANAGEMENT	ADMIN RECORD	WMP		SOUTHWEST DIVISION
LTR		08/03/92		PLAN				
0000000000000000		00000	SOUTHWEST DIVISION					
0013		03.6						
M00681	003203	01/29/97	CRWQCB SAN DIEGO	COMMENTS ON RFA DRAFT WASTE MANAGEMENT PLAN (WMP)	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		08/07/92	D. BARKER		INFO REPOSITORY	RFA		MCB CAMP PENDLETON
0000000000000000		00000	MCB CAMP PENDLETON					
0001		01.6	D. HETTERVIK					
M00681	001029	05/23/94	JACOBS ENGINEERING	DECISION LOGIC: RECOMMENDATIONS FOR FURTHER ACTION AT	ADMIN RECORD			SOUTHWEST DIVISION
XMTL		08/10/92		SV SITES				
N6871189D9296		00178	SOUTHWEST DIVISION					
0002		01.6						
M00681	001881	06/27/94	DTSC	REVIEW OF CAMP PENDLETON DRAFT ECOLOGICAL RISK	ADMIN RECORD	RISK	OU1,OU2	SOUTHWEST DIVISION
MEMO		08/11/92	J.M. POLISINI	ASSESSMENT WORKPLAN FOR OU1 (PCA 14650, SITE 400025-			GROUP A	
			SITE MITIGATION BRCH	43).			3,4,5,6,9	
0004		01.1	LETICIA SEGOVIA				24	
M00681	003204	01/29/97	DTSC LONG BEACH	REVIEW OF RCRA FACILITY ASSESSMENT WASTE MANAGEMENT	ADMIN RECORD	RCRA		SOUTHWEST DIVISION
LTR		08/11/92	A. ARELLANO	PLAN BY AGENCY; NO COMMENT ON THE PLAN AT THIS TIME	INFO REPOSITORY	ASSESSMENT		MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION			COMMENTS		
0001		01.6	T.C. CRANE					
M00681	002873	05/02/95	IT CORPORATION	DECISION LOGIC: RECOMMENDATIONS FOR FURTHER ACTION AT	ADMIN RECORD			SOUTHWEST DIVISION
LTR		08/17/92	M. PARKER	SV SITES				
0000000000000000		00000	SOUTHWEST DIVISION					
0002		01.6						
M00681	001882	06/27/94	DTSC	WORKING DRAFT ECOLOGICAL WORKPLAN FOR OU1 FOR MCB CAMP	ADMIN RECORD	OU	OU1	SOUTHWEST DIVISION
LTR		08/20/92	A.A. ARELLANO, JR	PENDLETON.			GROUP A	
			SOUTHWEST DIVISION				5,6,9,24	
0002		00.0	T.C. CRANE					

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M00681	002876	05/02/95	IT CORPORATION	SUMMARY OF DISCUSSION DURING 13 AUGUST INFORMAL	ADMIN RECORD			SOUTHWEST DIVISION
LTR		08/27/92	M. PARKER	DISPUTE RESOLUTION MEETING				
N6871189D9296		00166	SOUTHWEST DIVISION					
0003		03.6						
M00681	003205	01/29/97	SOUTHWEST DIVISION	INVITATION TO THE SECOND DISCUSSION SESSIONS TO	ADMIN RECORD	EVALUATION		SOUTHWEST DIVISION
LTR		08/28/92	E. DIAS	EVALUATE SITE CONDITIONS RCRA-FACILITY ASSESSMENT ON	INFO REPOSITORY	RCRA		MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	SEPTEMBER 8-9, 1992 W/ENCLS AGENDA & MAP		ASSESSMENT		
0005		01.6						
M00681	001884	06/27/94	SOUTHWEST DIVISION	EXTENSION REQUEST FOR DRAFT REMEDIAL INVESTIGATION	ADMIN RECORD	OU		
LTR		08/31/92	JAMES PAWLISCH	REPORT FOR OPERABLE UNIT #1 MCB CAMP PENDLETON.		RI		
			U.S. EPA					
0011		03.0	JULIE ANDERSON					
M00681	002847	05/02/95	SOUTHWEST DIVISION	EXTENSION REQUEST FOR DRAFT RI REPORT FOR OU #1	ADMIN RECORD	RI	OU1	SOUTHWEST DIVISION
LTR		06/31/92	J. PAWLISCH				GROUP A	
0000000000000000		00000	EPA SAN FRANCISCO				3,4,5,6,9,	
0008		03.6	J. ANDERSON				24	
M00681	000223	03/15/94	JACOBS ENGINEERING	ADDENDUM TO DATA MANAGEMENT PLAN RI\FS MCB CAMP	ADMIN RECORD	DMP		SOUTHWEST DIVISION
MISC		09/03/92	EDWARD MINUGH	PENDLETON (NO ENCLOSURE)		RI		
N6871189D9296		00166	SOUTHWEST DIVISION			FS		
0001		00.0	E. DIAS					
M00681	000102	03/11/94	JACOBS ENGINEERING	ADDENDUM TO DATA MANAGEMENT PLAN REMEDIAL	ADMIN RECORD	DMP		SOUTHWEST DIVISION
RPT		09/08/92		INVESTIGATION\FEASIBILITY STUDY RESPONSES TO COMMENTS		RI		
N6871189D9296		00166	SOUTHWEST DIVISION			FS		
0006		03.3					COMMENTS	
M00681	001030	05/23/94	JACOBS ENGINEERING	REVIEW OF RECOMMENDATIONS FOR RFA SITES	ADMIN RECORD	RFA		SOUTHWEST DIVISION
XMTL		09/08/92						
N6871189D9296		00178	SOUTHWEST DIVISION					
0001		01.6						
M00681	002735	01/18/95	SOUTHWEST DIVISION	PUBLIC NOTICE TO COMMENT ON THE DRAFT ENVIRONMENTAL	ADMIN RECORD	PUBNOT		SOUTHWEST DIVISION
LTR		09/08/92	R.F. KIESLING	IMPACT STATEMENT				
0000000000000000		00000	SOUTHWEST DIVISION					
0006		10.3						

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M00681 MM N6871189D9296 0004	002945	06/12/95 09/10/92	JACOBS ENGINEERING	SUMMARY OF 10 SEPTEMBER INFORMAL DISPUTE RESOLUTION MEETING	ADMIN RECORD		11,12,13, 21	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0100	000103	03/11/94 09/14/92	JACOBS ENGINEERING	REVISED FINAL HEALTH AND SAFETY PLAN FOR REMEDIAL INVESTIGATION\FEASIBILITY STUDY	ADMIN RECORD	H&SP RI FS		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0001	002736	01/18/95 09/22/92	MCB CAMP PENDLETON	NOTICE OF TRC MEETING FOR 20 OCT 1992	ADMIN RECORD	TRC		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0001	002874	05/02/95 09/24/92	IT CORPORATION	REVIEW OF RECOMMENDATIONS FOR RFA SITES	ADMIN RECORD	RFA		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0031	002877	05/02/95 10/01/92	VARIOUS	REGULATORY AGENCY COMMENTS ON DRAFT OU #1 HUMAN HEALTH RISK ASSESSMENT WORK PLAN	ADMIN RECORD	COMMENTS	OUI GROUP A 3,4,5,6,9  24	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0200	001031	05/23/94 10/09/92	JACOBS ENGINEERING	DRAFT FINAL RI/FS WASTE MANAGEMENT PLAN	ADMIN RECORD	WMP RI FS		SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0100	002654	01/09/95 10/09/92	JACOBS ENGINEERING	DRAFT FINAL RI/FS WASTE MANAGEMENT PLAN MCB CAMP PENDLETON	ADMIN RECORD	RI FS WMP		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0001	003336	08/27/97 10/12/92	CITIZENS COORDINATE	REQUEST FOR FURTHER CLARIFICATION OF WHAT RESPONSIBILITIES ARE INCLUDED WITH PARTICIPATING IN THE TECHNICAL REVIEW COMMITTEE FOR THE IRP	ADMIN RECORD INFO REPOSITORY	REQUEST PUB. PARTICIPATI IRP		SOUTHWEST DIVISION MCB CAMP PENDLETON
		01.6	J. ROBERTUS					



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M00681	000057	03/10/94	JACOBS	DRAFT RCRA FACILITY ASSESSMENT REPORT	ADMIN RECORD	RCRA	3,4,5,6,9,	SOUTHWEST DIVISION
RPT		11/02/92	WILLIAMS			SWMU	24,OU1,OU2	
N6871189D9296		00176	NAVFACENGCOM	(COMMENTS WRITTEN ON DOCUMENT)		RFA	GROUP A	
0800		01.1				FFA	7,8,14,19,	
						REMOVAL(3)	20,22,OU3	
						REMOVAL(6)	GROUP B	
						LF	1,2,10,16,	
						UST	17,27,111,	
						PCB	28,155	
						AAL	29,241	
							30,146,	
							31,79,26	
							GROUP C	
							1,2,18,32,	
							200,203,	
							204,33,255	
							34,275	
							11,12,13,	
							21	
M00681	000058	03/10/94	JACOBS	DRAFT RCRA FACILITY ASSESSMENT REPORT MARINE CORPS	ADMIN RECORD	PR	GROUP A	SOUTHWEST DIVISION
RPT		11/02/92	WILLIAMS	BASE CAMP PENDLETON, CALIFORNIA APPENDICES C AND D		SV	GROUP B	
N6871189D9296		00178	NAVFACENGCOM	PR/SV SITE MAPS AND PR SITE DESCRIPTIONS			GROUP C	
800		01.1					GROUP D	
							4,5,6,9,24	
							7,8,14,19,	
							20,22,1,2,	
							10,16,17,	
							27,28,29,	
							30,31,18,	
							32,33,34	

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M00681	000059	03/10/94	JACOBS	DRAFT RCRA FACILITY ASSESSMENT REPORT	ADMIN RECORD	RFA	GROUP A	SOUTHWEST DIVISION
RPT		11/02/92	WILLIAMS	APPENDIX G ANALYTICAL		RCRA	GROUP B	
N6871189D9296		00176	NAVFACENCOM	RESULTS VOLUME 1 OF 4			GROUP C	
800		01.1					GROUP D	
							7,8,14,19,	
							20,22,1,2,	
							10,16,27,	
							27,28,29,	
							30,31,18,	
							32,33,34,	
							11,12,13,	
							21	
M00681	000060	03/10/94	JACOBS	DRAFT RCRA FACILITY ASSESSMENT REPORT	ADMIN RECORD	RCRA	GROUP A	SOUTHWEST DIVISION
RPT		11/02/92	WILLIAMS	APPENDIX K BORING LOGS		RFA	GROUP B	
N6871189D9296		0176	NAVFACENCOM				GROUP C	
1000		01.1					GROUP D	
							7,8,14,19	
							20,22,1,2,	
							10,16,17,	
							27,28,29,	
							30,31,18,	
							32,33,34,	
							11,12,13	
							21	
M00681	002915	05/30/95	JACOBS ENGINEERING	APPENDIX B PHOTOGRAPHIC DOCUMENTATION DRAFT RFA	ADMIN RECORD			SOUTHWEST DIVISION
RPT		11/02/92		REPORT				MCB CAMP PENDLETON
N6871192D9296		00166	SOUTHWEST DIVISION					
0350		01.1						
M00681	002916	05/30/95	JACOBS ENGINEERING	APPENDIX G ANALYTICAL RESULTS DRAFT RFA REPORT	ADMIN RECORD	DATA		SOUTHWEST DIVISION
RPT		11/02/92		VOLUME 1 OF 4, 2 OF 4, 3 OF 4 AND 4 OF 4				MCB CAMP PENDLETON
N6871192D9296		00166	SOUTHWEST DIVISION					
1500		01.1						
M00681	002917	05/30/95	JACOBS ENGINEERING	APPENDICES E AND F SAMPLING VISIT LOGBOOK AND HEALTH	ADMIN RECORD	H&SP		SOUTHWEST DIVISION
RPT		11/02/92		AND SAFETY PLAN DRAFT RFA REPORT				MCB CAMP PENDLETON
N6871192D9296		00166	SOUTHWEST DIVISION					
0500		01.1						

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M00681 RPT N6871192D9296 0350	002918	05/30/95 11/02/92	JACOBS ENGINEERING	APPENDICES H, I, AND J GEOPHYSICS, SOIL VAPOR, AND TANK TESTING RESULTS DRAFT RFA REPORT	ADMIN RECORD	TANK		SOUTHWEST DIVISION
M00681 RPT N6871192D9296 1200	002919	05/30/95 11/02/92	JACOBS ENGINEERING	APPENDIX A PR/VSI DOCUMENTATION FORMS DRAFT RFA REPORT VOLUME 1 OF 3, 2 OF 3 AND 3 OF 3	ADMIN RECORD	RFA		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0013	002879	05/02/95 11/03/92	US EPA R. SERAYDARIAN	INFORMAL RESOLUTION OF DISPUTE FOR CAMP PENDLETON REVISED FFA APPENDIX A	ADMIN RECORD	FFA	21	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 150	000105	03/11/94 11/13/92	JACOBS ENGINEERING RICHARD WADE	DRAFT ECOLOGICAL RISK ASSESSMENT SAMPLING AND ANALYSIS PLAN REMEDIAL INVESTIGATION\FEASIBILITY STUDY GROUP A SITES	ADMIN RECORD	RA RI FS	3,OU1 4, GROUP A 4A	SOUTHWEST DIVISION
						REMOVAL(3) REMOVAL(6)	5,OU2 6 9 24	
M00681 LTR 0000000000000000 0001	003283	08/22/97 11/13/92	MCB CAMP PENDLETON D. HETTERVIK	RESPONSE TO REQUEST TO ATTEND TECHNICAL REVIEW COMMITTEE MEETING	ADMIN RECORD INFO REPOSITORY	RESPONSE REQUEST TRC		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 RPT 0000000000000000 0075	000106	03/11/94 11/16/92	CH2M HILL EARL BYRON	DRAFT ADDENDUM ECOLOGICAL RISK ASSESSMENT SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	RA SAP	GROUP A OU1 3,4,5,6,9	SOUTHWEST DIVISION
							21,22	
M00681 MM N6871189D9296 0005	002671	01/09/95 11/20/92	JACOBS ENGINEERING	PROJECT MANAGERS MEETING MINUTES OF THE FFA W/ DISCUSSIONS AND DECISIONS SUMMARIZED MCB CAMP PENDLETON	ADMIN RECORD	FFA		SOUTHWEST DIVISION

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M00681 XMTL N6871189D9296 0002	002880	05/02/95 11/25/92	JACOBS ENGINEERING	QUARTERLY PROJECT MANAGERS' MEETING MINUTES OF 19 OCTOBER MEETING	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0009	000118	03/11/94 12/10/92	LOS ANGELES TIME	NEWSPAPER ARTICLE "THE PENDLETON PRESERVE" MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	PUBNOT	45,OU2	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 LTR 000000000000000 0002	003337	08/27/97 12/17/92	MCB CAMP PENDLETON D. HETTERVIK CAL. DPT. FISH & GAME C. TAUCHER	LETTER INVITING RECIPIENT TO SERVE AS A MEMBER OF THE IRP TECHNICAL REVIEW COMMITTEE REQUIRED BY THE SECTION 211 OF THE SUPERFUND	ADMIN RECORD INFO REPOSITORY	IRP REQUEST SUPERFUND		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0060	002865	05/02/95 12/21/92	JACOBS ENGINEERING	AUDIT OF NAVY CLEAN MCB CAMP PENDLETON FIELD TEAM RI/FS	ADMIN RECORD			SOUTHWEST DIVISION
M00681 LTR 000000000000000 0031	002866	05/02/95 12/30/92	EPA SOUTHWEST DIVISION	COMMENTS ON DRAFT ECOLOGICAL RISK ASSESSMENT WORK PLAN AND SAP FOR GROUP A SITES	ADMIN RECORD	COMMENTS	GROUP A 3,4,5,6,9, 24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	003206	01/29/97 12/31/92	EPA SAN FRANCISCO R. SERAYDARIAN SOUTHWEST DIVISION E. DIAS	COMMENTS ON THE DRAFT RFA REPORT DATED NOVEMBER 3, 1992; FINAL DRAFT RFA IS OUR ON MARCH 5, 1992 W/ENCLS	ADMIN RECORD INFO REPOSITORY	COMMENTS RFA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0004	003207	01/29/97 01/06/93	DTSC LONG BEACH L. SEGOVIA SOUTHWEST DIVISION E. DIAS	COMMENTS ON RCRA FACILITY ASSESSMENT DRAFT CONCERNS AND COMMENTS FROM DTSC ARE ENCLOSED AND INCLUDE IN REVISED VERSION ON REPORT	ADMIN RECORD INFO REPOSITORY	COMMENTS RCRA ASSESSMENT		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0005	000240	03/15/94 01/14/93	SOUTHWEST DIVISION JAMES PAWLISCH CRWQCB MARK J. ALPERT	IDENTIFICATION OF STATE ARARs FOR GROUP A SITE 3, 5 6 AND 9 AT MCB CAMP PENDLETON	ADMIN RECORD	ARAR REMOVAL(3) REMOVAL(6)	5,3,6,9 GROUP A OU1,OU2	SOUTHWEST DIVISION

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M00681	000114	03/11/94	JACOBS ENGINEERING	RESULTS OF SURVEY TO LOCATE RI SITES 1 AND 2 (MAPS INCLUDED)	ADMIN RECORD	RI	1 2 OU3	SOUTHWEST DIVISION
MEMO		01/27/93						
000000000000000	00166	00166	SOUTHWEST DIVISION					
0040		03.6						
M00681	002867	05/02/95	SOUTHWEST DIVISION	COMMENTS ON DRAFT ECOLOGICAL SAMPLING AND ANALYSIS PLAN FOR GROUP A SITES RI/FS	ADMIN RECORD	COMMENTS	GROUP A 3,4,5,6,9, 24	SOUTHWEST DIVISION
LTR		01/29/93						
000000000000000	00000	00000	JACOBS ENGINEERING					
0004		03.6						
M00681	003208	01/29/97	CRWQCB SAN DIEGO	CONCURRENCE WITH THE CONCLUSION AND RECOMMENDATIONS ON THE DRAFT RCRA FACILITY ASSESSMENT REPORT (RFA)	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		02/03/93	M. ALPERT		INFO REPOSITORY	RCRA		MCB CAMP PENDLETON
000000000000000	00000	00000	SOUTHWEST DIVISION			ASSESSMENT		
0001		01.6	E. DIAS					
M00681	002670	01/09/95	JACOBS ENGINEERING	PROJECT MANAGERS MEETING MINUTES OF THE FFA FOR THE RI/FS AND ARAR, FS EFFECTS OF FLOODING ON THE RI PHASE I RI AT GROUP A SITES MCB CAMP PENDLETON	ADMIN RECORD	MTG MINS ARAR RI	GROUP A 3,4,5,6,9, 24	SOUTHWEST DIVISION
MM		02/05/93						
N6871189D9296		00166	SOUTHWEST DIVISION					
0011		01.1				FS FFA	OU1,OU2	
M00681	000076	03/11/94	JACOBS ENGINEERING	DRAFT FINAL WORK PLAN RI\FS GROUP A SITES ECOLOGICAL RISK ASSESSMENT MCB CAMP PENDLETON	ADMIN RECORD	RI RA FS	GROUP A 3,4,4A,6, 9,24,5	SOUTHWEST DIVISION
RPT		02/19/93	RICHARD WADE					
N6871189D9296		00166	SOUTHWEST DIVISION					
0450		03.3						
M00681	002868	05/02/95	IT CORPORATION	CORRECTIVE ACTION PLAN NO. 1 FOR NOVEMBER 1992 JACOBS FIELD AUDIT OF RI/FS	ADMIN RECORD	CA		SOUTHWEST DIVISION
LTR		02/22/93	D. MARK					
000000000000000	00000	00000	JACOBS ENGINEERING					
0052		03.6						
M00681	002707	01/17/95	MCB CAMP PENDLETON	IRP TRC MEETING MAP ENCLOSED UPDATE	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		02/23/93	L.E. ARMAS					
000000000000000	00000	00000	SOUTHWEST DIVISION					
0003		10.0	E. DIAS					
M00681	000082	03/11/94	JACOBS ENGINEERING	REMEDIAL INVESTIGATION\FEASIBILITY STUDY PHASE I RI TECHNICAL MEMORANDUM GROUP A SITES VOLUME I MCB CAMP PENDLETON	ADMIN RECORD	RI TECH MEMO FS	GROUP A 3,4,4A,5, 6,9-41,	SOUTHWEST DIVISION
RPT		02/25/93	RICHARD WADE					
N6871189D9296		00166	SOUTHWEST DIVISION					
100		03.4						

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M00681	000083	03/11/94	JACOBS ENGINEERING	REMEDIAL INVESTIGATION\FEASIBILITY STUDY PHASE I	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
RPT		02/25/93	RICHARD WADE	RI TECHNICAL MEMORANDUM GROUP A SITES VOLUME I		TECH MEMO	3,4,4A,5,6	
N6871189D9296		00166	SOUTHWEST DIVISION	MCB CAMP PENDLETON		FS	9,24	
300		03.4						
M00681	000084	03/11/94	JACOBS ENGINEERING	REMEDIAL INVESTIGATION\FEASIBILITY STUDY PHASE I	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
RPT		02/25/92	RICHARD WADE	RI TECHNICAL MEMORANDUM GROUP A SITES VOLUME III		TECH MEMO	3,4,4A,5,6	
N6871189D9296		00166	SOUTHWEST DIVISION	MCB CAMP PENDLETON		FS	9,24	
500		03.4						
M00681	000085	03/11/94	JACOBS ENGINEERING	REMEDIAL INVESTIGATION\FEASIBILITY STUDY PHASE I	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
RPT		02/25/93	RICHARD WADE	RI TECHNICAL MEMORANDUM GROUP A SITES VOLUME IV		TECH MEMO	3,4,4A,5,6	
N6871189D9296		00166	SOUTHWEST DIVISION	MCB CAMP PENDLETON		GW	9,24	
250		03.4				FS		
M00681	002708	01/18/95	MCB CAMP PENDLETON	FOR REVIEW, RETENTION & COMMENT ON THE RI/FS GROUP "A"	ADMIN RECORD	TRC	GROUP A	SOUTHWEST DIVISION
LTR		02/25/93	L.E. ARMAS	SITES ECOLOGICAL RISK ASSESSMENT DRAFT FINAL WORK PLAN		RI	3,4,5,6,9,	
0000000000000000		00000	REQCB SAN DIEGO	OF FEB. 19, 1993 (SEE DOC. NO. 000076)		FS	24	
0001		10.0	J. ANDERSON					
M00681	000079	03/11/94	JACOBS ENGINEERING	DRAFT FINAL SAMPLING ANALYSIS PLAN REMEDIAL	ADMIN RECORD	RA	GROUP A	SOUTHWEST DIVISION
RPT		02/26/93	RICHARD WADE	INVESTIGATION\FEASIBILITY STUDY GROUP A SITES		RI	3,4,4A,6,9	
N6871189D9296		00166	SOUTHWEST DIVISION	ECOLOGICAL RISK ASSESSMENT		FS	24	
0150		03.1						
M00681	002709	01/18/95	MCB CAMP PENDLETON	FOR REVIEW & COMMENT ON THE RI/FS GROUP "A" PHASE I	ADMIN RECORD	TRC	GROUP A	SOUTHWEST DIVISION
LTR		03/02/93	L.E. ARMAS	TECHNICAL MEMORANDUM OF FEB. 25, 1993		RI	3,4,5,6,9,	
0000000000000000		00000	TRC MEMBERS	(SEE DOC. NO. 000061, 62, 63, 64)		FS	24	
0001		10.0						
M00681	002774	01/27/95	MCB CAMP PENDLETON	RI/FS GROUP "A" SITES ECOLOGICAL RISK ASSESSMENT DRAFT	ADMIN RECORD	SAP	GROUP A	SOUTHWEST DIVISION
LTR		03/02/93	L.W. ARMAS	FINAL SAP OF FEB 26, 1993 SENT FOR REVIEW AND COMMENTS		CONFIDENTIAL DOC	3,4,5,6,9,	
0000000000000000		00000	TRC MEMBERS				24	
0001		10.1						
M00681	003190	01/09/97	MCB CAMP PENDLETON	TRANSMITTAL OF RI/FS GROUP A ECOLOGICAL RISK	ADMIN RECORD	RI		SOUTHWEST DIVISION
LTR		03/02/93	L. ARMAS	ASSESSMENT SAP FOR REVIEW AND RETENTION	INFO REPOSITORY	FS		MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	W/O ENCL		RISK		
0012		02.1						
						ASSESSMENT		
						SAP		

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M00681	000116	03/11/94	SOUTHWEST DIVISION	IDENTIFYING AND ADDRESSING POTENTIAL ARAR's IN THE	ADMIN RECORD	OU	OU 1	SOUTHWEST DIVISION
LTR		03/03/93	EDWARD K. DIAS	RI\FS FOR GROUP A SITES OU#1 MCB CAMP PENDLETON		RI	GROUP A	
0000000000000000		00000	DTSC			ARAR	3,4,5,6,9,	
0004		04.1	LETICIA SEGOVIA			FS	24	
M00681	002741	01/18/95	SOUTHWEST DIVISION	TRC MTG MINUTES OF OCT 20, 1992	ADMIN RECORD	TRC	GROUP A	SOUTHWEST DIVISION
XMTL		03/05/93	E.K. DIAS		INFO REPOSITORY	MTG MINS	3,4,5,6,9	MCB CAMP PENDLETON
0000000000000000		00000	EPA SAN FRANCISCO				24	OCEANSIDE LIBRARY
0007		10.4	R. SERAYDARIAN					BASE LIBRARY
M00681	002869	05/02/95	IT CORPORATION	MCB CAMP PENDLETON FFA PROJECT MANAGERS MEETING MINUTES	ADMIN RECORD	MTG MINS	3	SOUTHWEST DIVISION
LTR		03/05/93	D. MARK	20 NOVEMBER 1992 MEETING		REMOVAL(3)	OU2	
0000000000000000		00000	VARIOUS				GROUP A	
0004		03.6						
M00681	002870	05/02/95	IT CORPORATION	MINUTES OF MCB CAMP PENDLETON PROJECT MANAGERS'	ADMIN RECORD	MTG MINS	3,4,5,6,9	SOUTHWEST DIVISION
LTR		03/05/93	M. PARKER	MEETING 5 FEBRUARY 1993 MEETING		REMOVAL(3)	24	
0000000000000000		00000	VARIOUS			REMOVAL(6)	OU2	
0006		03.6					GROUP A	
M00681	001940	06/28/94	SOUTHWEST DIVISION	REQUEST FOR AN EXTENSION ON DRAFT FINAL RCRA FACILITY	ADMIN RECORD	RCRA		SOUTHWEST DIVISION
LTR		03/08/93	EDWARD K. DIAS	ASSESSMENT REPORT.		RFA		
0000000000000000		00000	U.S. EPA					
0002		06.0	R. SERAYDARIAN					
M00681	001941	06/28/94	SOUTHWEST DIVISION	NOTICE OF INTENT TO CONDUCT REMOVAL ACTIONS FOR SHORT-	ADMIN RECORD	FFA	3,OU2	SOUTHWEST DIVISION
LTR		03/11/93	EDWARD K. DIAS	TERM CLEANUPS OF SOIL CONTAMINANTS AT TWO SITES.		REMOVAL(3)	6,OU1	
			U.S. EPA			REMOVAL(6)	GROUP A	
0002		07.7	R. SERAYDARIAN					
M00681	002716	01/18/95	SOUTHWEST DIVISION	PROJECT MANAGERS MEETING MINUTES OF NOV. 20, 1992	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
XMTL		03/12/93	E.K. DIAS	AND FEB 2, 1993 ON ARARs, FFA, PHASE I AT GROUP A			3,4,5,6,9,	
0000000000000000		00000	RWQCB SAN DIEGO	SITES			24	
0014		10.0	J. ANDERSON					
M00681	002711	01/18/95	THE BLADE CITIZEN	NEWS PAPER ARTICLE "BASE STUDIES WASTE SITES" MARINE	ADMIN RECORD	GW		SOUTHWEST DIVISION
MISC		03/23/93	P. DIEHL	OFFICIALS WARY OF GROUND WATER CONTAMINATION	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	PUBLIC					OCEANSIDE LIBRARY
0002		10.6						BASE LIBRARY

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M00681 MM 000000000000000 0003	002791	02/03/95 03/25/93 00166 01.1	JACOBS ENGINEERING	JACOBS ENGINEERING	MINUTES OF 25 MARCH CONFERENCE CALL ON RISK ASSESSMENT ISSUES, MCB CAMP PENDLETON RI/FS AND RFA	ADMIN RECORD	RFA		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	002710	01/18/95 03/29/93 00000 10.0	MCB CAMP PENDLETON	L.E. ARMAS	LIST OF DOCUMENTS TO BE PROVIDED TO ALL TRC MEMBERS	ADMIN RECORD	TRC		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0015	003284	08/22/97 03/29/91 00000 01.6	MCB CAMP PENDLETON	L. ARMAS	TRANSMITTAL OF LIST OF DOCUMENTS TO ALL TECHNICAL REVIEW COMMITTEE MEMBERS	ADMIN RECORD INFO REPOSITORY	DATA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0003	003225	01/31/97 03/31/93 00000 04.5	EPA SAN FRANCISCO	R. SERAYDARIAN	COMMENTS ON THE TECHNICAL MEMORANDUM FOR RI/FS GROUP A SITES W/ENCLS	ADMIN RECORD INFO REPOSITORY	COMMENTS TECH MEMO RI FS	GROUP A 5	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 MM 000000000000000 0009	002712	01/18/95 04/02/93 00166 10.0	JACOBS ENGINEERING	JACOBS ENGINEERING	MEETING MINUTES OF 10th PROJECT MANAGERS MEETING ON 2 APRIL 1993 TRC MEETING MINUTES SITES 3,6,21,9	ADMIN RECORD	ADMIN MINS TRC GW UST	GROUP A 3,5,21,9	SOUTHWEST DIVISION
M00681 MM 000000000000000 0005	002713	01/18/95 04/19/93 00000 10.4	MCB CAMP PENDLETON	L.E. ARMAS	TRC MEETING MINUTES OF APRIL 1, 1993 GROUP A SITES AND ACTIONS TAKEN	ADMIN RECORD INFO REPOSITORY	TRC MTG MINS	GROUP A 3,4,5,6,9 23,24	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 XMTL 000000000000000 0006	002714	01/18/95 04/23/93 00000 10.0	SOUTHWEST DIVISION	E.K. DIAS	TRANSMITTAL OF MINUTES OF CONFERENCE ON 9 APRIL 93 ON RISK ASSESSMENT & EVALUATION OF SOIL BACKGROUND & 25 MARCH 93 RISK ASSESSMENT ISSUES RI/FS RFA	ADMIN RECORD	RFA MTG MINS RA  EVALUATION RI FS		SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0020	002659	01/09/95 04/26/93 00166 03.3	JACOBS ENGINEERING	D. TOWELL	ADDENDUM FOR GROUP A SITES RI/FS PRELIMINARY DRAFT PHASE 2 RI WORK PLAN MCB CAMP PENDLETON	ADMIN RECORD	RI FS	GROUP A 6,9	SOUTHWEST DIVISION

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M00681	003202	01/29/97	JACOBS ENGINEERING	APRIL 30, 1993 MEETING MINUTES ON EVALUATION OF RFA	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
XMTL		04/30/93		SITES	INFO REPOSITORY	RFA		MCB CAMP PENDLETON
000000000000000		00000	MEMBERS					
0002		10.5						
M00681	002782	02/03/95	DTSC LONG BEACH	RESPONSE TO PROPOSED STATE ARARs FOR MCB CAMP	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
LTR		05/07/93	J. BUSSEY	PENDLETON TO LETTER RECEIVED MARCH 10, 1992			3,5,6,9	
000000000000000		00000	SOUTHWEST DIVISION					
0009		04.1	E. DIAS					
M00681	001953	06/28/94	SOUTHWEST DIVISION	RESPONSE LETTER TO A LETTER SENT BY THE DEPARTMENT	ADMIN RECORD	RI		
LTR		05/12/93	J. PAWLISCH	OF TOXIC SUBSTANCES.		FS		
			DTS					
0001		01.1	JOHN SCANDURA					
M00681	001954	06/28/94	SOUTHWEST DIVISION	RESPONSE LETTER TO A LETTER SENT BY THE DEPARTMENT	ADMIN RECORD	RI		
LTR		05/12/93	J. PAWLISCH	OF TOXIC SUBSTANCES.		FS		
			DTS					
0004		01.1	JOHN SCANDURA					
M00681	003224	01/31/97	DTSC LONG BEACH	COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		05/13/93	L. SEGOVIA	STUDY PHASE I RI TECHNICAL MEMORANDUM FOR GROUP A	INFO REPOSITORY	RI		MCB CAMP PENDLETON
000000000000000		00000	SOUTHWEST DIVISION	SITES W/ENCLS		FS		
0003		01.6	E. DIAS					
						TECH MEMO		
M00681	003332	08/26/97	MCB CAMP PENDLETON	VARIOUS LETTERS PERTAINING TO LOW ATTENDANCE AT APRIL	AMIN RECORD			SOUTHWEST DIVISION
LTR		05/18/93	L. ARMAS	1, 1993 TECHNICAL REVIEW COMMITTEE MEETING AND	INFO REPOSITORY			MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	SCHEDULE PREFERENCE.				
0018		01.6	INDIVIDUALS					
M00681	003219	01/31/97	MCB CAMP PENDLETON	INSTALLATION RESTORATION PROGRAM REMEDIAL	ADMIN RECORD	IRP		SOUTHWEST DIVISION
LTR		05/21/93	L. ARMA	INVESTIGATION REPORT REVIEW AND TECHNICAL REVIEW	INFO REPOSITORY	RI		MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	COMMITTEE MEETING W/O ENCLS		TRC		
0015		01.6	INDIVIDUALS					
M00681	002658	01/09/95	JACOBS ENGINEERING	ADDENDUM FOR GROUP A SITES RI/FS DRAFT PHASE 2 RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
PLAN		05/26/93	E.B. LUEKER	WORK PLAN MCB CAMP PENDLETON	INFO REPOSITORY	FS	3,4,5,6,9	MCB CAMP PENDLETON
N6871189D9296		00166	SOUTHWEST DIVISION				24	OCEANSIDE LIBRARY
0020		03.3						
							OU1,OU2	BASE LIBRARY

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M00681	000093	03/11/94	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION\FEASIBILITY STUDY RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION	
RPT		05/28/93		REPORT FOR GROUP A SITES VOLUME 1 OF 6		FS	3,4,4A,5,9		
N6871189D9296		00166	SOUTHWEST DIVISION			EE\CA	24		
0300		03.4							
M00681	000094	03/11/94	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION\FEASIBILITY STUDY RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION	
RPT		05/28/93		REPORT FOR GROUP A SITES VOLUME 2 OF 6 APPENDICES A		FS	3,4,4A,5,9		
N6871189D9296		00166	SOUTHWEST DIVISION	THROUGH D			24		
0100		03.4							
M00681	000095	03/11/94	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION\FEASIBILITY STUDY RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION	
RPT		05/28/93		REPORT FOR GROUP A SITES VOLUME 3 OF 6 APPENDICES E		FS	2,4,4A,5,9		
N6871189D9296		00166	SOUTHWEST DIVISION	THROUGH H			24		
0100		03.4							
M00681	000096	03/11/94	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION\FEASIBILITY STUDY RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION	
RPT		05/28/93		REPORT FOR GROUP A SITES VOLUME 4 OF 6 APPENDICES I		FS	3,4,4A,5,9		
N6871189D9296		00166	SOUTHWEST DIVISION	THROUGH O		WATER	24		
0450		03.4							
M00681	000097	03/11/94	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION\FEASIBILITY STUDY RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION	
RPT		05/28/93		REPORT FOR GROUP A SITES VOLUME 5 OF 6 APPENDICES P		FS	3,4,4A,5,9		
N6871189D9296		00166	SOUTHWEST DIVISION	THROUGH Y		SOIL	24		
0550		03.4				HRA			
M00681	000098	03/11/94	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION\FEASIBILITY STUDY RI	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION	
RPT		05/28/93		REPORT FOR GROUP A SITES VOLUME 6 OF 6 APPENDIX Z		FS	3,4,4A5,9,		
N6871189D9296		00166	SOUTHWEST DIVISION			SOIL	24		
0550		03.4				DATA			
M00681	003335	08/27/97	CITY OF OCEANSIDE	LETTER SUGGESTING SCHEDULE TIMES FOR TECHNICAL REVIEW	ADMIN RECORD	REQUEST		SOUTHWEST DIVISION	
LTR		06/01/93	N. YORK	COMMITTEE MEETINGS	INFO REPOSITORY			MCB CAMP PENDLETON	
0000000000000000		00000	MCB CAMP PENDLETON						
0001		01.6	J. JOY						
M00681	002901	06/03/95	JACOBS ENGINEERING	RESPONSE TO COMMENTS ON PHASE 1 RI TECHNICAL	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION	
XMTL		06/08/93	E. MINUGH	MEMORANDUM FOR GROUP A SITES		REMOVAL(3)	3,4,5,6,9,		
0000000000000000		00166	SOUTHWEST DIVISION			REMOVAL(6)	24		
0004		03.6							

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M00681 MM 000000000000000 0015	002719  06/15/93 00166 10.0	01/18/95  06/15/93 00166 10.0	JACOBS ENGINEERING  DISTRIBUTION	MEETING MINUTES OF 11th PROJECT MANAGERS MEETING ON 6 & 7 MAY 1993 KEY TOPIC RI REPORT FOR GROUP A SITES PROPOSED REMOVAL ACTION, OU 1	ADMIN RECORD	RI RA	GROUP A OU1 3,4,5,6,9,  24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0018	002783  06/15/93 00000 04.1	02/03/95  06/15/93 00000 04.1	CRWQCB SAN DIEGO M.J. ALPERT DTSC LONG BEACH O.K. PATRICK	IDENTIFICATION OF POTENTIAL STATE AND REGIONAL WATER BOARD ARARs AND TO-BE-CONSIDERED REQUIREMENTS FOR MCB CAMP PENDLETON	ADMIN RECORD	ARAR	GROUP A 3,5,6,9	SOUTHWEST DIVISION
M00681 MM 000000000000000 0014	002722  06/18/93 00166 10.0	01/18/95  06/18/93 00166 10.0	JACOBS ENGINEERING  DISTRIBUTION	12TH FFA PROJECT MANAGERS MEETING MINUTES KEY TOPICS DRAFT RI REPORT FOR GROUP A SITES, HUMAN HEALTH RISK ASSESSMENT	ADMIN RECORD	MTG MINS RI	GROUP A 3,4,5,6,9 24	SOUTHWEST DIVISION
M00681 XMTL 000000000000000 0011	002900  06/18/93 00166 03.6	05/03/95  06/18/93 00166 03.6	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	TWELFTH FFA PROJECT MANAGERS' MEETING	ADMIN RECORD	MTG MINS REMOVAL (3) REMOVAL(6)	GROUP A 3,4,5,6,9 24	SOUTHWEST DIVISION
M00681 RPT  0007	001965  06/22/93  01.2	06/28/94  06/22/93  01.2	SOUTHWEST DIVISION ANN E. THOMPSON MCB CAMP PENDLETON	ENVIRONMENTAL CUSTOMER SERVICE VISIT. TRIP REPORT OF 15 JUNE 1993.	ADMIN RECORD	SV		
M00681 LTR 000000000000000 0001	003326  06/22/93 00000 01.6	08/26/97  06/22/93 00000 01.6	APCB SAN DIEGO M. LAKE MCB CAMP PENDLETON L. ARMAS	RESPONSE TO LETTER OF MAY 3, 1993 THAT MCB DOES NOT NEED TO APPLY FOR OR OBTAIN A PERMIT FOR LAS PULGAS SAN ONOFRE LANDFILLS, ACCORDING TO RULE 59 REQMTS.	ADMIN RECORD INFO REPOSITORY	PERMIT LANDFILL	LAS PULGAS SAN ONOFRE	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0002	002720  06/24/93 00166 08.0	01/18/95  06/24/93 00166 08.0	MCB CAMP PENDLETON L.W. ARMAS DISTRIBUTION	TABLE 8-1 REPLACEMENT TO THE PRELIMINARY RISK BASED RA GROUP A SITES HUMAN HEALTH RISK ASSESSMENT	ADMIN RECORD	RA 3,4,5,6,9, 24, OU1	GROUP A	SOUTHWEST DIVISION
M00681 XMTL 000000000000000 0008	002721  06/24/93 00166 10.0	01/18/95  06/24/93 00166 10.0	SOUTHWEST DIVISION E.K. DIAS EPA SAN FRANCISCO R. SERAYDARIAN	STATUS REPORTS PROJECT MANAGERS MEETING MINUTES MAY 93 AND MINUTES TO APR 30, 1993 CONFERENCE CALL	ADMIN RECORD	MTG MINS	RFA SITES	SOUTHWEST DIVISION



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M00681	003221	01/31/97	JACOBS ENGINEERING	JUNE 16, 1993 TWELFTH FFA PROJECT MANAGER'S MEETING	ADMIN RECORD	MTG MINS	GROUP A	SOUTHWEST DIVISION
LTR		07/01/93		MINUTES AND ATTENDEES SIGN UP SHEET	INFO REPOSITORY	FFA	4	MCB CAMP PENDLETON
0000000000000000	00000	00000	PARTICIPANTS	W/ENCLS			4A	
0014		01.6					5	
							24	
							3	
							9	
							6	
M00681	001040	05/23/94	JACOBS	MBC CAMP PENDLETON RI\FS GROUP B SITES ECOLOGICAL	ADMIN RECORD	FS	GROUP B	SOUTHWEST DIVISION
RPT		07/02/93		RISK ASSESSMENT WORK PLAN PRELIMINARY DRAFT		RA	7,8,8A,14,	
N6871189D9296		00166	SOUTHWEST DIVISION			RI	19,20,22	
0250		03.4					OU2	
M00681	001977	06/28/94	SOUTHWEST DIVISION	IDENTIFICATION OF STATE APPLICABLE OR RELEVANT AM	ADMIN RECORD	ARAR		SOUTHWEST DIVISION
LTR		07/16/93	JAMES PAWLISCH	APPROPRIATE REQUIREMENTS (ARARs) FOR MCB CAMP				
0000000000000000	00000	00000	EPA	PENDLETON				
0003		04.1	JOHN E. SCANDURA					
M00681	003228	01/31/97	DTSC LONG BEACH	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION (RI)	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		07/22/93	H. SALLOUM	REPORT FOR GROUP A SITES	INFO REPOSITORY	RI		MCB CAMP PENDLETON
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0018		03.6	E. DIAS					
M00681	003366	09/02/97	MCB CAMP PENDLETON	LETTER OF THANKS FOR PARTICIPATION IN TECHNICAL REVIEW	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		07/22/93	L. ARMAS	COMMITTEE MEETING FOR IRP, AND MENTION OF NEXT MEETING	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000	00000	00000	MCB CAMP PENDLETON					
0002		06.3	ASS. CHIEF STAFF					
M00681	003230	01/31/97	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		07/23/93	R. SERAYDARIAN	FOR GROUP A SITES INCLUDING THE HUMAN HEALTH RISK	INFO REPOSITORY	RI		MCB CAMP PENDLETON
0000000000000000	00000	00000	SOUTHWEST DIVISION	ASSESSMENT AND SPECIFIC ECOLOGICAL RISK ASSESSMENT		RISK		
0011		03.6	E. DIAS					
							ASSESSMENT	
M00681	003209	01/29/97	EPA SAN FRANCISCO	DRAFT FINAL RCRA FACILITY ASSESSMENT REPORT DATED	ADMIN RECORD	RCRA		SOUTHWEST DIVISION
LTR		07/26/93	R. SERAYDARIAN	JUNE 25, 1993 REVIEWED AND CONCUR WITH THE SITES	INFO REPOSITORY	ASSESSMENT		MCB CAMP PENDLETON
0000000000000000	00000	00000	SOUTHWEST DIVISION	RECOMMENDED FOR FURTHER ACTION UNDER CERCLA		CERCLA		
0001		01.6	E. DIAS					

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M00681 PLAN N6871189D9296 0010	002657	01/09/95 07/30/93 00166 03.3	JACOBS ENGINEERING E.B. LUEKER SOUTHWEST DIVISION	ADDENDUM FOR GROUP A SITES RI/FS TECHNICAL MEMORANDUM FOR DRAFT FINAL PHASE 2 RI WORK PLAN MCB CAMP PENDLETON	ADMIN RECORD	RI FS TECH MEMO	GROUP A 3,4,5,6,9, 24  OU1,OU2	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0004	002807	02/16/95 07/30/93 00166 03.4	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	RI/FS TECHNICAL MEMORANDUM FOR DRAFT FINAL PHASE 2 RI WORK PLAN ADDENDUM FOR GROUP A SITES	ADMIN RECORD	RI TECH MEMO FS	GROUP A 3,4,5,6,9 24	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003210	01/29/97 07/30/93 00000 01.6	DTSC LONG BEACH H. SALLOUM SOUTHWEST DIVISION E. DIAS	APPROVAL ON THE DRAFT FINAL RCRA FACILITY ASSESSMENT REPORT DATED JUNE 25, 1993	ADMIN RECORD INFO REPOSITORY	RCRA ASSESSMENT		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0038	002724	01/18/95 08/02/93 00166 10.4	MCB CAMP PENDLETON L.E. ARMAS DISTRIBUTION	TRC MEETING MINUTES OF JUNE 17, 1993	ADMIN RECORD INFO REPOSITORY	TRC MTG MINS	GROUP A 3,4,4A,5,9 24,6,	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 LTR 0000000000000000 0006	003229	01/31/97 08/02/93 00000 03.6	CRWQB SAN DIEGO M. ALPERT SOUTHWEST DIVISION E. DIAS	CONCURRENCE ON THE DRAFT REMEDIAL INVESTIGATION (RI) REPORT FOR GROUP A SITES; CANNOT CONCUR WITH SITE 24 "NO-ACTION INTERIM ROD" WITHOUT FURTHER CLARIFICATION	ADMIN RECORD INFO REPOSITORY	COMMENTS RI NFA	GROUP A 3 4  4A 5 9 24	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0001	003211	01/29/97 08/03/93 00000 01.6	CRWQCB SAN DIEGO M. ALPERT SOUTHWEST DIVISION E. DIAS	REVIEW OF DRAFT FINAL RCRA FACILITY ASSESSMENT (RFA) REPORT; NO COMMENTS AT THIS TIME (NOTE: DUPLICATE COPY REC'D W/ORIG)	ADMIN RECORD INFO REPOSITORY	RCRA ASSESSMENT COMMENTS		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0001	003226	01/31/97 08/09/93 00000 01.6	EPA REGION 9 R. SERAYDARIAN CAMP PENDLETON J. JOY	DOCUMENTING NO ACTION DECISIONS AT CAMP PENDLETON WITH ATTACHED EXCERPTS FORM OSWER DIRECTIVE 9335.3-02, CHAP. 9, CHECKLIST FOR NO ACTION RODS W/O ENCLS	ADMIN RECORD INFO REPOSITORY			SOUTHWEST DIVISION MCB CAMP PENDLETON

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M00681 MSG 000000000000000 0007	001474 08/10/93 00000	06/21/94 08/10/93 00000	CMC WASHINGTON DC MCB CAMP PENDLETON 01.1	MCB CAMP PENDLETON FACILITIES RESTORATION/REPAIR REQUIREMENTS RESULTING FROM STORM DAMAGE	ADMIN RECORD INFO REPOSITORY	WPSL		SOUTHWEST DIVISION
M00681 MAP N6871189D9296 0040	002808 08/10/93 00166 01.1	02/16/95 08/10/93 00166 01.1	JACOBS ENGINEERING S. TSAI SOUTHWEST DIVISION E. DIAS	RI/FS SAMPLING LOCATION MAPS FOR GROUP B AND PHASE 2 GROUP A SAMPLING LOCATIONS	ADMIN RECORD	MAP RI	GROUP A OU1 3,4,5,6,9,  24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0008	001983 08/12/93 00000	06/28/94 08/12/93 00000	SOUTHWEST DIVISION JAMES PAWLISCH EPA JOHN B. SCANDURA	IDENTIFICATION OF STATE APPLICABLE OF RELEVANT AND APPROPRIATE REQUIREMENTS FOR MCB CAMP PENDLETON.	ADMIN RECORD	ARAR FFA		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0012	003227 08/13/93 00000 04.5	01/31/97 08/13/93 00000 04.5	DTSC LONG BEACH M. GASLAN SOUTHWEST DIVISION E. DIAS	LIST OF POTENTIAL STATE ARARs FOR THE CERCLA REMOVAL ACTIONS AT SITES 3, 5, AND 6 AND THE CERCLA REMEDIAL ACTIONS AT SITE 9 PROPOSED FOR GROUP A SITES W/ENCLS	ADMIN RECORD INFO REPOSITORY	ARAR CERCLA REMOVAL  RA	3 5 6  9 GROUP A	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 RPT N6871189D9296 0250	002642 08/20/93 00166 03.3	01/06/95 08/20/93 00166 03.3	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT WORK PLAN RI/FS GROUP B SITES ECOLOGICAL RISK ASSESSMENT FOR MCB CAMP PENDLETON	ADMIN RECORD	RI FS	GROUP B 7,8,8A,14 19,20,22	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0001	002725 08/20/93 00166 10.0	01/18/95 08/20/93 00166 10.0	MCB CAMP PENDLETON L.E. ARMAS DISTRIBUTION	RI/FS SAMPLING LOCATION MAPS FOR GROUP B & PHASE 2 GROUP A SAMPLING LOCATIONS (W/O MAPS)	ADMIN RECORD CONFIDENTIAL DOC	MAP RI FS	GROUP B GROUP A 3,4,5,6,9,  24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0001	002726 08/23/93 00166 10.0	01/18/95 08/23/93 00166 10.0	MCB CAMP PENDLETON J.E. JOY DISTRIBUTION	RI/FS TECHNICAL MEMORANDUM FOR DRAFT FINAL PHASE 2 RI WORK PLAN ADDENDUM FOR GROUP A SITES (SEE DOC. NO. 002657 FOR ENCLOSURE)	ADMIN RECORD	TECH MEMO RI FS	GROUP A 3,4,5,6,9, 24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0023	003331 08/23/93 00000 01.6	08/26/97 08/23/93 00000 01.6	MCB CAMP PENDLETON J. JOY EPA SAN FRANCISCO R. SERAYDARIAN	LETTER ENCLOSING ANALYTICAL DATA FOR SOIL BORING TAKEN AT SITE 34. W/OUT ATTACHED MAP	ADMIN RECORD INFO REPOSITORY	DATA SOIL	34	SOUTHWEST DIVISION MCB CAMP PENDLETON

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M00681 LTR 000000000000000 0001	002727 08/31/93 00166 10.0	01/18/95 J.E. JOY DISTRIBUTION	MCB CAMP PENDLETON	RI/FS GROUP B SITES ECOLOGICAL RISK ASSESSMENT DRAFT WORK PLAN OF 20 AUG 1993 FOR REVIEW AND COMMENTS (SEE DOC. NO. 002642 FOR ENCLOSURE)	ADMIN RECORD	RI FS	GROUP B	SOUTHWEST DIVISION
M00681 XMTL 000000000000000 0035	002894 09/08/93 00166 03.6	05/03/95 D. MARK SOUTHWEST DIVISION	JACOBS ENGINEERING	IDENTIFICATION AND SCREENING OF TREATMENT TECHNOLOGICS SOIL AND GROUNDWATER CONTAMINATION GROUP A SITES 3, 5, 6, & 9	ADMIN RECORD	GW REMOVAL(3) REMOVAL(6)	3,5,6,9 GROUP A OU1,OU2,  OU3	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0004	003222 09/08/93 00000 01.6	01/31/97 J.E. JOY EPA SAN FRANCISCO R. SERAYDARIAN	MCB CAMP PENDLETON	RI/FS HUMAN HEALTH RISK ASSESSMENT WORK PLAN FOR GROUP "B" SITES DATED NOVEMBER 9, 1993; TRC COMMENTS DUE NO LATER THAN OCTOBER 9, 1993 W/O ENCLS	ADMIN RECORD INFO REPOSITORY RISK  ASSESSMENT WORK PLAN COMMENTS	RI FS		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 RPT N6871189D9296 0100	002639 09/09/93 00166 02.4	01/06/95 E.B. LUECKER SOUTHWEST DIVISION	JACOBS ENGINEERING	RI/FS EE/CA FOR GROUP A SITE 3, THE PEST CONTROL WASH RACK, AND SITE 6, THE DPDO (DRMO) SCRAP YARD AND B-2241 PRELIMINARY DRAFT	ADMIN RECORD	EE\CA RI FS	GROUP A 3,6	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0100	002640 09/09/93 00166 02.4	01/06/95 E.B. LUECKER SOUTHWEST DIVISION	JACOBS ENGINEERING	RI/FS EE/CA FOR GROUP A SITE 5, FIREFIGHTER DRILL FIELD PRELIMINARY DRAFT	ADMIN RECORD INFO REPOSITORY	RI FS EE\CA	GROUP A SITE 5	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 PLAN N6871189D9296 0150	002655 09/09/93 00166 03.3	01/09/95 D.R. LINCOLN SOUTHWEST DIVISION	JACOBS ENGINEERING	DRAFT WORK PLAN RI/FS GROUP B SITES HUMAN HEALTH RISK ASSESSMENT MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	RI FS RA	7,8,8A,14 19,20,22 GROUP B	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 LTR 000000000000000 0003	002728 09/10/93 00166 01.1	01/18/95 J.E. JOY DISTRIBUTION	MCB CAMP PENDLETON	REPLACEMENT PAGES FOR FIGURE 5-1 & PAGE 5-5 OF THE DRAFT FINAL RCRA RFA	ADMIN RECORD	RCRA		SOUTHWEST DIVISION

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M00681	003215	01/29/97	DTSC LONG BEACH	RESPONSE TO THE CONCERNS OF THE IDENTIFICATION OF	ADMIN RECORD	RESPONSE	GROUP A	SOUTHWEST DIVISION
LTR		09/10/93	O. PATRICK\	STATE ARARs	INFO REPOSITORY	ARAR		MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION					
0002		04.5	E. DIAS					
M00681	002122	06/29/94	SOUTHWEST DIVISION	CONFIRMATION OF THE EXTENSION OF THE DUE DATE FOR THE	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
LTR		09/16/93	EDWARD K. DIAS	DRAFT FINAL REMEDIAL INVESTIGATION REPORT FOR GROUP			3,4,5,6,9,	
0000000000000000		00000	CRWQCB SAN DIEGO	A SITES.			24, OUI	
0006		03.6	JOHN ANDERSON					
M00681	002895	05/03/95	JACOBS ENGINEERING	13TH FFA PROJECT MANAGERS' MEETING	ADMIN RECORD	MTG MINS	3,5,6,9	SOUTHWEST DIVISION
XMTL		09/17/93	D. MARK			REMOVAL(3)	GROUP A	
0000000000000000		00166	SOUTHWEST DIVISION			REMOVAL(6)		
0035		03.6						
M00681	002128	06/29/94	SOUTHWEST DIVISION	USE OF CALIFORNIA CANCER POTENCY FACTORS FOR MARINE	ADMIN RECORD	CANCER		
LTR		09/24/93	JAMES PAWLISCH	CORPS BASE CAMP PENDLETON.		CERCLA		
0000000000000000		00000	EPA					
0007		07.7	JOHN SCANDURA					
M00681	002787	02/03/95	COUNTY OF SAN DIEGO	REQUEST FOR IDENTIFICATION OF CHEMICAL LOCATION &	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
LTR		09/24/93	J.R. ODERMATT	ACTION SPECIFIC ARARs FOR MCB CAMP PENDLETON GROUP A			2,5,6,9	
0000000000000000		00000	DTSC LONG BEACH	SITES				
0003		04.1	M. GASLAN					
M00681	002784	02/03/95	CRWQCB SAN DIEGO	IDENTIFICATION OF POTENTIAL STATE AND REGIONAL WATER	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
LTR		09/27/93	M.J. ALPERT	BOARD ARARs AND TO-BE-CONSIDERED REQUIREMENTS FOR			3,5,6,9	
0000000000000000		00000	DTSC LONG BEACH	MCB CAMP PENDLETON				
0007		04.1	O.K. PATRICK					
M00681	002789	02/03/95	APCD SAN DIEGO	REQUEST FOR IDENTIFICATION OF ARARs FOR MCB CAMP	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
LTR		09/28/93	R.J. SMITH	PENDLETON GROUP A SITES			3,5,6,9	
0000000000000000		00000	DTSC LONG BEACH					
0150		04.1	M. GASLAN					
M00681	002131	06/29/94	SOUTHWEST DIVISION	FEDERAL FACILITIES AGREEMENT 7.5 AND 18.3. FORWARDING	ADMIN RECORD	FFA		
RPT		09/29/93	EDWARD K. DIAS	MINUTES OF THE 13TH FFA PROJECT MANAGERS' MEETING.		PN		
			U.S. EPA					
0032		06.0	R. SERAYDARIAN					

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M00681	002134	06/29/94	SOUTHWEST DIVISION	REQUEST FOR AN EXTENSION TO A DEADLINE SET FORTH IN	ADMIN RECORD	FFA		SOUTHWEST DIVISION
LTR		10/07/93	JAMES PAWLISCH	APPENDIX A OF THE FFA FOR MCB CAMP PENDLETON.		OU		
000000000000000		00000	U.S. EPA			FS		
0024		06.0	JULIE ANDERSON					
M00681	003333	09/27/97	MCB CAMP PENDLETON	VARIOUS LETTERS DOCUMENTING THE UPDATE OF THE IRP	ADMIN RECORD	IRP		SOUTHWEST DIVISION
LTR		10/07/93	J. JOY	TECHNICAL REVIEW COMMITTEE MEMBERS LIST, REQUEST FOR	INFO REPOSITORY	REQUEST		MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	REVIEW AND COMMENTS		COMMENTS		
0023		01.6						
M00681	003334	08/27/97	MCB CAMP PENDLETON	UPDATE OF THE IRP TECHNICAL REVIEW COMMITTEE MEMBERS	ADMIN RECORD	IRP		SOUTHWEST DIVISION
LTR		10/08/93	J. JOY	LIST, REQUEST FOR REVIEW AND COMMENTS	INFO REPOSITORY	REQUEST		MCB CAMP PENDLETON
000000000000000		00000	MCB CAMP PENDLETON			COMMENTS		
0004		01.6	A. SHALL					
M00681	002931	06/12/95	SOUTHWEST DIVISION	COMMENTS FROM EPA ON THE DRAFT WORK PLAN ADDENDUM FOR	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
XMTL		10/13/93	K. REYNOLDS	RFA SITES ADDED TO RI/FS				
000000000000000		00000	JACOBS ENGINEERING					
0007		03.6						

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M00681	003213	01/29/97	NOAA SAN FRANCISCO	REVIEW OF THE REMEDIAL INVESTIGATION/FEASIBILITY	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		10/14/93	D. KLIMAS	STUDY, GROUP B SITES, ECOLOGICAL RISK ASSESSMENT	INFO REPOSITORY	FS	8	MCB CAMP PENDLETON
000000000000000	00000	00000	SOUTHWEST DIVISION	DRAFT WORK PLAN, DATED AUGUST 20, 1993			8A	
0005	03.6	03.6	E. DIAS				19	
							20	
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							42	
							43	
M00681	001023	05/23/94	JACOBS	RI\FS RI REPORT FOR GROUP A SITES	ADMIN RECORD	FS	GROUP A	SOUTHWEST DIVISION
RPT		10/15/93		DRAFT FINAL VOLUMES 1 & 2 OF 6 APPENDICES A THROUGH D	INFO REPOSITORY	RI	3,4,4A,5,9	MCB CAMP PENDLETON
000000000000000	00000	00000	SOUTHWEST				24	OCEANSIDE LIBRARY
0050	03.4	03.4						BASE LIBRARY
M00681	001024	05/23/94	JACOBS	RI\FS RI REPORT FOR GROUP A SITES	ADMIN RECORD	FS	GROUP A	SOUTHWEST DIVISION
RPT		10/15/93		DRAFT FINAL VOLUME 3 OF 6 APPENDICES E THROUGH H	INFO REPOSITORY	RI	3,4,4A,5,9	MCB CAMP PENDLETON
000000000000000	00000	00000	SOUTHWEST				24	OCEANSIDE LIBRARY
0350	03.4	03.4						BASE LIBRARY

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M00681	001025	05/23/94	JACOBS	RI\FS RI REPORT FOR GROUP A SITES	ADMIN RECORD	FS	GROUP A	SOUTHWEST DIVISION
RPT		10/15/93		DRAFT FINAL VOLUME 4 OF 6 APPENDICES I THROUGH O	INFO REPOSITORY	RI	3,4,4A,5,9	MCB CAMP PENDLETON
000000000000000	00000		SOUTHWEST				24	OCEANSIDE LIBRARY
0250	03.4							BASE LIBRARY
M00681	001026	05/23/94	JACOBS	RI\FS RI REPORT FOR GROUP A SITES	ADMIN RECORD	FS	GROUP A	SOUTHWEST DIVISION
RPT		10/15/93		DRAFT FINAL VOLUME 5 OF 6 APPENDICES P THROUGH Y	INFO REPOSITORY	RI	3,4,4A,5,9	MCB CAMP PENDLETON
000000000000000	00000		SOUTHWEST				24	OCEANSIDE LIBRARY
0750	03.4							BASE LIBRARY
M00681	001027	05/23/94	JACOBS	RI\FS RI REPORT FOR GROUP A SITES	ADMIN RECORD	FS	GROUP A	SOUTHWEST DIVISION
RPT		10/15/93		DRAFT FINAL VOLUME 6 OF 6 APPENDICES Z AND AA	INFO REPOSITORY	RI	3,4,4A,5,9	MCB CAMP PENDLETON
000000000000000	00000		SOUTHWEST				24	OCEANSIDE LIBRARY
0850	03.4							BASE LIBRARY
M00681	002788	02/03/95	DEPT OF FISH & GAME	RI/FS ARARs ENCLOSED COMPLETE	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
LTR		10/18/93	M. MARTIN	LIST OF ARARs FOR PROTECTION OF STATE FISH AND		ARAR	3,5,6,9	
000000000000000	00000		DTSC LONG BEACH	WILDLIFE RESOURCES AT MCB CAMP PENDLETON		FS		
0048	04.1		O. PATRICK					
M00681	002896	05/03/95	JACOBS ENGINEERING	MEASURING AND SAMPLING FREE PRODUCT IN MONITORING	ADMIN RECORD	REMOVAL(3)	GROUP A	SOUTHWEST DIVISION
XMTL		10/20/93	D. MARK	WELLS		REMOVAL(6)	GROUP B	
000000000000000	00166		SOUTHWEST DIVISION					
0003	03.6							
M00681	003212	01/29/97	COUNTY OF SAN DIEGO	COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY	ADMIN RECORD	COMMENTS	GROUP B	SOUTHWEST DIVISION
LTR		10/20/93	L. SKINNER	STUDY HUMAN HEALTH RISK ASSESSMENT WORK PLAN FOR	INFO REPOSITORY	RI		MCB CAMP PENDLETON
000000000000000	00000		SOUTHWEST DIVISION	GROUP "B" SITES DATED SEPTEMBER 9, 1993		FS		
0002	04.5		E. DIAS					
						RISK ASSESSMENT WORK PLAN		
M00681	002932	06/12/95	SOUTHWEST DIVISION	COMMENTS ON THE RI/FS GROUP B HUMAN HEALTH RISK	ADMIN RECORD	COE	GROUP B	SOUTHWEST DIVISION
XMTL		10/21/93	K. REYNOLDS	ASSESSMENT WORK PLAN DRAFT 09 SEPT 1993				
000000000000000	00000		JACOBS ENGINEERING					
0026	03.6							

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M00681	002786	02/03/95	DTSC LONG BEACH	STATE ARARs FOR MCB CAMP PENDLETON GROUP A SITES	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
LTR		10/22/93	M. GASLAN	LIST OF OTHER AGENCY ARARs			3,5,6,9	
000000000000000		00000	SOUTHWEST DIVISION					
0021		04.1	E. DIAS					
M00681	002897	05/03/95	JACOBS ENGINEERING	RESPONSE TO COMMENTS FROM EPA, NOAA & DTSC ON RI/FS	ADMIN RECORD	COMMENTS	GROUP B	SOUTHWEST DIVISION
XMTL		10/29/93	D. MARK	STUDY GROUP B SITES ECOLOGICAL RISK ASSESSMENT				
000000000000000		00166	SOUTHWEST DIVISION	DRAFT WORK PLAN				
0025		03.6						
M00681	002893	05/03/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE RESPONSE TO COMMENTS ON DRAFT	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
XMTL		11/01/93	E. MINUGH	RI REPORT FOR GROUP A SITES		REMOVAL(3)	3,4,5,6,9	
000000000000000		00166	SOUTHWEST DIVISION			REMOVAL(6)	24	
0030		03.6						
M00681	003319	08/26/97	BIOSYSTEMS ANALYSIS	LETTER REQUESTING ACCESS TO SITE 6 AND ENRMO SURVEY	ADMIN RECORD	ASSESSMENT	6	SOUTHWEST DIVISION
LTR		11/03/93	J. MILLER	PERMIT TO CONDUCT WETLAND ASSESSMENT AS PART OF RI/FS	INFO REPOSITORY	RI	BLDG. 2241	MCB CAMP PENDLETON
000000000000000		00000	MCB CAMP PENDLETON	WORK PLAN FOR MCB CAMP PENDLETON		FS		
0002		06.3	J. JOY			WORK PLAN		
						PERMIT		
						SCRAPYARD		
M00681	002155	06/30/94	U.S. EPA	EXTENSION REQUEST FOR SUBMITTAL DEADLINES FOR OU #1,	ADMIN RECORD	FFA	OU1	SOUTHWEST DIVISION
LTR		11/08/93	R. SERAYDARIAN	MCB CAMP PENDLETON.		OU	GROUP A	
0009		11.0	SOUTHWEST DIVISION			ARAR	3,4,5,6,9,	
			JAMES PAWLISCH				24	
M00681	002157	06/30/94	DFG	5090 BP5/TS (NOV 3 1993) TECHNICAL PROJECT NOTE.	ADMIN RECORD	PN	GROUP B	SOUTHWEST DIVISION
LTR		11/09/93	JOHN TURNER			RI	OU3	
000000000000000		00000	MCB CAMP PENDLETON			FS	7,8,14,22,	
0002		11.0	J.E. JOY				19,20, OU2	
M00681	002163	06/30/94	EPA	MCB CAMP PENDLETON, DRAFT FINAL HUMAN HEALTH RISK	ADMIN RECORD	HA		SOUTHWEST DIVISION
LTR		11/29/93	MILASOL GASLAN	ASSESSMENT (HRA) WORKPLAN FOR GROUP B SITES.	H&SP			
000000000000000		00000	SOUTHWEST DIVISION					
0002		00.0	ED DIAS					

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M00681 LTR 000000000000000 0003	003214	01/29/97 11/29/93 00000 03.6	COUNTY OF SAN DIEGO L. SKINNER SOUTHWEST DIVISION E. DIAS	COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY ECOLOGICAL RISK ASSESSMENT WORK PLAN FOR GROUP "B" SITES	ADMIN RECORD INFO REPOSITORY	COMMENTS RI FS  RISK ASSESSMENT WORK PLAN	GROUP B	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0004	002164	06/30/94 11/30/93 00000 10.0	MCB CAMP PENDLETON J.E. JOY SOUTHWEST DIVISION ED DIAS	MCB CAMP PENDLETON INSTALLATION RESTORATION PROGRAM TECHNICAL REVIEW COMMITTEE MEMBERS LIST.	ADMIN RECORD	TRC		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0001	003361	08/27/97 11/30/93 00000 01.6	MCB CAMP PENDLETON J.E. JOY VARIOUS AGENCIES	UPDATE OF THE IRP TECHNICAL COMMITTEE REVIEW MEMBERS' LIST; REQUEST FOR REVIEW AND COMMENTS (REFERENCE DOC.#003333)	ADMIN RECORD INFO REPOSITORY	IRP RI FS  WORK PLAN SAP	GROUP A	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 RPT N6871189D9296 0200	002641	01/06/95 12/01/93 00000 01.1	BIOSYSTEMS J. MILLER SOUTHWEST DIVISION	FINAL WETLAND DELINEATION OF SITE 6 DPDO (DRMO) SCRAP YARD AND B-2241 AREA MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	REMOVAL(3) REMOVAL(6)	3,6,9 GROUP A OU1, OU2  OU3	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 LTR 000000000000000 0003	003218	01/31/97 12/01/93 00000 01.6	DTSC SACRAMENTO D. WANG US ARMY CORPS ENGNRS A. SHACTER	FIRST QUARTER FISCAL YEAR 1993/1994 ACTIVITIES REPORTS AND LIST OF DTSC'S RPM; NOTIFICATION OF CHANGE IN DTSC STAFF ASSIGNMENT TO DSMOA	ADMIN RECORD INFO REPOSITORY	DSMOA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 MISC 000000000000000 0009	003274	08/22/97 12/01/93 00000 02.2	MCB CAMP PENDLETON WALTER CRANE	PERMIT APPLICATION FOR GROUND WATER AND VADOSE MONITORING WELLS - REFUSE BURNING GROUNDS	ADMIN RECORD INFO REPOSITORY	PERMIT MONITORING WELLS	1 1D 14 AREA  11 AREA 13 AREA 20 AREA 43 AREA 52 AREA 62 AREA 64 AREA TWIN LAKES	SOUTHWEST DIVISION MCB CAMP PENDLETON

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M00681	002166	06/30/94	MCB CAMP PENDLETON	INVITATION TO SERVE AS A MEMBER OF A TECHNICAL REVIEW	ADMIN RECORD	TRC		SOUTHWEST DIVISION
LTR		12/02/93	J.E. JOY	COMMITTEE.				
000000000000000		00000	DFG					
0002		10.0	MICHEAL MARTIN					
M00681	003217	01/31/97	CRWQCB SAN DIEGO	CONCURRENCE AND COMMENTS ON THE DRAFT REMEDIAL	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		12/03/93	M. ALPERT	INVESTIGATION (RI) REPORT AND DRAFT FINAL RI REPORT	INFO REPOSITORY	RI		MCB CAMP PENDLETON
000000000000000		00000	SOUTHWEST DIVISION	FOR GROUP A SITES				
0001		03.6	E. DIAS					
M00681	002167	06/30/94	CRWQCB	TECHNICAL PROJECT NOTE-RESPONSE TO COMMENTS ON DRAFT	ADMIN RECORD	TECH MEMO	GROUP A	SOUTHWEST DIVISION
LTR		12/06/93	MARK J. ALPERT	REMEDIAL INVESTIGATION REPORT AND DRAFT FINAL RI REPORT		PN	3,4,5,6,9	
000000000000000		00000	SOUTHWEST DIVISION	FOR GROUP A SITES, MCB CAMP PENDLETON.		RI	24, OU1	
0001		06.0	EDWARD DIAS					
						COMMENTS		
M00681	003275	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	35	SOUTHWEST DIVISION
MISC		12/06/93		MONITORING WELLS - FORMER SEWAGE TREATMENT PLANT	INFO REPOSITORY	GW	25 AREA	MCB CAMP PENDLETON
000000000000000		00000		FACILITY IN 25 AREA				
0005		02.2						
						WELLS		
M00681	003360	08/27/97	MCB CAMP PENDLETON	DOCUMENTS TO ASSIST THE CAMP PENDLETON INSTALLATION	ADMIN RECORD	IRP	GROUP A	SOUTHWEST DIVISION
LTR		12/09/93	J.E. JOY	RESTORATION PROGRAM FOR GROUP A SITES, THE RI/FS STUDY	INFO REPOSITORY	RI		MCB CAMP PENDLETON
000000000000000		00000	DEPT. OF FISH & GAME	WORK PLAN AND RI/FS SAP (W/O ENCLS)		FS		
0001		01.6	M. MARTIN					
						WORK PLAN		
						SAP		
M00681	002653	01/09/95	JACOBS ENGINEERING	RI/FS PHASE I RI TECHNICAL MEMORANDUM GROUP B SITES	ADMIN RECORD	TECH MEMO	7,8,8A,14	SOUTHWEST DIVISION
RPT		12/10/93	E.M. MINUGH	MCB CAMP PENDLETON		RI	19,20,22	
N6871189D9296		00166	SOUTHWEST DIVISION			FS	GROUP B	
0550		03.4						
							OU2,OU3	
M00681	002116	06/29/94	SOUTHWEST DIVISION	IDENTIFICATION OF STATE ARAR'S UNDER THE COMPREHENSIVE	ADMIN RECORD	CERCLA	3,5,6,9	SOUTHWEST DIVISION
LTR		12/14/93	J.R. PAWLISCH	ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY		ARAR	GROUP A	
000000000000000		00000	CRWQCB	ACT (CERCLA)		REMOVAL(3)	OU1	
0005		04.1	MARK J. ALPERT					
						REMOVAL(6)	OU2	

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M00681 LTR 000000000000000 0006	002785	02/03/95 12/14/93 00000 04.1	SOUTHWEST DIVISION J.R. PAWLISCH CRWQCB SAN DIEGO M.J. ALPERT	REQUEST FOR CLARIFICATION OF THE STATE AND RWQCB POSITION REGARDING SOME REQUIREMENTS THAT HAVE BERN IDENTIFIED	ADMIN RECORD	ARAR	GROUP A 3,5,6,9	SOUTHWEST DIVISION
M00681 XMTL 000000000000000 0015	002888	05/03/95 12/21/93 00166 03.6	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	RESPONSE TO COMMENTS ON DRAFT HUMAN HEALTH RISK ASSESSM ENT WORK PLAN	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	002181	06/30/94 12/22/93 00000 10.0	DFG JOHN TURNER MCB CAMP PENDLETON JAYNE E. JOY	INVITATION TO PARTICIPATE IN TECHNICAL REVIEW COMMITTEE, CAMP PENDLETON.	ADMIN RECORD	TRC		SOUTHWEST DIVISION
M00681 LTR 0004	002182	06/30/94 12/23/93 06.0	SOUTHWEST DIVISION JAMES PAWLISCH DFG MICHAEL MARTIN	DISCUSSION OF ARARs IDENTIFIED BY FISH AND GAME	ADMIN RECORD	ARAR CERCLA TRC		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0003	002930	06/12/95 12/23/93 00000 03.6	DTSC LONG BEACH K. GASLAN SOUTHWEST DIVISION E. DIAS	COMMENTS ON THE DRAFT FINAL RI REPORT FOR GROUP A SITES	ADMIN RECORD	COE REMOVAL(3) REMOVAL(6)	GROUP A 3,4,5,6,9 24	SOUTHWEST DIVISION
							OUI	
M00681 XMTL 000000000000000 0006	002899	05/03/95 12/29/93 00166 04.1	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	MINUTES OF 16 DECEMBER MEETING ON ARARs	ADMIN RECORD	ARAR REMOVAL(3) REMOVAL(6)	GROUP A 3,5,6,9	SOUTHWEST DIVISION
M00681 LTR 0005	002187	06/30/94 12/29/93 11.1	DHS JOHN ODERMATT SOUTHWEST DIVISION ED DIAS	COMMENTS ON THE DRAFT RI/FS STUDY PHASE 1 RI TECHNICAL MEMORANDUM FOR GROUP "B" SITES AT MCB CAMP PENDLETON, DATED DECEMBER 1993.	ADMIN RECORD	RI FS TECH MEMO	GROUP B 7,8,14,19, 20,OU2,OU3	
M00681 XMTL 000000000000000 0020	002908	05/03/95 01/01/94 00000 04.1	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	MINUTES OF 17 DECEMBER 1993 MEETING ON REMEDIATION GOALS	ADMIN RECORD	MTG MINS REMOVAL(3) REMOVAL(6)	GROUP A 3,5,6,9	SOUTHWEST DIVISION

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M00681 CLTR 000000000000000 0008	003340 01/04/94 00000 03.2	08/27/97 01/04/94 00000 03.2	MCB CAMP PENDLETON J. JOY DPT. HEALTH SERVICES K. HEATON	COVER LETTER ENCLOSING PERMIT APPLICATIONS AND MAPS FOR GROUNDWATER AND VADOSE MONITORING WELLS IN ACCORDANCE WITH FEDERAL FACILITIES AGREEMENT	ADMIN RECORD INFO REPOSITORY	PERMIT GW MONITORING  WELLS FFA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0001	002107 01/11/94 00000 01.1	06/29/94 01/11/94 00000 01.1	U.S. EPA R. SERAYDARIAN MCB CAMP PENDLETON JAYNE JOY	PROPOSED ACTIONS AT INSTALLATION RESTORATION (IR) SITES 4, 4A, AND 22.	ADMIN RECORD	RI TECH MEMO	4 4A 22	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0007	002929 01/11/94 00000 03.6	06/12/95 01/11/94 00000 03.6	DTSC LONG BEACH O. PARTICK SOUTHWEST DIVISION E. DIAS	COMMENTS ON THE PHASE I RI TECHNICAL MEMORANDUM FOR GROUP B SITES	ADMIN RECORD	COMMENTS TECH MEMO	GROUP B	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0003	000246 01/12/94 00000 03.6	03/16/94 01/12/94 00000 03.6	EPA R. SERAYDARIAN SOUTHWEST ED DIAS	TECHNICAL MEMORANDUM FOR RI/FS GROUP B SITES	ADMIN RECORD	RI OU	GROUP B	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0034	002793 01/13/94 00166 02.4	02/03/95 01/13/94 00166 02.4	JACOBS ENGINEERING S. TSAI DISTRIBUTION	PROJECT NOTE REGARDING FOLLOW-UP EFFORT FOR MCB CAMP PENDLETON EE/CA FOR GROUP A SITES 3 AND 6 SOIL WASHING ALTERNATIVES	ADMIN RECORD	EE\CA MTG MINS	GROUP A 3,6	SOUTHWEST DIVISION
M00681 XMTL 000000000000000 0005	002902 01/18/94 00166 02.7	05/03/95 01/18/94 00166 02.7	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	APPLICABILITY OF 40 CRF 268.42(A)2 AND CORRELATIVE STATE REGULATIONS TO GROUP A SITES 3 AND 6	ADMIN RECORD	CRP REMOVAL(3) REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 LTR 0003	002108 01/20/94 11.0	06/29/94 01/20/94 11.0	U.S. EPA R. SERAYDARIAN SOUTHWEST DIVISION ED DIAS	TECHNICAL MEMORANDUM FOR RI/FS GROUP B SITES, MCB CAMP PENDLETON.	ADMIN RECORD	FS RI	GROUP B	
M00681 LTR 0002	002113 01/20/94 07.7	06/29/94 01/20/94 07.7	CRWQCB ARTHUR L. COE MCB CAMP PENDLETON J.H. ROBERTU	CEASE AND DESIST ORDER NOS. 89-03, 89-04, 89-05, 89-06 89-07, 89-08, 89-09, 89-14, 99-15.	ADMIN RECORD	C&D		

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M00681	002194	06/30/94	MCB CAMP PENDLETON	SUBMISSION LETTERS TO 15 SDAPCD EMPLOYEES CONCERNING	ADMIN RECORD	RI	5,OU1	SOUTHWEST DIVISION
LTR		01/25/94	J.E. JOY	RI/FS DRAFT ENGINEERING EVALUATION AND COST ANALYSIS		FS	GROUP A	
0000000000000000		00000	SDAPCD	FOR SITE 5 DATED 4 FEBRUARY 1994.		EE\CA		
0015		02.3						
M00681	002195	06/30/94	MCB CAMP PENDLETON	PROJECT NOTES ADDRESSING COMMENTS TO RI/FS DRAFT HUMAN	ADMIN RECORD	PN	GROUP B	SOUTHWEST DIVISION
LTR		01/25/94	J.E. JOY	HEALTH RISK ASSESSMENT WORK PLAN FOR GROUP "B" SITES.		RI	7,8,14,19,	
0000000000000000		00000	RWQCB			FS	20,22,OU2	
0001		06.0	JOHN ANDERSON			HRA	OU3	
M00681	002196	06/30/94	RWQCB	STAFF REPORT DESCRIBING FURTHER REGIONAL BOARD	ADMIN RECORD	NOV		
RPT		01/27/94	ARTHUR L. COE	ENFORCEMENT OPTIONS.# CEASE AND DESIST ORDERS.		C&D		
0024		07.7	MCB CAMP PENDLETON J.H. ROBERTUS					
M00681	002886	05/03/95	JACOBS ENGINEERING	PROJECT NOTE RE: FOLLOW-UP EFFORT FOR MCB CAMP	ADMIN RECORD	EE\CA	GROUP A	SOUTHWEST DIVISION
XMTL		01/31/94	E. MINUGH	PENDLETON EE/CA FOR GROUP A SITES 3 AND 6			3,6	
N6871189D929600		00166	SOUTHWEST DIVISION					
0074		02.7	R. GREEN					
M00681	002903	05/03/95	JACOBS ENGINEERING	ESTIMATED COST OF CONDUCTING RFA INVESTIGATION FOR	ADMIN RECORD	RFA	37	SOUTHWEST DIVISION
XMTL		01/31/94	E. MINUGH	RI SITE 37 (RFA SITE 255) MCB CAMP PENDLETON				
0000000000000000		00166	SOUTHWEST DIVISION					
0003		03.6						
M00681	002910	05/08/95	JACOBS ENGINEERING	FOLLOW UP EFFORT FOR MCB CAMP PENDLETON EE/CA FOR	ADMIN RECORD	EE\CA	3,6	SOUTHWEST DIVISION
MM		01/31/94	E. MINUGH	GROUP A SITES 3 AND 6		REMOVAL(3)	GROUP A	
N6871189D9296		00166	DISTRIBUTION			REMOVAL(6)		
0050		01.6						
M00681	003151	09/16/96	JACOBS ENGINEERING	EE/CA FOR GROUP A SITE 5 DRAFT	ADMIN RECORD	EE/CA(*)	5	SOUTHWEST DIVISION
RPT		02/04/94	E. LUECKER			TPH		
N6871189D9296		00166	SOUTHWEST DIVISION			NTCRA		
0150		02.4				ARAR		
M00681	002214	06/30/94	SOUTHWEST DIVISION	REGARDING ARARs COMMENTS ON THE APCD POSITION ON	ADMIN RECORD	CERCLA		SOUTHWEST DIVISION
LTR		02/11/94	W.A. DOS SANTOS	APPLICABILITY OF STATE ENVIRONMENTAL LAWS AT MCB		ARAR		
0000000000000000		00000	APCD	CAMP PENDLETON				
0004		01.1	RICHARD J. SMITH					

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M00681	002887	05/03/95	JACOBS ENGINEERING	RESPONSE TO COMMENTS ON DRAFT FINAL TECHNICAL	ADMIN RECORD	EE\CA	3,6	SOUTHWEST DIVISION
XMTL		02/14/94	E. MINUGH	MEMORANDUM FOR GROUP B SITES		COMMENTS	GROUP A	SOUTHWEST DIVISION
N6871189D9296		00166	SOUTHWEST DIVISION			REMOVAL(3)	OU1,OU2	
0034		03.6				REMOVAL(6)		
M00681	002577	01/05/95	SOUTHWEST DIVISION	DTSC ROLE AS LEAD STATE AGENCY FOR IDENTIFICATION OF	ADMIN RECORD	ARAR	GROUP A	SOUTHWEST DIVISION
LTR		02/25/94	J.R. PAWLISCH	STATE ARARs FOR MCB CAMP PENDLETON			3,4,5,6,9,	
0000000000000000		00000	EPA SACRAMENTO				24,OU1	
0005		04.1	A.J. LANDIS					
M00681	003066	03/04/96	JACOBS ENGINEERING	CLOSURE AND POSTCLOSURE MAINTENANCE PLAN BOX CANYON	ADMIN RECORD	CLOSURE	7	SOUTHWEST DIVISION
RPT		02/2/94	E.B. LUECKER	LANDFILL DRAFT REVISION 0				
N6871189D9296		00301	SOUTHWEST DIVISION					
0600		01.1						
M00681	002643	01/06/95	JACOBS ENGINEERING	DRAFT EE/CA FOR GROUP A SITE 3, PEST CONTROL WASH RACK	ADMIN RECORD	EE\CA	GROUP A	SOUTHWEST DIVISION
RPT		03/02/94	E.B. LUECKER	AND SITE 6 DPDO (DRMO) SCRAP YARD MCB CAMP PENDLETON			3,6	
N6871189D9296		00166	SOUTHWEST DIVISION					
0350		02.4						
M00682	002904	05/03/95	EPA SAN FRANCISCO	COMMENTS DRAFT EE/CA FOR GROUP A SITE 5	ADMIN RECORD	EE\CA	5	SOUTHWEST DIVISION
LTR		03/03/94	S.L. LAUTH				OU1	
0000000000000000		00000	SOUTHWEST DIVISION				GROUP A	
0001		02.7	E. DIAS					
M00681	002578	01/05/95	MCAS CAMP PENDLETON	MCB CAMP PENDLETON RI/FS DRAFT EE/CA FOR SITE 5	ADMIN RECORD	COMMENTS	5, OU1	SOUTHWEST DIVISION
LTR		03/07/94	S. GIBSON	COMMENTS		EE\CA	GROUP A	
0000000000000000		00000	SOUTHWEST DIVISION			RI		
0002		02.4	E. DIAS			FS		
M00681	002582	01/05/95	SOUTHWEST DIVISION	REQUESTING EXTENSION TO THE DEADLINE FOR THE DRAFT RI	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		03/10/94	W.A. DOS SANTOS	REPORT FOR GROUP B SITES FROM MARCH 14, 1994 TO		FFA		
0000000000000000		00000	EPA SAN FRANCISCO	OCTOBER 31 1994 SET FORTH IN APPENDIX A FFA				
0007		06.0	J. ANDERSON					
M00681	002600	01/05/95	DEPT OF FISH & GAME	MCB CAMP PENDLETON RI/FS FS FOR GROUP A SITES	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
LTR		03/10/94	J.L. TURNER		CONFIDENTIAL DOC	FS	3,4,5,6,9,	
0000000000000000		00000	SOUTHWEST DIVISION				24	
0002		06.0	E. DIAS					

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M00681	002695	01/17/95	MCB CAMP PENDLETON	DRAFT CAMP PENDLETON FS FOR GROUP A SITES SITE 9 OF	ADMIN RECORD	FS	GROUP A	SOUTHWEST DIVISION
LTR		03/10/94	J.E. JOY	MARCH 15, 1994 SENT OUT FOR COMMENTS (DRAFT FS SITE		COMMENTS	9	
0000000000000000		00000	DISTRIBUTION	LOCATED UNDER DOC. NO. 002644)		TRC	OU1	
0001		10.4						
M00681	002584	01/05/95	EPA SAN FRANCISCO,	EXTENSION REQUEST FOR THE DRAFT RI REPORT GROUP B	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		03/14/94	J. ANDERSON	SITES MCB CAMP PENDLETON WITH REVISED APPENDIX A FFA		OU	OU 2	
0000000000000000		00000	SOUTHWEST DIVISION	WITH APPROVED SCHEDULE FOR OU 2				
0009		06.0	W.A. DOS SANTOS					
M00681	002594	01/05/95	DTSC LONG BEACH	MCB CAMP PENDLETON DRAFT EE/CA FOR GROUP A SITE 5	ADMIN RECORD	EE\CA	GROUP A	SOUTHWEST DIVISION
LTR		03/14/94	O. PATRICK	COMMENTS		COMMENTS	5	
0000000000000000		00000	SOUTHWEST DIVISION					
0003		02.4	E. DIAS					
M00681	002644	01/06/95	JACOBS ENGINEERING	DRAFT RI/FS FS FOR GROUP A SITES SITE 9 MCB CAMP	ADMIN RECORD	RI	GROUP A	SOUTHWEST DIVISION
RPT		03/15/94	E.B. LUECKER	PENDLETON	INFO REPOSITORY	FS	9	MCB CAMP PENDLETON
N6871189D9296		00166	SOUTHWEST DIVISION				OU 1	OCEANSIDE LIBRARY
0550		04.0						BASE LIBRARY
M00681	003296	08/25/97		SAMPLE LOCATION MAPS FOR SITES 25J TO 25N	ADMIN RECORD	DATA	25J	SOUTHWEST DIVISION
MISC		03/16/94	B. C. WHITE		INFO REPOSITORY		25K	MCB CAMP PENDLETON
0000000000000000		00000					25L	
0006		03.1					25M	
							25N	
M00681	002597	01/05/95	DEPT OF FISH & GAME	REVIEW OF APPENDIX A ARARs FOR THE MCB AT CAMP	ADMIN RECORD	ARAR	5,OU1	SOUTHWEST DIVISION
LTR		03/18/94	J. TURNER	PENDLETON COMMENTS SITE 5		COMMENTS	GROUP A	
0000000000000000		00000	DTSC LONG BEACH				RI	
0004		02.7	O. PATRICK				FS	
M00681	002762	01/18/95	SOUTHWEST DIVISION	PROJECT NOTE REGARDING 14TH FFA PROJECT MANAGERS MTG	ADMIN RECORD	TECH MEMO	GROUP B	SOUTHWEST DIVISION
MISC		03/18/94	E.K. DIAS	KEY TOPIC PHASE I RI TECHNICAL MEMORANDUM FOR GROUP B		FFA		
0000000000000000		00166	DISTRIBUTION	SITES OF 10 DEC 1993		RI		
0051		06.0						
						MTG MINS		

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M00681 MM N6871189D9296 0071	002792	02/03/95 03/18/94	JACOBS ENGINEERING	14TH FFA PROJECT MANAGERS MEETING RI/FS AND REMOVAL A ACTION TOPICS	ADMIN RECORD	FFA MTG MINS	GROUP B 19,22,8,14 6,27,4,4A,  9,OU 1 5,3	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	003216	01/31/97 03/23/94	DFG SACRAMENTO J. TURNER	COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR GROUP A SITES AND SITE 9 DRAFT OF MARCH 15, 1994	ADMIN RECORD INFO REPOSITORY	COMMENTS RI FS	GROUP A 9	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0005	002905	05/03/95 03/28/94	EPA SAN FRANCISCO L.C. MALDONADO	COMMENTS ON ARAR FOR SITE 5	ADMIN RECORD	COMMENTS	5	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0006	002636	01/06/95 03/31/94	DTSC LONG BEACH J.E. SCANDURA	USE OF CALIFORNIA CANCER POTENCY FACTORS FOR MCB CAMP PENDLETON	ADMIN RECORD	CANCER ARAR CERCLA		SOUTHWEST DIVISION
M00681 LTR 000000000000000 0003	003307	08/25/97 03/31/94	MCB CAMP PENDLETON J. JOY	IDENTIFICATION OF ARARS FOR THE EE/CA FOR SITES 3 AND 6 AND REQUEST FOR COMMENTS ON SAME W/O ENCL	ADMIN RECORD INFO REPOSITORY	ARAR EE\CA COMMENTS	3 6	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0008	002907	05/03/95 04/04/94	COUNTY OF SAN DIEGO R.J. SMITH	DRAFT IDENTIFICATION OF ARARs FOR SITE 5 CAMP PENDLETON	ADMIN RECORD	ARAR	5	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0003	002635	01/06/95 04/07/94	EPA SAN FRANCISCO S.L. LAUTH	COMMENTS ON MCB CAMP PENDLETON DRAFT EE/CA FOR GROUP A SITES 3 & 6	ADMIN RECORD	EE\CA COMMENTS	GROUP A 3,6	SOUTHWEST DIVISION
M00681 XMTL 000000000000000 0007	002891	05/03/95 04/15/94	JACOBS ENGINEERING E. MINUGH	MINUTES OF 6 APRIL 1994 MEETING ON PROPERTY DISPOSITION FOR CTO #166	ADMIN RECORD	MTG MINS	GROUP D	SOUTHWEST DIVISION

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M00681	002892	05/03/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE MINUTES OF 15TH FFA PROJECT	ADMIN RECORD	MTG MINS	5	SOUTHWEST DIVISION
XMTL		04/18/94	E. MINUGH	MANAGERS MEETING			OU1,OU2	
000000000000000		00166	SOUTHWEST DIVISION				GROUP A	
0015		03.6						
M00681	002890	05/03/95	JACOBS ENGINEERING	MINUTES OF 14 APRIL 1994 MEETING ON ECOLOGICAL	ADMIN RECORD	MTG MINS	GROUP A	SOUTHWEST DIVISION
XMTL		04/19/94	E. MINUGH	CLEARANCE FOR REMAINING RI SAMPLING		REMOVAL(3)	6,4,9	
000000000000000		00166	SOUTHWEST DIVISION			REMOVAL(6)	GROUP B	
0006		03.6					8,14	
							GROUP C	
							1D,8,10,	
							14	
							16,17,27	
							28,30,35	
M00681	002906	05/03/95	CRWQCB SAN DIEGO	REVIEW COMMENTS ON THE APPENDIX A ARARs OF 14 MARCH	ADMIN RECORD	COMMENTS	5	SOUTHWEST DIVISION
LTR		04/25/94	A.L. COE	1994			GROUP A	
000000000000000		00000	SOUTHWEST DIVISION					
0001		02.7	E. DIAS					
M00681	002633	01/06/95	DTSC LONG BEACH	MCB CAMP PENDLETON REVIEW COMMENTS ON DRAFT EE/CA	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		04/28/94	O. PATRICK	GROUP A SITE 5 ARARs		ARAR	3,6,5	
000000000000000		00000	SOUTHWEST DIVISION	FOR GROUP SITE 3 & 6				
0003		06.0	E. DIAS					
M00681	002634	01/06/95	APCD SAN DIEGO	REQUEST THAT DTSC FUND APCD FOR CONTINUED	ADMIN RECORD	ARAR	9,OU1	SOUTHWEST DIVISION
LTR		04/26/94	R.J. SMITH	PARTICIPATION IN THE IDENTIFICATION AND ENFORCEMENT OF			GROUP A	
000000000000000		00000	DTSC SACRAMENTO	STATE ARARs FOR MCB CAMP PENDLETON SITE 9				
0001		06.0	R. BRAUSCH					
M00681	002889	05/03/95	JACOBS ENGINEERING	MINUTES OF 21 APRIL 1994 MEETING ON ARARs FOR SITE 5	ADMIN RECORD	ARAR	5	SOUTHWEST DIVISION
XMTL		04/28/94	E. MINUGH				OU3	
000000000000000		00166	SOUTHWEST DIVISION				OU1,OU2	
0005		04.1						
M00681	002632	01/06/95	DTSC LONG BEACH	MCB CAMP PENDLETON REVIEW COMMENTS OF APPENDIX A	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		04/29/94	N.C. GASLAN	GROUP A SITE 5 ARARs		ARAR	5	
000000000000000		00000	SOUTHWEST DIVISION					
0002		02.7	E. DIAS					

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M00681 XMTL 000000000000000 0034	002898	05/03/95 04/29/94 00166 02.7	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	31 MARCH 1994 MEETING ON APCD AND DEPARTMENT OF FISH AND GAME ARARs FOR SITE 5	ADMIN RECORD	ARAR CRP	5 OU1	SOUTHWEST DIVISION
M00681 LTR N6871187C2833 0003	002631	01/06/95 05/03/94 00000 06.0	SOUTHWEST DIVISION J.R. PAWLISCH PWS, INC. C. WEBER	CONTAMINATION AS A RESULT PROVIDING FOR SOLID WASTE COLLECTION AND DISPOSAL SERVICES AT THE MCB CAMP PENDLETON	ADMIN RECORD CONFIDENTIAL DOC	DISPOSAL	28 OU2 GROUP C	SOUTHWEST DIVISION
M00681 LTR N6871187C2833 0004	003302	08/25/97 05/03/94 01.6	SOUTHWEST DIVISION J. PAWLISCH PROFESSIONAL WASTE C. WEBER	NOTIFICATION OF POTENTIAL HAZARDOUS SUBSTANCE LIABILITY AT SITE 28, PWS TRASH HAULER'S MAINTENANCE AREA	ADMIN RECORD INFO REPOSITORY	HAZ WASTE RI	28	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 MM N6871189D9296 0150	002769	01/25/95 05/04/94 00166 01.1	JACOBS ENGINEERING S. TSAI SOUTHWEST DIVISION R. GREEN	FINAL TECHNICAL PROJECT NOTE REGARDING SUMMARY & EVALUATION OF RESULTS TO DATE FROM THE RI OF AT SITE 6 DPDO (DRMO) SCRAP YARD AND NEAR B-2241	ADMIN RECORD	GW RI EVALUATION	6, GROUP A B-2241	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	002629	01/06/95 05/09/94 00000 06.0	APCD SAN DIEGO R.J. SMITH SOUTHWEST DIVISION E. DIAS	REQUEST TO REVIEW DRAFT ARARS FOR CAMP PENDLETON SITES 3 & 6	ADMIN RECORD	ARAR REMOVAL(3) REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0012	002630	01/06/95 05/09/94 00000 06.0	CRWQCB SAN DIEGO J.P. ANDERSON SOUTHWEST DIVISION E. DIAS	REVIEW OF MCB CAMP PENDLETON DRAFT EE/CA FOR IRP GROUP "A" SITE 5, FIREFIGHTER DRILL FIELD, OF 4 FEB 1994	ADMIN RECORD	EE\CA COMMENTS	GROUP A 5	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0015	002628	01/06/95 05/11/94 00000 03.6	SOUTHWEST DIVISION J.R. PAWLISCH DEPT OF FISH & GAME J.L. TURNER	MCB CAMP PENDLETON RI/FS STEPS THAT CAN FACILITATE COORDINATION AND MAINTAIN FORWARD PROGRESS	ADMIN RECORD	RI FS	GROUP A 3,6,5,9 OU1,OU2	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0003	002627	01/06/95 05/13/94 00000 06.0	EPA SAN FRANCISCO S.L. LAUTH SOUTHWEST DIVISION E. DIAS	MCB CAMP PENDLETON COMMENTS ON THE DRAFT FS FOR GROUP "A" SITES, SITE 9	ADMIN RECORD	COMMENTS FS	GROUP A 9 OU 1	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0001	002612	01/05/95 05/17/94 00000 06.0	MCB CAMP PENDLETON J.E. JOY DTSC LONG BEACH O. PATRICK	MCB CAMP PENDLETON TECHNICAL PROJECT NOT WHICH SUMMARIZES & EVALUATES RESULTS FROM RI GROUNDWATER AT IR SITE 6 (LTR W/O PROJECT NOTE)	ADMIN RECORD	GW RI	6 GROUP A OU1	SOUTHWEST DIVISION

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M00681 CLTR 000000000000000 0002	003323 05/17/94 00000 01.6	08/26/97 05/17/94 00000 01.6	MCB CAMP PENDLETON J. JOY VARIOUS AGENCIES	2 COVER LETTERS ENCLOSING COPIES OF TECHNICAL PROJECT NOTE FOR RESULTS OF GROUNDWATER INVESTIGATION AT IR SITE 6. W/OUT ENCLOSURE	ADMIN RECORD INFO REPOSITORY	RESULTS GW INVESTIGATION	6	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0004	002613 05/19/94 00000 04.5	01/05/95 05/19/94 00000 04.5	DTSC LONG BEACH O. PATRICK SOUTHWEST DIVISION E. DIAS	MCB CAMP PENDLETON DRAFT FS GROUP A SITES, SITE 9 COMMENTS	ADMIN RECORD	FS COMMENTS	GROUP A 9	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0001	002615 05/26/94 00000 06.0	01/05/95 05/26/94 00000 06.0	MCB CAMP PENDLETON J.E. JOY LINDSAY MGMT SERVICE T. PECKHAM	EE/CA FOR GROUP "A" SITE 5 SENT FOR COMMENTS DRAFT FINAL MCB CAMP PENDLETON	ADMIN RECORD	EE\CA COMMENTS	GROUP A SITE 5	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0038	002794 05/26/94 00166 02.4	02/03/95 05/26/94 00166 02.4	JACOBS ENGINEERING S. TSAI DISTRIBUTION	PROJECT NOTE REGARDING RESPONSE TO COMMENTS ON DRAFT EE/CA AND ARARs FOR SITE 5	ADMIN RECORD	COMMENTS EE\CA ARAR	5	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0175	002645 05/27/94 00166 02.4	01/06/95 05/27/94 00166 02.4	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT FINAL EE/CA FOR GROUP A SITE 5 - FIREFIGHTING DRILL FIELD MCB CAMP PENDLETON	ADMIN RECORD	EE\CA	GROUP A 5	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0005	002616 05/31/94 00000 04.1	01/05/95 05/31/94 00000 04.1	EPA SAN FRANCISCO L.C. MALDONADO SOUTHWEST DIVISION R. CALLAWAY	MCB CAMP PENDLETON ARAR FOR FS STUDY SITE 9 AND EE/CA SITES 3 & 6 COMMENTS	ADMIN RECORD	ARAR FS EE\CA  REMOVAL(3) REMOVAL(6)	9,3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	003005 06/16/94 00000 01.6	09/25/95 06/16/94 00000 01.6	DTSC LONG BEACH M.C. GASLAN SOUTHWEST DIVISION E. DIAS	NOTIFICATION OF MR. ISAAC HIRBAWI AS THE NEW REMEDIAL PROJECT MANAGER	ADMIN RECORD	FFA		SOUTHWEST DIVISION
M00681 MISC 000000000000000 0001	003341 06/21/94 00000 10.0	08/27/97 06/21/94 00000 10.0	MCB CAMP PENDLETON	MCB CAMP PENDLETON JUNE 21, 1994 COMMUNITY RELATIONS MEETING SIGN-IN SHEET	ADMIN RECORD INFO REPOSITORY			SOUTHWEST DIVISION MCB CAMP PENDLETON

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M00681 LTR 000000000000000 0007	002619	01/05/95 06/27/94 00000 06.0	SOUTHWEST DIVISION J.R. PAWLISCH EPA SAN FRANCISCO J. ANDERSON	REQUEST FOR SCHEDULE EXTENSION TO FFA DEADLINE FOR THE MCB CAMP PENDLETON OU 1 DRAFT PROPOSED PLAN SET FORTH IN APPENDIX A OF THE FFA FROM JULY TO NOVEMBER	ADMIN RECORD	FFA	OU1 GROUP A 3,4,5,6,9,  24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	002621	01/05/95 06/30/94 00000 07.0	EPA SAN FRANCISCO J. ANDERSON SOUTHWEST DIVISION J.R. PAWLISCH	EXTENSION REQUEST FOR THE DRAFT PLAN AND INTERIM RECORD OF DECISION FOR OU 1 MCB CAMP PENDLETON	ADMIN RECORD	ROD	OU 1 GROUP A 3,4,5,6,9,  24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	003006	09/25/95 06/30/94 00000 01.6	PWS, INC. C. WEBER SOUTHWEST DIVISION J.R. PAWLISCH	INVESTIGATION OF LOCATION OF SITE 28 AS A WASHDOWN AREA	ADMIN RECORD CONFIDENTIAL DOC		26	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	002622	01/05/95 07/08/94 00000 07.0	DTSC LONG BEACH M.C. GASLAN SOUTHWEST DIVISION E. DIAS	MCB CAMP PENDLETON DRAFT FS FOR GROUP A SITES SITE 9 ARARs COMMENTS	ADMIN RECORD	ARAR COMMENTS	GROUP A 9 OU 1	SOUTHWEST DIVISION
M00681 LTR N4740892D3042 0003	002623	01/05/95 07/11/94 00000 01.1	OHM REMEDIATION C. JESPERSEN NFEC PORT HUENEME C. SCOTT	TRIP REPORT BIOREMEDIATION OF SITE #21 AND GROUP A IRP SITE 5 MCB CAMP PENDLETON	ADMIN RECORD	BIOREMEDIATION	GROUP A 21, 5	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0008	002524	01/04/95 07/13/94 00000 06.0	CRWQCB SAN DIEGO J.P. ANDERSON SOUTHWEST DIVISION E. DIAS	COMMENTS ON PROPOSED ARARs FOR INSTALLATION RESTORATION SITE 9, 41 AREA STUART MESA WASTE STABILIZATION POND CAMP PENDLETON	ADMIN RECORD	COMMENTS ARAR	9, OU 1	SOUTHWEST DIVISION
M00681 RPT 000000000000000 0100	002638	01/06/95 07/15/94 00000 02.5	JACOBS ENGINEERING SOUTHWEST DIVISION J.R. PAWLISCH	DRAFT ACTION MEMORANDUM FOR NON-TIME-CRITICAL REMOVAL ACTION SITE 5 FIREFIGHTER DRILL FIELD MCB CAMP PENDLETON	ADMIN RECORD	ACTMEMO	5	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0006	002525	01/04/95 07/22/94 00000 06.0	EPA SAN FRANCISCO S. LAUTH SOUTHWEST DIVISION E. DIAS	EXTENSION REQUEST FOR DRAFT PROPOSED PLAN AND INTERIM RECORD OF DECISION FOR OU #1 MCB CAMP PENDLETON	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION

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M00681	002624	01/05/95	CRWQCB SAN DIEGO	REVIEW OF MCB CAMP PENDLETON DRAFT ACTION MEMORANDUM	ADMIN RECORD	ACTMEMO	GROUP A	SOUTHWEST DIVISION
LTR		07/22/94	J.P. ANDERSON	FOR IRP GROUP A SITE 5 FIREFIGHTER DRILL FIELD OF		IRP	5	MCB CAMP PENDLETON
000000000000000		00000	DTSC LONG BEACH	15 JULY 1994		COMMENTS		
0004		02.7	I. HIRBAWI					
M00681	002625	01/05/95	DTSC LONG BEACH	MCB CAMP PENDLETON DRAFT ACTION MEMORANDUM DRAFT FINAL	ADMIN RECORD	ACTMEMO	GROUP A	SOUTHWEST DIVISION
LTR		07/25/94	M.C. GASLAN	EE/CA AND COST ANALYSIS FOR GROUP A SITE 5 COMMENTS		EE\CA	5	
000000000000000		00000	SOUTHWEST DIVISION					
0002		02.7	E. DIAS					
M00681	003007	09/25/95	IT CORPORATION	DISPOSAL OF NON-HAZARDOUS INVESTIGATION-DERIVED WASTE	ADMIN RECORD	DISPOSAL	8	SOUTHWEST DIVISION
LTR		08/03/94	E. MINUGH	AT LAS PULGAS LANDFILL				
000000000000000		00000	MCB CAMP PENDLETON					
0003		01.6	M. WHITE					
M00681	002610	01/05/95	SOUTHWEST DIVISION	CONTAMINATION AT PESTICIDE AND POL HANDLING AREAS AT	ADMIN RECORD	IRP	37	SOUTHWEST DIVISION
LTR		08/05/94	J.R. PAWLISCH	SAN CLEMENTS RANCH MCB CAMP PENDLETON		RFA		
000000000000000		00000	DEARDORR-JACKSON CO.					
0004		01.1	S. DEARDORFF					
M00681	002778	01/31/95	SOUTHWEST DIVISION	PWS RESPONSE DATED 3 MAY 1994 REGARDING CONTAMINATION	ADMIN RECORD	DISPOSAL	28	SOUTHWEST DIVISION
LTR		08/05/94	J. PAWLISCH	AS A RESULT OF CONTRACT N6871187C2833 PROVIDING FOR	CONFIDENTIAL DOC			
000000000000000		00000	PWS INC	SOLID WASTE COLLECTION & DISPOSAL SERVICES				
0005		01.1	C. WEBER					
M00681	002796	02/03/95	MCB CAMP PENDLETON	DISTRIBUTION OF ACTION MEMORANDUM FOR IRP SITE 5	ADMIN RECORD	ACTMEMO	5	SOUTHWEST DIVISION
LTR		08/13/94	J.E. JOY	FOR INFORMATION AND RETENTION				
000000000000000		00166	VARIOUS					
0001		10.0						
M00681	003303	08/25/97	DEPT OF HEALTH SVCS	HEALTH CONCERN REGARDING DRINKABLE WATER AT	ADMIN RECORD	DRINKING WATER		SOUTHWEST DIVISION
LTR		08/16/94	T. ROY	SAN CLEMENTE RANCH AREA	INFO REPOSITORY	WELLS		MCB CAMP PENDLETON
			MCB CAMP PENDLETON			INVESTIGATION		
0002		01.6	WATER QUAL BRCH					
M00681	002637	01/06/95	JACOBS ENGINEERING	ACTION MEMORANDUM FOR NON-TIME-CRITICAL REMOVAL ACTION	ADMIN RECORD	ACTMEMO	5	SOUTHWEST DIVISION
RPT		08/17/94	J.E. SCANDURA	SITE 5 FIREFIGHTER DRILL FIELD MCB CAMP PENDLETON	INFO REPOSITORY			MCB CAMP PENDLETON
000000000000000		00000	SOUTHWEST DIVISION	FINAL				OCEANSIDE LIBRARY
0100		02.5	J.R. PAWLISCH					BASE LIBRARY

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M00681 RPT N6871189D9296 0250	002805	02/13/95 09/09/94 00166 04.2	JACOBS ENGINEERING E.M. MIRUGH SOUTHWEST DIVISION	RI/FS FS FOR GROUP A SITES SITE 9 OU 1 DRAFT FINAL VOLUMES 1 OF 2 AND 2 OF 2 "PRIVILEGED ATTORNEY CLIENT COMMUNICATION DO NOT DUPLICATE DO NOT DISSEMINATE"	ADMIN RECORD CONFIDENTIAL DOC	RI FS	GROUP A OU 1 9	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003008	09/25/95 09/13/94 00000 01.6	MCB CAMP PENDLETON J.E. JOY MCB CAMP PENDLETON B. SANCET	DISPOSAL OF INVESTIGATIVE DERIVED WASTES FROM THE IRP INVESTIGATIONS	ADMIN RECORD	DISPOSAL		SOUTHWEST DIVISION
M00681 TEL  0002	003304	08/25/97 09/13/94  01.6	MCB CAMP PENDLETON J. JOY VARIOUS AGENCIES	TESTING OF AGRICULTURAL WELLS AT SAN CEMENTE FARM	ADMIN RECORD INFO REPOSITORY	WELLS DRINKING WATER		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0001	002611	01/05/95 09/16/94 00000 06.0	MCB CAMP PENDLETON J.E. JOY ATSDR ATLANTA, GA C. HOSSOM	FOR REVIEW AND RETENTION THE FS FOR GROUP "A" SITES, SITE 9 OU 1 MCB CAMP PENDLETON (LTR W/O FS SITE 9 REPORT)	ADMIN RECORD	FS	GROUP A 9 OU 1	SOUTHWEST DIVISION
M00681 LTR N6871187C2833 0027	003343	08/27/97 09/16/94 00000 01.6	PRESSEISEN & REIDEL J. PAWLISCH VARIOUS AGENCIES	REQUEST FOR ALL GOVERNMENT DOCUMENTS CONTAINING FACTUAL INFORMATION REGARDING SITE 28-26 W/ENCL. OF LETTERS REGARDING ALLEGATIONS OF PWS'S LIABILITY	ADMIN RECORD INFO REPOSITORY	REQUEST	28 AREA 26 37	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 RPT N6971189D9296 0275	002647	01/06/95 09/21/94 00166 04.2	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT FINAL RI/FS FS FOR GROUP A SITES SITE 9 OU 1 VOLUME 1 OF 2 MAIN TEXT AND APPENDIX A MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	RI FS	GROUP A 9 OU 1	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 RPT N6871189D9296 0275	002648	01/06/95 09/21/94 00166 04.2	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT FINAL RI/FS FS FOR GROUP A SITES SITE 9 OU 1 VOLUME 2 OF 2 APPENDICES B THROUGH H MCB CAMP PENDLETON	ADMIN RECORD	RI FS	GROUP A 9 OU 1	SOUTHWEST DIVISION
M00681 MM N6971189D9296 0045	002803	02/13/95 09/23/94 00166 01.1	JACOBS ENGINEERING S.Y. TSAI DISTRIBUTION	SEVENTEENTH FFA PROJECT MANAGERS MEETING MINUTES (PROJECT NOTE) FUTURE FFA DATES WITH RESPECT TO THE NAVY'S POLICY OF FUNDING	ADMIN RECORD	FFA MTG MINS	GROUP A OU1,OU2 9,5,3,6,4  4A,24,7,8 OU3 GROUP B	SOUTHWEST DIVISION

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M00681 XMTL N6871189D9296 0050	003019	10/02/95 09/26/94 00166 04.5	JACOBS ENGINEERING SOUTHWEST DIVISION E. DIAS	RESPONSE TO COMMENT ON DRAFT FEASIBILITY STUDY INCLUDING ARAR's FOR SITE 9	ADMIN RECORD	FS ARAR	9	SOUTHWEST DIVISION
M00681 MISC 0000000000000000 0051	002761	01/18/95 09/27/94 00166 06.0	JACOBS ENGINEERING S.Y. TSAI DISTRIBUTION	PROJECT NOTE REGARDING RESPONSE TO COMMENTS ON DRAFT FS, INCLUDING ARARs FOR SITE 9	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	002528	01/04/95 09/30/94 00000 02.7	DTSC LONG BEACH M.C. GASLAN SOUTHWEST DIVISION E. DIAS	EE/CA FOR GROUP A SITES 3 AND 6 ARARS COMMENTS MCB CAMP PENDLETON	ADMIN RECORD	ARAR REMOVAL(3) REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0010	002523	01/04/95 10/07/94 00000 06.0	CRWQCB SAN DIEGO J.P. ANDERSON DTSC LONG BEACH I. HIRBAWI	REQUEST FOR RWQCB ARARs FOR INSTALLATION RESTORATION SITE 3 (PEST CONTROL WASH RACK) SITE 6 (DPDO DRMO SCRAP YARD) MCB CAMP PENDLETON	ADMIN RECORD	ARAR REMOVAL(3) REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0001	002522	01/04/95 10/11/94 00000 06.0	MCB CAMP PENDLETON J.E. JOY EPA SAN FRANCISCO S. LAUTH	PROVIDE COMMENTS ON THE MCB CAMP PENDLETON DRAFT PROPOSED PLAN FOR OU 1 - SITE 9 (LTR W/O PROPOSED PLAN)	ADMIN RECORD	COMMENTS	OU 1 9	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0009	002701	01/17/95 10/11/94 00000 10.0	MCB CAMP PENDLETON J.E. JOY DISTRIBUTION	DRAFT PROPOSED PLAN FOR OU 1 SITE 9 SENT FOR COMMENTS DUE ON 4 NOV. 1994	ADMIN RECORD	COMMENTS	OU 1 9	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	002521	01/04/95 10/14/94 00000 06.0	CRWCB SAN DIEGO A.L. COE DTSC LONG BEACH I. HIRBAWI	REVIEW OF MCB CAMP PENDLETON RI/FS FOR GROUP A SITES 9 AND OPERABLE UNIT #1 DRAFT FINAL OF 09/09/94	ADMIN RECORD	RI FS COMMENTS	OU1 SITE 9 GROUP A	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0017	002539	01/04/95 10/18/94 00000 06.0	SOUTHWEST DIVISION E.K. DIAS APCD SAN DIEGO R.J. SMITH	MATERIAL SAFETY DATA SHEETS CONCERNING REVIEW & COMMENTS ON MCB CAMP PENDLETON ARARs FOR PROPOSED CLEANUP ACTIVITIES AT GROUP A SITES 3 & 6	ADMIN RECORD	ARAR DATA COMMENTS	GROUP A 3,6	SOUTHWEST DIVISION

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M00681	002540	01/04/95	CRWQCB SAN DIEGO	CONFIRMATION OF TELEPHONE CONVERSATION WITH MR. DE COSTA	ADMIN RECORD	GW	37	SOUTHWEST DIVISION
LTR		10/19/94	A. L. COE	CONCERNING GROUND WATER SAMPLING AT BASE WATER SUPPLY	FUEL			
0000000000000000		00000	MCB CAMP PENDLETON	WELL #61-511 IN THE SAN MATEO BASIN	DIESEL			
0003		06.0	J. JOY		TPH			
M00681	002694	01/17/95	ART INC.	SOIL WASHING TREATABILITY STUDY REPORT SITES 3 & 6	ADMIN RECORD	REMOVAL(3)	3,6	SOUTHWEST DIVISION
RPT		10/19/94		MCB CAMP PENDLETON ALSO APPENDIX A-D VOL 1 OF 2 AND		REMOVAL(6)	GROUP A	
0000000000000000		00000	SOUTHWEST DIVISION	APPENDIX E & F VOL. 2 OF 2			OUI,OU2	
0100		03.4						
M00681	002542	01/04/95	MCB CAMP PENDLETON	WETLAND ASSESSMENT SITES 3, 6, & 9 MCB CAMP PENDLETON	ADMIN RECORD	COMMENTS	3,6,9	SOUTHWEST DIVISION
LTR		10/21/94	J.E. JOY	PROVIDE FOR COMMENTS		REMOVAL(3)	GROUP A	
0000000000000000		00000	ARMY CORPS ENGINEERS			REMOVAL(6)	OUI,OU2	
0004		01.1	D. ZOUTENDYK					
M00681	003357	08/27/97	MCB CAMP PENDLETON	REQUEST FOR COMMENTS ON MCB CAMP PENDLETON DRAFT	ADMIN RECORD	COMMENTS	GROUP B	SOUTHWEST DIVISION
LTR		10/24/94	J.E. JOY	REMEDIAL INVESTIGATION FEASIBILITY STUDY GROUP B	INFO REPOSITORY	RI		MCB CAMP PENDLETON
0000000000000000		00000	MCB CAMP PENDLETON	SITES GROUP B DATED 28 OCTOBER 1997				
0014		01.6	COMMANDING GEN.					
M00681	002545	01/04/95	CRWQCB SAN DIEGO	REVIEW OF MCB CAMP PENDLETON DRAFT PROPOSED PLAN FOR	ADMIN RECORD	COMMENTS	9	SOUTHWEST DIVISION
LTR		10/25/94	J.P. ANDERSON	OU #1 GROUP A SITE 9-41 AREA, STUART MESAA WASTE			GROUP A	
0000000000000000		00000	DTSC LONG BEACH	STABILIZATION POND OF OCT. 11, 1994			OU 1	
0002		06.0	I. HIRBAWI					
M00681	002696	01/17/95	MCB CAMP PENDLETON	SAMPLE LOCATION MAPS FOR SITES 24 & 26 CURRENTLY BEING	ADMIN RECORD	MAP	24,26	SOUTHWEST DIVISION
LTR		10/26/94	J.E. JOY	SAMPLED				
0000000000000000		00000	DISTRIBUTION	(LTR W/O LOCATIONS MAPS)				
0001		06.0						
M00681	002565	01/04/95	EPA SAN FRANCISCO	REVISED FEDERAL FACILITIES AGREEMENT DEADLINES FOR	ADMIN RECORD	FFA	OU 2	SOUTHWEST DIVISION
LTR		10/27/94	S. LAUTH	OU 2 AND GROUP C SITES MCB CAMP PENDLETON		OU	GROUP C	
0000000000000000		00000	SOUTHWEST DIVISION					
0006		06.0	E. DIAS					
M00681	002520	01/04/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT PROPOSED PLAN FOR OPERABLE UNIT	ADMIN RECORD	COMMENTS	9	SOUTHWEST DIVISION
LTR		10/28/94	M.C. GASLAN	#1 GROUP a SITE 9-41 AREA STUART MESA WASTE		OU	OU 1	
0000000000000000		00000	SOUTHWEST DIVISION	STABILIZATION PONG OF 10/11/94 MCB CAMP PENDLETON				
0005		06.0	E. DIAS					

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M00681 RPT N6871189D9296 0450	002649	01/06/95 10/28/94 00166 03.4	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT RI/FS RI REPORT FOR GROUP B SITES VOLUME 1 OF 4 MAIN TEXT AND APPENDIX A MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	RI FS	GROUP B 7,8,8A,14 19,20,22	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 RPT N6871189D9296 0300	002650	01/06/95 10/28/94 00166 03.4	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT RI/FS RI REPORT FOR GROUP B SITES VOLUME 2 OF 4 APPENDICES B THROUGH F MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	RI FS	GROUP B 7,8,8A,14 19,20,22	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY
M00681 RPT N6871189D9296 0500	002651	01/06/95 10/28/94 00166 03.4	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT RI/FS RI REPORT FOR GROUP B SITES VOLUME 3 OF 4 APPENDICES G THROUGH P MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	RI FS	GROUP B 7,8,8A,14 19,20,22	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 RPT N6871189D9296 0500	002652	01/06/95 10/28/94 00166 03.4	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	DRAFT RI/FS RI REPORT FOR GROUP B SITES VOLUME 4 OF 4 APPENDICES Q THROUGH V MCB CAMP PENDLETON	ADMIN RECORD INFO REPOSITORY	RI FS	GROUP B 7,8,8A,14 19,20,22	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 PLAN 000000000000000 0009	002690	01/17/95 11/01/94 00000 03.4	MCB CAMP PENDLETON	NAVY PROPOSES PLAN FOR REMEDIAL ACTION AT OU 1 SITE 9	ADMIN RECORD INFO REPOSITORY	RA	9 OU1	SOUTHWEST DIVISION MCB CAMP PENDLETON OCEANSIDE LIBRARY  BASE LIBRARY
M00681 LTR 000000000000000 0005	002519	01/04/95 12/03/94 00000 06.0	EPA SAN FRANCISCO S. LAUTH SOUTHWEST DIVISION E. DIAS	DRAFT PROPOSED PLAN OPERABLE UNIT #1, SITE 9 COMMENTS ON MCB CAMP PENDLETON	ADMIN RECORD	OU COMMENTS	OU 1 9	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0085	002770	01/25/95 11/17/94 00166 01.1	JACOBS ENGINEERING S. TSAI SOUTHWEST DIVISION R. GREEN	MINUTES OF EIGHTEENTH FFA PROJECT MANAGERS MEETING (PROJECT NOTE) FFA DEADLINES AND SCHEDULE, SITE 5 REMOVAL ACTION, ETC.	ADMIN RECORD	MTG MINS FFA EE\CA  ARAR	5,3,6,9,37 OU1,OU2 GROUP A  GROUP B REMOVAL(3) REMOVAL(6)	SOUTHWEST DIVISION



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M00681	002700	01/17/95	MCB CAMP PENDLETON	INVITATION TO ATTEND THE IRP PUBLIC MEETING BEING HELD	ADMIN RECORD	FS	OU 1	SOUTHWEST DIVISION
LTR		12/14/94	J.E. JOY	ON 4 JANUARY 1995 MEETING WILL FOCUS ON THE FS FOR OUI		RA	9	
0000000000000000	00000	00000	DISTRIBUTION	IR SITE 9 AND PROPOSED PLAN (SEE DOC. NO. 002690)				
0004		10.0						
M00681	002609	01/05/95	SOUTHWEST DIVISION	MCB CAMP PENDLETON FUNDING REQUIREMENTS AND FFA	ADMIN RECORD	FFA	8	SOUTHWEST DIVISION
LTR		12/15/94	W.A. DOS SANTOS	DEADLINES SOUTHWEST DIVISION RESPONSE EXTENSION		RI		
0000000000000000	00000	00000	EPA SAN FRANCISCO	REQUEST PHASE III		FS		
0006		06.0	J. ANDERSON					
M00681	003342	08/27/97	SOUTHWEST DIVISION	LETTER ENCLOSING ANALYTICAL RESULTS FOR SITE 37,	ADMIN RECORD	RESULTS	37	SOUTHWEST DIVISION
LTR		12/15/94	L. HARVEY	EXTRACTED FROM THE DRAFT FINAL MCB CAMP PENDLETON RCRA	INFO REPOSITORY	RCRA	GROUP D	MCB CAMP PENDLETON
0000000000000000	00000	00000	VARIOUS AGENCIES	FACILITY ASSESSMENT REPORT, DATED JUNE 25, 1993 W/O EN		ASSESSMENT		
0003		01.6						
M00681	002626	01/06/95	EPA SAN FRANCISCO	MCB CAMP PENDLETON SCHEDULE EXTENSION REQUEST OF THE	ADMIN RECORD	GW	8	SOUTHWEST DIVISION
LTR		12/23/94	J. ANDERSON	DRAFT WORK PLAN ADDENDUM SITE 8 AND THE GROUNDWATER			OU2	
0000000000000000	00000	00000	SOUTHWEST DIVISION	BASIN STUDY WORK PLAN PHASE III			GROUP B	
0003		06.0	W.A. DOS SANTOS					
M00681	002703	01/17/95	CRWQCB SAN DIEGO	PRELIMINARY DRAFT RI/FS STUDY RI REPORT FOR GROUP B	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		12/29/94	J.P. ANSERSON	SITES COMMENTS		FS	8,14,20,19	
0000000000000000	00000	00000	DTSC LONG BEACH			COMMENTS	22,9	
0015		03.6	I. HIRBAWI					
M00681	002704	01/17/95	US DEPT OF INTERIOR	COMMENTS ON THE DRAFT RI REPORT FOR GROUP B SITES	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		12/30/94	G.C. KOBETICH			COMMENTS	8,7,19,20	
0000000000000000	00000	00000	SOUTHWEST DIVISION				22	
0004		06.0	E. DIAS					
M00681	002705	01/17/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT RI REPORT FOR GROUP B SITES	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		12/30/94	N.C. GASLAN	OF 28 OCT. 1994		COMMENTS	19,22,7,8	
0000000000000000	00000	00000	SOUTHWEST DIVISION				14,8A,20,	
0026		06.0	E. DIAS					
M00681	002706	01/17/95	USEPA SAN FRANCISCO	COMMENTS ON THE DRAFT RI REPORT FOR GROUP B SITES	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		12/30/94	S. LAUTH	OF 28 OCT. 1994		ARAR	7,8,14,19	
0000000000000000	00000	00000	SOUTHWEST DIVISION				20,22,8A,	
0019		06.0	E. DIAS					

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M00681	000245	03/16/94	TRC MEMBER	COMMENTS ON RI/FS RI REPORT FOR GROUP B SITES	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		01/03/95						
000000000000000	00000		ENVIR. SECURITY					
0001		03.6						
M00681	001022	05/23/94	IT CORPORATION	PUBLIC MEETING TRANSCRIPT OF JAN 4, 1995	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
MM		01/04/95	E. MINUGH					
000000000000000	00166		PUBLIC					
0035		10.4						
M00681	002882	05/02/95	IT CORPORATION	PUBLIC MEETING TRANSCRIPT OF JAN 4, 1995	ADMIN RECORD			SOUTHWEST DIVISION
MM		01/04/95	E. MINUGH					
000000000000000	00000		PUBLIC					
0035		10.4						
M00681	002883	05/02/95	IT CORPORATION	PUBLIC MEETING TRANSCRIPT OF JAN 4, 1995	ADMIN RECORD			SOUTHWEST DIVISION
LTR		01/04/95	E. MINUGH					
000000000000000	00000		PUBLIC					
0035		10.4						
M00681	002884	05/02/95	IT CORPORATION	PUBLIC MEETING TRANSCRIPT OF JAN 4, 1995	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
MM		01/04/95	E. MINUGH					
000000000000000	00000		PUBLIC					
0035		10.4						
M00681	002777	01/31/95	COMCABWEST EL TORO	CONTINUING FLOOD HAZARD AT MCB CAMP PENDLETON	ADMIN RECORD			SOUTHWEST DIVISION
MSG		01/09/95	LEVEE					
000000000000000	00000		CMC WASHINGTON DC					
0002		01.1						
M00681	002692	01/17/95	SOUTHWEST DIVISION	SCHEDULE EXTENSION REQUEST FOR MCB CAMP PENDLETON FOR	ADMIN RECORD	FFA	8	SOUTHWEST DIVISION
LTR		01/10/95	W.A. DOS SANTOS	RESPONSE TO DISAPPROVING FOR DELIVERABLES FOR THE				
000000000000000	00000		USEPA SAN FRANCISCO	DRAFT WORK PLAN ADDENDUM FOR SITE 8				
0033		06.0	J. ANDERSON					
M00681	002779	01/31/95	SOUTHWEST DIVISION	RESPONSE TO SCHEDULE EXTENSION REQUEST SUBMITTED ON	ADMIN RECORD	GW	8	SOUTHWEST DIVISION
LTR		01/10/95	W.A. DOS SANTOS	DECEMBER 23, 1994 FOR MCB CAMP PENDLETON				
000000000000000	00000		EPA SAN FRANCISCO					
0032		06.0	J. ANDERSON					

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M00681 MM N6871189D9296 0050	002804	02/13/95 01/11/95 00166 06.0	SOUTHWEST DIVISION J. ROGERS JACOBS ENGINEERING	GOVERNMENT AND REGULATORY AGENCY COMMENTS REGARDING DRAFT RI FOR GROUP B SITES AT MCB CAMP PENDLETON	ADMIN RECORD	COMMENTS RI	GROUP B 14,19,20 22,7,8  OU2,OU3	SOUTHWEST DIVISION
M00681 LTR N6871189D9296 0026	002693	01/17/95 01/12/95 00166 02.2	IT CORPORATION SOUTHWEST DIVISION	DRAFT SITE 26 PROPOSED SAMPLING LOCATIONS 26 AREA TRASH HAULERS MAINTENANCE AREA	ADMIN RECORD		28	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0001	002771	01/25/95 01/18/95 00000 10.1	MCB CAMP PENDLETON J.E. JOY MCAS CAMP PENDLETON S. GIBSON	IRP ADDENDUM DOCUMENTS SENT OUT TO TRC MEMBERS FOR REVIEW AND COMMENTS (LTR W/O DRAFT WP ADDENDUM FOR & SITE 8 & DRAFT WP ADDENDUM FOR GW SANTA MAGARITA BASIN	ADMIN RECORD CONFIDENTIAL DOC	IRP COMMENTS	8,GROUP B OU2	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0075	002772	01/25/95 01/18/95 00301 03.4	IT CORPORATION M. FLAUGHER SOUTHWEST DIVISION E. DIAS	DRAFT RI REPORT FOR GROUP B SITES PRELIMINARY DRAFT RESPONSE TO COMMENTS	ADMIN RECORD	COMMENTS RI	GROUP B	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0018	003246	04/17/97 01/18/95 00000 10.1	MCB CAMP PENDLETON J. JOY VARIOUS AGENCIES	REQUEST COMMENTS ON ADDENDUM FOR ADDT'L INVESTIGATION AT SITE 8 AND DRAFT WORK PLAN ADDENDUM FOR AQUIFER TESTING AND CAPTURE ZONE MODELING, DTD JAN. 26, 1995	ADMIN RECORD INFO REPOSITORY	REQUEST INVESTIGATION WORK PLAN  CZMA	OU 2 8 AREA 22  AREA 23	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 MM 0000000000000000 0028	002780	01/31/95 01/23/95 00000 10.4	MCB CAMP PENDLETON J.W. JOY SOUTHWEST DIVISION T. ZUGSAY	TRC MEETING MINUTES OF DECEMBER 15, 1994 FOR MCB CAMP PENDLETON	ADMIN RECORD CONFIDENTIAL DOC	MTG MINS REMOVAL(3)	5,3,9,7,8 8A,14,19 OU2,OU1  20,22 GROUP A GROUP B	SOUTHWEST DIVISION
M00681 LTR N6871187C2833 0002	002806	02/16/95 01/24/95 00000 07.6	SOUTHWEST DIVISION L.W. HARVEY PRESSEISEN & REIDEL. J.W. PRESSEISEN	RESPONSE TO REQUEST FOR SPECIFIC INFORMATION REGARDING BORINGS TAKEN ADJACENT TO THE CONCRETE WASH PAD AT THE SITE 28--26 IN FEBRUARY 1993	ADMIN RECORD CONFIDENTIAL DOC	RESPONSE	28 OU2 GROUP C	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0007	002773	01/25/95 01/25/95 00000 03.3	EPA SAN FRANCISCO J. ANDERSON SOUTHWEST DIVISION W.A. DOS SANTOS	SCHEDULE EXTENSION REQUEST FOR MCB CAMP PENDLETON FOR THE DRAFT WORK PLAN ADDENDUM FOR SITE 8, GW BASIN STUDY WORK PLAN GROUP C PHASE I RI TECH. MEMO.	ADMIN RECORD	TECH MEMO GW	8 GROUP C	SOUTHWEST DIVISION

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M00681 LTR 000000000000000 0006	002781	01/31/95 01/25/95 00000 07.1	EPA SAN FRANCISCO J. ANDERSON SOUTHWEST DIVISION W.A. DOS SANTOS	RESPONSE TO JANUARY 10, 1995 LETTER PROVIDING ADDITIONAL INFORMATION TO SUPPORT YOUR REQUEST FOR EXTENSION OF FFA DEADLINES ONE MONTH EXTENSION GIVEN	ADMIN RECORD	FFA	8, OU 2 GROUP C	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0150	002800	02/03/95 01/26/95 00301 03.3	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	RI/FS DRAFT SANTA MARGARITA BASIN GROUNDWATER STUDY WORK PLAN ADDENDUM REVISION 0	ADMIN RECORD	RI	45 OU2 GROUP C	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0150	002801	02/03/95 01/26/95 00301 03.3	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	RI/FS DRAFT WORK PLAN ADDENDUM FOR ADDITIONAL INVESTIGATION AT SITE 8 LAS PULGAS LANDFILL REVISION 0	ADMIN RECORD	RI FS	8 OU2 GROUP B	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0005	003322	08/26/97 01/26/95 00000 01.6	SOUTHWEST DIVISION J. JOY VARIOUS AGENCIES	LETTER INVITING RECIPIENT TO WORKSHOP ON FINALIZATION OF EE/CA FOR SITES 3 & 6 ON FEBRUARY 8 AND 9, 1995 W/ ENCL. OF PROPOSED AGENDAS	ADMIN RECORD INFO REPOSITORY	EE\CA	3 6	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 MM N6871189D9296 0026	002798	02/03/95 01/27/95 00166 00.0	JACOBS ENGINEERING M.C. SALMON SOUTHWEST DIVISION R. GREEN	SAMPLE LOCATION MAPS GROUP C SITES MCB CAMP PENDLETON	ADMIN RECORD	MAP	GROUP C	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0009	002799	02/03/95 01/27/95 00166 00.0	JACOBS ENGINEERING M.C. SALMON SOUTHWEST DIVISION R. GREEN	WELL LOCATION MAPS GROUP C SITES MCB CAMP PENDLETON	ADMIN RECORD	MAP	GROUP C	SOUTHWEST DIVISION
M00681 MISC 000000000000000 0002	002797	02/03/95 01/30/95 00000 10.3	SAN CLEMENTE PUB. J. RAMSEY PUBLIC NOTICE	CERTIFICATION OF NOTICE OF AVAILABILITY AND PUBLIC COMMENT PERIOD AND PUBLIC MEETING	ADMIN RECORD	PUBNOT	9 OU 1	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0003	003179	01/09/97 01/31/95 00000 01.6	MCB CAMP PENDLETON J.E. JOY VARIOUS AGENCIES	WELL LOCATION MAPS GROUP C SITES MCB CAMP PENDLETON W/O ENCLS	ADMIN RECORD INFO REPOSITORY	WELLS	GROUP C	SOUTHWEST DIVISION

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M00681	003321	08/26/97	CRWQCB SAN DIEGO	RWQCB REVIEW AND COMMENT ON SOIL WASHING TREATABILITY	ADMIN RECORD	COMMENTS	3	SOUTHWEST DIVISION
MISC		02/01/95	J. ANDERSON	STUDY FOR IR SITE 3, PEST CONTROL WASH RACK, AND	INFO REPOSITORY	SOIL	6	MCB CAMP PENDLETON
0000000000000000		00000	DTSC	SITE 6, DPDO SCRAPYARD, MCB CAMP PENDLETON		TREATABILITY STY		
0004		10.1	I. HIRBAWI			IR		
						DPDO		
						SCRAPYARD		
M00681	003233	04/17/97	CRWQCB SAN DIEGO	COMMENTS ON RI/FS STUDY DRAFT WORK PLAN ADDENDUM FOR	ADMIN RECORD	COMMENTS	OU 2	SOUTHWEST DIVISION
LTR		02/14/95	J. ANDERSON	ADDITIONAL INVESTIGATION AT SITE 8, LAS PULGAS	INFO REPOSITORY	RI	8	MCB CAMP PENDLETON
0000000000000000		00000	DTSC LONG BEACH	LANDFILL		FS	AREA 22	
0003		10.1	I. HIRBAWI			WORK PLAN	AREA 23	
						INVESTIGATION	GROUP B	
						LANDFILL		
M00681	003339	08/27/97	CRWQCB SAN DIEGO	COMMENTS ON REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	RI	23	SOUTHWEST DIVISION
LTR		02/14/95	J. ANDERSON	DRAFT SANTA MARGARITA BASIN GROUNDWATER STUDY WORK	INFO REPOSITORY	FS		MCB CAMP PENDLETON
0000000000000000		00000	DTSC LONG BEACH	PLAN ADDENDUM, DATED JANUARY 26, 1995		BASIN		
0010		10.1	I. HIRBAWI			GW		
						WORK PLAN		
M00681	002937	06/12/95	MARFORSERSUP	DRAFT SANTA MARGARITA BASIN GROUNDWATER STUDY WORK	ADMIN RECORD	COMMENTS	8	SOUTHWEST DIVISION
LTR		02/23/95	D.S. EVERSOLE	PLAN ADDENDUM AND DRAFT WORK PLAN ADDENDUM FOR				
0000000000000000		00000	SOUTHWEST DIVISION	ADDITIONAL INVESTIGATION AT SITE 8 LAS PULGAS LP				
0001		03.6	E. DIAS					
M00681	002999	09/25/95	SOUTHWEST DIVISION	INVITATION TO A SITE TOUR AND SCOPING MEETING FOR THE	ADMIN RECORD	GROUP C		SOUTHWEST DIVISION
LTR		02/24/95	E.K. DIAS	ECOLOGICAL RISK ASSESSMENT GROUP C SITES				
0000000000000000		00000	FISH & WILDLIFE					
0002		09.4	C. ROBERTS					
M00681	001028	05/23/94	DTSC LONG BEACH	COMMENTS ON RI/FS DRAFT WORK PLAN ADDENDUME FOR	ADMIN RECORD	COMMENTS	8	SOUTHWEST DIVISION
LTR		02/27/95	M.C. GASLAN	ADDITIONAL INVESTIGATION AT SITE 8, LAS PULGAS			OU2	
0000000000000000		00000	SOUTHWEST DIVISION	LAND FILL DATED JANUARY 26, 1995				
0015		03.6	E. DIAS					
M00681	002936	06/12/95	EPA SAN FRANCISCO	DRAFT SANTA MARGARITA BASIN GROUNDWATER STUDY WORK	ADMIN RECORD	COMMENTS	8	SOUTHWEST DIVISION
LTR		02/27/95	S. LAUTH	PLAN ADDENDUM AND DRAFT WORK PLAN ADDENDUM FOR				
0000000000000000		00000	SOUTHWEST DIVISION	ADDITIONAL INVESTIGATION AT SITE 8 LAS PULGAS LF				
0029		01.6	E. DIAS					



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M00681	003299	08/25/97	SOUTHWEST DIVISION	RESPONSE TO LETTER RE CONTAMINATION OF PESTICIDE AND	ADMIN RECORD	RESPONSE	37	SOUTHWEST DIVISION
LTR		03/07/95	L. HARVEY	POL HANDLING AREAS OP SAN CLEMENTE RANCH, IR SITE #37,	INFO REPOSITORY	PESTICIDES		MCB CAMP PENDLETON
0000000000000000		00000	KLEIN WEGIS ET AL	DATED NOV. 14, 1994 (W/O ENCLS)		POL		
0004		10.1	M. PUETTE			PRP		
						HERBICIDE		

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M00681	002939	06/12/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT EE/CA FOR GROUP A SITES 3 & 6	ADMIN RECORD	COMMENTS	3,6	SOUTHWEST DIVISION
LTR		03/10/95	M.C. GASLAN			EE\CA	GROUP A	
000000000000000		00000	SOUTHWEST DIVISION			REMOVAL(3)	OUI,OU2	
0013		02.7	E. DIAS			REMOVAL(6)		
M00681	003184	01/09/97	MCB CAMP PENDLETON	DRAFT FINAL WORK PLAN ADDENDUM FOR ADDITIONAL	ADMIN RECORD	WORK PLAN	8	SOUTHWEST DIVISION
LTR		03/21/95	J.E. JOY	INVESTIGATION AT SITE 8 & FOR AQUIFER TESTING & CAPTURE	INFO REPOSITORY	INVESTIGATION		MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	ZONE MODELING BY JUNE 26, 1995 PROVIDED FOR REVIEW				
0004		03.4						
M00681	003013	10/02/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE RESPONSE TO COMMENTS ON THE	ADMIN RECORD	COMMENTS	GROUP B	SOUTHWEST DIVISION
MEMO		03/24/95	E.M. MINUGH	DRAFT RI REPORT FOR GROUP B SITES				
N6871189D9296		00301	SOUTHWEST DIVISION					
0075		03.4	E. DIAS					
M00681	003014	10/02/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE RESPONSE TO COMMENTS ON THE	ADMIN RECORD	COMMENTS	8	SOUTHWEST DIVISION
XMTL		03/27/95	E.M. MINUGH	DRAFT WORK PLAN ADDENDUM FOR ADDITIONAL INVESTIGATION				
N6871189D9296		00301	SOUTHWEST DIVISION	AT SITE 8				
0030		03.3	E. DIAS					
M00681	003015	10/02/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE RESPONSE TO AGENCY COMMENTS ON	ADMIN RECORD	COMMENTS	45	SOUTHWEST DIVISION
XMTL		03/27/95	E.M. MINUGH	THE DRAFT SANTA MARGARITA BASIN GROUNDWATER STUDY WORK				
N6871189D9296		00301	SOUTHWEST DIVISION	PLAN ADDENDUM OF 26 JANUARY 1995				
0030		03.3	E. DIAS					
M00681	003017	10/02/95	JACOBS ENGINEERING	DRAFT FINAL SANTA MARGARITA BASIN GROUNDWATER STUDY	ADMIN RECORD	GW	45	SOUTHWEST DIVISION
RPT		03/27/95	E.M. MINUGH	WORK PLAN ADDENDUM REVISION 0 RI/FS				
N6871189D9296		00302	SOUTHWEST DIVISION					
0300		03.3	E. DIAS					
M00681	003020	10/02/95	JACOBS ENGINEERING	DRAFT FINAL WORK PLAN ADDENDUM FOR ADDITIONAL	ADMIN RECORD	RI	8	SOUTHWEST DIVISION
PLAN		03/27/95	E.M. MINUGH	INVESTIGATION AT SITE 8 LAS PULGAS LANDFILL RI/FS		FS		
N6871189D9296		00301	SOUTHWEST DIVISION	REVISION 0		LF		
0075		03.3	E. DIAS					
M00681	003182	01/09/97	MCB CAMP PENDLETON	TRANSMITTAL OF DRAFT ROD AND REQUEST FOR COMMENTS	ADMIN RECORD	COMMENTS	OUI	SOUTHWEST DIVISION
LTR		03/28/95	J.E. JOY	BY MAY 31, 1995	INFO REPOSITORY	ROD	9	MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	W/O ENCL				
0003		05.1						

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M00681	003183	01/09/97	MCB CAMP PENDLETON	PERMIT APPLICATIONS FOR GROUNDWATER MONITORING WELLS	ADMIN RECORD	PERMIT	8	SOUTHWEST DIVISION
LTR		03/28/95	J.E. JOY	AND SOIL BORINGS	INFO REPOSITORY	GW		MCB CAMP PENDLETON
000000000000000		00000	DHS SAN DIEGO	W/ENCL		MONITORING		
0012		01.6	K. HEATON			WELLS		
						SOIL		
M00681	003181	01/09/97	DTSC LONG BEACH	COMMENTS ON THE DRAFT FACT SHEET NUMBER 3	ADMIN RECORD	COMMENTS	5 GROUP A	SOUTHWEST DIVISION
LTR		03/29/95	M. GASLAN	W/ENCL	INFO REPOSITORY	PUBNOT	9 GROUP B	MCB CAMP PENDLETON
000000000000000		00000	SOUTHWEST DIVISION				3 GROUP C	
0003		10.1	E. DIAS				6 GROUP D	
							15	
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M00681	003180	01/09/97	MCB CAMP PENDLETON	DRAFT ROD FOR OU1 SITES 9 AND GROUP A FOR COMMENTS	ADMIN RECORD	ROD	9	SOUTHWEST DIVISION
LTR		03/30/95	J.E. JOY	W/O ENCL	INFO REPOSITORY		GROUP A	MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES					
0003		05.1						
M00681	001036	05/23/94	JACOBS ENGINEERING	RECORD OF DECISION FOR OU 1 SITE 9 AND GROUP A	ADMIN RECORD	ROD	OU 1, 9	SOUTHWEST DIVISION
RPT		03/31/95		NO ACTION SITES DRAFT			GROUP A	
000000000000000		00166	DISTRIBUTION				3,4,5,24	
0450		05.1						
M00681	002952	07/05/95	LAW/CRANDALL	REPORT OF WASTE ANALYSIS PLAN FOR MCB CAMP PENDLETON	ADMIN RECORD			SOUTHWEST DIVISION
PLAN		04/01/95	M.A. FEAREY	VOLUME 1 OF 2 AND VOLUME 2 OF 2				
N6871193D1452		DO 27	SOUTHWEST DIVISION					
1000		00.0						
M00681	003145	08/07/96	OHM REMEDIATION	DRAFT CONTRACTOR QUALITY CONTROL PLAN ADDENDUM,	ADMIN RECORD		13 AREA	SOUTHWEST DIVISION
PLAN		04/01/95	M. MILLER	13 AREA				
00N6871193D1459		00000	SOUTHWEST DIVISION					
0052		03.3						
M00681	003152	09/16/96	MCAS CAMP PENDLETON	MCB CAMP PENDLETON IRP DRAFT FINAL WORK PLAN ADDENDUM	ADMIN RECORD	IRP	8	SOUTHWEST DIVISION
LTR		04/03/95	J.E. JOY	FOR ADDITIONAL INVESTIGATION AT SITE 8, DRAFT FINAL WP		WORK PLAN		
000000000000000		00000	VARIOUS AGENCIES &	GR STUDY, & PROJECT NOTE W/O ENCL		GW		
0010		01.6	INDIVIDUALS					

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M00681	002998	09/25/95	SOUTHWEST DIVISION	INVITATION TO THE 22ND FFA PROJECT MANAGERS' MEETING	ADMIN RECORD			SOUTHWEST DIVISION
LTR		04/04/95	E.K. DIAS					
000000000000000		00000	VARIOUS					
0002		01.6						
M00681	003153	09/16/96	MCAS CAMP PENDLETON	IRP TECHNICAL PROJECT NOTE ADDRESSING RESPONSE TO	ADMIN RECORD	IRP	GROUP B	SOUTHWEST DIVISION
LTR		04/04/95	J.E. JOY	COMMENTS ON DRAFT RI RPT FOR GRP "B" SITES & DRAFT WP		RI	8	
000000000000000		00000	VARIOUS AGENCIES	ADDENDUM FOR ADD'L INVESTIGATION AT SITES 8 W/O ENCL				
0011		01.6	INDIVIDUALS					
M00681	003016	10/02/95	JACOBS ENGINEERING	FACT SHEET NO. 3	ADMIN RECORD	PUBNOT	3,6,5,9,4,	SOUTHWEST DIVISION
XMTL		04/14/95	E.M. MINUGH			REMOVAL(3)	4A,24	
N6871189D9296		00166	SOUTHWEST DIVISION			REMOVAL(6)	GROUP A	
0008		10.6	E. DIAS					
						OU1		
M00681	002944	06/12/95	CRWQCB SAN DIEGO	COMMENTS ON DRAFT FINAL RI REPORT FOR GROUP B IR SITES	ADMIN RECORD	COMMENTS	GROUP B	SOUTHWEST DIVISION
LTR		04/26/95	J.P. ANDERSON					
000000000000000		00000	DTSC LONG BEACH					
0002		03.6	I. HIRBAWI					
M00681	002927	06/12/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE ADDITIONAL SAMPLING OF GROUP	ADMIN RECORD	CLOSURE	GROUP B	SOUTHWEST DIVISION
RPT		04/28/95	E.M. MINUGH	B IMPOUNDMENTS ECOLOGICAL RISK ASSESSMENT WORK PLAN		RA		
N6871189D9296		00301	SOUTHWEST DIVISION	FOR SAMPLING OF GROUP B IMPOUNDMENTS PRIOR TO CLOSURE				
0015		03.6						
M00681	002927	06/12/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE REGARDING ADDITIONAL	ADMIN RECORD	GW	8,35	SOUTHWEST DIVISION
RPT		05/02/95	E.M. MINUGH	INVESTIGATION AT SITES 8 & 35 AND SANTA MARGARITA				
N6871189D9296		00301	SOUTHWEST DIVISION	GROUNDWATER STUDY				
0004		03.3						
M00681	003345	08/27/97	MCB CAMP PENDLETON	LETTER ENCLOSING TECHNICAL PROJECT NOTES WHICH	ADMIN RECORD	SAP	GROUP B	SOUTHWEST DIVISION
LTR		05/08/95	J. JOY	PRESENT THE SAMPLING PLAN AT MCB CAMP PENDLETON, GROUP	INFO REPOSITORY			MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	B. W/OUT ENCLOSURE				
0016		01.6						
M00681	002933	06/12/95	DTSC LONG BEACH	COMMENTS ON THE GROUP C ECOLOGICAL RISK ASSESSMENT FOR	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
LTR		05/10/95	M. C. GASLAN	CHEMICALS OF POTENTIAL ECOLOGICAL CONCERN MEMORANDUM		SAP		
000000000000000		00000	SOUTHWEST DIVISION	OF MARCH 23, 1995 & INTERIM WP SAP				
0012		08.3	E. DIAS					

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M00681	003362	08/27/97	JACOBS ENGINEERING	GROUP C SITES ECOLOGICAL RISK ASSESSMENT-INTERIM	ADMIN RECORD	RISK	GROUP C	SOUTHWEST DIVISION
PLAN		05/12/95	J. GLEASON	WORK PLAN AND SAMPLING AND ANALYSIS PLAN	INFO REPOSITORY	WORK PLAN	1D	MCB CAMP PENDLETON
N6871189D9296		00301	VARIOUS AGENCIES			SAP	1E	
0075		02.1					2B	
							2C	
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M00681	003185	01/09/97	MCB CAMP PENDLETON	REQUEST FOR COMMENTS ON THE ENCLOSED EE/CA FOR SITE 7	ADMIN RECORD	REQUEST	7	SOUTHWEST DIVISION
LTR		05/22/95	J.E. JOY	W/O ENCL	INFO REPOSITORY	COMMENTS		MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES			EE/CA(*)		
0015		02.4						
M00681	003018	10/02/95	JACOBS ENGINEERING	DRAFT EE/CA FOR INSTALLATION OF A CAP AT SITE 7 -	ADMIN RECORD	EE\CA	7	SOUTHWEST DIVISION
RPT		05/25/95	E.M. MINUGH	BOX CANYON LANDFILL REVISION 0		LF		
N6871189D9296		00301	SOUTHWEST DIVISION					
0250		02.4	E. DIAS					
M00681	003178	01/09/97	SOUTHWEST DIVISION	AGENDA FOR THE 23RD PROJECT MANAGERS MEETING	ADMIN RECORD	MTG MINS		SOUTHWEST DIVISION
LTR		05/25/95	E. DIAS	W/ENCL	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	EPA SAN FRANCISCO					
0003		01.6	S. LAUTH					
M00681	003000	09/25/95	DTSC LONG BEACH	DTSC REQUEST FISH & GAMES INPUT ON POTENTIAL CHEMICAL,	ADMIN RECORD	ARAR	7	SOUTHWEST DIVISION
LTR		05/30/95	M.C. GASLAN	LOCATION, AND ACTION SPECIFIC ARAR'S AFFECTING THE				
0000000000000000		00000	FISH & GAME	PROPOSED REMOVAL ACTION AT SITE 7				
0004		02.7	M. MARTIN					

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M00681 LTR 000000000000000 0004	003001	09/25/95 05/30/95 00000 02.7	DTSC LONG BEACH M.C. GASLAN APCD SAN DIEGO M. LAKE	DTSC REQUESTS APCDs INPUT ON POTENTIAL CHEMICAL, LOCATION, AND ACTION SPECIFIC ARAR's AFFECTING THE PROPOSED REMOVAL ACTION AT SITE 7	ADMIN RECORD	ARAR	7	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0004	003003	09/25/95 05/30/95 00000 02.7	DTSC LONG BEACH M.C. GASLAN WASTE MGMT BOARD J. CLINKENBEARD	DTSC REQUEST WASTE MGMT INPUT ON POTENTIAL CHEMICAL, LOCATION, AND ACTION SPECIFIC ARAR's AFFECTING THE PROPOSED REMOVAL ACTION AT SITE 7	ADMIN RECORD	ARAR	7	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0015	003186	01/09/97 05/30/95 00000 10.1	MCB CAMP PENDLETON J.E. JOY VARIOUS AGENCIES	REVISION TO THE COMMENT DUE DATE FOR MCB CAMP PENDLETON EE/CA FOR SITE 7-REVISED DUE DATE JULY 28, 1995	ADMIN RECORD INFO REPOSITORY	COMMENTS EE/CA(*)	7	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 000000000000000 0005	002996	09/25/95 05/31/95 00000 05.4	DTSC LONG BEACH M.C. GASLAN SOUTHWEST DIVISION E. DIAS	COMMENTS ON THE DRAFT ROD FOR OU1 SITE 9 AND GROUP A NO ACTION SITES OF MARCH 31, 1995	ADMIN RECORD	COMMENTS ROD REMOVAL(3)  REMOVAL(6)	OU1 GROUP A 3,4,5,6,9  24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0014	002934	06/12/95 06/05/95 00000 05.4	CRWQCB SAN DIEGO J. ODERMATT DTSC LONG BEACH I. HIRBAWI	REQUEST FOR RWQCB REVIEW OF DRAFT ROD FOR OU 1 SITE 9 & GROUP A NO ACTION SITES OF MARCH 31, 1995 AND COMMENTS	ADMIN RECORD	COMMENTS ROD REMOVAL(3)  REMOVAL(6)	OU1 9, GROUP A 3,4,5,6,24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0014	003002	09/25/95 06/05/95 00000 05.4	CRWQCB SAN DIEGO J.P. ANDERSON DTSC LONG BEACH I. HIRBAWI	COMMENTS TO REQUEST FOR RWQCB REVIEW OF DRAFT ROD FOR OU 1 SITE 9 AND GROUP A NO ACTION SITES OF MARCH 31, 1995	ADMIN RECORD	COMMENTS ROD REMOVAL(3)  REMOVAL(6)	GROUP A OU1 9  3,4,5,6,24	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0006	002959	07/25/95 06/09/95 00301 00.0	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	MEETING MINUTES GROUP C SITES HUMAN HEALTH RISK ASSESSMENT WORK PLAN ADDENDUM SCOPING	ADMIN RECORD	MTG MINS	GROUP C	SOUTHWEST DIVISION
M00681 MISC 000000000000000 0001	002994	09/25/95 06/09/95 00000 10.3	SUN POST NEWS	NOTICE OF AVAILABILITY PUBLIC COMMENT PERIOD AND PUBLIC MEETING FOR NO REMEDIAL ACTIONS SITES 4,4A,24	ADMIN RECORD	PUBNOT	4,4A,24	SOUTHWEST DIVISION

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M00681 MISC 00000000000000 0001	002995	09/25/95 06/09/95 00000 10.3	THE SCOUT	NOTICE OF AVAILABILITY PUBLIC COMMENT PERIOD AND PUBLIC MEETING FOR NO REMEDIAL ACTIONS SITES 4,4A,24	ADMIN RECORD	PUBNOT	4,4A,24	SOUTHWEST DIVISION
M00681 LTR 00000000000000 0001	002993	09/25/95 06/12/95 00000 10.3	MCB CAMP PENDLETON J.E. JOY VARIOUS	PROPOSED PLAN PUBLIC COMMENT PERIOD BEGINS 10 JUNE 1995 N	ADMIN RECORD	PUBNOT	4,4A,24	SOUTHWEST DIVISION
M00681 LTR 00000000000000 0014	003198	01/09/97 06/20/95 00000 02.4	MCB CAMP PENDLETON J.E. JOY VARIOUS AGENCIES	TRANSMITTAL OF EE/CA FOR GROUP A SITE 3 AND 6 FOR REVIEW AND RETENTION W/O ENCL	ADMIN RECORD INFO REPOSITORY	EE/CA(*) 6	3 6	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 00000000000000 0014	003189	01/09/97 06/20/95 00000 03.3	MCB CAMP PENDLETON J.E. JOY VARIOUS AGENCIES	TRANSMITTAL OF DRAFT GROUP C ECOLOGICAL RISK ASSESSMENT WORK PLAN FOR COMMENTS W/O ENCL	ADMIN RECORD INFO REPOSITORY	RISK ASSESSMENT WORK PLAN  COMMENTS	GROUP C	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 00000000000000 0014	003292	08/25/97 06/20/95 00000 01.6	MCB CAMP PENDLETON J. JOY VARIOUS AGENCIES	REQUEST FOR COMMENTS TO DRAFT GROUP "C" HUMAN HEALTH RISK ASSESSMENT WORK PLAN, DATED 20 JUNE 1995 W/O ENCL	ADMIN RECORD INFO REPOSITORY	REQUEST COMMENTS RA  WORK PLAN		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 PLAN N6871189D9296 0350	002950	07/05/95 06/21/95 00301 03.3	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION	RI/FS GROUP C SITES HUMAN HEALTH RISK ASSESSMENT WORK PLAN ADDENDUM DRAFT, REVISION 0	ADMIN RECORD	HRA	GROUP C	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0550	002951	07/05/95 06/21/95 00166 02.4	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION	DRAFT FINAL EE/CA FOR GROUP A SITE 3 AND 6 REVISION 0	ADMIN RECORD	EE\CA REMOVAL(3) REMOVAL(6)	GROUP A 3, 6	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0350	002957	07/06/95 06/23/95 00301 03.3	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION E. DIAS	RI/FS GROUP C SITES, ECOLOGICAL RISK ASSESSMENT DRAFT WORK PLAN	ADMIN RECORD	RI FS	1D,1E,2B, 2C,6,10,16 17,25,26,  27,28,29, 30,35	SOUTHWEST DIVISION

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M00681	002954	07/06/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE MINUTES OF 21ST FFA PROJECT	ADMIN RECORD	MTG MINS	3,6	SOUTHWEST DIVISION
MM		06/27/95	E.M. MINUGH	MANAGERS' MEETING		REMOVAL(3)	GROUP A	
N6871189D9296		00166	SOUTHWEST DIVISION			REMOVAL(6)	4,5,9,24	
0012		00.0	E. DIAS				7,8,14,19	
							20,22	
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							1,2,10,16,	
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							35,	
							GROUP D	
M00681	002955	07/06/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE MINUTES OF 22ND FFA PROJECT	ADMIN RECORD	MTG MINS	4,4A,24,3,	SOUTHWEST DIVISION
MM		06/27/95	E.M. MINUGH	MANAGERS' MEETING		REMOVAL(3)	6,7,8,9	
N6871189D9296		00166	SOUTHWEST DIVISION			REMOVAL(6)	OUI	
0029		00.0	E. DIAS					
M00681	002956	07/06/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE MINUTES OF 23RD FFA PROJECT	ADMIN RECORD	MTG MINS	4,4A,24,8	SOUTHWEST DIVISION
MM		06/27/95	E.M. MINUGH	MANAGERS' MEETING		REMOVAL(6)	16,17,27,6	
N6871189D9296		00166	SOUTHWEST DIVISION			OU2,9		
0013		00.0	E. DIAS					
M00681	003187	01/09/97	MCB CAMP PENDLETON	DRAFT GROUP C HUMAN HEALTH RISK ASSESSMENT WORK PLAN	ADMIN RECORD	ASSESSMENT	GROUP C	SOUTHWEST DIVISION
LTR		06/30/95	J.E. JOY	SENT FOR COMMENTS	INFO REPOSITORY	WORK PLAN		
0000000000000000		00000	VARIOUS AGENCIES	W/O ENCL		COMMENTS		
0014		03.3					RISK	
M00681	003301	08/25/97	SOUTHWEST DIVISION	RESPONSE TO REQUEST FOR CLARIFICATION OF DOCUMENT	ADMIN RECORD	RESPONSE	28	SOUTHWEST DIVISION
LTR		07/05/95	L. HARVEY	REQUEST (PRELIMINARY REVIEW REPORT FOR SITE 28, DATED	INFO REPOSITORY	REQUEST		MCB CAMP PENDLETON
N6871187C2833		00000	PRESSEISEN & REIDELB	MAY 13, 1991) OF JUNE 1, 1995		PRP		
0003		10.1	J. PRESSEISEN					
M00681	002984	09/25/95	CRWQCB SAN DIEGO	CRWQCB SAN DIEGO WILL DETOUR COMMENTS ON THE DRAFT	ADMIN RECORD	HRA	GROUP C	SOUTHWEST DIVISION
LTR		07/18/95	J.P. ANDERSON	GROUP C HUMAN HRA WORK PLAN TO DTSC AND EPA				
0000000000000000		00000	DTSC LONG BEACH					
0001		03.6	I. HIRBAWI					

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M00681	002985	09/25/95	CRWQCB SAN DIEGO	COMMENTS ON THE DRAFT EE/CA FOR INSTALLATION OF A CAP	ADMIN RECORD	COMMENTS	SITE 7	SOUTHWEST DIVISION
LTR		07/18/95	J.P. ANDERSON	AT SITE 7 OF MAY 25, 1995		EE\CA		
000000000000000		00000	DTSC LONG BEACH					
0007		02.7	I. HIRBAWI					
M00682	002991	09/25/95	MCB CAMP PENDLETON	TRC MEETING OF 9 AUGUST 1995 AGENDA AND MAP	ADMIN RECORD	TRC	3,6,7	SOUTHWEST DIVISION
LTR		07/18/95	J.E. JOY			REMOVAL(3)	GROUP A	
000000000000000		00000	VARIOUS			REMOVAL(6)	OU1,OU3	
0003		10.4						
						OU2		
M00681	002992	09/25/95	CRWQCB SAN DIEGO	RWQCB REQUESTS AN EXTENSION OF TIMETABLE FOR DELIVERY	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION
LTR		07/19/95	A.L. COE	OF DRAFT FINAL ROD OU1		REMOVAL(3)	3,4,5,6,9	
000000000000000		00000	EPA SAN FRANCISCO			REMOVAL(6)	24	
0002		05.4	J. ANDERSON					
M00681	002982	09/25/95	SOUTHWEST DIVISION	INVITATION TO ATTEND THE 24TH FFA PROJECT MANAGERS'	ADMIN RECORD	FFA	OU2	SOUTHWEST DIVISION
LTR		07/21/95	E.K. DIAS	MEETING		REMOVAL(3)	8,6,16,17	
000000000000000		00000	EPA SAN FRANCISCO			REMOVAL(6)	27,7,3,6,5	
0005		01.6	S. LAUTH					
						OU1		
						GROUP C		
						14,19,20		
						22		
M00681	002990	09/25/95	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT EE/CA FOR INSTALLATION OF A CAP	ADMIN RECORD	COMMENTS	SITE 7	SOUTHWEST DIVISION
LTR		07/21/95	S. LAUTH	AT SITE 7 OF MAY 25, 1995		EE\CA		
000000000000000		00000	SOUTHWEST DIVISION					
0002		02.7	E. DIAS					
M00681	002986	09/25/95	MCB CAMP PENDLETON	DEWATERING OPERATION AT THE MCAS DRAINAGE DITCH	ADMIN RECORD	WATER	4	SOUTHWEST DIVISION
LTR		07/24/95	L.E. ARMAS					
000000000000000		00000	MCAS EL TORO					
0002		01.6						
M00681	002983	09/25/95	MCB CAMP PENDLETON	DEWATERING INVESTIGATION CONDUCTED DETERMINED THAT	ADMIN RECORD	WATER	45	SOUTHWEST DIVISION
LTR		07/25/95	L. ARMAS	THE FINAL POINT OF DISCHARGE WAS TO THE SANTA				
000000000000000		00000	CRWQCB SAN DIEGO	MARGARITA RIVER				
0001		01.6	X.O.					

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M00681	002978	09/25/95	MCB CAMP PENDLETON	HALTED DISCHARGE OF DEWATERING EFFLUENT TO THE SANTA	ADMIN RECORD		45	SOUTHWEST DIVISION
LTR		07/26/95	L. ARMAS	MARGARITA RIVER, PENDING IMPLEMENTATION OF ALTERNATE				
0000000000000000		00000	CRWQCB SAN DIEGO	DISCHARGE OPTIONS				
0001		01.6	X.O.					
M00681	002979	09/25/95	FISH & WILDLIFE	COMMENTS ON THE EE/CA FOR INSTALLATION OF A CAP AT	ADMIN RECORD	COMMENTS	SITE 7	SOUTHWEST DIVISION
LTR		07/27/95	G.C. KOBETICH	SITE 7- BOX CANYON LANDFILL		EE\CA	OU3	
0000000000000000		00000	SOUTHWEST DIVISION				GROUP B	
0001		02.7	E. DIAS					
M00681	002980	09/25/95	EPA SAN FRANCISCO	30-DAY EXTENSION FOR THE NAVY'S SUBMITTAL OF THE DRAFT	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION
LTR		07/27/95	J. DIAMOND	FINAL ROD FOR OU 1 NOT NECESSARY		REMOVAL(3)	GROUP A	
0000000000000000		00000	RWQCB SAN DIEGO			REMOVAL(6)	3,4,5,6,9,	
0001		05.4	A.L. COE				24	
M00681	002962	07/31/95	JACOBS ENGINEERING	DRAFT FINAL RECORD OF DECISION FOR OU 1 SITE 9 AND	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION
RPT		07/28/95		GROUP A NO ACTIONS SITES		REMOVAL(3)	GROUP A	MCAS CAMP PENDLETON
N6871189D9296		00166	SOUTHWEST DIVISION			REMOVAL(6)	9	
0350		05.1					3,4,5,6,24	
M00681	002976	09/25/95	MCB CAMP PENDLETON	DRAFT FINAL RECORD OF DECISION FOR OU 1 SITE 9 AND	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION
RPT		07/28/95	J.E. JOY	GROUP A NO ACTIONS SITES (SENT FOR COMMENTS)		REMOVAL(3)	GROUP A	
N6871189D9296		00166	VARIOUS	(SEE DOC. NO. 002962 FOR THE ROD)		REMOVAL(6)	3,4,5,6,9,	
0001		05.1					24	
M00681	002987	09/25/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT EE/CA FOR INSTALLATION OF A CAP	ADMIN RECORD	COMMENTS	SITE 7	SOUTHWEST DIVISION
LTR		07/28/95	M.C. GASLAN	AT SITE 7		EE\CA		
0000000000000000		00000	SOUTHWEST DIVISION					
0028		02.7	E. DIAS					
M00681	002989	09/25/95	SOUTHWEST DIVISION	REVISED 24TH MEETING PROPOSED AGENDA	ADMIN RECORD	FFA	OU1,OU2	SOUTHWEST DIVISION
MEMO		07/31/95	E. DIAS			REMOVAL(3)	6,16,17,27	
0000000000000000		00000	VARIOUS			REMOVAL(6)	8,7,3,6,5	
0003		01.6					10,19,20,	
							22	
							GROUP C	



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M00681	002977	09/25/95	DTSC LONG BEACH	COMMENTS ON THE EE/CA FOR GROUP A SITE 3 AND SITE 6	ADMIN RECORD	COMMENTS	GROUP A	SOUTHWEST DIVISION
LTR		08/17/95	M.C. GASLAN	DRAFT FINAL OF 21 JUNE 1995		EE\CA	3,6	
000000000000000		00000	SOUTHWEST DIVISION			REMOVAL(3)		
0012		02.7	E. DIAS					
M00681	002968	09/25/95	CRWQCB SAN DIEGO	REQUEST FOR EXTENSION OF REVIEW PERIOD DEADLINE FOR	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION
LTR		08/21/95	A.L. COE	THE DRAFT FINAL RECORD OF DECISION (ROD), OU1		REMOVAL(3)	GROUP A	
000000000000000		00000	SOUTHWEST DIVISION			REMOVAL(6)	3,4,5,6,9	
0002		05.4	J. PAWLISCH					
M00681	002969	09/25/95	CRWQCB SAN DIEGO	COMMENTS ON THE REVIEW OF THE DRAFT FINAL RECORD OF	ADMIN RECORD	COMMENTS	OU1	SOUTHWEST DIVISION
LTR		08/23/95	J.P. ANDERSON	DECISION (ROD) FOR OU 1 - SITE 9 & GROUP A NO ACTION		ROD	SITE 9	
000000000000000		00000	DTSC LONG BEACH	SITESOF JULY 28, 1995		REMOVAL(3)	3,4,5,6,24	
0004		05.4	I. HIRBAWI			REMOVAL(6)		
M00681	002963	09/08/95	JACOBS ENGINEERING	DRAFT FINAL WORK PLAN ECOLOGICAL RISK ASSESSMENT	ADMIN RECORD		GROUP C	SOUTHWEST DIVISION
PLAN		08/25/95	E.M. MINUGH	RI/FS GROUP C SITES REVISION 0			1D,1E,2B,	
N6871189D9296		00301	SOUTHWEST DIVISION				2C,6,10,16	
1500		03.3					17,25,26,	
							27,28,29,	
							30,35	
M00681	003071	03/28/96	DTSC SACRAMENTO	ARARs REVIEW FOR SITE 9 MISSTATEMENT OF THE LAW	ADMIN RECORD	ARAR	9	SOUTHWEST DIVISION
LTR		08/25/95	R.B. PEREZ				GROUP A	
000000000000000		00000	DTSC LONG BEACH				OU1	
0002		01.6	I. HIRBAWI					
M00681	002970	09/25/95	DTSC LONG BEACH	COMMENTS ON THE DRAFT FINAL RECORD OF DECISION (ROD)	ADMIN RECORD	COMMENTS	OU1	SOUTHWEST DIVISION
LTR		08/29/95	M.C. GASLAN	FOR OU 1 - SITE 9 & GROUP A NO ACTION SITES 4, 4A,		ROD	9	
000000000000000		00000	SOUTHWEST DIVISION	24 JULY 28, 1995				
0009		05.4	E. DIAS				4,4A,24	
M00681	002971	09/25/95	DTSC LONG BEACH	REQUEST FOR EXTENSION OF THE FFA DEADLINE FOR THE	ADMIN RECORD	ROD	OU1	SOUTHWEST DIVISION
LTR		08/29/95	M.C. GASLAN	INVOCATION OF DISPUTE RESOLUTION FOR THE DRAFT FINAL		REMOVAL(3)	3,4,5,6,9	
000000000000000		00000	CRWQCB SAN DIEGO	ROD OU 1		REMOVAL(6)	24	
0003		05.4	A.L. COE					

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M00681 LTR 0000000000000000 0001	002974	09/25/95 08/29/95 00000 05.4	EPA SAN FRANCISCO J. ANDERSON RWQCB SAN DIEGO A. COE	REQUEST FOR EXTENSION OF REVIEW PERIOD DEADLINE FOR THE DRAFT FINAL RECORD OF DECISION (ROD) OU 1	ADMIN RECORD	ROD REMOVAL(3) REMOVAL(6)	OU1 GROUP A 3,4,5,6,9	SOUTHWEST DIVISION
							24	
M00681 LTR 0000000000000000 0006	002972	09/25/95 09/01/95 00000 01.6	CRWQCB SAN DIEGO J.P. ANDERSON MCB CAMP PENDLETON C. REINKE	TECHNICAL EVALUATION OF PROPOSED LOCATIONS FOR NEW BASE WATER SUPPLY WELL NEAR EXISTING GROUND WATER PLUMES IN 22 AREA	ADMIN RECORD	WELLS WATER REMOVAL(6)	6,17 GROUP A	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0095	003052	10/23/95 09/01/95 00301 01.6	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	TECHNICAL PROJECT NOTE MINUTES OF 24TH FFA PROJECT MANAGER'S MEETING	ADMIN RECORD	MTG MINS	7,8	SOUTHWEST DIVISION
M00681 PLAN 00N6871193D1459 0080	003146	08/07/96 09/01/95 00000 03.3	OHM REMEDIATION M. MILLER SOUTHWEST DIVISION	FINAL WORK PLAN SOIL VAPOR EXTRACTION PILOT TEST AND SITE ASSESSMENT, 13 AREA MCB CAMP PENDLETON.	ADMIN RECORD	SA WORK PLAN	13 AREA	SOUTHWEST DIVISION
M00681 PLAN N6871189D9296 0350	002966	09/25/95 09/05/95 00301 02.1	JACOBS ENGINEERING E.B. LUECKER SOUTHWEST DIVISION	RI/FS GROUP C SITES ECOLOGICAL RISK ASSESSMENT DRAFT SAMPLING AND ANALYSIS PLAN	ADMIN RECORD	SAP RI FS	GROUP C SITE 0001D 2C	SOUTHWEST DIVISION
							6,25,27,29 30	
M00681 LTR 0000000000000000 0004	003051	10/13/95 09/06/95 00000 01.6	SOUTHWEST DIVISION E.K. DIAS EPA SAN FRANCISCO S. LAUTH	INVITATION TO THE 25TH FEDERAL FACILITIES AGREEMENT PROJECT MANAGERS MEETING WITH AGENDA	ADMIN RECORD	FFA		SOUTHWEST DIVISION
M00681 MISC N6871189D9296 0007	003054	10/23/95 09/08/95 00301 01.6	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO COMMENTS ON THE DRAFT ECOLOGICAL RISK ASSESSMENT WORK PLAN RI/FS FOR GROUP C SITES OF 23 JUNE 1995	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
M00681 MISC N6871189D9296 0089	002967	09/25/95 09/12/95 00166 02.4	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION	RESPONSES TO COMMENTS ON DRAFT EE/CA FOR SITES 3 & 6	ADMIN RECORD	EE\CA COMMENTS REMOVAL(3)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
						REMOVAL(6)		

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M00681 RPT N6971189D9296 0650	003069	03/04/96 09/15/95 00166 02.4	SOUTHWEST DIVISION	DRAFT FINAL EE/CA FOR GROUP A SITE 3 PEST CONTROL WASH RACK & SITE DPDO SCRAP YARD REVISION 1	ADMIN RECORD	EE\CA REMOVAL(3) REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 MEMO 0000000000000000 0005	003011	10/02/95 09/21/95 00000 05.4	SOUTHWEST DIVISION	AGREED UPON LANGUAGE FOR AMENDING THE DRAFT FINAL ROD FOR OU-1 SITE 9 AND GROUP A NO FURTHER ACTION SITES FOR ARAR's	ADMIN RECORD CONFIDENTIAL DOC	ARAR REMOVAL(3) REMOVAL(6)	9 GROUP A OU1  3,4,5,6,24	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003012	10/02/95 09/22/95 00000 05.4	SOUTHWEST DIVISION	AGREED UPON LANGUAGE FOR AMENDING THE DRAFT FINAL ROD FOR OU-1 SITE 9 AND GROUP A NO FURTHER ACTION SITES FOR ARAR's	ADMIN RECORD	ROD ARAR REMOVAL(3)  REMOVAL(6)	9 OU1 GROUP A  3,4,5,6,24	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0350	003009	10/02/95 09/25/95 00301 02.4	JACOBS ENGINEERING	DRAFT FINAL EE/CA FOR INSTALLATION OF A CAP AT SITE 7 BOX CANYON LANDFILL REVISION 0	ADMIN RECORD	EE\CA LF	7	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003010	10/02/95 09/28/95 00000 05.4	DTSC LONG BEACH	AGREED UPON LANGUAGE FOR AMENDING THE DRAFT FINAL ROD FOR OU-1 SITE 9 AND GROUP A NO FURTHER ACTION SITES FOR ARAR's	ADMIN RECORD	ARAR REMOVAL(3) REMOVAL(6)	9 OU1 GROUP A  3,4,5,6,24	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003049	10/13/95 09/28/95 00000 05.4	DTSC LONG BEACH	AGREEMENT REACHED BETWEEN THE CAL/EPA, DTSC & RWQCB LEGAL COUNSELS ON THE PROPOSED "AGREE-TO-DISAGREE" LANGUAGE RE: SWRCB RESOLUTIONS NO. 68-16 & 92-49	ADMIN RECORD	ROD REMOVAL(3) REMOVAL(6)	OU1 3,4,5,6,9 24	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0013	003048	10/13/95 09/29/95 00000 03.6	DTSC LONG BEACH	COMMENTS FROM CAL/EPA, DTSC AND RWQCB ON THE RI/FS PHASE I RI TECHNICAL MEMORANDUM GROUP C SITES OF AUGUST 16, 1995	ADMIN RECORD	COMMENTS TECH MEMO	GROUP C OU2	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003050	10/13/95 09/29/95 00000 05.4	CRWQCB SAN DIEGO	SWRCB NOTIFIED THAT THE REMAINING STATE ARAR ISSUES HAVE BEEN SUCCESSFULLY RESOLVED IN ORDER TO FINALIZE THE ROD FOR OU1	ADMIN RECORD	ROD REMOVAL(3) REMOVAL(6)	OU1 3,4,5,6,9 24	SOUTHWEST DIVISION

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M00681 LTR 000000000000000 0006	003065	11/01/95 09/29/95 00000 07.8	MCB CAMP PENDLETON W.A. SPENCER ACS ENVIR SECURITY	QUARTER CEASE AND DESIST ORDER REPORT TO THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD	ADMIN RECORD	C/A ORDER		SOUTHWEST DIVISION
M00681 RPT N6871193D1459 0015	003060	11/01/95 10/01/95 DO 17 01.1	OHM REMEDIATION S. BORNHOFT SOUTHWEST DIVISION	MONTHLY REPORT FOR FREE PRODUCT RECOVERY FOR MCAS FUEL FARM MCB CAMP PENDLETON 23 AREA	ADMIN RECORD	FUEL	22	SOUTHWEST DIVISION
M00681 RPT N4740892D3042 1500	003231	02/03/97 10/01/95 DO#39 01.3	OHM REMEDIATION M. MILLER SOUTHWEST DIVISION	DRAFT SITE ASSESSMENT REPORT REMOVAL OF HYDROCARBONS FROM SOIL AND GROUNDWATER 11 AREA AND 22 AREA GAS STATIONS (1 ORIG. REC'D NO DUP)	ADMIN RECORD	SA REMOVAL SOIL  GW	22 43	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0002	003044	10/13/95 10/02/95 00000 05.4	CRWQCB SAN DIEGO J.R. ODERMATT SOUTHWEST DIVISION CO	REMAINING ISSUES REGARDING STATE ARARs HAVE BEEN SUCCESSFULLY RESOLVED IN ORDER TO FINALIZE THE RECORD OF DECISION FOR OU 1	ADMIN RECORD	ARAR ROD REMOVAL(3)  REMOVAL(6)	OU1 3,4,5,6,9 24	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0001	003045	10/13/95 10/03/95 00000 07.8	TRC MEMBER E.O. WALTON MCB CAMP PENDLETON	COMMENTS ON THE INVESTIGATION/FEASIBILITY STUDY, GROUP C SITES, ECOLOGICAL RISK ASSESSMENT SAMPLING AND ANALYSIS PLAN ADDENDUM DRAFT, 05 SEPTEMBER 1995	ADMIN RECORD	COE	GROUP C	SOUTHWEST DIVISION
M00681 XMTL N6871189D9296 0024	003046	10/13/95 10/03/95 00166 02.7	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO COMMENTS FROM REGULATORY AGENCIES ON THE DRAFT FINAL EE/CA GROUP A SITE 3 & SITE 6, 21 JUNE 95	ADMIN RECORD	COMMENTS EE\CA REMOVAL(3)  REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 XMTL N6871189D9296 0046	003047	10/13/95 10/03/95 00166 05.4	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO DRAFT RECORD OF DECISION FOR OU1 - SITE 9 AND GROUP A NO ACTION SITES	ADMIN RECORD	COMMENTS ROD REMOVAL(3)  REMOVAL(6)	GROUP A 9 OU1  3,4,5,6,24	SOUTHWEST DIVISION
M00681 MISC N6871189D9296 0040	003057	10/23/95 10/03/95 00166 01.6	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO COMMENTS ON DRAFT RECORD OF DECISION FOR OU1 SITE 9 AND GROUP A NO ACTION SITES	ADMIN RECORD	COMMENTS REMOVAL(3) REMOVAL(6)	GROUP A OU1,9 3,4,5,6,24	SOUTHWEST DIVISION

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M00681 MISC N6871189D9296 0020	003058	10/23/95 10/03/95 00166 01.6	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION O. MCCLAIN	RESPONSE TO COMMENTS FROM REGULATORY AGENCIES ON THE DRAFT FINAL EE/CA GROUP A SITE 3, & 6 21 JUNE 1995	ADMIN RECORD	COMMENTS EE\CA REMOVAL(3)  REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION
M00681 XMTL N6871189D9296 0007	003042	10/13/95 10/05/95 00166 05.4	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO COMMENTS FROM REGULATORY AGENCIES ON THE ROD, OU1 - SITE 9 AND GROUP A NO ACTION SITES, DRAFT FINAL 28 JULY 1995	ADMIN RECORD	COMMENTS ROD REMOVAL(3)  REMOVAL(6)	GROUP A OU1 9 3,4,5,6,24	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003043	10/13/95 10/05/95 00000 07.8	FISH & WILDLIFE G.C. KOBETICH SOUTHWEST DIVISION E. DIAS	COMMENTS ON THE THE ECOLOGICAL RISK ASSESSMENT DRAFT SAMPLING AND ANALYSIS PLAN FOR GROUP C SITES	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
M00681 RPT N6871193D7531 0011	003061	11/01/95 10/06/95 DO 07 01.1	BROWN & CALDWELL D.G. WHITTAKER SOUTHWEST DIVISION B. TOMINNA	DRAFT WORK PLAN TO PERFORM OXIDATION POND SEDIMENT SAMPLING AT BOTTOM OF HORSE LAKE MCB CAMP PENDLETON	ADMIN RECORD	SEDIMENTS	HORSE LAKE	SOUTHWEST DIVISION
M00681 XMTL N6871189D9296 0029	003041	10/13/95 10/09/95 00301 02.7	JACOBS ENGINEERING B.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO COMMENTS FROM REGULATORY AGENCIES ON THE DRAFT EE/CA FOR INSTALLATION OF A CAP AT SITE 7 - BOX CANYON LANDFILL, 25 MAY 1995	ADMIN RECORD	COMMENTS	7	SOUTHWEST DIVISION
M00681 MISC N6871189D9296 0020	003056	10/23/95 10/11/95 00301 01.6	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION G. MCCLAIN	RESPONSE TO COMMENTS ON DRAFT RI/FS GROUP C SITES, HUMAN HEALTH RISK ASSESSMENT WORK PLAN ADDENDUM	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
M00681 MEMO N6871189D9296 0250	003055	10/23/95 10/13/95 00166 02.4	JACOBS ENGINEERING ACTION GROUP A SITES 3 & 6	ACTION MEMORANDUM FOR NON-TIME-CRITICAL REMOVAL ACTION GROUP A SITES 3 & 6	ADMIN RECORD	ACTMEMO REMOVAL(3) REMOVAL(6)	GROUP A 3,6	SOUTHWEST DIVISION
M00681 RPT N6871189D9296 0175	003232	02/03/97 10/13/95 00276 01.3	JACOBS ENGINEERING D. O'CONNOR SOUTHWEST DIVISION	AREAS 12 AND 13 DRAFT SITE ASSESSMENT DATED OCTOBER 16, 1995 REVISION O VOLUME I OF II (1 ORIG. REC'D NOT DUP)	ADMIN RECORD	SA	12 13 10  11	SOUTHWEST DIVISION

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M00681	003053	10/23/95	JACOBS ENGINEERING	TECHNICAL PROJECT NOTE MINUTES OF 25TH FFA PROJECT	ADMIN RECORD	MTG MINS	3,6,7,OU2	SOUTHWEST DIVISION
MM		10/16/95	E.M. MINUGH	MANAGER'S MEETING		REMOVAL(3)	8,OU1,29	
N6871189D9296		00301	SOUTHWEST DIVISION			REMOVAL(6)	17,GROUP B	
0070		01.6	G. MCCLAIN					
							GROUP C	
							GROUP A	
							OU2,OU3	
M00681	003062	11/01/95	BROWN & CALDWELL	FINAL WORK PLAN TO PERFORM OXIDATION POND SEDIMENT	ADMIN RECORD	SEDIMENTS	HORSE LAKE	SOUTHWEST DIVISION
RPT		10/16/95	D.G. WHITTAKER	SAMPLING AT BOTTOM OF HORSE LAKE MCB CAMP PENDLETON				
N6871193D7531		DO 07	SOUTHWEST DIVISION					
0014		01.1	B. TOMINNA					
M00681	003064	11/01/95	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM FOR THE	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
LTR		10/16/95	S. LAUTH	GROUP C SITES				
0000000000000000		00000	SOUTHWEST DIVISION					
0002		03.6	E. DIAS					
M00681	003063	11/01/95	BROWN & CALDWELL	OXIDATION POND SEDIMENT SAMPLING AT BOTTOM OF HORSE	ADMIN RECORD	SEDIMENTS	HORSE LAKE	SOUTHWEST DIVISION
LTR		10/20/95	D.G. WHITTAKER	LAKE MCB CAMP PENDLETON				
N6871193D7531		DO 07	SOUTHWEST DIVISION					
0002		01.1	B. TOMINNA					
M00681	003297	08/25/97	HOLGUIN, FAHAN ASSOC	WORK PLAN FOR PRELIMINARY SITE ASSESSMENT	ADMIN RECORD	WORK PLAN	AREA 1	SOUTHWEST DIVISION
PLAN		10/20/95	M. MAGARGEE		INFO REPOSITORY	SA	AREA 2	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION			SOIL	AREA 3	
0018		03.3	J. PAWLISCH					
						UST		
						POL		
						RFA		

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M00681 CLTR N69871189D9296 0175	003059	11/01/95 10/24/95	JACOBS ENGINEERING	PRELIMINARY DRAFT ACTION MEMORANDUM FOR NON-TIME- CRITICAL REMOVAL ACTION SITE 7 - BOX CANYON LANDFILL REVISION 0	ADMIN RECORD	ACTMEMO	7	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0011	003329	08/26/97 10/24/95	BROWN AND CALDWELL D. WHITTAKER	LETTER ENCLOSING 6 COPIES OF FIGURES 1 & 2 WHICH WERE INADVERTENTLY LEFT OUT OF THE FINAL WORKPLAN FOR OXIDATION POND SEDIMENT SAMPLING, OCTOBER 16, 1995	ADMIN RECORD INFO REPOSITORY	WORK PLAN SEDIMENTS	OXIDATION POND	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0003	003265	08/21/97 10/26/95	SOUTHWEST DIVISION E. DIAS	INVITATION TO ATTEND MARINE CORPS BASE CAMP PENDLETON 26TH FEDERAL FACILITIES AGREEMENT PROJECT MANAGER'S MEETING ON NOVEMBER 8 AND 9, 1995	ADMIN RECORD INFO REPOSITORY	MTG MINS FFA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0004	003266	08/21/97 10/26/95	SOUTHWEST DIVISION E. DIAS	INVITATION TO ATTEND MARINE CORPS BASE CAMP PENDLETON 26TH FEDERAL FACILITIES AGREEMENT PROJECT MANAGER'S MEETING ON NOVEMBER 8 AND 9, 1995	ADMIN RECORD INFO REPOSITORY	MTG MINS FFA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0004	003267	08/21/97 10/26/95	SOUTHWEST DIVISION E. DIAS	INVITATION TO ATTEND MARINE CORPS BASE CAMP PENDLETON 26TH FEDERAL FACILITIES AGREEMENT PROJECT MANAGER'S MEETING ON NOVEMBER 8 AND 9, 1995	ADMIN RECORD INFO REPOSITORY	MTG MINS FFA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0004	003268	08/21/97 10/26/95	SOUTHWEST DIVISION E. DIAS	INVITATION TO ATTEND MARINE CORPS BASE CAMP PENDLETON 26TH FEDERAL FACILITIES AGREEMENT PROJECT MANAGER'S MEETING ON NOVEMBER 8 AND 9, 1995	ADMIN RECORD INFO REPOSITORY	MTG MINS FFA		SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 MEMO 0000000000000000 0017	003264	08/21/97 10/27/95	E. MINUGH AND J. GLEASON	PROPOSED METHODOLOGY FOR GROUP C SITES BACKGROUND EVALUATION WAS DRAFTED AND ATTACHED WITH THE STATISTICAL APPROACH CALCULATION FOR RISK ASSESS. INCLD	ADMIN RECORD INFO REPOSITORY	BACKGROUND EVALUATION	4 4A 6	SOUTHWEST DIVISION MCB CAMP PENDLETON

16  
17  
27  
OU 2  
23

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M00681	003263	08/21/97	US DEPT. OF INTERIOR	COMMENTS ON THE ECOLOGICAL RISK ASSESSMENT DRAFT FINAL	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
LTR		10/31/95	G. KOBETICH	WORK PLAN FOR THE GROUP C SITES	INFO REPOSITORY	RISK	26	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION				35	
0002		10.1	E. DIAS				16	
							22 AREA	
							BLDG.22151	
							BLDG.22187	
M00681	003262	08/21/97	DTSC LONG BEACH	COMMENTS ON THE INTERVIEW SOLICITATION LETTER,	ADMIN RECORD	COMMENTS		SOUTHWEST DIVISION
LTR		11/02/95	M. C. GASLAN	INTERVIEW RESPONSE CARD, INTERVIEW QUESTIONS AND	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION	PROPOSED MAILING LIST				
0012		10.1	E. DIAS					
M00681	003083	05/14/96	JACOBS ENGINEERING	DRAFT FINAL RI/FS GROUP C SITES ECOLOGICAL RISK	ADMIN RECORD	SAP	GROUP C	SOUTHWEST DIVISION
RPT		11/06/95	E.B. LUECKER	ASSESSMENT SAMPLING AND ANALYSIS PLAN REVISION 0				
N6871189D9296		00301	SOUTHWEST DIVISION					
0250		03.1						
M00681	003269	08/21/97	SOUTHWEST DIVISION	REQUEST FOR A SCHEDULE EXTENSION TO AN FFA DEADLINE	ADMIN RECORD	REQUEST	OU 2	SOUTHWEST DIVISION
LTR		11/06/95	J. PAWLISCH	FOR THE MCB CAMP PENDLETON IN ACCORDANCE WITH SECTIONS	INFO REPOSITORY	FFA	16	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	8.4 AND 9 OF THE FFA			17	
0021		01.6					27	
							GROUP C	
							4	
							4A	
							6	
							GROUP A	
							GROUP B	
							8	
							22 AREA	
							23 AREA	
M00681	003300	08/25/97	SOUTHWEST DIVISION	CONCERNS OF WORKPLAN DATED OCT. 28, 1995, ON	ADMIN RECORD	WORK PLAN	17	SOUTHWEST DIVISION
LTR		11/08/95	L. HARVEY	CONTAMINATION OF PESTICIDE AND POL HANDLING AREAS OF	INFO REPOSITORY	PESTICIDES		MCB CAMP PENDLETON
0000000000000000		00000	KLEIN WEGIS ET AL	SAN CLEMENTE RANCH SITE 37		POL		
0003		10.1	C. BURGER					
						HERBICIDE		
						COMMENTS		

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M00681	003271	08/22/97	U.S. EPA REGION IX	RESPONSE TO EXTENSION REQUEST FOR DRAFT FEASIBILITY	ADMIN RECORD	REQUEST	OU 2	SOUTHWEST DIVISION
LTR		11/13/95	J. ANDERSON	STUDY, PROPOSED PLAN AND RECORD OF DECISION FOR OU 2	INFO REPOSITORY	FS	4	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION			ROD	4A	
0006		01.6	J. PAWLISCH			GW	16	
						FFA	17	
							27	
							OU 3	
							GROUP B	
							GROUP C	
M00681	003273	08/22/97	MCB CAMP PENDLETON	AUGUST 9, 1995 TECHNICAL REVIEW COMMITTEE MEETING	ADMIN RECORD	MTG MINS	5	SOUTHWEST DIVISION
MM		11/13/95	J. JOY	MINUTES	INFO REPOSITORY	SOIL	3	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION			EE\CA	6	
0007		01.6	T. ZUGSAY			GW	BLDG. 2241	
						RI	4	
						FS	4A	
						ROD	7	
						LANDFILL	9	
						REMOVAL	41	
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							8A	

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M00681	003273						OU 1	
							17	
							29	
							44	
							GROUP A	
							GROUP B	
							GROUP C	
							GROUP D	

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M00681	003288	08/22/97	SOUTHWEST DIVISION	DRAFT PHASE 2 RI WORK PLAN FOR GROUP C SITES	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
PLAN		12/05/95	D. MANGOLD		INFO REPOSITORY	WORK PLAN	2C	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES			REMOVAL	10	
0009		03.3				DATA	16	
						SOIL	20	
						FS	GROUP B	
						BACKGROUND	GROUP D	
						PRG	1F	
							2D	
							33 AREA	
							28 AREA	
							22 AREA	
							43 AREA	
							BLDG.22151	
							BLDG.22187	
M00681	002320	08/26/97	OHM REMEDIATION SVCS	TREATABILITY TESTING REPORT FOR THE STABILIZATION OF	ADMIN RECORD	TREATABILITY	STY 6	SOUTHWEST DIVISION
RPT		12/07/95	P LEAR	PESTICIDE-CONTAMINATED SOIL FROM SITE 6, DPDO, SCRAP	INFO REPOSITORY	PESTICIDES		MCB CAMP PENDLETON
N6871193D1459		00000	SOUTHWEST DIVISION	YARD		SOIL		
0008		01.2	D. JESPERSEN			SCRAPYARD		
						DPDO		
M00682	003270	08/22/97	MCB CAMP PENDLETON	INSTALLATION RESTORATION PROGRAM, TECHNICAL REVIEW	ADMIN RECORD	IRP	3	SOUTHWEST DIVISION
LTR		12/15/95	J. JOY	MEETING WILL BE HELD ON JANUARY 9, 1996	INFO REPOSITORY		6	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION	INCLUDES MEETING MAP AND AGENDA			7	
0003		01.6	T. ZUGSAY					
							OU 1	
							9	
							GROUP C	
							GROUP A	
M00681	003076	03/28/96	OHM REMEDIATION	QUARTERLY GROUNDWATER MONITORING REPORT FOURTH QUARTER	ADMIN RECORD	GW	18	SOUTHWEST DIVISION
RPT		01/01/96	M.W. MILLER	1995 13 AREA GAS STATION				
N6871193D1459		00 26	SOUTHWEST DIVISION					
0150		01.1						
M00681	003077	03/28/96	OHM REMEDIATION	MONTHLY REPORT FREE PRODUCT RECOVERY FOR MONTH OF	ADMIN RECORD	GW	18	SOUTHWEST DIVISION
RPT		01/01/96	M.W. MILLER	DECEMBER 1995 13 AREA GAS STATION REMEDIATION				
N6871193D1459		00 26	SOUTHWEST DIVISION					
0034		01.1						

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M00681 MM 00000000000000 0033	003073	03/28/96 01/09/96 00000 10.3	MCB CAMP PENDLETON J.E. JOY TRC MEMBERS	JANUARY 9, 1996 TRC MEETING MINUTES	ADMIN RECORD	TRC REMOVAL(3) REMOVAL(6)	OU1 3,4,5,6,9, 24,7,8,14,  19,20,22, GROUP C 1,2,10,16, 17,27,28, 29,30,31, 35,18,32, 33,34,36, 37,38,39, 40,41,42 OU2,OU3	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0010	003070	03/04/96 01/24/96 00301 01.6	JACOBS ENGINEERING E. MINUGH SOUTHWEST DIVISION	DRAFT MINUTES OF THE TWENTY SEVENTH FFA PROJECT MANAGERS' MEETING	ADMIN RECORD	MTG MINS REMOVAL(3) REMOVAL(6)	GROUP A GROUP B GROUP C  GROUP D 3,5,6,7,8A 19,20,22, 2B,17,27, 28,31,35	SOUTHWEST DIVISION
M00681 RPT N6871193D1459 0034	003075	03/28/96 02/01/96 00 26 01.1	OHM REMEDIATION M.W. MILLER SOUTHWEST DIVISION	MONTHLY REPORT FREE PRODUCT RECOVERY FOR MONTH OF JANUARY 1996 13 AREA GAS STATION	ADMIN RECORD		18	SOUTHWEST DIVISION
M00681 LTR 00000000000000 0002	003072	03/28/96 02/08/96 00000 01.6	EPA SAN FRANCISCO S. LAUTH SOUTHWEST DIVISION D. MANGOLD	EPA HAS NO COMMENTS ON THE DRAFT WORK PLAN FOR PHASE 2 GROUP C SITES SITES 2C, 10, 16 & 20 IN AGREEMENT WITH PROPOSED SAMPLING APPROACH	ADMIN RECORD	COMMENTS	GROUP C 2C,10,17, 20	SOUTHWEST DIVISION
M00681 MEMO N6871189D9296 0150	003068	03/04/96 02/15/96 00301 02.5	JACOBS ENGINEERING SOUTHWEST DIVISION	DRAFT ACTION MEMORANDUM FOR NON TIME CRITICAL REMOVAL ACTION SITE 7 BOX CANYON LANDFILL REVISION 0	ADMIN RECORD	ACTMEMO	7	SOUTHWEST DIVISION
M00681 MEMO N6871189D9296 0150	003067	03/04/96 02/16/96 00166 02.5	JACOBS ENGINEERING SOUTHWEST DIVISION	DRAFT ACTION MEMORANDUM FOR NON TIME CRITICAL REMOVAL ACTION SITE 3 PEST CONTROL WASH RACK, SITE 6 DPDO SCRAP YARD REVISION 0	ADMIN RECORD	ACTMEMO REMOVAL(3) REMOVAL(6)	3,6 GROUP A OU1,OU2	SOUTHWEST DIVISION

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M00681	003069	05/30/96	OHM REMEDIATION	CONCLUSION FROM 22 FEBRUARY 1996 MEETING WITH COUNTY	ADMIN RECORD	SA	13 AREA	SOUTHWEST DIVISION
LTR		02/29/96	S. BORNHOFT	OF SAN DIEGO SAN DIVISION FOR FINALIZATION OF THE				
N6871193D1459		DO 26	VARIOUS AGENCIES	SITE ASSESSMENT FOR THE 13 AREA GAS STATION				
0010		01.6						
M00681	003103	08/07/96	SOUTHWEST DIVISION	REQUESTING THAT DTSC IDENTIFY POTENTIAL STATE CHEMICAL	ADMIN RECORD	ARAR	8, 22 AREA	SOUTHWEST DIVISION
LTR		03/04/96	D. MANGOLD	LOCATION, AND ACTION-SPECIFIC ARARs FOR OU #2.		FFA	23 AREA	
0000000000000000		00000	DTSC LONG BEACH	(ENCL. ATTACHMENT 1)		HAZ WASTE		
0004		03.6	I. HIRBAWI					
M00681	003079	04/01/96	JACOBS ENGINEERING	RI/FS TECHNICAL ADDENDUM TO THE RI REPORT FOR GROUP B	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
RPT		03/05/96	E.M. MINUGH	SITES DRAFT REVISION 0 VOLUME 1 OF 3		FS		
N6871189D9296		00301	SOUTHWEST DIVISION					
0400		03.4						
M00681	003104	09/07/96	MCB CAMP PENDLETON	REQUEST FOR COMMENTS ON THE DRAFT RI/FS TECHNICAL	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		03/05/96	J.E. JOY	ADDENDUM TO THE RI FOR GROUP B SITE OF MARCH 5, 1996		FS		
0000000000000000		00000	DTSC LONG BEACH	NO LATER THAN MARCH 6, 1996 (W/O ENCL) REF# 000687		COMMENTS		
0001		03.6	I. HIRBAWI					
M00681	003105	08/07/96	MCB CAMP PENDLETON	REQUEST FOR COMMENTS ON DRAFT RI/FS TECHNICAL ADDENDUM	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		03/05/96	J.E. JOY	TO THE RI FOR GROUP B SITE OF MARCH 5, 1996		FS		
0000000000000000		00000	RWQCB SAN DIEGO	NO LATER THAN MARCH 6, 1996 (W/O ENCL) REF# 000687		COMMENTS		
0001		03.6	J. ODERMATT					
M00681	003106	08/07/96	MCB CAMP PENDLETON	REQUEST FOR COMMENTS ON DRAFT RI/FS TECHNICAL ADDENDUM	ADMIN RECORD	RI	GROUP B	SOUTHWEST DIVISION
LTR		03/05/96	J.E. JOY	TO THE RI FOR GROUP B SITE OF MARCH 5, 1996 COMMENTS		FS		
0000000000000000		00000	EPA SAN FRANCISCO	NO LATER THAN MARCH 6, 1996 (W/O ENCL) REF# 000667		COMMENTS		
0001		03.6	S. LAUTH					
M00681	003078	04/01/96	JACOBS ENGINEERING	DRAFT FINAL MINUTES OF THE TWENTY SEVENTH FFA PROJECT	ADMIN RECORD	MTG MINS	GROUP A	SOUTHWEST DIVISION
MM		03/08/96	E.M. MINUGH	MANAGERS' MEETING		REMOVAL(3)	GROUP B	
N6971189D9296		00301	SOUTHWEST DIVISION			REMOVAL(6)	GROUP C	
0049		03.6					GROUP D	
							3,5,6,4,4A	
							6,7,8A,19	
							20,22,14,	
							2B,17,27,	
							28,31,35	
							16,2C,10,	
							1D,E,29,30	
							OU2,OU3	

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M00681 LTR N6871189D9296 0009	003067	05/30/96 03/08/96 00301 03.6	JACOBS ENGINEERING E.M. MINUGH VARIOUS AGENCIES	PROJECT NOTE RE: DRAFT FINAL WORK PLAN FOR PHASE 2 RI AT GROUP C SITES	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
M00681 PLAN N6871193D1459 0031	003080	04/01/96 03/13/96 DO 26 01.1	OHM REMEDIATION G. JAMES SOUTHWEST DIVISION	WORK PLAN ADDENDUM FOR VACUUM ENHANCED PRODUCT RECOVERY SYSTEM 13 AREA GAS STATION	ADMIN RECORD		18	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003107	08/07/96 03/18/96 00000 03.6	EPA SAN FRANCISCO M. GILL SOUTHWEST DIVISION D. MANGOLD	COMMENTS PROVIDED REGARDING DRAFT ACTION MEMORANDUM FOR NTCRA, SITE 3 & 6 OF FEBRUARY 15, 1996	ADMIN RECORD	COMMENTS ACTMEMO	3,6	SOUTHWEST DIVISION
M00681 MM N6871189D9296 0008	003081	04/01/96 03/20/96 00301 00.0	JACOBS ENGINEERING E.M. MINUGH SOUTHWEST DIVISION	DRAFT MINUTES OF THE TWENTY EIGHTH FFA PROJECT MANAGERS' MEETING	ADMIN RECORD	MTG MINS REMOVAL(3) REMOVAL(6)	3,6,7, GROUP D 18,32,33,  34,37,1F, 2D,2G,1,2 OU2, OU3 4,4A,6,16, 17,27,8 GROUP B 7,14 21,OU1 GROUP A	SOUTHWEST DIVISION MCB CAMP PENDLETON
M00681 LTR 0000000000000000 0003	003108	08/07/96 03/20/96 00000 02.7	DTSC LONG BEACH M. GASLAN SOUTHWEST DIVISION D. MANGOLD	REVIEW OF DRAFT ACTION MEMORANDUM FOR NTCRA, SITE 3 & 6 OF FEBRUARY 15, 1996	ADMIN RECORD	ACTMEMO EE\CA	3,6	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0002	003109	08/07/96 03/27/96 00000 02.7	EPA SAN FRANCISCO N. GASLAN SOUTHWEST DIVISION D. MANGOLD	COMMENTS ON DRAFT ACTION MEMORANDUM FOR NTCRA SITE 7 OF FEBRUARY 15, 1996	ADMIN RECORD	COMMENTS ACTMEMO	7	SOUTHWEST DIVISION
M00681 LTR 0000000000000000 0006	003110	08/07/96 03/27/96 00000 03.6	MCB CAMP PENDLETON J.E. JOY RWQCB SAN DIEGO J. ODERMATT	REQUEST FOR COMMENTS ON DRAFT RI/FS FOR OU2, SITE 8 22/23 AREA SITES OF APRIL 1, 1996 NO LATER THAN MAY 10 1996 (W/O ENCL.)	ADMIN RECORD	COMMENTS RI FS	OU #2, 8 22 AREA 23 AREA	SOUTHWEST DIVISION

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M00681	003092	08/06/96	SOUTHWEST DIVISION	DRAFT: RI/FS FEASIBILITY STUDY FOR OU2	ADMIN RECORD	RI	OU2	SOUTHWEST DIVISION
RPT		04/01/96		SITE 8 AND 22/23 AREA SITES VOLUMES 1 THROUGH 5		FS	22 AREA	
00N6871189D9296		00019	MCB CAMP PENDLETON				23 AREA	
3500		01.3						
M00681	003144	08/07/96	OHM REMEDIATION	DRAFT WORK PLAN FOR 13 AREA	ADMIN RECORD	WORK PLAN	13 AREA	SOUTHWEST DIVISION
PLAN		04/01/96	M. MILLER					
00N6871193D1459		00000	SOUTHWEST DIVISION					
0050		01.3						
M00681	003090	05/30/96	DTSC LONG BEACH	DTSC REQUEST APCD PROVIDE INPUT ON POTENTIAL CHEMICAL	ADMIN RECORD	ARAR	4,4A,6,16,	SOUTHWEST DIVISION
LTR		04/04/96	M.C. GASLAN	LOCATION, AND ACTION SPECIFIC ARARs AFFECTING OU2		GW	17,27,8	
0000000000000000		00000	APCD SAN DIEGO	FS INCLUDES GROUNDWATER AT SITES 4,4A,6,16,17,27 & 8			OU2	
0020		02.7	M. LAKE					
M00681	003091	05/30/96	DTSC LONG BEACH	DTSC REQUEST DFG PROVIDE INPUT ON POTENTIAL CHEMICAL	ADMIN RECORD	ARAR	4,4A,6,16	SOUTHWEST DIVISION
LTR		04/04/96	M.C. GASLAN	LOCATION, AND ACTION SPECIFIC ARARs AFFECTING OU2			17,27,8	
0000000000000000		00000	DFG MONTEREY	FS INCLUDES GROUNDWATER AT SITES 4,4A,6,16,17,27 & 8			OU2	
0002		02.7	M. MARTIN					
M00681	003111	08/07/96	SOUTHWEST DIVISION	REQUEST FOR COMMENTS ON FINAL REVISED TREATABILITY	ADMIN RECORD	COMMENTS	6	SOUTHWEST DIVISION
LTR		04/08/96	D. MANGOLD	TESTING RESULTS FOR SITE 6 BY APRIL 23, 1996				
0000000000000000		00000	DTSC LONG BEACH					
0002		03.6	I. HIRBAWI					
M00681	003159	10/02/96	OHM REMEDIATION	QUARTERLY GROUNDWATER MONITORING REPORT-FIRST	ADMIN RECORD	GW	13 AREA	SOUTHWEST DIVISION
RPT		04/10/96	M. MILLER	QUARTER 1996 13 AREA GAS STATION	INFO REPOSITORY	MONITORING		MCB CAMP PENDLETON
N6871193D1459		DO#26	SOUTHWEST DIVISION					
0150		09.3						
M00681	003160	10/02/96	OHM REMEDIATION	DRAFT REMEDIATION WORK PLAN	ADMIN RECORD	WORK PLAN	13 AREA	SOUTHWEST DIVISION
PLAN		04/11/96	M. MILLER	REMOVAL OF HYDROCARBONS FROM SOIL 13 AREA GAS STATION		SOIL		
N6871193D1459		DO#26	SOUTHWEST DIVISION					
1000		03.3						
M00681	003093	08/06/96	SOUTHWEST DIVISION	DRAFT: RI REPORT FOR GROUP C SITES RI/FS	ADMIN RECORD	RI	1D,1E,2B	SOUTHWEST DIVISION
RPT		04/12/96		VOLUMES 1 THROUGH 5		FS	17,27,28	
00N6871189D9296		00301	MCB CAMP PENDLETON			WORK PLAN	29,30,31	
3500		01.3						
						SMP	35,43,44	
							45, GROUP C	

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M00681	003086	05/30/96	JACOBS ENGINEERING	RESPONSE TO COMMENTS ON THE RI/FS PHASE I RI	ADMIN RECORD	RESPONSE	GROUP C	SOUTHWEST DIVISION
LTR		04/15/96	E.M. MINUGH	TECHNICAL MEMORANDUM GROUP C SITES 16 AUGUST 1995		COMMENTS		
N6871189D9296		00301	VARIOUS AGENCIES	DATED 15 APRIL 1996		TECH MEMO		
0030		02.7						
M00681	003112	08/07/96	MCB CAMP PENDLETON	EXTENSION FOR COMMENT PERIOD ON DRAFT MCB CAMP	ADMIN RECORD	COMMENTS	OU #2, 8	SOUTHWEST DIVISION
LTR		04/15/96	J.E. JOY	PENDLETON RI/FS OU2 SITE 6, AND 22/23 AREA SITES		RI	22 AREA	
0000000000000000		00000	VARIOUS AGENCIES	TO MAY 15, 1996.		FS	23 AREA	
0003		03.6						
M00681	003113	08/07/96	DTSC LONG BEACH	REVIEW OF MCB CAMP PENDLETON DRAFT CLOSURE & POST	ADMIN RECORD	CLOSURE		SOUTHWEST DIVISION
LTR		04/15/96	I. HIRBAWI	CLOSURE MAINTENANCE PLAN BOX CANYON LANDFILL DTD		COMMENTS		
0000000000000000		00000	SOUTHWEST DIVISION	FEBRUARY 26, 1996. NO COMMENTS. (CIWMB COMMENTS ENCL.)				
0006		03.6	D. MANGOLD					
M00681	003158	10/02/96	SOUTHWEST DIVISION	DRAFT RI/FS REVISED RI WORK PLAN FOR GROUP D SITES	ADMIN RECORD	RI	OU3	SOUTHWEST DIVISION
PLAN		04/15/96				FS	32	
0000000000000000		00301	MCB CAMP PENDLETON			WORK PLAN	34	
0075		03.3					36	
							37	
							38	
							39	
							40	
							41	
							42	
M00681	003158	continued					1	
							1A	
							1B	
							1C	
							2	
							1F	
M00681	003114	08/07/96	SOUTHWEST DIVISION	TO PROPOSE MILESTONES & DEADLINES FOR GROUP D SITES,	ADMIN RECORD	REMOVAL	OU #2 & 3	SOUTHWEST DIVISION
LTR		04/19/96	D. MANGOLD	DEFINITIONS & DEADLINES OF OU2 & 3, AND DISCUSS THE		GW	1D,1B,29,	
0000000000000000		00000	EPA SAN FRANCISCO	REMOVAL STATUS OF SITES, 1D, 1E, 29 & 30.		EE/CA(*)	30	
0003		03.6	S. LAUTH					GROUP D

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M00681	003234	04/17/97	MCB CAMP PENDLETON	WORK PLAN FOR CAPTURE ZONE ANALYSIS AT MCAS FUEL FARM,	ADMIN RECORD	WORK PLAN	OU 2	SOUTHWEST DIVISION
LTR		04/19/96	J. JOY	23 AREA	INFO REPOSITORY	FUEL FARM	8	MCB CAMP PENDLETON
0000000000000000	00000	00000	CRWQCB SAN DIEGO				AREA 22	
0005	01.6	01.6	J. ODERMATT				AREA 23	
M00681	003325	09/26/97	MCB CAMP PENDLETON	3 LETTERS TRANSMITTING DRAFT FINAL ACTION MEMORANDUM	ADMIN RECORD	ACTMEMO	6	SOUTHWEST DIVISION
LTR		04/19/96	J. JOY	FOR NON-TIME-CRITICAL REMOVAL ACTION SITE 6, DPDO	INFO REPOSITORY	NTCRA		MCB CAMP PENDLETON
0000000000000000	00000	00000	VARIOUS AGENCIES	SCRAP YARD DATED APRIL 22, 1996. W/OUT ENCLOSURE		DPDO		
0003	01.6	01.6				SCRAPYARD		
M00681	003082	05/14/96	JACOBS ENGINEERING	DRAFT FINAL ACTION MEMORANDUM FOR NON-TIME-CRITICAL	ADMIN RECORD	ACTMEMO	6	SOUTHWEST DIVISION
MEMO		04/22/96		REMOVAL ACTION SITE 6 REVISION 0				
N6871189D9296	00166	00166	SOUTHWEST DIVISION					
0085	02.5	02.5						
M00681	003115	08/07/96	SOUTHWEST DIVISION	PROJECT NOTE FOR IR SITE 3 & 6, TRANSMITTED FOR REVIEW	ADMIN RECORD	COMMENTS	3,6	SOUTHWEST DIVISION
LTR		04/23/96	J. DUNAWAY	REVIEW AND COMMENT. WRITTEN COMMENTS BE RETURNED IN				
0000000000000000	00000	00000	EPA SAN FRANCISCO	2 WKS. (ENCL REC'D AND PROCESSED 8/25/97)				
0002	03.6	03.6	S. LAUTH					
M00681	003116	08/07/96	DTSC LONG BEACH	COMMENTS OF FINAL REVISED TREATABILITY STUDY TESTING	ADMIN RECORD	COMMENTS	6	SOUTHWEST DIVISION
LTR		04/24/96	I. HIRBAWI	REPORT FOR THE STABILIZATION OF PESTICIDE-CONTAMINATED		PESTICIDES		
0000000000000000	00000	00000	SOUTHWEST DIVISION	SOIL FOR SITE 6				
0014	04.5	04.5	D. MANGOLD					
M00681	003117	08/07/96	DTSC LONG BEACH	COMMENTS ON DRAFT ACTION MEMORANDUM FOR NTCRA, SITE 7	ADMIN RECORD	ACTMEMO	7	SOUTHWEST DIVISION
LTR		04/24/96	M. GASLAN	OF FEBRUARY 15, 1996 (W/ENCL)		COMMENTS		
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0004	02.5	02.5	D. MANGOLD					
M00681	003118	08/07/96	EPA SAN FRANCISCO	COMMENTS ON DRAFT TECHNICAL ADDENDUM TO THE RI REPORT	ADMIN RECORD	COMMENTS	GROUP B	SOUTHWEST DIVISION
LTR		04/24/96	M. GILL	FOR GROUP B SITES OF MARCH 5, 1996		RI		
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0003	03.6	03.6	D. MANGOLD					
M00681	003119	08/07/96	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT ACTION MEMORANDUM FOR SITE 6	ADMIN RECORD	ACTMEMO	6	SOUTHWEST DIVISION
LTR		04/24/96	S. LAUTH			COMMENTS		
0000000000000000	00000	00000	SOUTHWEST DIVISION					
0002	03.6	03.6	D. MANGOLD					

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M00681 MEMO 000000000000000 0100	003157	10/02/96 04/30/96	SOUTHWEST DIVISION MCB CAMP PENDLETON	DRAFT FINAL ACTION MEMORANDUM FOR NTCRA SITE 7	ADMIN RECORD	ACTMEMO	7	SOUTHWEST DIVISION
M00681 LTR N6871189D9296 0005	003084	05/30/96 05/01/96	JACOBS ENGINEERING E.M. MINUGH	RESPONSE TO COMMENTS ON THE DRAFT ACTION MEMORANDUM FOR NON TIME CRITICAL REMOVAL ACTION SITE 7 BOX CANYON LANDFILL 15 FEBRUARY 1996	ADMIN RECORD	RESPONSE COMMENTS	7	SOUTHWEST DIVISION
M00681 LTR N6871189D9296 0006	003085	05/30/96 05/01/96	JACOBS ENGINEERING E.M. MINUGH	RESPONSE TO COMMENTS ON THE DRAFT ACTION MEMORANDUM FOR NON TIME CRITICAL REMOVAL ACTION SITE 3 PEST CONTROL WASH RACK SITE 6 (DRMO) 15 FEBRUARY 1996	ADMIN RECORD	RESPONSE COMMENTS REMOVAL	3,6	SOUTHWEST DIVISION
M00681 LTR 000000000000000 0014	003120	08/07/96 05/02/96	MCB CAMP PENDLETON J.E. JOY	RESPONSE TO ADDRESS CHANGES OR CONDITIONS REGARDING PHASE III & IV SITES ASSESSMENT WORK (W/ENCL)	ADMIN RECORD	RESPONSE UST		SOUTHWEST DIVISION
M00681 MM N6871189D9296 0069	003088	05/30/96 05/10/96	JACOBS ENGINEERING E.M. MINUGH	DRAFT FINAL MINUTES OF THE TWENTY EIGHTH FFA PROJECT MANAGERS' MEETING	ADMIN RECORD	MTG MINS	OU2 1,2,25 GROUP C	SOUTHWEST DIVISION
							OU3 7,3,6, GROUP D 18,32,33, 34,37 8,4,4A,16 17,27 GROUP B 14,21,	
M00681 LTR 000000000000000 0002	003235	04/17/97 05/10/96	APCD SAN DIEGO R. SALCEDO	COMMENTS TO ARARs DISCUSSED IN FEASIBILITY STUDY FOR OU 2, VOL. I	ADMIN RECORD INFO REPOSITORY	COMMENTS ARAR FS	OU 2 8 AREA 22	SOUTHWEST DIVISION MCB CAMP PENDLETON
			DTSC SAN DIEGO I. HIRBAWI				AREA 23	
M00681 LTR 000000000000000 0002	003121	08/07/96 05/14/96	DTSC LONG BEACH J.E. SCANDURA	CONFIRM EXTENSION OF THE DUE DATE FOR THE DRAFT FS REPORT FOR OU2 AND DRAFT RI REPORT COMMENTS.	ADMIN RECORD	FS RI	OU 2	SOUTHWEST DIVISION
			SOUTHWEST DIVISION D. MANGOLD					

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M00681	003122	08/07/96	DTSC LONG BEACH	COMMENTS ON THE REVISED DRAFT RI WORK PLAN FOR GROUP D	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
LTR		05/14/96	M. GASLAN			WORK PLAN		
000000000000000		00000	SOUTHWEST DIVISION			REC		
0005		03.6	D MANGOLD			COMMENTS		
M00681	003124	08/07/96	EPA SAN FRANCISCO	COMMENTS ON DRAFT REVISED RI WORKPLAN FOR GROUP D	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
LTR		05/14/96	M. GILL	SITES OF APRIL 15, 1996		WORK PLAN		
000000000000000		00000	SOUTHWEST DIVISION			COMMENTS		
0026		03.6	D MANGOLD					
M00681	003123	08/07/96	EPA SAN FRANCISCO	DRAFT FINAL ACTION MEMORANDUM FOR NTCRA SITE 7 OF	ADMIN RECORD	ACTMEMO	7	SOUTHWEST DIVISION
LTR		05/15/96	M. GILL	APRIL 30, 1996 RECEIVED		RESPONSE		
000000000000000		00000	SOUTHWEST DIVISION					
0003		02.7	D. MANGOLD					
M00681	003125	08/07/96	CRWQCB SAN DIEGO	COMMENTS ON DRAFT REVISED WORK PLAN FOR GROUP D SITES,	ADMIN RECORD	COMMENTS	GROUP D	SOUTHWEST DIVISION
LTR		05/15/96	J. ANDERSON	OF APRIL 15, 1996		WORK PLAN		
000000000000000		00000	SOUTHWEST DIVISION					
0003		03.6	D MANGOLD					
M00681	003236	04/17/97	EPA SAN FRANCISCO	COMMENTS TO DRAFT FS (SITE 8 AND 22/23 AREA SITES),	ADMIN RECORD	COMMENTS	OU 2	SOUTHWEST DIVISION
LTR		05/15/96	M. GILL	DATED APRIL 1, 1996	INFO REPOSITORY	FS	8	MCB CAMP PENDLETON
000000000000000		00000	SOUTHWEST DIVISION				AREA 22	
0010		10.1	D. MANGOLD				AREA 23	
M00681	003126	08/07/96	DTSC LONG BEACH	ARARs REQUEST FOR OU2 (W/ENCL)	ADMIN RECORD	ARAR	OU2	SOUTHWEST DIVISION
LTR		05/16/96	O. PATRICK					
000000000000000		00000	SOUTHWEST DIVISION					
0030		03.6	D MANGOLD					
M00681	003305	08/25/97	SOUTHWEST DIVISION	RESPONSE TO LETTER OF JAN. 26, 1996 ON THE ALLEGED	ADMIN RECORD	RESPONSE	28	SOUTHWEST DIVISION
LTR		05/16/96	R. CALLAWAY	CONTAMINATION PROVIDING FOR SOLID WASTE COLLECTION AND	INFO REPOSITORY	INVESTIGATION		MCB CAMP PENDLETON
N6871187C2833		00000	PRESSEISEN & REIDEL	DISPOSAL SERVICES		RI		
0003		10.1	J. PRESSEISEN			CERCLA		
M00681	003314	08/26/97	MCB CAMP PENDLETON	LETTER ENCLOSING THE BIOLOGICAL OPINION FOR MCB CAMP	ADMIN RECORD	MTG MINS	6	SOUTHWEST DIVISION
LTR		05/16/96	J. JOY	PENDLETON, AND APRIL 15, 1996 MINUTES WITH US FISH &	INFO REPOSITORY	IRP		MCB CAMP PENDLETON
000000000000000		00000	EPA SAN FRANCISCO	WILDLIFE ON IRP, SITE 6 REMOVAL ACTION		REMOVAL		
0005		06.3	C. CALLAHAN			RA		
						USFWS		



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M00681	003306	08/25/97	MCB CAMP PENDLETON	PROPOSED PLAN FOR REMEDIAL ACTION AT SITES 2B, 3, 4, 4A, 5, 6, 7, 8, 8A, 14, 16, 17, 19, 20, 22, 27, 31, 43, 44, AND 45	ADMIN RECORD INFO REPOSITORY	WORK PLAN RA CLEANUP	2B 3 4	SOUTHWEST DIVISION MCB CAMP PENDLETON
0026		03.3				FS ROD EE\CA GW SOIL SEDIMENTS LANDFILL CANCER TCE WELLS ARAR	4A 5 6 7 8 8A 14 16 17 19 20 22 27 31 43 44 45 OU 1 OU 2 GROUP A GROUP B GROUP C GROUP D OU 3	
M00681	003130	08/07/96	SOUTHWEST DIVISION	THIRTIETH FFA PM MEETING AGENDA	ADMIN RECORD	MTG MINS COMMENTS	3,6 OU2	SOUTHWEST DIVISION
LTR		06/04/96	D. MANGOLD					
0000000000000000		00000	EPA LONG BEACH					
0004		03.6	M. GASLAN					
M00681	003149	08/13/96	DTSC LONG BEACH	ARARs REQUEST FOR OU 2, MCB CAMP PENDLETON, DTD MAY 16, 1996 HAD PREVIOUSLY TRANSMITTED AND DTSC IS FORWARDING ADDITIONAL INFOR. (ENCL.)	ADMIN RECORD	ARAR	OU 2 8,4,4A,17 27,6	SOUTHWEST DIVISION
LTR		06/06/96	I. HIRBAWI					
0000000000000000		00000	SOUTHWEST DIVISION					
0004		04.5	D. MANGOLD				22 AREA 23 AREA	
						REMOVAL		

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M00681	003132	08/07/96	MCB CAMP PENDLETON	RESPONSE TO LETTER OF APRIL 22, 1996, INFORMATION WAS	ADMIN RECORD	RESPONSE	6	SOUTHWEST DIVISION
LTR		06/08/96	J.E. JOY	REVIEWED & APPROVED BY EPA, DTSC, RWQCB, & APCD. TO			22 AREA	
0000000000000000		00000	OCEANSIDE SCH. DIST.	(W/ENCL)				
0004		03.6	B. SULLIVAN					
M00681	003298	08/25/97	KLEIN WEGIS ET AL	RESPONSE TO ALLEGED CONTAMINATION OF PESTICIDE IN POL	ADMIN RECORD	RESPONSE	37	SOUTHWEST DIVISION
LTR		06/10/96	C. BURGER	HANDLING AREAS, SAN CLEMENTE RANCH, IR SITE 37	INFO REPOSITORY	PESTICIDES		MCB CAMP PENDLETON
			SOUTHWEST DIVISION			PRG		
0003		10.1	L. HARVEY			HERBICIDE		
M00681	003131	08/07/96	EPA SAN FRANCISCO	COMMENTS ON DRAFT RI FOR GROUP C SITES OF APRIL	ADMIN RECORD	COMMENTS	1E, 2B	SOUTHWEST DIVISION
LTR		06/11/96	M. GILL	12, 1996		RI	17-22 AREA	
0000000000000000		00000	SOUTHWEST DIVISION			RISK	32 AREA	
0017		03.6	D. MANGOLD			GW	28-26 AREA	
							GROUP C	
M00681	003129	08/07/96	MCB CAMP PENDLETON	NOTIFICATION THAT ADDITIONAL SAMPLING WILL BE	ADMIN RECORD			SOUTHWEST DIVISION
LTR		06/12/96	J.E. JOY	PERFORMED AT BLDG.43574 SITE, AS FUNDING BECOMES AVAIL.				
0000000000000000		00000	COUNTY OF SAN DIEGO	AND AS IT FITS INTO CAMP PENDLETONS PRIORITY PRGM.				
0007		03.6	L. SKINNER					
M00681	003133	08/07/96	JACOBS ENGINEERING	RESPONSE TO COMMENTS ON THE DRAFT REVISED WORK PLAN	ADMIN RECORD	COMMENTS	GROUP D	SOUTHWEST DIVISION
LTR		06/12/96	E. MINUGH	FOR GROUP D SITES DTD APRIL 15, 1996.		RESPONSE		
00N6871189D9296		00301	SOUTHWEST DIVISION					
0012		03.6	K. KENNEDY					
M00681	003134	08/07/96	JACOBS ENGINEERING	APPENDIX F- REVISIONS TO THE SAMPLING & ANALYSIS PLAN	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
LTR		06/14/96	E. MINUGH	FOR THE RI FOR GROUP D SITES & THE PHASE 2 RI FOR			GROUP C	
00N6871189D9296		00012	SOUTHWEST DIVISION	GROUP C SITES (REV. 1 JUNE 14, 1996)				
0050		03.6	K. KENNEDY					
M00681	003135	08/07/96	JACOBS ENGINEERING	REVISION TO THE SAP FOR THE RI GROUP D SITES AND	ADMIN RECORD	SMP	GROUP D	SOUTHWEST DIVISION
LTR		06/14/96	E. MINUGH	THE PHASE 2 RI FOR GROUP C SITES (REV JUNE 14, 1996)			GROUP C	
00N6871189D9296		00301	SOUTHWEST DIVISION					
0001		03.6	K. KENNEDY					
M00681	003136	08/07/96	JACOBS ENGINEERING	ADDENDUM TO THE DRAFT FINAL WORK PLAN FOR PHASE 2 RI	ADMIN RECORD	WORK PLAN	GROUP C	SOUTHWEST DIVISION
LTR		06/14/96	E. MINUGH	AT GROUP C SITES FOR ADDITIONAL ECOLOGICAL SAMPLING,				
00N6871189D9296		00001	SOUTHWEST DIVISION	DTD JUNE 14, 1996.				
0007		03.6	K. KENNEDY					



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M00681	003344	08/27/97	MCB CAMP PENDLETON	LETTER ENCLOSING EXECUTIVE SUMMARY OF FEASIBILITY	ADMIN RECORD	FS	OU 2	SOUTHWEST DIVISION
LTR		06/25/96	J. JOY	STUDY FOR OPERABLE UNIT 2, SITE 8, LAS PULGAS LANDFILL	INFO REPOSITORY	LANDFILL	8	MCB CAMP PENDLETON
0000000000000000		00000	B & V	AND GROUNDWATER FOR 22/23 AREA SITES (MARCH 24, 1996)		GW	4	
0010		01.6	M. LANE				6	
							16	
							AREA 22	
							BLDG. 2241	
							17	
							27	
							AREA 23	
							4A	
M00681	003140	08/07/96	JACOBS ENGINEERING	MAY 7/8, 1996, DRAFT FINAL MINUTES OF THE TWENTY-NINTH	ADMIN RECORD	MTG MINS	3,6,7,29	SOUTHWEST DIVISION
LTR		06/26/96	E. MINUGH	FFA PROJECT MANAGERS MEETING.		REMOVAL	35,30,1D	
00N6871189D9296		00301	VARIOUS AGENCIES			FFA	GROUP D	
0025		03.6						
						CERCLA,	GROUP B	
							OU2,OU3	
M00681	003378	09/03/97	NORTH COUNTY TIMES	PROOF OF PUBLICATION FOX PUBLIC NOTICE OF AVAILABILITY	ADMIN RECORD	PUBNOT	3	SOUTHWEST DIVISION
MISC		06/27/96	S. LOY	& PUBLIC COMMENT PERIOD FOR ADMIN. RECORD & TECHNICAL	INFO REPOSITORY	COMMENTS	6	MCB CAMP PENDLETON
0000000000000000		00000		ADDENDUM TO FINAL EE/CA FOR SITES 3 AND 6		EE\CA		
0002		10.3						
M00681	003141	08/07/96	DTSC LONG BEACH	RESPONSE TO LETTER DTD MARCH 29, 1996, RENEWAL OF	ADMIN RECORD	RESPONSE		SOUTHWEST DIVISION
LTR		06/28/96	M. SANDHU	HAZARDOUS WASTE FACILITY PERMIT. CONTAINER STORAGE	HAZ WASTE			
0000000000000000		00000	MCB CAMP PENDLETON	AREA.				
0003		03.6	T. DECOSTA					
M00681	003143	08/07/96	OHM REMEDIATION	FINAL SITE ASSESSMENT REPORT, 13 AREA	ADMIN RECORD	SA	13 AREA	SOUTHWEST DIVISION
RPT		07/01/96	P. AHN					
00N6871193D1459		00000	SOUTHWEST DIVISION					
2000		01.3						
M00681	003175	01/09/97	MCB CAMP PENDLETON	CONFIRMATION OF THE NEW FFA DATE FOR THE DRAFT OU2	ADMIN RECORD	FFA	OU2	SOUTHWEST DIVISION
LTR		07/02/96	D. MANGOLD	PROPOSED PLAN AND TRANSMITTAL OF THE FINAL PROJECT	INFO REPOSITORY	PROPOSAL	3	MCB CAMP PENDLETON
0000000000000000		00000	DTSC LONG BEACH	NOTE FOR SITES 3 & 6		FS	6	
0003		01.6	I. HIRBAWI					
M00681	003142	08/07/96	JACOBS ENGINEERING	ADDENDUM TO THE DRAFT FINAL REVISED RI WORK PLAN	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
LTR		07/03/96	E. MINUGH	FOR GROUP D SITES.		WORK PLAN		
00N6871189D9296		00301	SOUTHWEST DIVISION					
0003		03.6	K. KENNEDY					

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M00681	003147	08/12/96	EPA SAN FRANCISCO	REGARDING DRAFT FINAL ACTION MEMO, FOR NTCRA, SITE 3	ADMIN RECORD	ACTMEMO	3,6	SOUTHWEST DIVISION
LTR		07/22/96	M. GILL	CAMP PENDLETON & TREATABILITY TESTING REPORT FOR SUB-				
0000000000000000		00000	SOUTHWEST DIVISION	SITE 3A, DTD 5/96.				
0002		01.6	M. MANGOLD					
M00681	003363	08/28/97	EPA SAN FRANCISCO	COMMENTS ON THE DRAFT FINAL ACTION MEMORANDUM FOR	ADMIN RECORD	COMMENTS	3	SOUTHWEST DIVISION
LTR		07/22/96	M. GILL	NTCRA SITE 3 WERE SATISFACTORILY INCORPORATED INTO THE	INFO REPOSITORY	ACTMEMO	6	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION	ACTION MEMO. CONCURRENCE WITH THIS VERSION AS FINAL		NTCRA		
0001		01.6	D. MANGOLD					
M00681	003355	08/27/97	SOUTHWEST DIVISION	NOTIFICATION OF THE COMMENCEMENT DATE OF THE REMOVAL	ADMIN RECORD	REMOVAL	6	SOUTHWEST DIVISION
LTR		07/23/96	C. ROTHWELL	ACTION AT IR SITE 6; TO BE PERFORMED BY OHM	INFO REPOSITORY	IR		MCB CAMP PENDLETON
0000000000000000		00000	EPA SAN FRANCISCO	REMEDICATION SERVICES		EE/CA(*)		
0002		01.6	M. GILL					
M00681	003313	08/26/97	EPA SAN FRANCISCO	LETTER DOCUMENTING DELAY IN ENDORSEMENT OF PROPOSALS	ADMIN RECORD	PROPOSAL	3	SOUTHWEST DIVISION
LTR		07/30/96	M. GILL	BECAUSE SITE 3 AND SITE 6 PROJECT 140TH DATED 07/01/96	INFO REPOSITORY		6	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION	HAS NOT YET BEEN RECEIVED				
0002		01.6	D. MANGOLD					
M00681	003148	08/12/96	JACOBS ENGINEERING	JUNE 17, 1996, DRAFT FINAL MINUTES OF THE THIRTIETH	ADMIN RECORD	MTG MINS	6,7,1F,2D	SOUTHWEST DIVISION
MM		08/06/96	E. MINUGH	FFA PROJECT MANAGERS MEETING			OU2, OU3	
0000000000000000		0301	VARIOUS AGENCIES				12/13 AREA	
0030		01.6					FS,GPC	
M00681	003365	09/02/97	JACOBS ENGIN. GROUP	RESPONSE TO VARIOUS REGULATORY AGENCY COMMENTS ON	ADMIN RECORD	RESPONSE	OU 2	SOUTHWEST DIVISION
MISC		08/08/96	E. MINUGH	DRAFT REMEDIAL INVESTIGATION REPORT FOR GROUP C SITES,	INFO REPOSITORY	COMMENTS	6	MCB CAMP PENDLETON
N6971189D9296		0301	SOUTHWEST DIVISION	DATED 12 APRIL 1996 (REF#03093)		RI	16	
0100		10.1	K. KENNEDY				17	
							27	
							35	
							2B	
							43	
							44	
							45	
							28	
M00681	003379	09/03/97	JACOBS ENG. GROUP	RESPONSE TO COMMENTS FROM VARIOUS REGULATORY AGENCIES	ADMIN RECORD	RESPONSE	OU 2	SOUTHWEST DIVISION
MISC		08/09/96	E. MINUGH	ON THE FEASIBILITY STUDY FOR OPERABLE UNIT 2	INFO REPOSITORY	COMMENTS	AREA 22	MCB CAMP PENDLETON
N6871189D9296		0301	SOUTHWEST DIVISION			FS	AREA 23	
0091		10.1	K. KENNEDY					
						OU	8	

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M00681	003154	09/16/96	JACOBS ENGINEERING	AUGUST 2, 1996 DRAFT MINUTES OF THE THIRTY-FIRST	ADMIN RECORD	MTG MINS	21	SOUTHWEST DIVISION
MM		08/15/96	E. MINUGH	FFA PROJECT MANAGERS MEETING			OU3	
N6871189D9296		00301	SOUTHWEST DIVISION				OU2	
0016		06.3	K. KENNEDY				29	
							30	
							1D	
							1E	
							2	
							6	
							7	
							17	
							18	
							32	
					ADMIN RECORD		28	
							GROUP C	
							44	
							37	
M00681	003294	08/25/97	EPA SAN FRANCISCO	CONCURRENCE WITH DRAFT FINAL REVISED RI WORKPLAN FOR	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
LTR		08/22/96	M. GILL	GROUP D SITES, JUNE 7, 1996 AND ADDENDUM TO DRAFT	INFO REPOSITORY	WORK PLAN		MCB CAMP PENDLETON
			VARIOUS AGENCIES	FINAL REVISED RI WORKPLAN FOR GROUP D, JULY 3, 1996				
0001		10.1						
M00681	003155	09/16/96	OHM REMEDIATION	RESPONSE TO REGULATORY AGENCY COMMENTS ON FINAL	ADMIN RECORD	RESPONSE	13 AREA	SOUTHWEST DIVISION
LTR		08/23/96	S. BORNHOFT	SITE ASSESSMENT REPORT DATED JULY 1, 1996		SA		
N6871193D1459		DO#26	SOUTHWEST DIVISION					
0011		10.1	K. KENNEDY					
M00681	003156	09/16/96	MCB CAMP PENDLETON	RESPONSE TO COMMENTS ON THE FINAL REMEDIATION WORK	ADMIN RECORD	RESPONSE	13 AREA	SOUTHWEST DIVISION
LTR		08/28/96	J.E. JOY	PLAN FOR REMOVAL OF HYDROCARBONS, 13 AREA GAS STATION		COMMENTS		
0000000000000000		00000	RWQCB SAN DIEGO	W/O ENCLS		REMOVAL		
0001		06.3	J. ODERMATT					
M00681	003172	01/09/97	DTSC LONG BEACH	CLOSURE PLAN APPROVAL NOTICE OF DEFICIENCY 24 AREA	ADMIN RECORD	CLOSURE	24 AREA	SOUTHWEST DIVISION
LTR		08/30/96	D. R. REGE	BUNKER STORAGE AREA FACILITY	INFO REPOSITORY			MCB CAMP PENDLETON
0000000000000000		00000	MCB CAMP PENDLETON	W/ATTACHMENT				
0024		01.6	T. DECOSTA					

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M00681	003173	01/09/97	CRWQCB SAN DIEGO	ASTM RISK BASED CORRECTIVE ACTION DEMONSTRATION	ADMIN RECORD	RISK		SOUTHWEST DIVISION
LTR		09/05/96	J. ANDERSON	SITE MEETING WITH MCB CAMP PENDLETON	INFO REPOSITORY	RISK		MCB CAMP PENDLETON
000000000000000		00000	LAWRENCE NAT'L LAB					
0007		01.6	D. RICE					
M00681	003260	05/22/97	KLEINFELDER, INC	DRAFT WORK PLAN SITE ASSESSMENT FOR ENGINEERING	ADMIN RECORD	WORK PLAN	1D	SOUTHWEST DIVISION
PLAN		09/06/96	M. ROHR	EVALUATION/COST ANALYSIS AND ACTION MEMORANDUM	INFO REPOSITORY	SA	13	MCB CAMP PENDLETON
N6871195D7571		DO#05	SOUTHWEST DIVISION	FOR FIVE SITES		EVALUATION	29	
0105		03.3						
						COST	30	
						ACTMEMO	35	
						EE\CA	AREA 20	
						NCP	AREA 22	
						CONTAM*	AREA 25	
						HOT SPOTS	AREA 31	
M00681	003374	09/02/97	VARIOUS AGENCIES	2 REVIEW AND COMMENT TO RESPONSE TO COMMENTS FROM	ADMIN RECORD	COMMENTS	GROUP C	SOUTHWEST DIVISION
MISC		09/06/96		REGULATORY AGENCIES ON DRAFT REMEDIAL INVESTIGATION	INFO REPOSITORY	RESPONSE	28	MCB CAMP PENDLETON
000000000000000		00000	VARIOUS AGENCIES	FOR GROUP C SITES, DATED APRIL 12, 1996		RI	29	
0009		10.1						
							30	
							2B	
							17	
							AREA 22	
							AREA 23	
							OU 2	
M00682	003161	10/10/96	MCB CAMP PENDLETON	RESPONSE TO COMMENTS FOR THE FINAL SITE ASSESSMENT	ADMIN RECORD	RESPONSE	13 AREA	SOUTHWEST DIVISION
LTR		09/10/96	J.E. JOY	REPORT 13 AREA GAS STATION	INFO REPOSITORY	SA		MCB CAMP PENDLETON
000000000000000		00000	RWQCB SAN DIEGO	W/ENCLS				
0011		10.1	J. ODERMATT					
M00681	003162	10/14/96	JACOBS ENGINEERING	RESPONSE TO COMMENTS FROM CIWMB ON DRAFT CLOSURE AND	ADMIN RECORD	COMMENTS	7	SOUTHWEST DIVISION
XMTL		09/18/96	E. MINUGH	POSTCLOSURE MAINTENANCE PLAN SITE 7		CLOSURE		
N6871189D9296		00301	SOUTHWEST DIVISION	(NOTE: NO DUPLICATE COPY REC'D FOR IR)		LANDFILL		
0009		10.1	K. KENNEDY					
M00681	003318	08/26/97	SOUTHWEST DIVISION	NEWS RELEASE OF SEPTEMBER 1996 COMPLETION DATE FOR	ADMIN RECORD	PUB. PARTICIPATI	6	SOUTHWEST DIVISION
MISC		09/18/96	L. SAUNDERS	CLEANUP AT FORMER SCRAP YARD AND RESTORATION TO	INFO REPOSITORY	PUBNOT		MCB CAMP PENDLETON
000000000000000		00000	PUBLIC	WETLAND		CLEANUP		
0003		10.6						
						SCRAPYARD		



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M00681	003193	01/23/97	JACOBS ENGINEERING	REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT FINAL	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
RPT		09/23/96		RI REPORT FOR GROUP C SITES REV.O VOLUME 3	INFO REPOSITORY	FS	10	MCB CAMP PENDLETON
N6871189D9296	00301		SOUTHWEST DIVISION	CLE-I01-01F301-B7-0025		BACKGROUND	1E	
2000	03.4					RISK	2B	
						SOIL	17	
						GW	27	
							28	
							29	
							30	
							31	
							35	
							43	
							44	
							45	
M00681	003194	01/23/97	JACOBS ENGINEERING	REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT FINAL	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
RPT		09/23/96		RI REPORT FOR GROUP C SITES REV.O VOLUME 4	INFO REPOSITORY	SA	10	MCB CAMP PENDLETON
N6871189D9296	00301		SOUTHWEST DIVISION	CLE-I01-01F301-B7-0025		GW	1E	
2000	03.4					SOIL	2B	
						RISK	17	
							27	
							28	
							29	
							30	
							31	
							31	
							35	
							43	
							44	
							45	
M00681	003195	01/23/97	JACOBS ENGINEERING	REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT FINAL	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
RPT		09/23/96		RI REPORT FOR GROUP C SITES REV.O VOLUME 5	INFO REPOSITORY	FS	44	MCB CAMP PENDLETON
N6871189D9296	00301		SOUTHWEST DIVISION	CLE-I01-01F301-B7-0025			45	
2000	03.4							
M00681	003317	08/26/97	S.D. DLY TRANSCRIPT	SD DAILY TRANSCRIPT ARTICLE: "CLEAN UP OF FORMER	ADMIN RECORD	CLEANUP		SOUTHWEST DIVISION
MISC		09/23/96		SCRAP YARD UNDER WAY AT CAMP PENDLETON"	INFO REPOSITORY	SCRAPYARD		MCB CAMP PENDLETON
0000000000000000	00000		PUBLIC			PUB. PARTICIPATI		
0001	10.6							

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M00681	003312	08/26/97		PHONE LOG FOR DISCUSSION OF REMOVAL OF ADDITIONAL	ADMIN RECORD	REMOVAL	3	SOUTHWEST DIVISION
MISC		09/24/96	T TROST	CONTAMINATION AT SITES 3 & 6	INFO REPOSITORY		6	MCB CAMP PENDLETON
			FISH AND WILDLIFE					
0001		06.3	C. ROBERTS					
M00681	003116	08/26/97	THE DISPATCH	NEWSPAPER ARTICLE: "CAMP PENDLETON CLEAN UP RESTORING	ADMIN RECORD	CLEANUP		SOUTHWEST DIVISION
MISC		09/26/96		HAZARDOUS SITE TO WETLANDS STATUS"	INFO REPOSITORY	HAZ WASTE		MCB CAMP PENDLETON
			PUBLIC			PUB. PARTICIPATI		
0000000000000000		00000						
0001		10.6						
M00681	003176	01/09/97	EPA SAN FRANCISCO	APPROVAL OF THE DRAFT FINAL RI/FS FOR OU2 SITE 8 AND	ADMIN RECORD	RI	OU2	SOUTHWEST DIVISION
LTR		09/27/96	M. GILL	22/23 AREA SITES REPORT CONSIDERED FINAL	INFO REPOSITORY	FS	6	MCB CAMP PENDLETON
			SOUTHWEST DIVISION					
0000000000000000		00000						
0007		04.0	D. MANGOLD					
M00681	003261	05/22/97	PARSONS ENGINEERING	DRAFT FINAL EVALUATION OF REMEDIATION BY NATURAL	ADMIN RECORD	EVALUATION	4	SOUTHWEST DIVISION
RPT		10/01/96		ATTENUATION FOR CONTAMINATED GROUNDWATER AT SITES 4/4A		CONTAM*	4A	
N47408950727		DO#16	SOUTHWEST DIVISION	6 AND 16/17/27 (AREAS 22/23)		GW	6	
0160		01.2						
							16	
							17	
							27	
							AREA 22	
							AREA 23	
M00681	003174	01/09/97	SOUTHWEST DIVISION	DRAFT STABILIZATION PILOT TEST REPORT FOR SITE 3	ADMIN RECORD		3	SOUTHWEST DIVISION
LTR		10/03/96	D. MANGOLD	TRANSMITTAL	INFO REPOSITORY			MCB CAMP PENDLETON
			DTSC LONG BEACH	W/O ENCL				
0000000000000000		00000						
0004		01.6	I. HIRBAWI					
M00681	003168	01/09/97	MCB CAMP PENDLETON	RESPONSE TO COMMENTS FOR THE FINAL SITE ASSESSMENT	ADMIN RECORD	RESPONSE	22 AREA	SOUTHWEST DIVISION
LTR		10/05/96	J.E. JOY	REPORT FOR THE 22 AND 43 AREA GAS STATIONS W/ENCLS	INFO REPOSITORY	COMMENTS		MCB CAMP PENDLETON
			RWQCB SAN DIEGO			SA	43	
0000000000000000		00000						
0063		10.1	J. ODERMATT					
M00681	003238	04/17/97	CRWQCB SAN DIEGO	REQUEST TO INITIATE DISPUTE RESOLUTION PROCESS AT	ADMIN RECORD	REQUEST	OU 2	SOUTHWEST DIVISION
LTR		10/08/96	J. ROBERTUS	MCB CAMP PENDLETON	INFO REPOSITORY		8	MCB CAMP PENDLETON
			SOUTHWEST DIVISION				AREA 22	
0000000000000000		00000						
0005		11.3	D. MANGOLD					
							AREA 23	



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M00681	003240	continued					27 AREA 22 AREA 23	
M00681	003375	09/03/97	VARIOUS AGENCIES	COMMENTS FROM RWQCB & DTSC (W/OUT ENCL.) ON EVAL. OF	ADMIN RECORD	COMMENTS	2	SOUTHWEST DIVISION
MISC		10/25/96		REMEDATION BY NATURAL ATTENUATION FOR CONTAMINATED	INFO REPOSITORY	EVALUATION	4	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	GROUNDWATER SITE 2, 4/4A, 6, 16, 17, & 27 (DATE 10/96)		GW	4A	
0018		10.1					6 16 17 27	
M00681	003311	08/26/97	SOUTHWEST DIVISION	LETTER NOTING THE COMMENCEMENT DATE FOR THE REMOVAL	ADMIN RECORD	REMOVAL	3	SOUTHWEST DIVISION
LTR		10/28/96		ACTION AT IR SITE 3, PEST CONTROL WASH RACK	INFO REPOSITORY	IR		MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES			RA		
0002		01.6						
M00681	003191	01/23/97	JACOBS ENGINEERING	REMEDIAL INVESTIGATION/FEASIBILITY STUDY DRAFT FINAL	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
RPT		11/01/96	E. MINUGH	RI REPORT FOR GROUP C SITES REV.O VOLUME 1	INFO REPOSITORY	FS	10	MCB CAMP PENDLETON
N6871289D9296		00301	SOUTHWEST DIVISION	CLE-I01-01F301-B7-0025	ADMIN RECORD	RISK	1E	
2000		03.4				SOIL	28	
						GW	17	
							27	
							28	
							29	
							30	
							31	
							35	
							43	
							44	
							45	
M00681	003376	09/03/97	DTSC LONG BEACH	LETTER DENYING REQUEST FOR APPROVAL OF EXTENDED	ADMIN RECORD	REQUEST		SOUTHWEST DIVISION
LTR		11/05/96	J. KOU	STORAGE, BUT CONSIDER APPLICATION FOR EMERGENCY PERMIT	INFO REPOSITORY	PERMIT		MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	AND DELAYED CLOSURE FOR CSA, W/OUT ATTACHMENT 1 & 2	CLOSURE			
0004		06.3						

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M00681	003241	04/17/97	EPA SAN FRANCISCO	COMMENTS TO DRAFT FINAL EVALUATION OF REMEDIATION BY	ADMIN RECORD	COMMENTS	OU 2	SOUTHWEST DIVISION
LTR		11/06/96	S. LAUTH	NATURAL ATTENUATION FOR CONTAMINATED GROUNDWATER AT	INFO REPOSITORY	EVALUATION	8	MCB CAMP PENDLETON
0000000000000000		00000	SOUTHWEST DIVISION	SITES 4/4A, 6 AND 16/17/27 (AREAS 22/23), DTD OCT 1996		CONTAM*	4	
0008		10.1	D. MANGOLD					
							4A	
							6	
							16	
							17	
							27	
							AREA 22	
							AREA 23	
M00681	003369	09/02/97	DTSC LONG BEACH	REQUEST FOR RESPONSE TO ALL COMMENTS PRIOR TO	ADMIN RECORD	RESPONSE	OU 2	SOUTHWEST DIVISION
MISC		11/06/96	I. HIRBAWI	ACCEPTANCE OF DRAFT FINAL RI/FS FOR OU 2, SITES 8 AND	INFO REPOSITORY	REQUEST	8	MCB CAMP PENDLETON
0000000000000000		00000	VARIOS AGENCIES	22/23 AREA SITES, DATED SEPTEMBER 23, 1996		COMMENTS	AREA 22	
0003		10.1						
							AREA 23	
						RI		
						FS		
M00681	003371	09/02/97	DTSC LONG BEACH	LETTER FORWARDING CAL/INTEGRATED WASTE MANAGEMENT	ADMIN RECORD	COMMENTS	BOX CANYON	SOUTHWEST DIVISION
LTR		11/06/96	I. HIRBAWI	BOARD'S COMMENTS ON DRAFT FINAL CLOSURE & POSTCLOSURE	INFO REPOSITORY	CLOSURE	LANDFILL	MCB CAMP PENDLETON
0000000000000000		00000	VARIOS AGENCIES	MAINTENANCE PLAN-BOX CANYON LANDFILL W/ENCL OF 2 MEMOS			8	
0020		10.1						
							4A	
							6	
							16	
							17	
							27	
							22	
							22 AREA	
							23 AREA	
M00681	003373	09/02/97	VARIOUS AGENCIES	3 LETTERS FROM VARIOUS AGENCIES REQUESTING MATERIALS	ADMIN RECORD	REQUEST		SOUTHWEST DIVISION
LTR		11/06/96		RELEVANT TO FFA AND ARARS FOR MCB CAMP PENDLETON	INFO REPOSITORY	FFA		MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES			ARAR		
0003		06.3						
M00681	003372	09/02/97	SOUTHWEST DIVISION	LETTER DOCUMENTING THAT LEGAL REPRESENTATIVES WILL	ADMIN RECORD	ARAR	OU 2	SOUTHWEST DIVISION
LTR		11/07/96	D. MANGOLD	RESOLVE DIFFERING OPINIONS REGARDING STATE ARARS IN	INFO REPOSITORY	FS		MCB CAMP PENDLETON
0000000000000000		00000	VARIOS AGENCIES	DRAFT FEASIBILITY STUDY FOR OU 2, DATED APRIL 1, 1996				
0003		06.3						

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M00681	003252	04/21/97	MCB CAMP PENDLETON	ENCLOSURE LTR OF DRAFT FINAL RI/FS, OU 2, SITE 8 22/23	ADMIN RECORD	RI	OU 2	SOUTHWEST DIVISION
LTR		11/12/96	J. JOY	AREA SITES, VOLS. 1-5, DTD SEP. 23, 1996; EVAL. OF REMED	INFO REPOSITORY	FS	8	MCB CAMP PENDLETON
0000000000000000	00000	00000	DEPT. HEALTH SERVICE	BY NATURAL ATTENUATION FOR CONTAM. GW (XREF.DOC#003261		EVALUATION	AREA 22	
0002		03.6	T. ROY			CONTAM*	AREA 23	
						GW	4/4A	
							6	
							16	
							17	
							27	
M00681	003167	01/09/97	SOUTHWEST DIVISION	REQUEST FOR COMMENTS ON THE DRAFT OU2 PROPOSED	ADMIN RECORD	REQUEST	OU2	SOUTHWEST DIVISION
LTR		11/15/96	D. MANGOLD	PLAN AND TRANSMITTAL OF ENCLOSED POINT PAPER	INFO REPOSITORY	COMMENTS		MCB CAMP PENDLETON
0000000000000000	00000	00000	VARIOUS AGENCIES	W/ENC				
0015		01.6						
M00681	003166	01/09/97	EPA SAN FRANCISCO	AGENCY CONCURRENCE TO FINALIZE THE DRAFT FINAL	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
LTR		11/27/96	M. GILL	GROUP C AND DRAFT FINAL TECHNICAL ADDENDUM TO THE RI	INFO REPOSITORY		GROUP B	MCB CAMP PENDLETON
0000000000000000	00000	00000	SOUTHWEST DIVISION	REPORT FOR GROUP B AS THE FINAL				
0001		01.6	D. MANGOLD					
M00681	003276	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	10	SOUTHWEST DIVISION
MISC		12/01/96	W. CRONE	MONITORING WELLS - 26 AREA SEWAGE SLUDGE COMPOSTING	INFO REPOSITORY	GW	26 AREA	MCB CAMP PENDLETON
0000000000000000	00000	00000		YARD		MONITORING		
0005		02.2				WELLS		
M00681	003277	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	16	SOUTHWEST DIVISION
MISC		12/06/96	W. CRONE	MONITORING WELLS - 22 AREA BUILDINGS 22151 AND 22187	INFO REPOSITORY	GW	17	MCB CAMP PENDLETON
0000000000000000	00000	00000		DITCH CONFLUENCE AND DITCH		MONITORING	BLDG.22151	
0006		02.2				WELLS	BLDG.22187	
							22 AREA	
M00681	003278	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	28	SOUTHWEST DIVISION
MISC		12/06/96	W. CRONE	MONITORING WELLS - 26 AREA TRASH HAULERS MAINTENANCE	INFO REPOSITORY	GW	26 AREA	MCB CAMP PENDLETON
0000000000000000	00000	00000		AREA		MONITORING		
0006		02.2				WELLS		

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M00681	003279	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	GW	27	SOUTHWEST DIVISION
MISC		12/06/96	W. CRONE	MONITORING WELLS - 22 AREA DITCHES BEHIND BUILDING	INFO REPOSITORY	MONITORING	BLDG.22210	MCB CAMP PENDLETON
0000000000000000		00000		22210		WELLS		
0006		02.2				PERMIT		
M00681	003280	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	146	SOUTHWEST DIVISION
MISC		12/06/96	W. CRONE	MONITORING WELLS - FIRING RANGE SOIL IN 31 AREA	INFO REPOSITORY	GW	31 AREA	MCB CAMP PENDLETON
0000000000000000		00000				MONITORING		
0005		02.2				WELLS		
M00681	003281	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	29	SOUTHWEST DIVISION
MISC		12/06/96	W. CRONE	MONITORING WELLS - 25 AREA SKEET RANGE	INFO REPOSITORY	GW	25 AREA	MCB CAMP PENDLETON
0000000000000000		00000				MONITORING		
0006		02.2				WELLS		
M00681	003282	08/22/97	MCB CAMP PENDLETON	PERMIT APPLICATION FOR GROUND WATER AND VADOSE	ADMIN RECORD	PERMIT	17	SOUTHWEST DIVISION
MISC		12/06/96	W. CRONE	MONITORING WELLS - 22 AREA BUILDING 22187 MARSH AND	INFO REPOSITORY	GW	BLDG.22187	MCB CAMP PENDLETON
0000000000000000		00000		DITCH		MONITORING	22 AREA	
0006		02.2				WELLS		
M00681	003242	04/17/97	SOUTHWEST DIVISION	TRANSMITTAL OF INSTALLATION RESTORATION PROGRAM	ADMIN RECORD	IRP	OU 2	SOUTHWEST DIVISION
LTR		12/09/96	D. MANGOLD	SCHEDULE	INFO REPOSITORY		8	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES				AREA 22	
0004		01.6					AREA 23	
M00681	003377	09/03/97	DTSC LONG BEACH	LETTER DOCUMENTING REVIEW OF DRAFT FINAL SITE CLOSEOUT	ADMIN RECORD	COMMENTS	5	SOUTHWEST DIVISION
LTR		12/12/96	J. SCANDURA	REPORT-GROUP A SITE 5-DATED SEPTEMBER 20, 1996, AND	INFO REPOSITORY	CLOSURE	GROUP A	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	RECOMMENDING NO FURTHER ACTION FOR SITE 5	NFA			
0002		10.1						

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M00681	003269	08/22/97	MCB CAMP PENDLETON	TRANSMITTAL OF EXECUTIVE SUMMARY OF DRAFT FINAL	ADMIN RECORD	RI	GROUP C	SOUTHWEST DIVISION
LTR		12/17/96	J. JOY	REMEDIAL INVESTIGATION REPORT FOR GROUP C SITES	INFO REPOSITORY	SOIL	1D	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	(PAGES XII AND XIV NOT INCLUDED IN EXECUTIVE SUMMARY)		IR	1E	
0000		01.6					2B	
							29	
							30	
							31	
							35	
							43	
							44	
							45	
							16	
							17	
							27	
							28	
M00681	003368	09/02/97	DTSC LONG BEACH	COMMENTS ON 11/27/96 CONF. CALL TO DISCUSS COMMENTS ON	ADMIN RECORD	COMMENTS	GROUP D	SOUTHWEST DIVISION
MISC		12/17/96	I. HIRBAWI	PERMISSIBLE LIMITS EXPOSURE METHODOLOGY PROPOSED FOR	INFO REPOSITORY	EXPOSURE		MCB CAMP PENDLETON
0000000000000000		00000	VARIOS AGENCIES	USE IN ECOLOGICAL RISK ASSESSMENT OF GROUP D SITES		RISK		
0009		10.1				ASSESSMENT		
M00681	003243	04/17/97	SOUTHWEST DIVISION	FAX DRAFT AGENDA FOR FFA MEETING, JANUARY 22, 1997,	ADMIN RECORD	FFA	OU 2	SOUTHWEST DIVISION
LTR		12/18/96	D. MANGOLD	ALSO ENCLOSED IS DRAFT LETTER FOR REVIEW AND COMMENTS	INFO REPOSITORY	COMMENTS	8	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	CONCERNING SITES 8 AND 14 OUT OF CERCLA		CERCLA	14	
0004		01.6					AREA 22	
							AREA 24	
							OU 3	
M00681	003244	04/17/97	RWQCB SAN DIEGO	COMMENTS ON REVIEW OF REMEDIATION BY NATURAL	ADMIN RECORD	COMMENTS	OU 2	SOUTHWEST DIVISION
MEMO		12/31/96	T. PELTIER	ATTENUATION STUDY FOR 22/23 AREA	INFO REPOSITORY		8	MCB CAMP PENDLETON
0000000000000000		00000	DTSC SAN DIEGO				AREA 22	
0005		10.1	J. ANDERSON				AREA 23	



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M00681	003380	09/03/97	JACOBS ENG. GROUP	OCTOBER 22, 1996 DRAFT FINAL MINUTES OF THE 32ND FFA	ADMIN RECORD	MTG MINS	3	SOUTHWEST DIVISION
MM		01/28/97	J. GLEASON	PROJECT MANAGERS' MEETING. W/ENCLOSURE OF SCHEDULE,	INFO REPOSITORY	FFA	6	MCB CAMP PENDLETON
N6871189D9296		0301	SOUTHWEST DIVISION	SIGN-IN SHEETS, AND MISCELLANEOUS HANDOUTS			7	
0110		10.4	M. SCHWEER					
							OU 2	
							BLDG. 2243	
							AREA 22	
							AREA 23	
							1D	
							1E	
							29	
							30	
							35	
							8	
							14	
M00681	003287	08/22/97	EPA SAN FRANCISCO	CONCERNS REGARDING REDESIGN OF LANDFILL CAP AND	ADMIN RECORD	LANDFILL	1D	SOUTHWEST DIVISION
LTR		02/04/97	S. LAUTH	PROPOSED REMOVAL ACTIONS FOR GROUP C SITES 1D, 1C, 29,	INFO REPOSITORY	REMOVAL	1E	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	30, AND 35		EE\CA	29	
0003		01.6				HABITAT	30	
							35	
							OU 2	
							GROUP C	
							7	
M00681	003286	08/22/97	SOUTHWEST DIVISION	TRANSMITTAL OF TECHNICAL MEMORANDUM SUMMARIZING	ADMIN RECORD	TECH MEMO	1D	SOUTHWEST DIVISION
LTR		02/11/97	D. MANGOLD	RESULTS OF FIELD INVESTIGATION, DETERMINATION OF	INFO REPOSITORY	REMOVAL	1E	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES	POTENTIAL REMOVAL ACTIONS (W/O ENCL)		INVESTIGATION	29	
0002		01.6				HABITAT	30	
							35	
							GROUP C	
							GROUP D	

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M00681	003254	05/22/97	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
RPT		02/14/97	E. MINUGH	REMEDIAL INVESTIGATION FOR GROUP D SITES		FS	1A	
N6871189D9296		00301	SOUTHWEST DIVISION	REV.O VOLUME 1		OU	1B	
1000		03.4						
						GW	1C	
						NCP	1F	
						VOC	1H	
						PCB	1I	
						PRG	2A	
							2D	
							2E	
							2F	
							2G	
							18	
							32	
							33	
							34	
							36	
							37	
							38	
							39	
							40	
							41	
							42	
							GROUP C	
							2C	
							10	
							16	
							17	
							27	
							GROUP B	



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M00681 003255 continued

17  
27  
GROUP C

M00681	003256	05/22/97	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
RPT		02/14/97	E. MINUGH	REMEDIAL INVESTIGATION FOR GROUP D SITES		FS	1A	
N6871189D9296		00302	SOUTHWEST DIVISION	REV.O VOLUME 3		GW	1B	
2000		03.4						

SOIL 1C  
PRG 1F  
VOC 1H  
1I  
2A  
2D  
2F  
2G  
18  
32  
33  
34  
37  
40  
2C  
10  
16  
17  
27  
GROUP C

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M00681	003257	05/22/97	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
RPT		02/14/97	E. MINUGH	REMEDIAL INVESTIGATION FOR GROUP D SITES		FS	1A	
N6871189D9296		00301	SOUTHWEST DIVISION	REV.O VOLUME 4		SOIL	1B	
2000		03.4				PCB	1C	
							1F	
							1H	
							1I	
							2A	
							2D	
							2F	
							2G	
							18	
							32	
							33	
							34	
							37	
							40	
							2C	
							10	
							16	
							17	
							27	
							GROUP C	

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M00681	003258	05/22/97	JACOBS ENGINEERING	DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY	ADMIN RECORD	RI	GROUP D	SOUTHWEST DIVISION
RPT		02/14/97	E. MINUGH	REMEDIAL INVESTIGATION FOR GROUP D SITES		FS	23	
N6871189D9296		00301	SOUTHWEST DIVISION	REV.O VOLUME 5		GW	1A	
1000		03.4				CONTAM*	1B	
						RA	1C	
							1F	
							1H	
							1I	
							2A	
							2D	
							2F	
							2G	
							18	
							32	
							33	
							34	
							37	
							40	
							2C	
							10	
							16	
							17	
							27	
M00681	003247	04/17/97	SOUTHWEST DIVISION	REQUEST FOR AMENDMENT TO DELETE IR SITE 8 AND SITE 14	ADMIN RECORD	REQUEST	OU 2	SOUTHWEST DIVISION
LTR		02/24/97	D. MANGOLD	FROM SCOPE OF COVERAGE OF FFA, INCLUDING APPENDIX A	INFO REPOSITORY	IR	8	MCB CAMP PENDLETON
0000000000000000		00000	VARIOUS AGENCIES			FFA	14	
0004		03.6						
							AREA 22	
							AREA 23	
M00681	003259	05/22/97	OHM REMEDIATION	DRAFT REMOVAL ACTION SITE CLOSURE REPORT	ADMIN RECORD	REMOVAL	GROUP A	SOUTHWEST DIVISION
RPT		02/24/97	G. JAMES	NON-TIME CRITICAL REMOVAL ACTION IRP GROUP A SITE 3	INFO REPOSITORY	CLOSURE	3	MCB CAMP PENDLETON
N6871193D1459		DO#73	SOUTHWEST DIVISION	REV. 0		NTCRA	SUBSITE 3A	
2500		01.2	D. JESPERSEN			IRP	SUBSITE 3B	
						SOIL	SUBSITE 3C	
							SUBSITE 3D	



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M00681	003290	08/22/97	MCB CAMP PENDLETON	REQUEST FOR COMMENTS ON DRAFT ENGINEERING EVALUATION/ COST ANALYSIS FOR GROUP C SITES 1D, 1E, 30 AND 35 W/O ENCL	ADMIN RECORD INFO REPOSITORY	EE\CA REQUEST COMMENTS	GROUP C 1D 1E  30 35	SOUTHWEST DIVISION MCB CAMP PENDLETON
LTR		03/18/97	J. JOY					
0000000000000000		00000	VARIOUS AGENCIES					
0004		01.6						
M00681	003251	04/17/97	SOUTHWEST DIVISION	RE DTSC COMMENTS ON DRAFT FINAL RI/FS FOR OU 2 FEBRUARY 26, 1997; REQUEST FOR COMMENTS (W/O ENCL)	ADMIN RECORD INFO REPOSITORY	COMMENTS RI FS  REQUEST RISK	OU 2 8 AREA 22  AREA 23 OU 4	SOUTHWEST DIVISION MCB CAMP PENDLETON
LTR		03/25/97	D. MANGOLD					
0000000000000000		00000	DTSC LONG BEACH					
0002		10.1	I. HIRBAWI					
M00681	003348	08/27/97	JACOBS ENG. SERVICES	TRANSMITTAL OF PROPOSED PLAN FOR NO REMEDIAL ACTION AT OPERABLE UNIT 2 SITES, DATED APRIL 1997	ADMIN RECORD INFO REPOSITORY	RA RISK	OU 2 3 5  6 17 AREA 22 AREA 23 16 8 OU 4 2B 19 20 28 31 43 44 45 8A	SOUTHWEST DIVISION
XMTL		04/01/97	J. GLEASON					
N6871189D9296		0301	SOUTHWEST DIVISION					
0019		04.3	M. SCHWEER					
M00681	003327	08/26/91	MCB CAMP PENDLETON	LETTER REQUESTING THAT BOX CANYON LANDFILL IS NOT INCLUDED IN ORDER 97-11	ADMIN RECORD INFO REPOSITORY	REQUEST LANDFILL CERCLA  FFA	BOX CANYON	SOUTHWEST DIVISION MCB CAMP PENDLETON
LTR		04/02/97	K. QUIGLEY					
0000000000000000		00000	RWQCB SAN DIEGO					
0002		01.6	M. ALPERT					







TOTAL RECORDS PRINTED: 928

REPORT SPECIFICATION FOR: RPT131

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FILE: Central Activity File Documents

SELECTION CRITERIA:

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SORT CRITERIA:

01 Doc. Date

PAGE BREAK LEVEL:

00 NO PAGEBREAK

TYPE REPORT FORM

PAPER MASTER ACTIVITY FILE (with Key/Add Info)

APPENDIX B

<IMG SRC 97191L4>

1 MS. TROST: Good evening and welcome to the formal  
2 portion of our public meeting with the proposed plan for  
3 Operable Unit 2. My name is Theresa Trost. I am with the  
4 Environmental Security, Camp Pendleton. And for the record I  
5 would like the members of the panel that was going to sit up  
6 here to please state their name and their affiliation.

7 MR. MANGOLD: Davis Mangold, the Remedial Project Manager  
8 for Southwest Division.

9 MS. LAUTH: Sheryl Lauth, L-a-u-t-h, Remedial Project  
10 Manager from EPA.

11 MR. ODERMATT: John Odermatt, O-d-e-r-m-a-t-t, Remedial  
12 Project Manger from the Regional Water Quality Control Board.

13 MR. HIRBAWI: Isaac Hirbawi, Remedial Project Manager for  
14 DTSC, Department of Toxics.

15 MS. TROST: I guess I could say let the record show that  
16 there is no member of the public in the audience and that we  
17 have filled the requirement under CERCLA to have a public  
18 meeting. And I would now like to propose a closed meeting.

19 Is there a second?

20 MR. MANGOLD: Second.

21 MS. TROST: The meeting is now closed.

22 (The public meeting  
23 concluded at 7:05 p.m.)

24  
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REPORTER'S CERTIFICATE

STATE OF CALIFORNIA    )  
                          )    ss  
COUNTY OF SAN DIEGO    )

I, ELANA K. SHIRLEY, CSR No. 9651, a Certified  
Shorthand Reporter for the State of California do hereby  
certify:

That said public meeting was taken before me at the time  
and place therein stated and was thereafter transcribed into  
print under my direction and supervision, and I hereby  
certify the foregoing public meeting is a full, true and correct  
transcript of my shorthand notes so taken.

WITNESS my hand this 27th day of May, 1997

<IMG SRC 97191L5>