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Dear Ms. Cook, Ms. Lofstrom, and Mr. West:

I am pleased to submit to you the *Final Record of Decision, Operable Unit 5/IR-02 Groundwater, Former Naval Air Station Alameda and Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex, Alameda, California* dated August 2007. This Record of Decision (ROD) documents the remedy for OU-5/IR-02 groundwater and summarizes results of the remedial investigation/feasibility study. Unless otherwise noted, recipients receive one hard copy and one CD of the signed ROD.

If you have any questions, please call Ms. Mary Parker, the Navy Project Manager, at 619-532-0945, or me at (619) 532-0907.

Sincerely.

THOMAS L. MACCHIARELLA BRAC Environmental Coordinator By direction of the Director

Enclosure: 1. Final Record of Decision, Operable Unit 5/IR-02 Groundwater, Former Naval Air Station Alameda and Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex, Alameda, California dated August 2007

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FINAL

RECORD OF DECISION OPERABLE UNIT 5/IR-02 GROUNDWATER

ALAMEDA POINT AND FISCA ALAMEDA, CALIFORNIA

August 2007

Prepared for:

Department of the Navy Base Realignment and Closure Program Management Office West 1455 Frazee Road, Suite 900 San Diego, CA 92108-4310

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μg/L	micrograms per liter
$\mu g/m^3$	micrograms per cubic meter
1.2-DCA	1.2-dichloroethane
ACL	alternative concentration limit
ACPWA	Alameda County Public Works Agency
AFWBZ	Alameda Formation water-bearing zone
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
Army	Department of the Army
BAAQMD	Bay Area Air Quality Management District
Basin Plan	San Francisco Bay Basin Water Quality Control Plan
BCT	BRAC Cleanup Team
bgs	below ground surface
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAA	Clean Air Act
Cal. Code Regs.	California Code of Regulations
Cal/EPA	California Environmental Protection Agency
CCC	California Civil Code
CCR	California Code of Regulations
CDC	Child Development Center
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, Liability Information System
CERFA	Community Environmental Response Facilitation Act
C.F.R.	Code of Federal Regulations
COC	chemical of concern
COPC	chemical of potential concern
CSF	cancer slope factor
CZMA	Coastal Zone Management Act
DoD	Department of Defense

DON	Department of the Navy
DTSC	Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EBS	Environmental Baseline Survey
EPA	U.S. Environmental Protection Agency
ERA	ecological risk assessment
EPC	exposure point concentration
ERM	Environmental Resources Management
ERRG	Engineering/Remediation Resources Group, Inc.
ESA	Endangered Species Act
FFA	Federal Facility Agreement
FFSRA	Federal Facility Site Remediation Agreement
FISCA	Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex
FOD	frequency of detection
FOSL	Finding of Suitability to Lease
FS	Feasibility Study
FWBZ	first water-bearing zone
FWENC	Foster Wheeler Environmental Corporation
GW	groundwater
HEAST	Health Effects Assessment Summary Tables
HHRA	human health risk assessment
HI	hazard index
IC	Institutional control
ID	identification
ILCR	incremental lifetime cancer risk
IR	Installation Restoration
IR-02	Installation Restoration Site 02
IRIS	Integrated Risk Information System
IT	International Technology Corporation

ITSI	Innovative Technical Solutions, Inc.
LUC	Land Use Control
LUCIP	Land Use Control Implementation Plan
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MNA	monitored natural attenuation
MOA	Memorandum of Agreement
MTBE	methyl tertiary-butyl ether
NAAQS	National Ambient Air Quality Standards
NACIP	Navy Assessment and Control of Installation Pollutants
NAS	Naval Air Station
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEESA	Naval Energy and Environmental Support Activity
Neptune	Neptune and Company, Inc.
NPL	National Priority List
NSC	Naval Supply Center
OEHHA	Office of Environmental Health Hazard Assessment
OSWER	Office of Solid Waste and Emergency Response
OU	Operable Unit
OU-5	Operable Unit 5
РАН	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
POC	point of compliance
PRC	PRC Environmental Management, Inc.
PRG	Preliminary Remediation Goal
RAB	Restoration Advisory Board
RAO	remedial action objective
RAP	Remedial Action Plan

RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RfD	reference dose
RG	remedial goal
ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
Shaw	Shaw Environmental, Inc.
SIP	State Implementation Plan
SSDS	sub-slab depressurization system
SVE	soil vapor extraction
SVOC	semivolatile organic compound
SWBZ	second water-bearing zone
SWMU	Solid Waste Management Unit
SWRCB	State Water Resources Control Board
TBC	to be considered
TCLP	Toxicity Characteristic Leaching Procedure
TCRA	time-critical removal action
TDS	total dissolved solids
TtEMI	Tetra Tech EM, Inc.
TPH	total petroleum hydrocarbons
UIC	Underground Injection Control
U.S.	United States
USC	United States Code
USFWS	United States Fish and Wildlife Service
USCG	United States Coast Guard
USGS	United States Geologic Survey

Versar	Versar, Inc.
VOC	volatile organic compound
Water Board	San Francisco Bay Water Board
WQCP	Water Quality Control Plan
WQO	water quality objective
yd ³	cubic yards
yr	year

DECLARATION

SITE NAME AND LOCATION

This decision document addresses the shallow groundwater at Operable Unit (OU) 5 (OU-5) and Installation Restoration (IR) Site 02 (OU-5/IR-02). OU-5 is located east of Main Street on the former Naval Air Station (NAS) Alameda, now referred to as Alameda Point, in Alameda, California. IR-02 (and nearby sites) are located to the east on the adjacent former Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex (FISCA). Shallow groundwater beneath OU-5 on Alameda Point and IR-02 on FISCA is being addressed in the same Record of Decision (ROD) because there is one plume. The U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) identification (ID) number is CA2170023236.

STATEMENT OF BASIS AND PURPOSE

This ROD presents the selected remedy, remedial action for shallow groundwater (Remedial Alternative 4) at OU-5/IR-02, in Alameda, California. Alternative 4 is biosparging with soil vapor extraction (SVE), nutrients/microorganism enhancement, as required, monitored natural attenuation (MNA), and institutional controls (ICs) while the remediation is in progress.

This document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Title 42 United States Code Section 9601, et seq.), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (Title 40 Code of Federal Regulations Part 300). The Department of Toxic Substances Control (DTSC) and the Department of the Navy (DON) have agreed to remove Federal Facility Site Remediation Agreement (FFSRA) obligations related to groundwater at FISCA IR-02 (and other FISCA sites within this plume) and to address this groundwater under the Alameda Naval Air Station Federal Facility Agreement (FFA). This ROD was prepared in accordance with the Alameda Point FFA requirements. This decision is based on information contained in the Administrative Record file (a site-specific Administrative Record Index is included as Appendix A), as well as on extensive field investigations, laboratory analyses, interpretation of the data, review of current and future conditions, and thorough assessment of the potential human health and ecological risks. Based on these findings, further action is required at this site. The DON, the San Francisco Bay Water Board (Water Board), the State of California Environmental Protection Agency, DTSC, and the EPA concur on the selected remedy for this site.

ASSESSMENT OF THE SITE

The DON, in coordination with the regulatory agencies, has made a risk management decision that remedial action is warranted for shallow groundwater to protect public health and the environment based on the following:

- Site histories
- Field investigations
- Laboratory analytical results
- Evaluation of potential ecological and human health risks
- Current and reasonable anticipated future land use

Results of previous investigations indicate that benzene and naphthalene in shallow groundwater at OU-5/IR-02 pose a potential risk to human health based on current and reasonably anticipated future land uses. For the current and future residential use for most of this site, the carcinogenic risk without using the groundwater for drinking water is within the risk management range. Carcinogenic and non-carcinogenic risks if the groundwater were used for drinking water exceed the risk management range. The ecological risk assessment concluded that there are no unacceptable ecological risks at the site. Additionally, the ecological risk assessment concluded that the site supports only limited habitat, the presence of terrestrial receptors is limited, and future land uses would not create additional ecological habitat.

DESCRIPTION OF THE SELECTED REMEDY: ALTERNATIVE 4 – BIOSPARGING, SOIL VAPOR EXTRACTION, NUTRIENT/MICROORGANISM ENHANCEMENT, MONITORED NATURAL ATTENUATION, AND INSTITUTIONAL CONTROLS

Six remedial alternatives (Alternatives 1 through 6) were developed and analyzed to address potential risks to human health from benzene and naphthalene in shallow groundwater at OU-5/IR-02. This ROD documents the selection of Alternative 4 to remediate shallow groundwater at the site. Alternative 4 includes the following components:

- Biosparging to introduce air as an oxygen source to accelerate biodegradation of contaminants;
- SVE to capture and treat potential escaping vapors, which could migrate through the vadose zone to the ground surface;

- Nutrient and/or microorganism enhancement to enhance the degradation rate, as required;
- Monitored natural attenuation to ensure that the remedy is effective and is being completed in accordance with the ROD; and
- Institutional controls (ICs) to prevent the potential exposure of property users to groundwater contamination and maintain the integrity of the remedial action until remedial goals have been achieved.

STATUTORY DETERMINATIONS

The selected remedy is protective of human health and the environment, complies with federal and state requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. The selected remedy will obviate the need for and satisfy the corrective action requirements of the Resource Conservation and Recovery Act (RCRA) or otherwise applicable State hazardous waste or water quality protection laws. The remedy uses permanent solutions and alternative treatment or resource recovery technologies to the maximum extent practicable and satisfies the statutory preference for remedies employing treatment that reduces toxicity, mobility or volume of hazardous substances, pollutants or contaminants as a principal element. A five-year review pursuant to CERCLA Section 121 and the NCP will be conducted, if the remedial action objective and remedial goals are not met before the end of the review period.

DATA CERTIFICATION CHECKLIST

Checklist Item	Description
Chemicals of potential concern and their respective concentrations.	Chemicals of potential concern are characterized throughout OU-5/IR-02 based on data from numerous investigations. A description of these activities is provided in Section 2.0 of the ROD. A description of the nature and extent of contamination at OU-5/IR-02 is presented in Section 5.3 of the ROD.
Risk assessments are representative of the chemicals of potential concern.	A baseline human health risk assessment (HHRA) was conducted as part of the Site 25/IR-02 RI/FS using data representative of current conditions at OU-5/IR-02. A screening level ecological risk assessment (ERA) was conducted for Alameda Point (OU-2 Draft RI) and a qualitative ERA was conducted for FISCA. The results of these risk assessments are presented in Section 7.0 of this ROD.
Remedial levels established for chemicals of concern and the basis for these levels.	The response action for groundwater selected in this ROD is necessary to protect the public health or the environment from actual or threatened releases of hazardous substances into the environment. The risk assessments are presented in Section 7.0 of this ROD, and the remedial levels are presented in Section 8.0.
How source materials constituting principal threats are addressed.	Former buildings, site usage, and surrounding areas, along with storm water sewers and fuel lines, were investigated and evaluated as potential sources. Results of environmental investigations have not identified any significant soil contamination or suggested the presence of a continuing source. Potential usage of groundwater for non-drinking water or drinking water presents a risk to human health. Section 5.3 of the ROD describes the nature and extent of remaining contamination, and principal threat waste is presented in Section 11.0.
Current and reasonably anticipated future land use assumptions and current and potential beneficial uses of groundwater used in the baseline risk assessment and ROD.	OU-5 is currently a residential area, comprised primarily of residential, education, and day care usage. The long-term reuse of OU-5 is anticipated to be residential and educational. IR-02 is currently vacant. The planned future usage of IR-02 is a mix of residential and commercial. As part of the HHRA, the risks were evaluated under two different scenarios: residential and occupational (which includes commercial). Although groundwater at the site is not expected to be used for domestic uses, it was assumed under the residential-use scenario that a resident would be using groundwater for domestic purposes, including drinking, and bathing. Land use and beneficial uses of groundwater are discussed in Section 6.0 of this ROD.
Potential land and groundwater use that will be available at the site as a result of the selected remedy.	Potential land and groundwater uses at the site are discussed in Sections 6.1 and 6.2 of the ROD. After remedial goals are met, the selected remedy will allow for unrestricted site use.
Estimated capital, annual operation and maintenance, and total present worth costs, discount rate, and the number of years over which the remedy cost estimates are projected.	This ROD recommends Alternative 4 as the selected remedy for groundwater at the site. Section 12.0 of this ROD describes the selected groundwater remedy. Estimated capital and operation and maintenance costs are presented in Table 12-1.
Key factors that led to selecting the remedy.	Alternative 4 was selected in part because of its lower potential risk to site occupants via fugitive emissions and also because of its benefit in the short term – achieving contaminant mass reduction in approximately eight years. Section 12.0 of this ROD describes the selected remedy, and Section 13.0 describes the statutory determinations that were made regarding the selected remedy. Section 14.0 documents that the DON has reviewed all written and oral comments submitted during the public comment period and has determined that no significant changes to the selected groundwater remedial action are necessary or appropriate.

This signature sheet documents the DON's and the EPA's co-selection of the remedial action in this ROD for OU-5/IR-02 at Alameda Point and FISCA of remedial action for groundwater, and the State of California, by the DTSC's and the Water Board's concurrence with this ROD. The respective parties may sign this sheet in counterparts.

AUTHORIZING SIGNATURES

Signature

8/9/07

Date

Mr. Thomas L. Macchiarella Base Realignment and Closure Environmental Coordinator Base Realignment and Closure Program Management Office West Department of the Navy

Signature

Mr. John Chesnutt Acting Branch Chief, Federal Facilities Cleanup Branch United States Environmental Protection Agency

Date

The State of California, Department of Toxic Substances Control had an opportunity to review and comment on the Record of Decision, and DTSC's comments were addressed.

Signature

Mr. Anthony Landis, P.E. Chief, Northern California Operations, Office of Military Facilities California Environmental Protection Agency Department of Toxic Substances Control

Signature

Mr. Bruce H. Wolfe Executive Officer San Francisco Bay Water Board

Date

Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007 This page intentionally left blank.

1.0 SITE NAME, LOCATION, AND DESCRIPTION

This Record of Decision (ROD) presents the selected remedy for Operable Unit (OU) 5/Installation Restoration (IR) Site 02 (OU-5/IR-02) groundwater. OU-5 is located east of Main Street, on the former Naval Air Station (NAS) Alameda now referred to as Alameda Point in Alameda, California. IR-02 (and nearby sites) are located to the east on the adjacent former Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex (FISCA). This ROD was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Title 42 United States Code [USC], Section 9601 et seq.) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (Title 40 Code of Federal Regulations [C.F.R.] Part 300). The Department of Toxic Substances Control (DTSC) and the Department of the Navy (DON) have agreed to remove Federal Facility Site Remediation Agreement (FFSRA) obligations related to groundwater at FISCA IR-02 (and other FISCA sites within this plume) and to address this groundwater under the Alameda NAS Federal Facility Agreement (FFA) requirements. This ROD was prepared in accordance with the Alameda NAS FFA requirements. The decision for this site is based on the information contained in the Administrative Record. The Administrative Record Index for this site is found in Appendix A.

1.1 SITE NAME

This ROD addresses OU-5/IR-02 groundwater. Some previous site documentation, within the Administrative Record, referred to OU-5 as Site 25. Hereafter, the site collectively will be referred to as OU-5/IR-02, or will be broken out as either OU-5 to represent the property within Alameda Point and IR-02 to represent the property within FISCA. OU-5/IR-02 includes six IR sites, discussed in Section 1.3. These IR sites, while included within the OU-5/IR-02 ROD, are not included in the title, for brevity.

1.2 SITE LOCATION

OU-5/IR-02 is located within two former DON installations in Alameda, California: OU-5 is located on the former NAS Alameda (hereinafter referred to as Alameda Point) and IR-02 is located on the former FISCA (hereinafter referred to as FISCA).

Alameda Point, located adjacent to the City of Oakland, in Alameda County, is roughly rectangular, about two miles long (east to west) and one mile wide (north to south), and occupies 1,734 acres. Alameda Point is located adjacent to FISCA on the western tip of Alameda Island, which is surrounded by San Francisco Bay and the Oakland Inner Harbor. OU-5 is located east

of Main Street. FISCA, comprising approximately 143 acres, is located along the southern shore of the Oakland Inner Harbor (Figures 1-1 and 1-2).

1.3 SITE DESCRIPTION

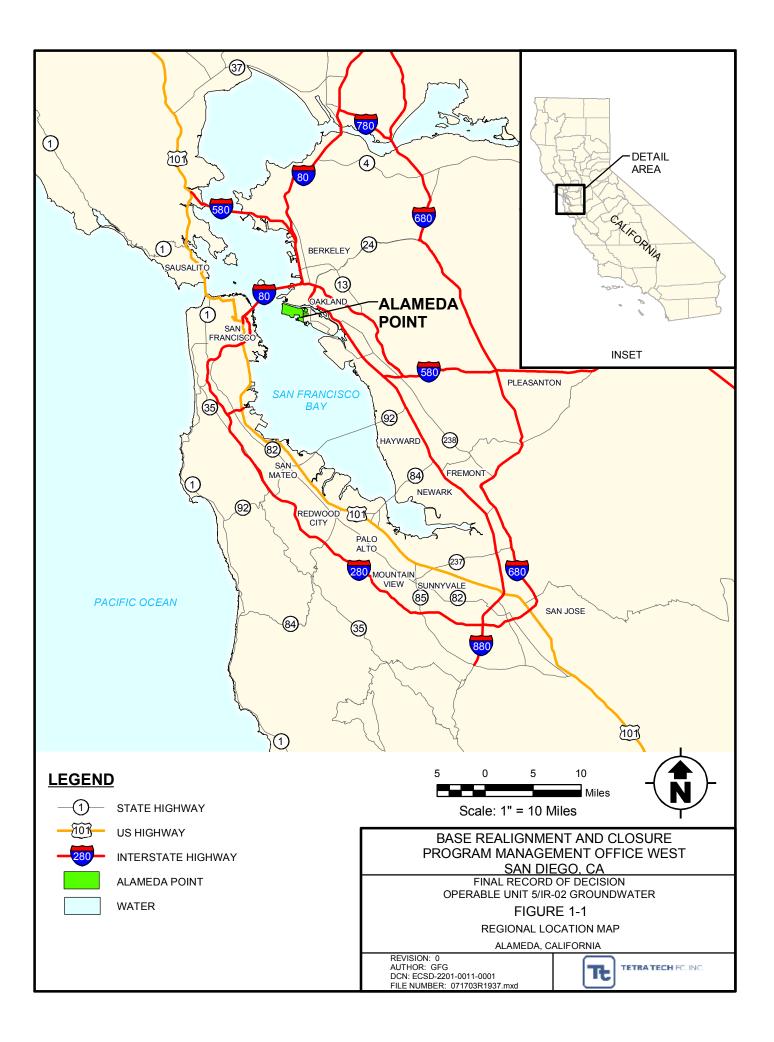
Shallow groundwater beneath OU-5 on Alameda Point and IR-02 on FISCA is being addressed in the same ROD because there is one plume. The OU-5 property is currently owned by the DON. FISCA has been transferred to the City of Alameda.

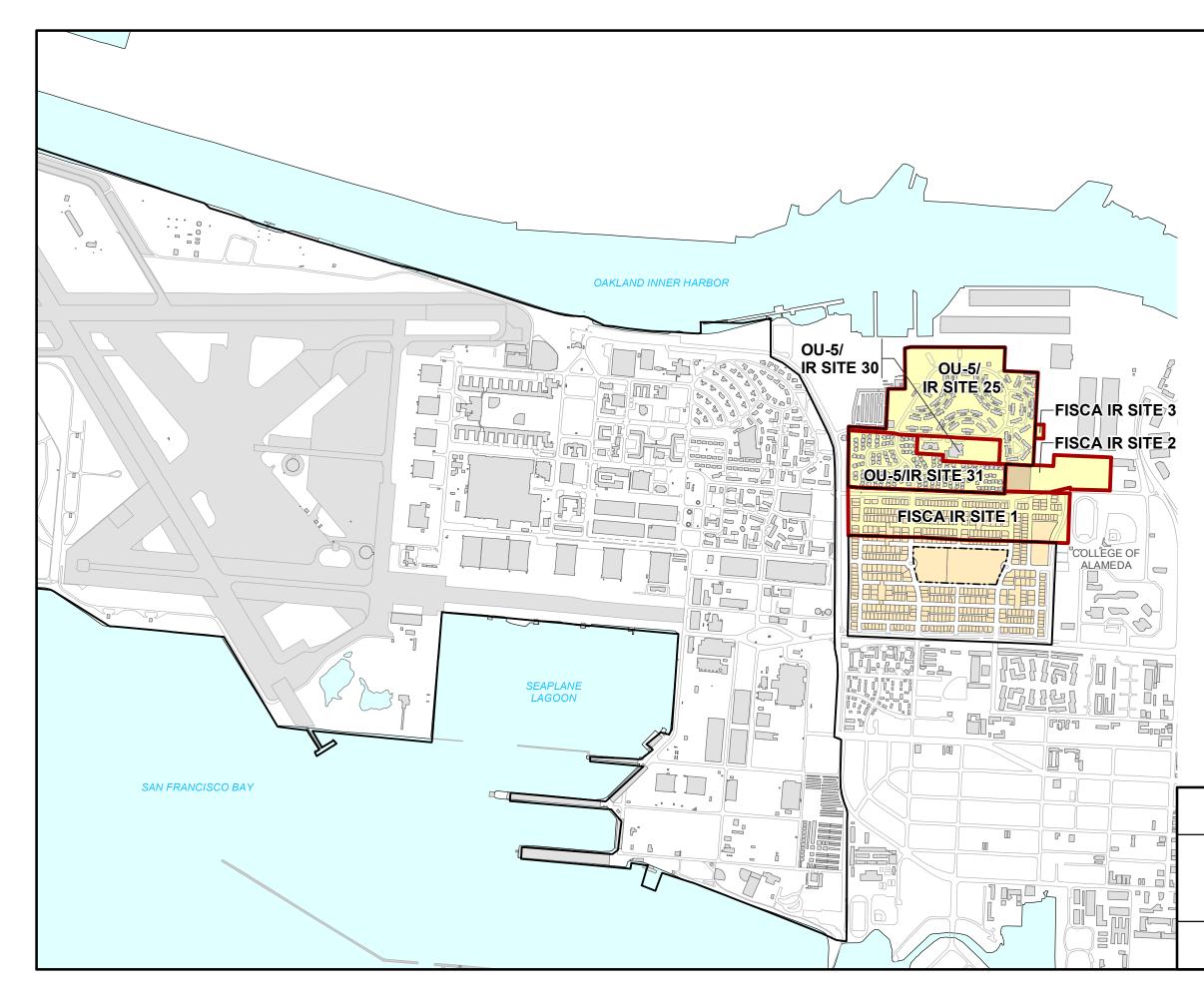
OU-5/IR-02 groundwater consists of shallow groundwater beneath portions of six individual IR sites. The following three OU-5 sites are located on Alameda Point:

- Site 25 is located on the northeast side of Alameda Point. It is divided into three parcels (181, 182, and 183) in the Environmental Baseline Survey (EBS) (International Technology Corporation [IT], 1998). Parcel 181 contains United States Coast Guard (USCG) North Village multi-unit housing structures (not occupied). Parcel 182 is a park area, and Parcel 183 contains Building 545, which is currently used as the USCG Housing Maintenance Office. Site 25 is approximately 42 acres in size.
- Site 30 is located south of Site 25 on Alameda Point. It is divided into two parcels (179 and 180). Parcel 179 contains the Island High School (formerly the George Miller Elementary School) and Parcel 180 contains the Woodstock Child Development Center (CDC). Both of these facilities are currently occupied. Site 30 is approximately 6 acres in size.
- Site 31 is located south and west of Site 30 on Alameda Point. It is divided into two parcels (178 and 184) and includes USCG Marina Village residential housing (occupied). Site 31 is approximately 25 acres in size.

OU-5/IR-02 groundwater includes portions of the following three FISCA sites:

- IR-01 is a former warehouse area located south of Site 31 on the southwest side of FISCA. Bayport Housing is currently being constructed at IR-01.
- IR-02 is located on the south central side of FISCA. The Defense Logistics Agency Defense Reutilization and Marketing Office operated a screening lot and scrap yard at IR-02 until 1997. The western portion of IR-02 was used as a screening lot and for temporary equipment storage. The eastern portion of IR-02 was used as a scrap yard and for temporary storage of discarded automobiles, stockpiled scrap metal, and surplus equipment. A multi-family residential project is currently planned for the western portion of IR-02.
- IR-03 is located on the west central side of FISCA. It formerly consisted of an automotive drive-up maintenance rack over an asphalt-paved area.





<u>LEGEND</u>

L!

ROAD

IR SITES WITH PART OF THE SITE WITHIN OU-5/IR-02

ALAMEDA POINT BOUNDARY

BUILDING

BAYPORT DEVELOPMENT

39 - UNIT HOUSING AREA

BAYPORT SCHOOL BOUNDARY

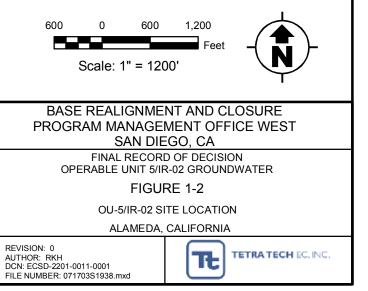
RUNWAY WATER

NOTES:

IR - INSTALLATION RESTORATION (PROGRAM)

FISCA - FORMER FLEET INDUSTRIAL SUPPLY CENTER, OAKLAND ALAMEDA ANNEX AND ALAMEDA FACILITY

OU - OPERABLE UNIT

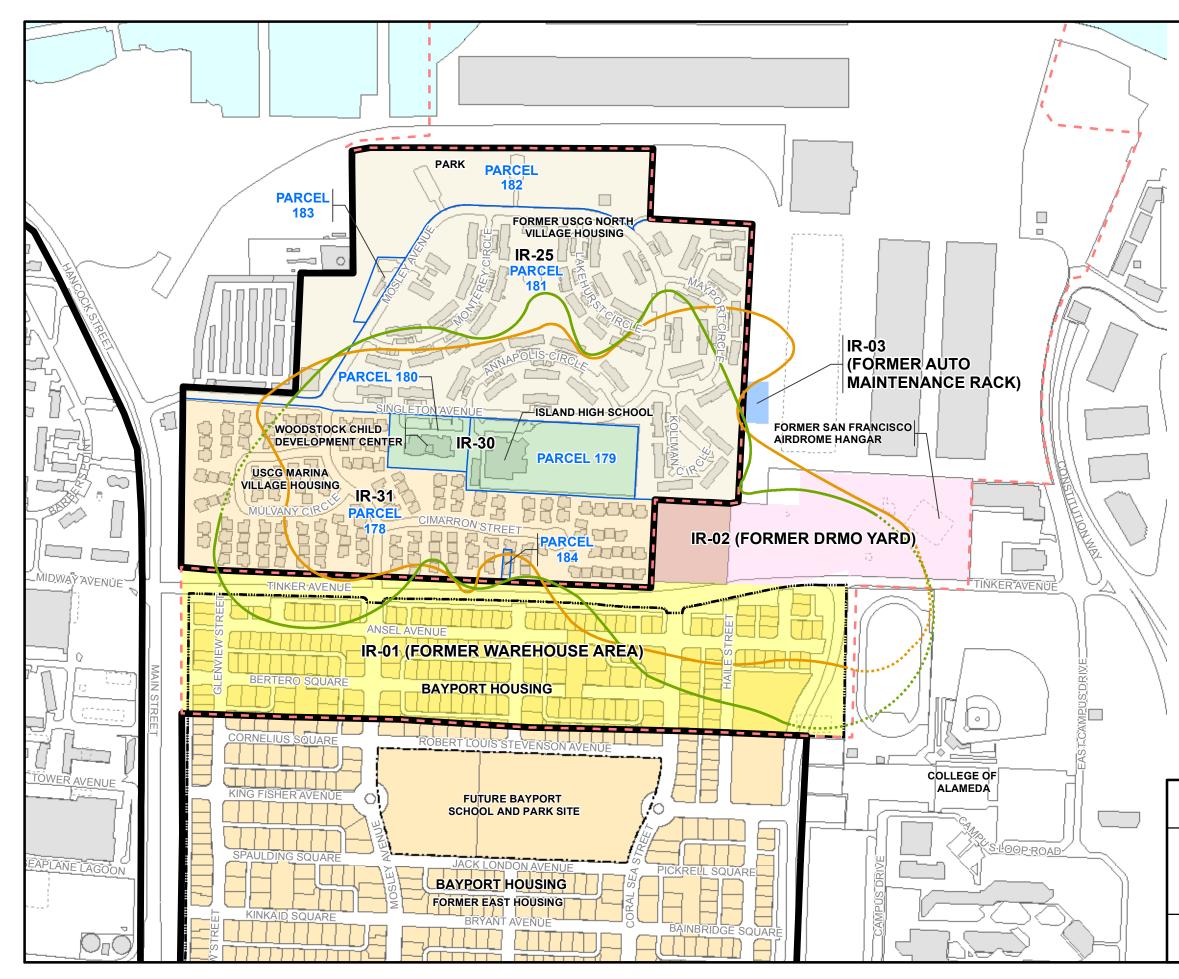


Groundwater within the first water-bearing zone (FWBZ) beneath the site is contaminated with dissolved-phase benzene and naphthalene. The sources of this contamination are believed to be primarily previous point-source releases and contaminated fill used to create Alameda Point and FISCA. Contamination entrapped in the Marsh Crust may be contributing to the concentrations of contaminants observed in groundwater. A description of the Marsh Crust is in Section 2.1. Groundwater is not currently used for drinking water, and water service is provided by the East Bay Municipal Utility District from a separate source.

Figure 1-3 denotes parcels and key features at the site. The benzene and naphthalene plume boundaries on Figure 1-3 are for the combined upper and lower water-bearing zones as described in Section 5.0, and are based on available well and HydroPunch[®] data through May 2006. These plume boundaries may be updated in the remedial design and other pertinent documents as additional data are collected.

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Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007



ROAD SENZENE GROUNDWATER PLUME BOUNDARY, 1 µg/L DASHED WHERE INFERRED (DATA THROUGH MAY 2006) NAPHTHALENE GROUNDWATER PLUME BOUNDARY, 100 µg/L. DASHED WHERE INFERRED BOUNDARY, 100 µg/L. DASHED WHERE INFERRED ALAMEDA POINT BOUNDARY FISCA BOUNDARY IR-25 (OU-5) IR-30 (OU-5) IR-31 (OU-5) IR-31 (OU-5) IR-31 (FISCA) IR-02 (FISCA) IR-03 (FISCA) IR-04 (FISCA) IR-05 (FISCA) IR-06 (FISCA) IR-07 (FISCA) IR-07 (FISCA)	LEGEND						
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FIGURE 1-3							
OU-5/IR-02 PARCEL DELINEATION AND SITE FEATURES							
ALAMEDA, CALIFORNIA REVISION: 0 AUTHOR: RKH DCN: ECSD-2201-0011-0001 FILE NUMBER: 071703L1939.mxd							

2.0 SITE HISTORY AND RESPONSE ACTIVITIES

This section summarizes the site history, key investigation activities, and removal actions conducted at OU-5/IR-02.

2.1 SITE HISTORY

Alameda Point and FISCA histories are described below.

2.1.1 Alameda Point

Alameda Point is located on the western tip of Alameda Island, which is on the eastern side of San Francisco Bay. Most of the northern portions of Alameda Island were covered by the waters and tidal lands of San Francisco Bay. To create Alameda Point, fill material was dredged from San Francisco Bay and the Oakland Inner Harbor. The fill used to create OU-5 is believed to contain contaminants from the original dredge materials (IT et al., 2002).

In the late 1800s, the nearest land to OU-5 consisted of the "Alameda Mole," a railroad embankment that ran through marshland and intertidal areas. From the late 1800s until the 1920s, two manufactured gas plants and an oil refinery (Pacific Coast Oil Works), an asphalt pipe manufacturing plant, a soap company, a carriage factory, and other manufacturing businesses were located near the present-day OU-5 (Willard, 1988). These facilities may have discharged petroleum products and other wastes, which were deposited along the sides of tidal channels and on the surface of marshlands near OU-5. As the marshlands and intertidal areas were filled in, the discharged petroleum products became entrapped in the subsurface, creating what is now referred to as the Marsh Crust. The Marsh Crust layer consists of entrapped organic matter with medium- to heavy-weight petroleum hydrocarbons, situated at approximately 18 to 20 feet below ground surface (bgs) across Alameda Point and FISCA (Neptune and Company, Inc. [Neptune] et al., 2001; PRC Environmental Management, Inc. [PRC] and Versar, Inc. [Versar], 1996). According to historical photographs and records, fill material was in place within the OU-5 area by 1930.

The U.S. Army acquired Alameda Point from the city of Alameda in 1930. The DON later acquired the land from the U.S. Army in 1936, and built Alameda Point to support the DON's operations in Europe before World War II. The base was operated as an active naval facility from 1940 to 1997. During the history of NAS Alameda, it housed approximately 60 military tenant commands for a combined military/civilian workforce of over 18,000 personnel.

The OU-5 property, located east of Main Street, was acquired later than the Alameda Point property west of Main Street. OU-5 property was acquired in various transactions between 1951 and 1968 for purposes of housing and storage. Descriptions of existing site usage are presented in Section 1.3.

Sites 30 and 31 have always been part of Alameda Point. Previously, the Sites 30 and 31 area was called Alameda Facility and was used by various Alameda Point Squadrons.

Alameda Point was closed in April 1997, under the Base Realignment and Closure (BRAC) Act. Alameda Point was designated as a National Priority List (NPL) site in July 1999 (U.S. Environmental Protection Agency [EPA], 1999). The listing of Alameda Point on the NPL invokes the applicable requirements of the NCP. The DON and EPA negotiated and signed a FFA in 2001 and DTSC and the Water Board signed it in 2005.

2.1.2 FISCA

From approximately 1900 to 1936, fill material obtained from unknown sources was used to create FISCA. Based on the history of Alameda Point OU-5, it is likely that the source of the fill material for FISCA was dredge spoils from the surrounding San Francisco Bay and the Oakland Inner Harbor.

In the mid-1920s, a commercial airport known as the San Francisco Bay Airdrome was constructed in what is now the southern portion of FISCA. The airdrome consisted of a 2,500-foot runway, a passenger terminal, and an aircraft maintenance hangar. Maintenance of aircraft would likely have involved the use and storage of hazardous materials and the generation of associated wastes in the form of solvents, paints, and petroleum-based products such as aircraft fuel and lubricating oil. By 1932, the airdrome reached its operational peak, serving approximately 11,000 customers per month. Wartime activities at the nearby NAS Alameda caused air traffic conflicts and, in 1941, the airdrome was closed (PRC and Versar, 1996). Between 1946 and 1966, the U.S. government purchased the property that is now FISCA.

The property comprising FISCA was assigned to the NAS Alameda in 1951. In 1980, FISCA was transferred to the Naval Supply Center (NSC) Oakland. FISCA, in conjunction with the NSC Oakland, served as the main supply facility supporting the Department of Defense (DoD) operation of military fleets and shore activities in the Pacific Basin. The facility was closed in September 1998 (Tetra Tech EMI, Inc. [TtEMI], 2000a).

FISCA Site IR-01 is a former warehouse area located on the south side of FISCA. FISCA Site IR-02 was historically used as a screening lot and scrap yard. The western portion of FISCA IR-02 was used as a screening lot, where equipment was stored temporarily and sorted for resale or

disposal. The eastern portion of FISCA IR-02 was used as a scrap yard, where discarded autos, stockpiled scrap metal, and surplus equipment were temporarily stored. FISCA Site IR-03 is located on the west side of FISCA. It formerly consisted of an automotive drive-up maintenance rack over an asphalt-paved area.

In 1996, FISCA was designated for closure under the Base Realignment and Closure (BRAC) Act of 1990. It was formally closed in September 1998. FISCA was transferred under an early transfer conveyance to the City of Alameda in June 2000 and following that conveyance the DON has continued to investigate and remediate FISCA sites under a revised FFSRA entered into with DTSC.

A Remedial Action Plan (RAP)/ROD to address soil contamination within IR-02 was completed in 2001 (TtEMI, 2001). The RAP/ROD addressed the selected remedy for IR-02 soil, which was contaminated with polychlorinated biphenyls (PCBs) and cadmium.

2.2 INVESTIGATION ACTIVITIES

The DON began investigations of contaminated sites in 1982 under the auspices of the DON Assessment and Control of Installation Pollutants (NACIP) program. The DON's procedures and priorities for conducting environmental investigations and cleanups have evolved, partly in response to events such as the closure of NAS Alameda in April 1997 and FISCA in September 1998, under the BRAC Act, and the designation of Alameda Point as a NPL site in July 1999. When NAS Alameda and FISCA were listed for closure, responsibility for the environmental cleanup program at Alameda Point passed to the BRAC Cleanup Team (BCT). At both Alameda Point and FISCA, the BCT consists of representatives from the DON, EPA, Water Board, and DTSC. The listing of Alameda Point on the NPL requires EPA concurrence prior to the final classification of any property as uncontaminated. The remedial investigation for OU-5/IR-02 groundwater as well as this ROD were conducted under the Alameda Naval Air Station FFA.

No enforcement activities have occurred in association with OU-5 or IR-02. Environmental investigation and remedial activities associated with OU-5 and IR-02 are implemented under the DON's installation-wide environmental program called the IR Program. The purpose of this program is to identify, investigate, assess, characterize, and cost-effectively clean up or control releases of hazardous substances to reduce the risk to human health and the environment. The program is administered in accordance with the following environmental laws:

- CERCLA, as amended by SARA, and the Community Environmental Response Facilitation Act (CERFA)
- Resource Conservation and Recovery Act (RCRA)

CERCLA generally applies to inactive sites where a hazardous substance is known or suspected to have been released to the environment. RCRA generally applies to active solid and hazardous waste management facilities. RCRA may also apply to past solid waste management units (SWMUs) and/or areas of concern that are located on past hazardous waste management facilities. CERCLA and RCRA address the investigation and cleanup of contaminated property through slightly different, but functionally equivalent processes; therefore, regulatory authorities normally require the application of only one of the processes, when both CERCLA and RCRA apply to a single site. Historically a number of investigations have been conducted at both Alameda Point OU-5 and FISCA, particularly Site IR-02. 2 Key investigations are summarized in Table 2-1. Additional information on CERCLA, RCRA, and EBS investigations, and the USCG Residential Risk Evaluation follows.

2.2.1 CERCLA Investigation Activities

Final Remedial Investigation, Fleet and Industrial Supply Center Oakland, Alameda Annex (PRC and Versar, 1996): the report provided characterization information for FISCA, including details on the nature and extent of contamination, previous risk assessment results, and detailed hydrogeologic data including pumping tests.

Final Feasibility Study for Soil at SWMU 1 (TtEMI, 1999a): This report evaluated alternatives for addressing shallow soil contaminated with PCBs and cadmium at SWMU 1 (IR-02). A *Remedial Action Plan/Record of Decision for IR-02* was prepared for excavation and off-site disposal of the impacted soil.

Final OU-5 Remedial Investigation, Alameda Point (IT et al., 2002): The Final Remedial Investigation (RI) Report provided information from groundwater and soil gas sampling events conducted in 2001, which was designed to further characterize both Alameda Point Site 25 (OU-5) and FISCA IR-02. The Final RI Report also contained a human health risk assessment (HHRA) based on the results of the sampling and analysis program. The Final RI included detailed information on the nature and extent of groundwater contamination; specifically, vertical stratification of benzene contamination. As part of the RI, 42 soil gas samples were collected at 32 locations and analyzed from depths of approximately 2 feet and 5 feet bgs. Detected concentrations of benzene were low, with a maximum detection of 20 micrograms per cubic meter ($\mu g/m^3$) at 2 feet bgs and 15 $\mu g/m^3$ at 5 feet bgs. The highest naphthalene detections were 54 $\mu g/m^3$ at 2 feet bgs and 180 $\mu g/m^3$ at 5 feet bgs. Methyl tertiary-butyl ether (MTBE) was detected in various soil gas samples, at concentrations ranging from 6.6 $\mu g/m^3$ (2 feet bgs) to a maximum of 170 $\mu g/m^3$ (5 feet bgs). MTBE was detected in approximately 65 percent of soil gas samples and appeared to be widespread in soil gas. The maximum concentration was located in the scrap yard area of IR-02. Soil gas samples collected during the RI were co-located with

TABLE 2-1

SUMMARY OF REMOVAL ACTIONS, REMEDIAL ACTIONS, AND INVESTIGATIVE ACTIVITIES

Date	Investigation/Activity	Objective	Summary of Findings
1988	Preliminary Assessment Report, Naval Supply Center, Alameda Annex and Facility	Identify sites that posed risks to human health or the environment and to identify areas where hazardous materials were stored, transferred, processed, and disposed.	VOCs identified in groundwater (NEESA, 1988).
2001	Environmental Baseline Survey, Zone 16: Housing Zone, Parcels 178-184	Parcel by parcel inventory of property to identify known or suspected releases associated with previous activities.	Between 1994 and 1995, soil, soil gas and groundwater samples were collected as part of the EBS for the Site 25 parcels. VOCs were detected in soil gas, soil, and groundwater samples. Additional soil and groundwater sampling was recommended (IT, 2001b-j).
2002	OU-5 Remedial Investigation	Characterize the nature and extent of contamination.	Potential sources of groundwater contamination were identified. Vertical stratification of benzene in groundwater was also indicated (IT et al., 2002).
2001, 2002	TCRA for USCG North Housing and Estuary Park in Site 25	Address health risk from PAH-impacted soils by removal of upper 2 feet of soil in areas with highest PAH concentrations.	Soil was excavated in selected areas without hardscape to a depth of 2 feet below surface, orange plastic fencing was placed, and the soil was replaced with clean fill. A total of 38 trees were removed (FWENC, 2002).
1996, 1998	Two Removal Actions at IR-02	(1) address lead and PCBs in surface soils; and (2) address PCBs in subsurface soils near a sump.	(1) excavated 80 cy of PCB-impacted and 245 cy lead-impacted surface soils; and (2) excavated 84 cy PCB-impacted soils near the sump.
2001	Remedial Action for IR- 02	Removal and off-site disposal of shallow soil contaminated with PCBs and cadmium to residential standards on the western one-third of the site, and to industrial standards on the eastern portion of the site.	Approximately 16,000 tons of soil was excavated to depths ranging from 6 inches to 2 feet and disposed off-site. Results of confirmation samples from excavations were below cleanup criteria (TtEMI, 2001a).

TABLE 2-1

SUMMARY OF REMOVAL ACTIONS, REMEDIAL ACTIONS, AND INVESTIGATIVE ACTIVITIES

Date	Investigation/Activity	Objective	Summary of Findings
2004	Groundwater RI/FS, Site 25/IR-02	Perform HHRA, identify ARARs, develop and evaluate remedial alternatives.	HHRA indicated potential unacceptable risk from hypothetical groundwater ingestion pathway. Alternative analysis indicated Alternative 4 was most favorable (ERRG, 2004).
2004	TCRA at Site 30	Reduce exposure to shallow soils at school and child center areas.	Excavated 5 foot by 5 foot area and installed cover materials (pavement, synthetic turf, liners) in uncovered areas (Bechtel Environmental, Incorporated, 2005).
2004	Site 30 Soil Remedial Investigation	Evaluate soil and verify that contamination in the groundwater beneath IR Site 30 is consistent with the OU-5/IR-02 plume.	Verified that contamination in the groundwater beneath IR Site 30 was consistent with the OU-5/IR- 02 groundwater plume (Bechtel Environmental, Incorporated, 2005).
2005	Site 31 Soil Remedial Investigation	Evaluate soil and evaluate if groundwater beneath IR Site 31 has characteristics consistent with the known contaminants of the OU-5/IR-02 groundwater plume; or if the data indicate a site-specific release has occurred and contributed unique contaminants to groundwater which are related specifically to previous IR Site 31 activities.	Verified groundwater beneath IR Site 31 had characteristics consistent with the known contaminants of the OU-5/IR-02 groundwater plume (CDM, 2007).
2002-2007	Basewide Groundwater Monitoring	Conducted to (1) monitor the status of contaminant plumes in groundwater, (2) determine the potential for natural degradation, (3) determine the groundwater flow direction and gradients, and (4) identify locations where additional wells are needed and locations where existing wells can be abandoned.	Select wells were identified for groundwater monitoring (ITSI, 2006).

Abbreviations and Acronyms:

ARAR – Applicable or Relevant and Appropriate Requirements CDM – Camp, Dresser, and McGee, Inc.

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TABLE 2-1

SUMMARY OF REMOVAL ACTIONS, REMEDIAL ACTIONS, AND INVESTIGATIVE ACTIVITIES

cy – cubic yard

ERRG – Engineering/Remediation Resources Group, Inc. FWENC – Foster Wheeler Environmental Corporation HHRA – human health risk assessment IR – Installation Restoration IT – International Technology Corporation ITSI – Innovative Technical Solutions, Incorporated NEESA – Naval Energy and Environmental Support Center OU – Operable Unit PAH – polynuclear aromatic hydrocarbon PCB – polychlorinated biphenyl TCRA – Time-Critical Removal Action TtEMI – Tetra Tech EM, Incorporated USCG – United States Coast Guard VOC – volatile organic compound

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Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007 groundwater samples to provide an indication of whether VOCs in groundwater were volatilizing into soil gas. In general, there appeared to be little correlation between benzene groundwater contamination and benzene soil gas detections (as was seen in previous soil gas investigations), indicating that volatilization of dissolved-phase benzene was not occurring. There also appeared to be more detections of MTBE in soil gas than in groundwater, indicating that MTBE contamination at the site may be due more substantially to surface discharges than groundwater volatilization.

Final Groundwater Remedial Investigation/ Feasibility Study, Alameda Point Site 25/Alameda Annex IR-02 (ERRG, 2004): the document summarizes the activities conducted at the site, now referred to as OU-5/IR-02. An HHRA was conducted and documented to determine pathways of contamination exposure and receptors at risk. Risks were quantified and used to determine that a response action for groundwater was required. Six alternatives were introduced and evaluated. The *Proposed Plan for Operable Unit 5/IR-02 Groundwater, Former NAS Alameda and Alameda Annex* (DON, 2006) documented the DON's preferred alternative.

2.2.2 RCRA Investigation Activities

On July 24, 1993, DTSC issued to DON for Alameda Point a Hazardous Waste Facility Permit, Number CA 2170 023 236, ("Alameda RCRA Permit") which expired on July 24, 2003. Alameda Point includes OU-5. There were no Solid Waste Management Units (SWMUs) or Areas of Concern (AOCs) identified within the area of OU-5 in the Alameda RCRA Permit or any subsequent corrective action requirements stemming from the Alameda RCRA Permit.

On July 31, 1993, DTSC issued to DON a Hazardous Waste Facility Permit for FISCA ("FISCA RCRA Permit"), Number CA 1170090012, which expired on July 31, 2003. The FISCA RCRA Permit identified one Hazardous Waste Storage Facility (Building 5), four Solid Waste Management Units (SWMUs) and eight Areas of Concern (AOCs). The area known as the Scrap Yard and Screening Lot was located within the current IR-02 site and was listed as SWMU No. 1. The DON obtained clean closure determination for Building 5 from DTSC in 1999 leaving only the resolution of any corrective actions stemming from the FISCA RCRA Permit. The new FFSRA signed in 2000 addressed corrective actions and a series of three letters from 2002 to 2004 further clarified the process for final resolution of RCRA corrective action issues (DON, 2002a; DTSC, 2003; DTSC, 2004). The selected remedy in this ROD will obviate the need for and satisfy the corrective action requirements of RCRA or otherwise applicable State hazardous waste or water quality protection laws.

2.2.3 EBS Investigation Activities

As mandated by BRAC, the DON conducted a series of basewide investigations. These investigations were called the EBS. The objective of the EBS was to inventory the property, parcel by parcel, and identify known or suspected releases associated with historical or recent uses. The EBS identified no RCRA or petroleum activities in the OU-5 area.

Environmental Baseline Survey, Data Evaluation Summaries – Final – Volumes I-XIV, NAS Alameda, California (IT, 2001a-k): Between 1994 and 1995, soil, soil gas and groundwater samples were collected as part of the EBS for the Site 25 parcels. Fifteen soil gas samples were collected in Parcel 181 where there is housing. Benzene was not detected above project reporting limits in any of these soil gas samples. The EBS recommended additional soil and groundwater sampling.

2.2.4 USCG Residential Risk Evaluation

Residential Risk Evaluation for U.S. Coast Guard Housing, Alameda, California (TtEMI, 2002): In 2002, the USCG used the Johnson and Ettinger model to calculate indoor air concentrations based on the Alameda Point OU-5 RI (IT et al., 2002) soil gas, HydroPunch[®], and groundwater monitoring well data. A screening risk evaluation was performed, and the estimated risk based on soil gas and HydroPunch[®] data was less than a cancer risk of 1×10^{-5} . However, because the estimated risk associated with the groundwater monitoring well data was greater than 1×10^{-5} (the screening risk level used in the risk evaluation), crawl space, indoor air, and ambient air samples were collected. The results indicated that VOC concentrations were consistent with outdoor air concentrations. Indoor air VOC concentrations were consistent with outdoor air concentrations and ambient air measurements collected by the California Air Resources Board. Therefore, it was concluded that the risks to USCG personnel residing at Alameda Point are not likely to differ from other individuals residing in the San Francisco Bay Area. As a result of the evaluation, a recommendation was made to revisit the conclusion if groundwater concentrations increased over time.

2.3 PREVIOUS REMOVAL ACTIONS

Several removal actions and one remedial action have taken place at OU-5/IR-02. The following describes the actions that have occurred.

2.3.1 Alameda Point

The DON has conducted three removal actions within OU-5. Specifically, removal actions were conducted between 2000 and 2004 within Parcels 179, 180, 181, and 182.

In October 2000, soil with elevated levels of polynuclear aromatic hydrocarbons (PAHs) was removed from the Clover Park play area at Site 25 (Parcel 181). To eliminate risk to children in the play area, soils within the play area were excavated to a depth of 4 feet and transported off site to an approved landfill. An estimated 900 cubic yards of soil were removed. A high-density polyethylene liner was placed in the bottom of the excavation and covered with clean fill from 4 feet bgs to 1.25 feet bgs and compacted to 90 percent relative compaction. Pea gravel was then placed from 1 to 1.25 feet bgs. Fall zone material was placed from 1 foot bgs to final grade by the USCG, followed by the installation of a new play structure.

A time critical removal action (TCRA) occurred in winter 2001 to spring 2002 to remove soils with elevated concentrations of PAHs to a depth of 2 feet bgs from the Site 25 USCG North Housing and Estuary Park areas (Parcels 181 and 182), resulting in a total excavation area of approximately 26 acres. The area was then backfilled with clean imported fill, topsoil, and sod. The excavated soils were disposed of at an off-site disposal facility.

In 2004 a TCRA was conducted at Site 30 (Parcels 179 and 180) in the school and daycare areas. The TCRA included installation of soil coverings such as liners or asphalt to prevent contact with the soil and limited excavation in an area where PCBs were detected.

2.3.2 FISCA

The DON has conducted two removal actions and one remedial action within IR-02. The first removal action was conducted to excavate PCB- and lead-contaminated soil located near former buildings 365 and 366. In 1996, approximately 80 cubic yards (yd³) of soil west of building 366 were removed to a cleanup level of 1 milligrams per kilogram (mg/kg). Approximately 245 yd³ of lead-contaminated soils from an area south of former building 365 were removed to a risk-based cleanup level of 324 mg/kg.

A second removal action occurred in 1998 in the south central portion of IR-02. Approximately 84 yd³ of PCB-contaminated soil were removed to a cleanup level of 1 mg/kg.

In 2001, a remedial action occurred to remove PCB and cadmium-contaminated soil from both the planned residential area (western one-third of the property) and the planned industrial area (eastern two-thirds of the property). Soil contaminated with PCBs and cadmium in excess of residential levels (1 mg/kg and 12 mg/kg, respectively), and industrial levels (10 mg/kg and 450 mg/kg, respectively) were removed from the future residential and industrial areas. The excavated soils were disposed of at an off-site disposal facility. The work was performed pursuant to the RAP/ROD which included ICs to restrict future residential development of the planned industrial portion of IR-02.

2.4 MOST RECENT DTSC ACTION FOR WESTERN ONE-THIRD OF FISCA IR-02

During September 2006, DTSC prepared and submitted for public comment a Draft Removal Action Work Plan (RAWP). Public input on the Draft RAWP was solicited at a public meeting on September 21, 2006, and the RAWP was finalized on October 3, 2006.

The RAW included the following requirements:

- An initial gas barrier membrane placed on the soil sub grade;
- A continuous gravel blanket beneath the floor slab and continuous interior footings;
- Inlet pipes to allow fresh air to enter the gravel blanket;
- Outlet pipes to collect fresh air from the inlet pipes and soil gas and direct it to the roof;
- A membrane constructed on top of the floor slab to mitigate the potential for gas movement into the living spaces;
- A concrete topping slab to protect the membrane; and
- Wind driven turbines.

Additional actions relating to the western one-third of FISCA IR-02 are presented in Section 12.5.1.2.

2.5 FUTURE REFINEMENTS OF PLUME DELINEATION

As specified in the Final RI/FS, additional data collection will be performed to support the Remedial Design (RD). In addition to supporting various aspects of the design, this groundwater sampling will provide data to further refine the plume boundary.

3.0 COMMUNITY PARTICIPATION

Community Relations Plans for Alameda Point and FISCA were developed to document interests, issues, and concerns raised by the community regarding ongoing investigation and cleanup activities and to describe a specific community relations program designed to address community issues and concerns (TtEMI, 2003). The Alameda Point initial plan was prepared in February 1989 and revised most recently in 2003. The Community Relations Plan for FISCA was revised in October 2005. The revisions incorporated the most recent assessment of community issues, concerns, and informational needs related to the ongoing environmental investigation and remediation program at Alameda Point and FISCA.

3.1 RESTORATION ADVISORY BOARD

In 1993, individuals from local communities began to play an increasingly significant role in the environmental restoration process with the establishment of the Alameda Point Restoration Advisory Board (RAB) and the FISCA RAB. Original membership in the board was solicited by the DON through newspaper notices, including business and homeowners' representatives, residents, local elected officials, and regulatory agency staff.

The RABs currently consist of members of the DON, the community, and regulatory agencies. The Alameda Point RAB meetings occur monthly and are open to the public. The meetings are held in the evenings after normal working hours on the first Thursday of each month at Building 1, Room 140, at 950 West Mall Square at Alameda Point. FISCA RAB meetings are held at the same location on a variable frequency. RAB members review and comment on technical documents.

The DON and regulators report information about OU-5/IR-02, including the availability of site documents, to the RAB members during the monthly RAB meetings. Copies of the RAB meeting minutes and documents describing environmental investigations and removal actions are available at the following Alameda Point information repository and Administrative Record file locations:

Alameda Point Information Repository 950 West Mall Square Building 1, Room 240 Alameda, California 94501	
Administrative Record Naval Facilities Engineering Command, Southwest 937 Harbor Drive, Building 1, 3 rd Floor San Diego, California 92132	

In addition, the new Alameda Public Library will maintain new DON environmental documents during review periods. This library is located at 1550 Oak Street, Alameda, California 94501. RAB meeting minutes are also available at the DON BRAC Program Management Office website at http://www.bracpmo.navy.mil.

3.2 PUBLIC MAILINGS

Public mailings, including information updates, fact sheets, and Proposed Plans, have been used to ensure a broad dissemination of information throughout the local community. Information updates announcing the OU-5/IR-02 program process have been delivered to residents living near Alameda Point and FISCA and mailed to city, state, and federal officials; agencies; local groups; and individuals identified in the Community Relations Plan since March 1990 (TtEMI, 2003). Updates and fact sheets have included information concerning the status of environmental investigations, the upcoming remedy selection process, ways the public can participate in the investigation and remediation, the history and geology of the area, and the availability of the Administrative Record for Alameda Point. Proposed Plans provide an overview of environmental investigation results (including ecological risk assessment [ERA] and HHRA results), remedial alternatives for a site or group of sites, and present the preferred alternative. The updates, fact sheets, and Proposed Plans are mailed to between 400 and 1,400 households, businesses, public officials, and agencies in an effort to reach community members. Alameda Point updates, fact sheets, and Proposed Plan related to OU-5/IR-02 are summarized in Table 3-1.

3.3 COMMUNITY PARTICIPATION FOR OU-5/IR-02

The Groundwater Remedial Investigation/Feasibility Study Alameda Point Site 25/Alameda Annex IR-02 (ERRG, 2004) was finalized in October 2004. The Proposed Plan for Operable Unit 5/IR-02 Groundwater (DON, 2006) was released to the public in March 2006 at the beginning of the public comment period to provide information and solicit public input on the DON's recommended action. These documents are available to the public at the information repository maintained at Alameda Point and at the Administrative Record file. The information repository also contains a complete index of the Administrative Record file (Appendix A), along with information about how to access the complete file at the Naval Facilities Engineering Command, Southwest in San Diego, California.

A 30-day public comment period for the OU-5/IR-02 Proposed Plan extended from March 6 through April 4, 2006. In addition, a public meeting was held on March 15, 2006. A notice of the public comment period and public meeting as published in the *Alameda Journal* and in the *Oakland Tribune* (Appendix B).

TABLE 3-1

SUMMARY OF ALAMEDA POINT FACT SHEETS, NEWSLETTERS, AND PROPOSED PLAN RELATED TO OU-5/IR-02

Reference	Title	
DON, 1990a	Fact Sheet 1: Remedial Investigation/Feasibility Study Update	
DON, 1990b	Fact Sheet 2: Remedial Investigation/Feasibility Study Update	
DON, 1991	Fact Sheet 3: Remedial Investigation/Feasibility Study Update	
DON, 1993	Fact Sheet 4: Installation Restoration Program Update	
DON, 1995	Fact Sheet 5: BRAC Cleanup Plan	
DON, 1996a	Fact Sheet 7: History and Geology	
DON, 2003	Alameda Point Focus Environmental July 2003 Newsletter	
DON, 2004	Navy's Environmental Activities at Alameda Point March 2004 Newsletter	
DON, 2005	Alameda Point Focus Environmental February 2005 Newsletter	
DON, 2006	Alameda Point Focus Environmental Fall 2005/ Winter 2006 Newsletter	
DON, 2006	Proposed Plan for Operable Unit 5/IR-02 Groundwater, Former NAS Alameda and Alameda Annex (FISCA)	
DON, 2007	Alameda Point Focus Environmental Fall 2006/ Winter 2007 Newsletter	

Abbreviations and Acronyms:

BRAC – Base Realignment and Closure DON – Department of the Navy FISCA – Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex IR – Installation Restoration NAS – Naval Air Station OU – Operable Unit This page intentionally left blank.

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At the public meeting, the BRAC Environmental Coordinator and DON Remedial Project Manager gave presentations on the conditions at OU-5/IR-02, described the selected remedy, and representatives from the DON and environmental regulatory agencies were available to answer questions. A court reporter prepared a transcript of the meeting (Appendix C). Responses to comments received during the public comment period are included in the Responsiveness Summary as part of this ROD (Appendix D).

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4.0 SCOPE AND ROLE OF OPERABLE UNIT AND RESPONSE ACTION

This ROD addresses dissolved phase benzene and naphthalene in a shallow groundwater plume that lies beneath portions of Alameda Point and FISCA, which includes the following parcels and IR sites:

- Parcels 178, 179, 180, 181, 182, 183, and 184 within IR Sites 25, 30, and 31 at Alameda Point
- IR-01, IR-02, and IR-03 at FISCA

Because the contaminants are present in groundwater across all of the parcels and IR sites mentioned above, and may have a common source, they were grouped and identified as OU-5/IR-02 in order to best facilitate the CERCLA response. The sources of this contamination are believed to be primarily previous point-source releases and contaminated fill used to create Alameda Point and FISCA. Contamination entrapped in the Marsh Crust may also be contributing to the concentrations of contaminants observed in groundwater.

This ROD addresses benzene and naphthalene in the shallow groundwater plume. If data collected during the pre-design sampling indicates that the plume boundary requires revision, it will be revised as part of the RD.

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5.0 SITE CHARACTERISTICS

This section summarizes information on the geology, hydrogeology, and the chemicals that are present in the groundwater at OU-5/IR-02. A complete discussion of sampling locations and methodologies, chemicals detected at each site, nature and extent of contamination, fate and transport, and evaluation of human and ecological risks is presented in the *Final Groundwater Remedial Investigation/Feasibility Study Report for Alameda Point Site 25 and Alameda Annex IR-02* (ERRG, 2004). Additional site description is presented in Section 1.3.

5.1 GEOLOGY

The site is located along the eastern San Francisco Bay (East Bay Margin), which occupies a depression between two uplifted areas: the Berkeley Hills, located approximately 10 miles east of the site, and the Montara Mountains (and others) located to the west. The depression and uplifted areas were formed by two sub-parallel, active faults: the San Andreas Fault west of San Francisco Bay and the Hayward Fault east of San Francisco Bay. The San Andreas Fault is located approximately 12 miles west of OU-5/IR-02, and the Hayward Fault is located approximately 5 miles east of OU-5/IR-02. Hickenbottom and Muir have described the geology of the eastern San Francisco Bay (Hickenbottom and Muir, 1988). TtEMI has outlined the specific lithology present at Alameda Point (TtEMI, 2000a). The geology, as described in the *Final Determination of Beneficial Uses of Groundwater* (TtEMI, 2000a), describes two geological units within the shallow water-bearing zone: shallow fill found in the uppermost 10 to 20 feet and the underlying native sediment material that includes the Bay Mud and Merritt Sand Formation.

Surface and near-surface soil at OU-5/IR-02 consists of artificial fill placed during the historical filling of the tidal marshlands, which occurred from approximately 1900 to 1930. The fill is present in the northern portion of OU-5/IR-02 from land surface to approximately 10 feet bgs and in the southern portion from land surface to approximately 20 feet bgs. The site was formerly marshland and San Francisco Bay intertidal area (the northern portion of the site previously contained an outcropping of land). Affected groundwater is located primarily within the artificial fill. No archaeological or historical resources are associated with the artificial fill (ERRG, 2004).

Fill material at the site is a heterogeneous, laterally discontinuous mixture of poorly graded, fineto medium-grained sand, clay, and silt mixed with some construction debris and organic material. The artificial fill materials are believed to be dredged spoils from the tidal flats in the surrounding San Francisco Bay and the Oakland Inner Harbor. Industrial waste is also believed to be a potential source of the fill material. The thickness of the fill is probably most influenced by the presence of historical tidal channels that once transected the tidal flats. A layer with high organic content, called the "Marsh Crust," typically encountered between 18 and 20 feet bgs (Neptune et al., 2002) marks the top of the Bay Mud throughout the site. The Marsh Crust is a layer of contaminated sediment believed to be formed by the discharge of petroleum waste from two manufactured gas plants and an oil refinery. This waste migrated over much of the surface of the surrounding marshlands and was deposited through tidal actions under what would later become FISCA and the eastern portion of Alameda Point.

The Bay Mud layer underlying the site fill material ranges in thickness from 25 to 100 feet (PRC and Versar, 1996) and consists of recent sediment deposited in an estuarine environment. The Bay Mud is thickest at the west side of the site, and thins to approximately 25 feet at the northeastern and southeastern regions of the site (PRC, 1993). The Bay Mud generally consists of gray to black, medium- to high-plasticity silty clay with laterally discontinuous, poorly graded silty and clayey sand layers. While thin lenses of fine sand have also been observed, no extensive sand layers have been observed within the Bay Mud.

The Merritt Sand Formation underlies the Bay Mud across the site. The Merritt Sand Formation is composed of brown, fine- to medium-grained, poorly graded sand. The sand formation is generally laterally continuous throughout the site, except where it is bisected by a major paleochannel that is filled with thicker deposits of the Bay Mud. The Merritt Sand Formation is found below the Bay Mud at depths as great as 135 feet bgs across Alameda Point. However, the thickness of the formation is unknown beneath OU-5/IR-02.

5.2 HYDROGEOLOGY

Contamination is located in the fill material above the Bay Mud, which constitutes the shallow, unconfined FWBZ beneath the site. As discussed in Section 1.3, the FWBZ contains the shallow groundwater, which is the focus of this ROD. The Bay Mud under the FWBZ forms an aquitard between the shallow groundwater and the Merritt Sand, which composes much of the deeper, confined aquifer beneath the facility (PRC and Versar, 1996).

Two primary regional aquifers have been identified beneath the site: the Merritt Sand aquifer, which is referred to as the second water-bearing zone (SWBZ); and the deeper Alameda aquifer, which is referred to as the Alameda Formation water-bearing zone (AFWBZ). The groundwater management subarea, containing the Merritt Sand and the Alameda aquifer, is referred to as the Oakland Upland and Alluvial Plain Management Subarea (PRC and Versar, 1996).

The saturated thickness of the FWBZ averages approximately 10 feet beneath the site, and the depth to groundwater ranges from approximately 2 to 10 feet bgs (IT et al., 2002; Shaw Environmental, Inc. [Shaw], 2004b; 2004c). The elevation of the water table in the FWBZ ranges from 3 to 8 feet above mean sea level (Shaw, 2004b and 2004c).

Ongoing groundwater monitoring programs continue to record the depth to groundwater, as well as other groundwater characteristics. Groundwater flow direction in the FWBZ is highly variable beneath the site. Groundwater generally has been reported to flow in a north to northwest direction, toward the Oakland Inner Harbor (PRC and Versar, 1996; TtEMI, 1999b; IT et al., 2002). However, groundwater contour maps indicate a high level of local variability. The local variation is likely due, primarily to the variations in permeability of the shallow aquifer fill material (ERRG, 2004).

Two tidal influence studies were conducted for the FISCA site (PRC, 1993; PRC and Versar, 1996). The results of these studies indicate that maximum groundwater fluctuations in the measured wells ranged from 0.059 to 1.1 feet, while the maximum tidal fluctuations in the Oakland Inner Harbor ranged from 6.1 to 6.9 feet. The greatest fluctuations were from wells that were screened in higher-permeability materials (PRC and Versar, 1996). Localized, higher-permeability areas appear to exist outside identified historic tidal channels (PRC and Versar, 1996). Shallow groundwater level fluctuations during the daily tidal cycle are expected because the FWBZ is hydraulically connected to the Oakland Inner Harbor. The groundwater level fluctuations reflect a temporary shift in the groundwater flow direction that changes direction during the daily tidal cycle, but does not affect the general groundwater flow direction north to northwest toward the Oakland Inner Harbor. In addition, the tidal influence exhibited by shallow monitoring wells reflects the hydraulic response based on the changing tide and does not represent active mixing of the groundwater underlying the site with the Oakland Inner Harbor (ERRG, 2004).

The Bay Sediment Unit, a layer of silts and clays, acts as a confining or semiconfining layer separating the FWBZ from the SWBZ. Recharge of the SWBZ is mainly by lateral flow from upgradient areas on Alameda Island. The SWBZ is believed to discharge through lateral groundwater flow to the San Francisco Bay, Oakland Inner Harbor, and Seaplane Lagoon. Gradients tend to be steeper at low tide, and reverse at high tide in some areas (IT et al., 2002).

The top of the AFWBZ at the site is approximately 100 feet bgs, ranging in thickness from 200 to 800 feet. The San Antonio aquitard, which includes the Yerba Buena Mud and a thin, upper clay-rich portion of the Alameda Formation, separates the AFWBZ from the SWBZ. Little is known about the hydraulic properties of the AFWBZ.

There are no drinking water wells installed within the OU-5/IR-2 plume area. Water service is provided by the East Bay Municipal Utility District (EBMUD) from a separate source outside of the area. Portions of the groundwater within the plume underlying these sites are designated a potential drinking water source in the San Francisco Bay Basin Water Quality Control Plan (Basin Plan). Because of saltwater intrusion and naturally high total dissolved solids, it is unlikely that the shallow groundwater beneath the OU-5/IR-02 area would be used as a potential source of drinking water. In June 1999, the Water Board issued a letter that stated that the groundwater at FISCA meets the exemption criteria in the State Water Resources Control Board (SWRCB) Resolution No. 88-63 and Water Board Resolution No. 89-39 and it is unlikely that the shallow groundwater would be used as a potential source of drinking water.

5.3 NATURE AND EXTENT OF CONTAMINATION IN GROUNDWATER

The OU-5 RI reported the following analytes had been previously detected in groundwater at OU-5 (IT et al., 2002):

- Sixteen PAHs
- Forty-eight semi-volatile organic compounds (SVOCs), not including PAHs
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX)
- MTBE
- Twenty-nine volatile organic compounds (VOCs), not including BTEX and MTBE
- Three categories of total petroleum hydrocarbons (TPH)

The Base-wide Groundwater Monitoring Program (Shaw, 2004a) includes the following analytes for OU-5/IR-02:

- VOCs including oxygenated additives and naphthalene
- PAHs
- Dissolved metals
- Anions
- Sulfide
- Alkalinity
- Dissolved gases
- Ferrous iron

Benzene and naphthalene have been consistently detected above drinking water action levels (Maximum Containment Levels [MCLs] or Preliminary Remediation Goals [PRGs]). These two contaminants represent approximately 90 percent of the calculated human health risks associated with the site, primarily from the groundwater ingestion pathway. Therefore, these substances have been retained as the primary risk drivers for the site. Additional details on chemicals of potential concern (COPC) selection are presented in Section 7.0. As discussed in the RI/FS (ERRG, 2004), all analytes with a frequency of detection above 5 percent were retained as COPCs for the HHRA.

There have been isolated detections of both MTBE and 1,2-DCA above drinking water action levels; however, the available data indicate that the concentrations of MTBE and 1,2-dichloroethane (1,2-DCA) previously detected were localized and anomalous and have not been replicated during numerous subsequent sampling events. Therefore, MTBE and 1,2-DCA are not considered COPCs.

Numerous HydroPunch[®] groundwater samples were collected throughout the site to characterize the benzene and naphthalene plumes. The HydroPunch[®] groundwater samples were typically collected through a 4-foot screen interval. The screen intervals were typically installed in the upper portion of the FWBZ (less than 16 feet bgs) or the lower portion of the FWBZ (16 to 20 feet bgs). Groundwater monitoring well data from the Spring 2006 Alameda Basewide Annual Groundwater Monitoring Report (Innovative Technical Solutions, Inc. [ITSI], 2006) are also presented on the figures. The monitoring wells were typically screened from 10 to 20 feet bgs, across the upper and lower portions of the FWBZ

5.3.1 Benzene Concentration

Benzene isoconcentration contours in the upper and lower FWBZ based on previous sampling data are shown on Figures 5-1 and 5-2. Benzene contamination at the site is stratified, or vertically distributed, as well as laterally distributed. Generally, benzene concentrations have been found to increase with depth to the top of the Marsh Crust, with the highest concentrations detected in HydroPunch[®] samples collected from approximately 16 to 20 feet bgs. Soils below approximately 20 feet bgs are predominantly Bay Mud, which is present across the site at a thickness ranging from 25 to 100 feet (as discussed in Section 5.1) and serves as an effective aquitard to limit downward migration of contaminants. Because the plume boundary is not well-defined laterally in certain locations, additional data will be collected during the pre-design. Additional pre-design sampling is described in Section 5.3.3.

5.3.2 Naphthalene Concentrations

Naphthalene isoconcentration contours in the upper and lower FWBZ are shown on Figures 5-3 and 5-4, respectively. The naphthalene plume is generally co-located with the benzene plume. The extent of the naphthalene plume greater than 100 μ g/L generally lies within the extent of the 1 μ g/L benzene plume. Because the plume boundary is not well-defined in certain locations, additional data will be collected during the pre-design. Additional pre-design sampling is described in Section 5.3.3.

5.3.3 Pre-Design Sampling

Data related to the extent of the benzene and naphthalene plumes will be collected as part of the pre-design field work. The pre-design work plan includes the following activities:

- Passive soil gas survey, including in the College of Alameda area to help locate additional direct push HydroPunch[®] groundwater sample points;
- HydroPunch[®] groundwater sampling in the College of Alameda area to further evaluate the extent of the benzene and naphthalene plumes; and
- Additional HydroPunch[®] groundwater sampling and groundwater monitoring well installation to refine the remainder of the plume boundary.

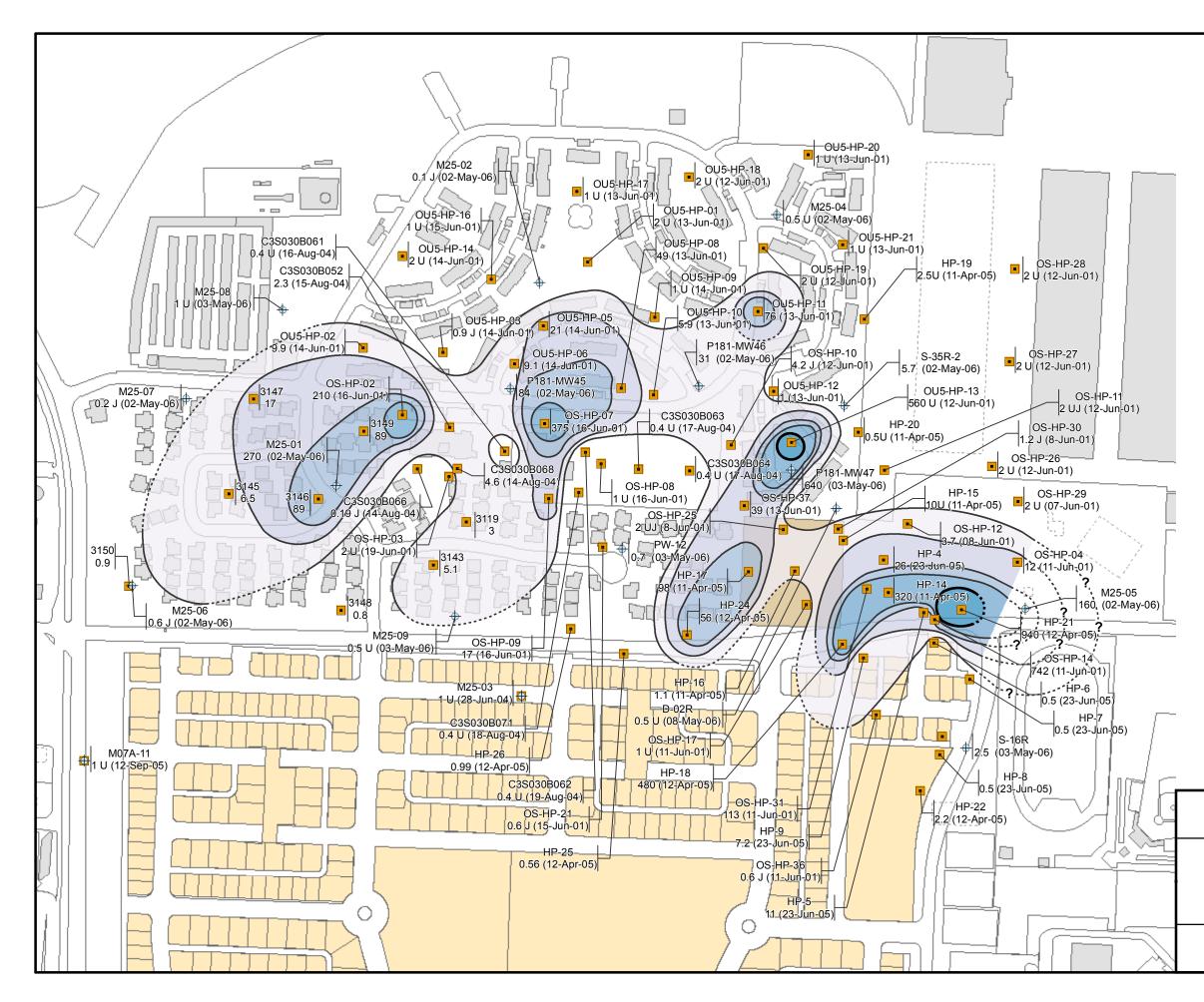
5.4 POTENTIAL CONTAMINANT SOURCES

While several previous characterization efforts have been conducted, none have conclusively determined the source(s) of groundwater contamination in the FWBZ. There are four possible sources of shallow groundwater contamination at the site:

- Contaminated fill material, which was used to fill in marshland and create the site;
- Buried inclusions of high-concentration material trapped near the Marsh Crust surface during creation of the site;
- Layers of petroleum-related contamination on the historic shoreline, marshland, and tidal channels underlying the site, referred to as the Marsh Crust; and/or
- Point-source releases such as fuel spills.

The most likely sources of groundwater contamination at the site are localized in nature. Historical DON activities may have contributed to these potential sources described above.

The term "source material" refers to contamination that would continue to leach contaminants to groundwater, potentially causing plumes to enlarge and concentrations in groundwater to increase. Contaminant migration from sources is often accelerated by the presence of subsurface



_	
÷	MONITORING WELL CONCENTRATIONS (µg/L)
	HYDROPUNCH CONCENTRATIONS (µg/L)
	ROAD
	1- 10 μg/l BENZENE DASHED WHERE INFERRED
	10 - 50 μg/L BENZENE DASHED WHERE INFERRED
	50 - 100 µg/L BENZENE DASHED WHERE INFERRED
	100 - 500 μg/L BENZENE DASHED WHERE INFERRED
	> 500 µg/L BENZENE DASHED WHERE INFERRED
	BAYPORT DEVELOPMENT
	39 - UNIT HOUSING AREA
	BUILDING
	FORMER BUILDING
NOTEO	

NOTES:

BGS - BELOW GROUND SURFACE

FWBZ - FIRST WATER-BEARING ZONE

J - ESTIMATED DATA

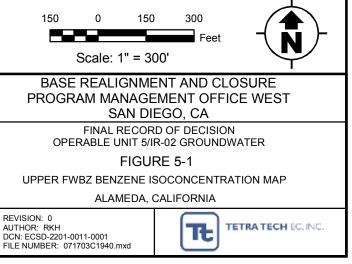
µg/L - MICROGRAMS PER LITER

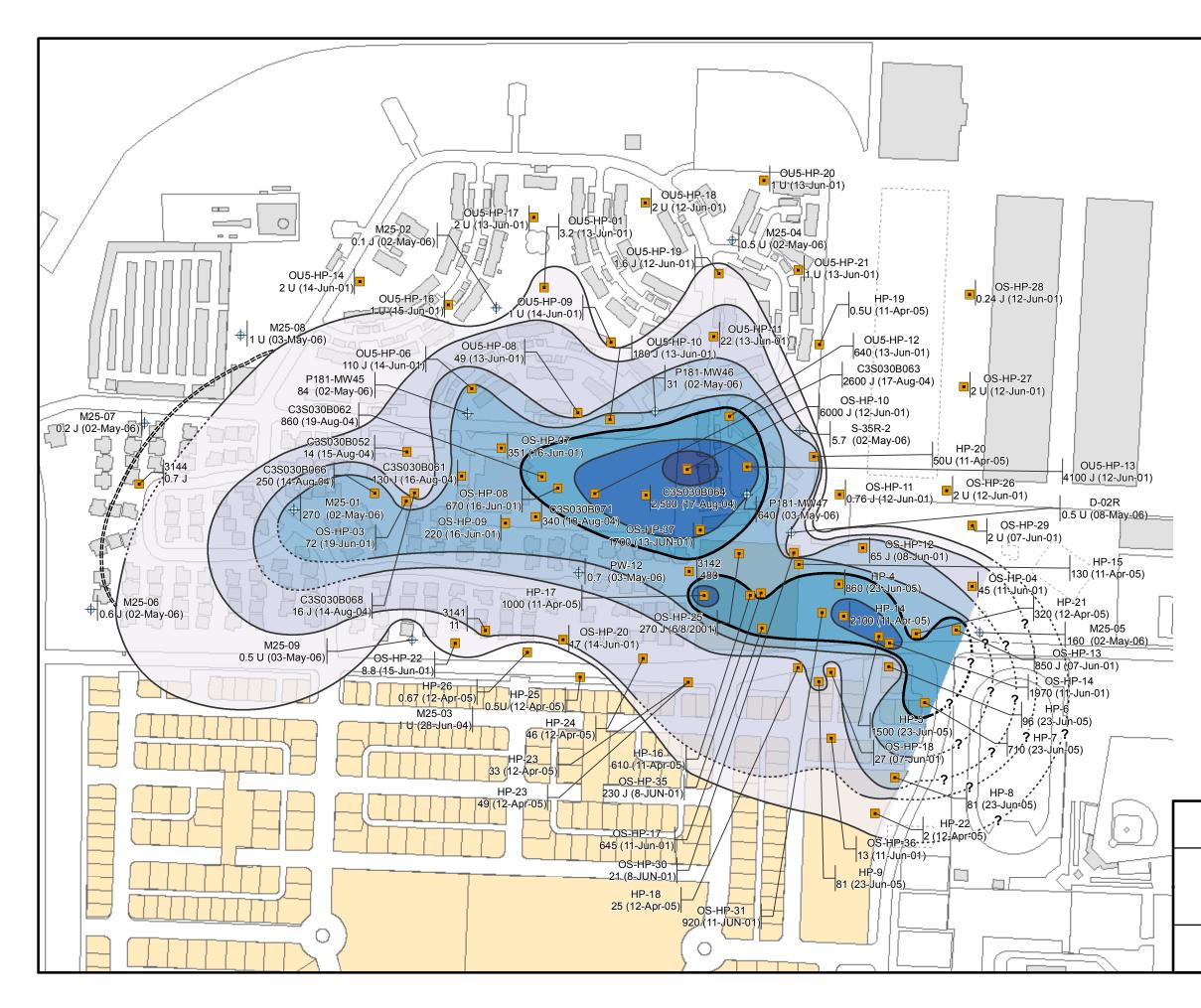
U - NOT DETECTED AT LABORATORY REPORTING LIMIT

(12-JUN-01) - DATE SAMPLED

UPPER FWBZ INCLUDES GROUNDWATER SAMPLES TYPICALLY COLLECTED FROM A 4 FOOT HYDROPUNCH SCREEN INTERVAL LOCATED BETWEEN 6 AND 16 FT BGS.

MONITORING WELLS TYPICALLY SCREENED FROM 10 - 20 FT BGS AND ARE NOT CONSIDERED REPRESENTATIVE OF THE UPPER FWBZ





MONITORING WELL CONCENTRATIONS (µg/L)			
HYDROPUNCH CONCENTRATIONS (µg/L)			
ROAD			
AREA WHERE EXTENT OF UPPER FWBZ µg/L BENZENE PLUME EXCEEDS EXTENT OF LOWER FWBZ µg/L BENZENE PLUME			
1 - 10 μg/l BENZENE DASHED WHERE INFERRED			
10 - 50 μg/l BENZENE DASHED WHERE INFERRED			
50 - 100 μg/I BENZENE DASHED WHERE INFERRED			
100 - 500 μg/l BENZENE DASHED WHERE INFERRED			
500 - 1,000 μg/l BENZENE DASHED WHERE INFERRED			
1,000 - 5,000 μg/l BENZENE DASHED WHERE INFERRED >5,000 μg/L BENZENE			
BAYPORT DEVELOPMENT 39 - UNIT HOUSE AREA			
BUILDING FORMER BUILDING			
DW GROUND SURFACE			
ST WATER-BEARING ZONE			
ΓΕΟ ΔΑΤΑ			
OGRAMS PER LITER			
TECTED AT LABORATORY REPORTING LIMIT			
(12-JUN-01) - DATE SAMPLED			
/BZ INCLUDES GROUNDWATER SAMPLES COLLECTED FROM A 4 FOOT HYDROPUNCH TERVAL LOCATED BETWEEN 16 AND 20 FT BGS			
NG WELLS TYPICALLY SCREENED FROM BGS AND ARE NOT CONSIDERED ITATIVE OF THE LOWER FWBZ			
0 150 300			
Scale: 1" = 300'			
BASE REALIGNMENT AND CLOSURE PROGRAM MANAGEMENT OFFICE WEST SAN DIEGO, CA			
FINAL RECORD OF DECISION ERABLE UNIT 5/IR-02 GROUNDWATER FIGURE 5-2			
LOWER FWBZ BENZENE ISOCONCENTRATION MAP			
ALAMEDA, CALIFORNIA			

REVISION: 0 AUTHOR: RKH DCN: ECSD-2201-0011-0001 FILE NUMBER: 071703C1941.mxd

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¢	MONITORING WELL CONCENTRATIONS (µg/L)
	HYDROPUNCH CONCENTRATIONS (µg/L)
	ROAD
	100 - 1,000 µg/l NAPHTHALENE DASHED WHERE INFERRED
	1,000 - 5,000 μg/L NAPHTHALENE DASHED WHERE INFERRED
	5,000 - 10,000 µg/L NAPHTHALENE DASHED WHERE INFERRED
	BAYPORT DEVELOPMENT
	39 - UNIT HOUSING AREA
	BUILDING
	FORMER BUILDING
NOTEO	

NOTES:

BGS - BELOW GROUND SURFACE

FWBZ - FIRST WATER-BEARING ZONE

J - ESTIMATED DATA

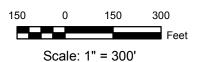
µg/L - MICROGRAMS PER LITER

U - NOT DETECTED AT LABORATORY REPORTING LIMIT

(12-JUN-01) - DATE SAMPLED

UPPER FWBZ INCLUDES GROUNDWATER SAMPLES TYPICALLY COLLECTED FROM A 4 FOOT HYDROPUNCH SCREEN INTERVAL LOCATED BETWEEN 6 AND 16 FT BGS.

MONITORING WELLS TYPICALLY SCREENED FROM 10 - 20 FT BGS AND ARE NOT CONSIDERED REPRESENTATIVE OF THE UPPER FWBZ





BASE REALIGNMENT AND CLOSURE PROGRAM MANAGEMENT OFFICE WEST SAN DIEGO, CA FINAL RECORD OF DECISION

OPERABLE UNIT 5/IR-02 GROUNDWATER

FIGURE 5-3

UPPER FWBZ NAPHTHALENE ISOCONCENTRATION MAP

ALAMEDA, CALIFORNIA





LEGEND	
+	MONITORING WELL CONCENTRATIONS (µg/L)
	HYDROPUNCH CONCENTRATIONS (µg/L)
	ROAD
	100 - 1,000 µg/l NAPHTHALENE DASHED WHERE INFERRED
	1,000 - 5,000 μg/L NAPHTHALENE DASHED WHERE INFERRED
	5,000 - 10,000 μg/L NAPHTHALENE DASHED WHERE INFERRED
	>10,000 µg/L NAPHTHALENE DASHED WHERE INFERRED
	BAYPORT DEVELOPMENT
	39 - UNIT HOUSING AREA
[]	BAYPORT SCHOOL BOUNDARY
	BUILDING
	FORMER BUILDING

NOTES:

BGS - BELOW GROUND SURFACE

FWBZ - FIRST WATER-BEARING ZONE

J - ESTIMATED DATA

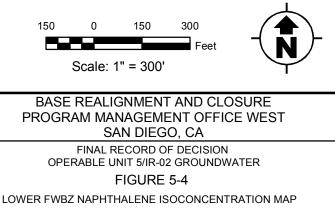
µg/L - MICROGRAMS PER LITER

U - NOT DETECTED AT LABORATORY REPORTING LIMIT

(12-JUN-01) - DATE SAMPLED

LOWER FWBZ INCLUDES GROUNDWATER SAMPLES TYPICALLY COLLECTED FROM A 4 FOOT HYDROPUNCH SCREEN INTERVAL LOCATED BETWEEN 16 AND 20 FT BGS.

MONITORING WELLS TYPICALLY SCREENED FROM 10 - 20 FT BGS AND ARE NOT CONSIDERED REPRESENTATIVE OF THE LOWER FWBZ



ALAMEDA, CALIFORNIA

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utilities that provide preferential pathways for contaminant migration. A number of subsurface utilities exist at the site; however, based on ongoing groundwater monitoring data, they do not appear to be acting as preferential pathways.

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Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007

6.0 CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES

This section discusses (1) current and reasonably anticipated future land uses and (2) current and potential groundwater and surface water uses. This information was incorporated into the development of exposure scenarios for the HHRA.

6.1 LAND USES

Under the Alameda Point General Development Plan, as amended in 2003, Chapter 9, Figure 9-2 (City of Alameda, 2003) the proposed land use for the OU-5 area includes residential and educational uses. The OU-5 area, which currently is federal property managed by DON, includes portions of three sites on Alameda Point that overlie the shallow groundwater plume. The OU-5 area consists of multiple-unit housing structures, open space park areas, a day care center and the Island High School (formerly George P. Miller Elementary School). The current site use and the planned future site use are the same.

In 2000, the City approved a Master Development Plan for the area that included the "Bayport" residential development currently under construction. The Master Development Plan provides for 437 market rate housing units, 58 moderate-income housing units, 91 low- and very low-income units, and 1.3 million square feet of office and research and development facilities. Under the Alameda Point General Development Plan, as amended in 2003 (City of Alameda, 2003) the proposed land use for FISCA Sites IR-01, IR-02, and IR-03 includes residential and commercial/industrial. IR-01 is residential (within the Bayport development), IR-02 has a western part that is residential, with the remaining commercial/industrial, and IR-03 is commercial/industrial.

FISCA was the first military property to be conveyed to the City and redeveloped. A number of restrictions on the property use were included in the deeds conveying FISCA property. Subsequently, various parties including the City, DON, and DTSC entered in covenants to permit the enforcement of the restrictions contained in the deeds. A description of the various covenants is in Section 12.5.

Residential housing construction is underway within portions of FISCA and at the East Housing Property within Alameda Point. Current and proposed OU-5 and IR-02 land uses are listed in Table 6-1. Figure 6-1 shows the proposed future land use designations.

6.2 GROUNDWATER USES

Separate groundwater beneficial use studies were conducted for both Alameda Point and FISCA. Both concluded that groundwater in the FWBZ is not likely to be used as a drinking water source. The studies evaluated groundwater in the FWBZ and SWBZ with an emphasis on the FWBZ due to shallow groundwater contamination, relevancy to human health risk calculations, and some total dissolved solids (TDS) concentrations that were below the federal criteria for potential use as drinking water. The beneficial use evaluations used two primary criteria: TDS concentrations and well yields.

Portions of the groundwater within the plume underlying OU-5/IR-02 are designated a potential drinking water source in the Basin Plan. Because of saltwater intrusion and naturally high TDS, it is unlikely that the shallow groundwater beneath the OU-5/IR-02 area would be used as a potential source of drinking water.

6.2.1 Alameda Point

In July 2000, the *Final Determination of the Beneficial Uses of Groundwater, Alameda Point* was published (TtEMI, 2000a). Based on the EPA criteria for TDS concentrations and well yield, the report classified the FWBZ as a Class II aquifer (a current or potential source of drinking water, or having other beneficial uses). Water in the SWBZ was classified as a Class III aquifer (not a potential source of drinking water, and of limited beneficial use) due to high TDS concentrations (TtEMI, 2000a).

Following beneficial use determinations, the Alameda Point BCT concurred that even though it is unlikely that the FWBZ will be used as a future drinking water source, the HHRA would evaluate the groundwater ingestion pathway.

Drinking water is currently supplied to Alameda Point by the EBMUD. No changes in current groundwater usage are anticipated, as the restrictions against groundwater usage are well defined in the institutional controls for Alameda Point. Section 12.5 details institutional controls at Alameda Point.

6.2.2 FISCA

In November 1999, a groundwater beneficial uses evaluation for FISCA was released. As in the Alameda Point investigation, groundwater beneficial use was evaluated using both federal and State criteria, and also took into consideration site-specific factors (TtEMI, 1999b). The report concluded that shallow groundwater in the FWBZ should not be designated as a potential drinking water source. The findings leading to this conclusion included high TDS concentrations in the FWBZ which exceeded both Federal and State criteria for the majority of FISCA as well

TABLE 6-1

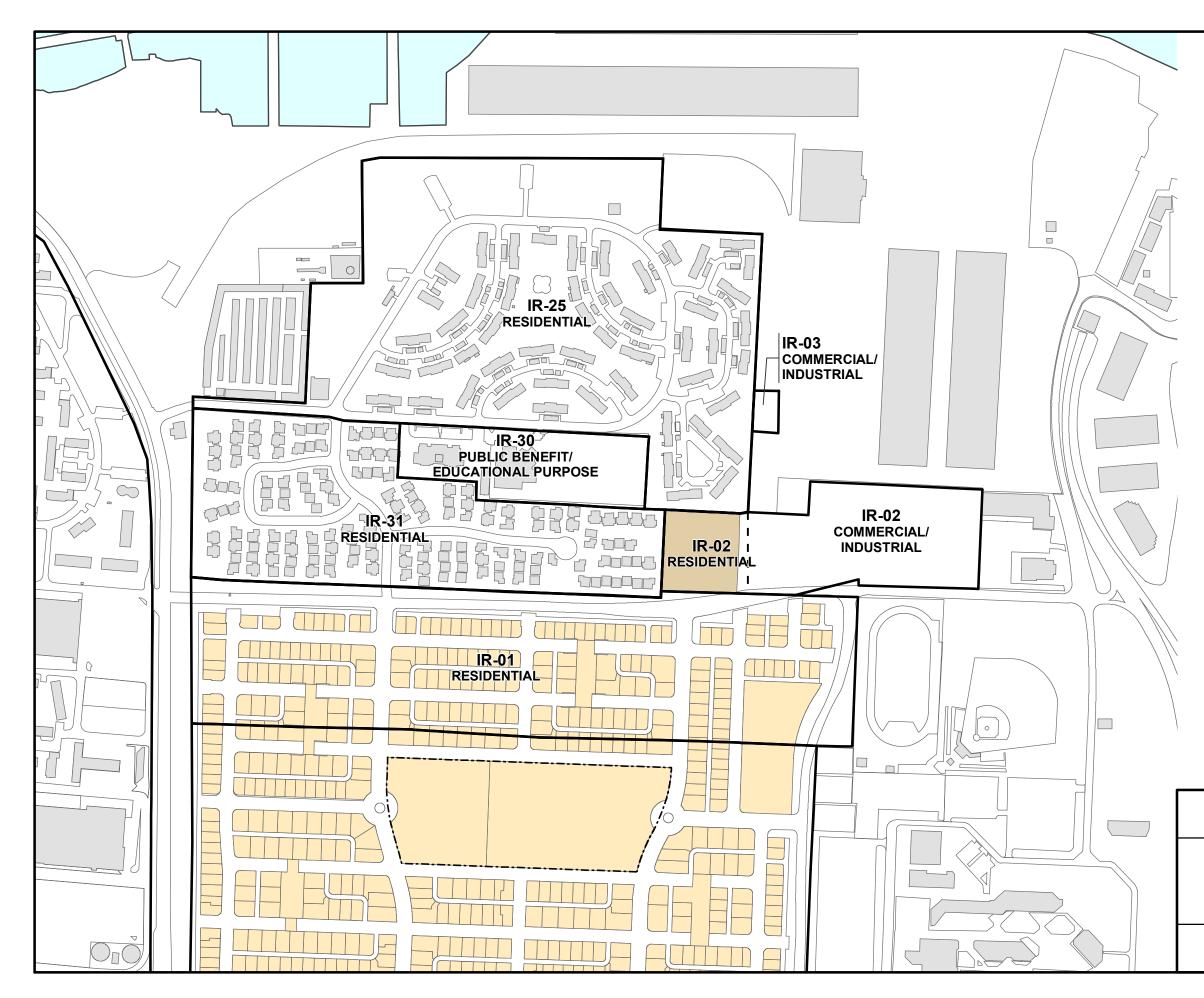
CURRENT AND PROPOSED LAND USES

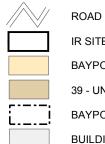
Site	Current Land Uses or Land Use Prior to Closure	Proposed Future Land Use	EBS No.
OU-5/Site 25	Residential	Residential	EBS 181, 182, 183
OU-5/Site 30	Civic/Institutional	Public Benefit (Educational Purposes)	EBS 179
OU-5/Site 31	Residential	Residential	EBS 178, 180, 184
FISCA/IR-01	Residential	Residential	
FISCA/IR-02	Residential/Industrial	Residential (western portion) and Commercial/Industrial	
FISCA/IR-03	Commercial/Industrial	Commercial/Industrial	

Abbreviations and Acronyms:

EBS – Environmental Baseline Survey FISCA – Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex IR – Installation Restoration OU – Operable Unit This page intentionally left blank.

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IR SITE BOUNDARY

BAYPORT DEVELOPMENT

39 - UNIT HOUSING AREA

BAYPORT SCHOOL BOUNDARY

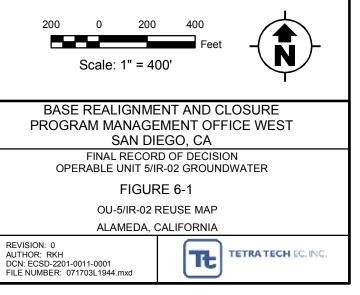
BUILDING

NOTES:

FISCA - FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND, ALAMEDA FACILITY/ALAMEDA ANNEX

IR - INSTALLATION RESTORATION (PROGRAM)

SOURCE: CITY OF ALAMEDA, 2003



as the fact that prolonged pumping of shallow groundwater is likely to result in decreased well yields.

In a letter dated June 9, 1999, The Water Board concurred that based on high TDS concentrations; the shallow groundwater beneath FISCA meets the State exemption criteria for drinking water, and it is unlikely that the shallow groundwater would be used as a source of drinking water (Regional Water Quality Control Board [RWQCB], 1999). However, the Water Board required the DON to evaluate all other potential beneficial uses of groundwater at FISCA. Subsequently, the DON evaluated agricultural, industrial, and freshwater replenishment uses. It was concluded that shallow groundwater beneath the site may have agricultural and industrial beneficial uses, but the potential is considered low because of TDS concentrations, which exceeded recommended levels for many agricultural and industrial uses. Additionally, land subsidence and saltwater intrusion might occur if shallow groundwater were pumped.

Drinking water is currently supplied to FISCA by the EBMUD. No changes in current groundwater usage are anticipated, as the restrictions against groundwater usage are well defined in the deed restrictions and land covenants established as part of the FISCA transfer. Section 12.5 details land use restrictions, covenants, and deeds at FISCA.

6.3 SURFACE WATER USES

OU-5/IR-2 does not have naturally occurring surface streams or true ponds.

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7.0 SUMMARY OF SITE RISKS

As part of the RI/FS (ERRG, 2004), an HHRA and an ERA were conducted to evaluate potential risks to human health posed by chemical substances detected in groundwater at the site. The HHRA was based on groundwater and soil gas data only. The objective of the risk assessment was to estimate the risks to human and ecological receptors from exposure to chemicals in groundwater and soil gas at the site. The risk assessment provides the basis for taking action and identifying the COPCs and exposure pathways, including the use of shallow groundwater as both a non-drinking water and a drinking water source.

The risk assessment was performed in accordance with the EPA's *Risk Assessment Guidance for Superfund, Volume I: - Human Health Evaluation Manual (Part A), Interim Final* (EPA, 1989), and DTSC's *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities* (California, State of, Department of Toxic Substances Control [DTSC], 1992).

A conceptual site model was used to support these risk assessments by identifying the potential receptors and exposure pathways associated with contaminated groundwater and existing soil gas. The detailed approach and results of the HHRA are presented in the *Final Groundwater Remedial Investigation/Feasibility Study, Alameda Point Site 25 and Alameda Annex IR-02* (ERRG, 2004). Sections 7.1 and 7.2 summarize the approach used and results for the HHRA and ERA. The HHRA provides the basis upon which it was determined that a response action was necessary for OU-5/IR-02. The carcinogenic risks as a result of groundwater use for non-drinking water purposes (irrigation, other commercial uses) were within the EPA's risk management range; however, the carcinogenic and non-carcinogenic risks as a result of ingestion of shallow groundwater exceeded EPA's risk management range. Therefore, the DON, in coordination with the regulatory agencies, made a risk management decision that remedial action is warranted.

7.1 BASELINE HHRA APPROACH

The HHRA was conducted for OU-5/IR-02 and identified COPCs in groundwater and soil gas only (ERRG, 2004). Exposure scenarios were evaluated based on all applicable exposure pathways for the site, including the use of shallow groundwater as a non-drinking and drinking water source. Carcinogenic and non-carcinogenic risks were calculated for drinking and non-drinking water usage. Under current land use restrictions, risks to residents, worker and students at the site were evaluated and determined to exceed the EPA risk management range for drinking water. Risk levels were within EPA's risk management range for all other non-ingestion pathways. Details of

the HHRA methodology are provided in the *Final Groundwater Remedial Investigation/Feasibility Study, Alameda Point Site 25 and Alameda Annex IR-02* (ERRG, 2004).

7.1.1 Identification of Chemicals of Potential Concern

The methodology used to identify COPCs and evaluate risk is consistent with the *EPA Risk* Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A), Interim Final (EPA, 1989) and Part B (EPA, 1991) and the Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazard Waste Sites and Permitted Facilities (Cal/EPA, 1996).

In order to ensure that a risk assessment focuses on those substances that contribute the greatest to the overall risk, EPA allows for screening steps to identify the COPCs for quantitative evaluation in the Tier 2 risk assessment. Tier 2 standards use site-specific information within risk assessment calculations. In general, chemicals exhibiting a low frequency of detection (FOD) do not contribute significantly to risk estimates. EPA suggests that chemicals with a FOD less than or equal to five percent may be considered for elimination (EPA, 1989). The exception for the risk assessment conducted for OU-5/IR-02 was n-butylbenzene, because of the relative magnitude of one of the groundwater n-butylbenzene results. Therefore, n-butylbenzene was the only analyte with a detection frequency less than five percent that retained a COPC rating for the risk assessment.

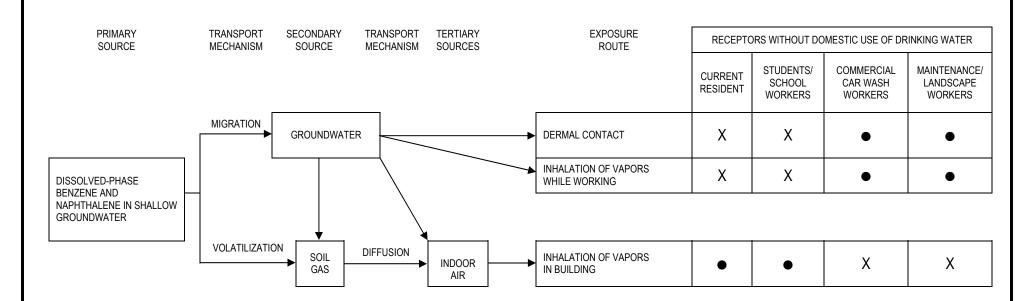
7.1.2 Exposure Assessment

A conceptual site model is presented on Figure 7-1 and was used to support the risk assessment by identifying potential receptors and exposure pathways. The exposure scenarios with the greatest potential for completion are the following:

- On-site residents, students, and school workers theoretically exposed to vapor intrusion in indoor air;
- Workers theoretically exposed to contamination in groundwater during the operation of a commercial car wash; and
- Maintenance/landscape workers theoretically exposed to contaminants in groundwater through irrigation activities.

Although groundwater at the site is currently not used as a drinking water source and any future development at the site is expected to include connecting the developments to the existing municipal water supply, direct exposure to groundwater as a drinking water source was also

FIGURE 7-1



CONCEPTUAL SITE MODEL

LEGEND

POTENTIALLY COMPLETE EXPOSURE PATHWAY

X INCOMPLETE EXPOSURE PATHWAY

Final Record of Decision OU-5/IR-02 Groundwater Former NAS Alameda and Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex DCN: ECSD-2201-0011-0001 CTO No. 0011, 08/07 considered based on input from stakeholders. Direct exposure pathways to groundwater as a drinking water source are the following:

- Ingestion of water by commercial workers and residential receptors
- Inhalation of contaminants from water by residential receptors resulting from household use (showering, etc.)

An exposure assessment identifies the populations at potential risk and the mechanisms by which members of those populations could be exposed to the COPCs in each medium. It is also a process by which the chemical concentrations at the point of exposure and the chemical doses are calculated.

All potential exposure point concentrations (EPCs) were based on the maximum detected concentration at the site in soil vapor, HydroPunch[®], or monitoring well samples. EPCs were calculated for each source medium separately.

7.1.2.1 Residential Scenario

Current and potential future residents (children and adults) are assumed to be exposed to COPCs in groundwater. For purposes of the HHRA, water used in the home was assumed to come from a private well that draws water from the shallow aquifer beneath the site. For the residential exposure scenario, the volatilization of groundwater constituents into soil gas that migrates into indoor air was estimated using an empirical model known as the Johnson and Ettinger model.

7.1.2.2 Occupational Scenario

Under both the car wash and landscape worker scenarios, the inhalation of contamination was based on volatilization of water during operation of spray jets and sprinklers. The air concentrations resulting from these water use scenarios are based on activity-specific water use rates, chemical transfer efficiency from air to water, and ambient air dilution.

Under the lawn irrigation/landscape worker scenario, the water use rate was based on the water needs for growing lawn in the Alameda area. The chemical air emission rate was then based on the application rate, transfer efficiency, and groundwater concentration. Once the amount of chemical volatilized during an event was estimated, an air concentration was derived based on simple mixing and diffusion with ambient outdoor air.

7.1.3 Toxicity Assessment

The toxicity assessment focuses on the toxicity of COPCs. Numerical toxicity values were developed for use in the calculation of the hazard quotients (for non-carcinogens) and risks (for carcinogens).

Toxicity values, when available, are published by the EPA in the on-line Integrated Risk Information System (IRIS; EPA, 2004) and the Health Effects Assessment Summary Tables (HEAST). Cancer slope factors (CSFs) are chemical-specific, experimentally derived potency values used to calculate the risk of cancer resulting from exposure to carcinogenic chemicals. Cal/EPA publishes CSFs for use in Cal/EPA oversight projects (Office of Environmental Health Hazard Assessment [OEHHA], 2004). A higher value implies a more potent carcinogen.

Reference doses (RfDs) are experimentally derived "no-effect" values used to quantify the extent of adverse non-cancer health effects from exposure to chemicals. A lower RfD implies a more potent toxicant. These criteria are generally developed by EPA risk assessment work groups and listed in EPA Risk Assessment Guidance Documents and databases.

The hierarchy for selecting toxicity criteria is as follows:

- OEHHA cancer potency factors
- EPA's IRIS (2004)
- EPA's HEAST

With the exception of oral toxicity values being used to characterize risks from dermal exposures, route to route extrapolation of toxicity criteria for pathways (inhalation, oral) without established criteria was not undertaken.

7.1.4 Risk Characterization

The final step in the HHRA is the characterization of the potential risks associated with exposure to detected chemicals. Risk characterization combines the exposure and toxicity assessments to produce quantitative estimates of risk from COPCs. Chemicals might present noncancer health effects in addition to cancer risks; therefore, the potential for both types of effects are evaluated. Noncancer health hazards and cancer risks are characterized separately, as described below. It is important to note that the noncancer hazard index (HI) is estimated differently than lifetime cancer risk. Noncancer effects manifest over a specific time period, and once the exposure period is over, the hazard has also passed (that is, no latency is assumed). A HI of 1 or less is set by EPA as protective of noncancer health hazards.

Excess lifetime cancer risks are probabilities generally expressed in scientific notation (for example, 1×10^{-6} or 1E-6). An excess lifetime cancer risk of 1×10^{-6} indicates that, as a plausible upper bound, an individual has a one in a million probability 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. The exposure conditions that are reasonably expected to occur at the site, as defined by EPA are termed the reasonable maximum exposure (EPA, 1989). To assist with the characterization of cancer risks, a federally established risk management range was developed to protect human health and help risk managers determine whether site risks are significant enough to warrant cleanup. Guidelines for managing cancer risks are promulgated in the NCP (Title 40 C.F.R. 300.430[e][2][i][A][2]). According to these regulations, when an excess cancer risk is above 10^{-4} action is generally warranted, and when excess cancer risks are within the risk management range from 10^{-6} to 10^{-4} , site-specific factors are considered when making decisions about whether action is required.

7.1.4.1 Tier 1 and 2 Risk Assessment

The results of the Tier 1 exposure assessment outlined above indicated that estimated HIs and incremental lifetime cancer risk (ILCRs) were of potential concern. Because these risks were associated with the maximum detected groundwater concentrations and highly conservative (in most cases, default or most conservative) exposure parameters, they were carried through to a Tier 2 assessment so that the implications of using more realistic exposure point concentrations and exposure parameters can be understood.

Because cancer risks and HIs for reasonably foreseeable complete exposure pathways were driven by the estimated exposures to benzene and naphthalene, respectively, Tier 2 concentrations are derived for benzene and naphthalene for groundwater and benzene for soil gas.

For groundwater, the Tier 2 assessment used appropriate geostatistical methods for determining relevant groundwater EPCs for each COPC and/or location. These concentrations were used to estimate theoretical human exposure to COPCs in both the theoretical exposure scenarios -- the potential beneficial use scenarios and the school site scenario. Calculations were based on groundwater data compiled from the quarterly groundwater monitoring program conducted in 2001.

For soil gas, four exposure areas were defined based on current land use. They include FISCA, and Alameda Point Sites 25, 30, and 31. The maximum benzene values were selected as the Tier 2 values for each of these four locations.

Both cancer and non-cancer risks to theoretical car wash and landscape workers, residents, school workers, and students are presented in Table 7-1. For residents, assuming the groundwater is not used for drinking water, the carcinogenic risk is 1×10^{-5} using EPA risk assessment methodology.

7.1.4.2 Chemicals of Concern

Cancer and non-cancer risk drivers were identified for OU-5/IR-02. A risk driver is defined as a COPC that has one or more of the following characteristics:

- An individual cancer risk estimate exceeding 1×10^{-6} ;
- A cancer risk estimate that is less than 1×10^{-6} but that, when combined with other COPCs with cancer risk estimates less than 1×10^{-6} , causes the sum of the cancer risk estimates to exceed 1×10^{-6} ;
- An HI greater than 1; and/or
- An HI that is less than 1 but that, when combined with COPCs with the same mechanisms of toxic action and HIs also less than 1, causes the sum of the HIs to be greater than 1.

Carcinogenic risk drivers for the commercial and residential scenario include benzene and naphthalene in groundwater through ingestion, and they are the chemicals of concern (COCs) addressed by this ROD.

Carcinogenic and non-carcinogenic risks for non-drinking water uses were within EPA's risk management range (10^{-4} to 10^{-6}). Risks for scenarios including drinking water use exceeded the EPA's risk management range. The results of this HHRA are similar to those of the previous HHRA performed for FISCA, with risk levels within the EPA's risk management range for all non-ingestion pathways.

The findings of the HHRA indicate that, under current land use scenarios, risks from nondrinking water uses to residents, students, and workers at the site are within the EPA's risk management range. If groundwater wells were installed, use of groundwater could potentially pose an unacceptable cancer risk to car wash and landscape workers. Under the non-drinking water use scenarios, the non-carcinogenic HIs ranged from 0.29 to 0.99. Because the entire range is below the acceptable level of 1.0, non-carcinogenic adverse health effects to workers are considered unlikely.

TABLE 7-1

SUMMARY OF TIER 2 HHRA RESULTS

Exposure			ogenic Hazard ndex	Carcinogenic Risk		
Scenario	Pathway	Average Exposure	Reasonable Maximum Exposure	Average Exposure	Reasonable Maximum Exposure	
Assuming No	Domestic D	rinking Wate	r Use (500-foot	Radius Krig	ing)	
Car Wash Worker	Inhalation and Dermal	0.38	0.99	2 x 10 ⁻⁶	2 x 10 ⁻⁵	
Landscape Worker	Inhalation and Dermal	0.66	0.98	3 x 10 ⁻⁶	3 x 10 ⁻⁵	
Resident	Inhalation	0.29	0.29	1 x 10 ⁻⁵	1 x 10 ⁻⁵	
School Worker	Inhalation	0.29	0.29	7 x 10 ⁻⁶	7 x 10 ⁻⁶	
School Student	Inhalation	0.29	0.29	2 x 10 ⁻⁶	2 x 10 ⁻⁶	
Assuming Do	Assuming Domestic Drinking Water Use (500-foot Radius Kriging					
Resident	Ingestion	88	145	5 x 10 ⁻³	2 x 10 ⁻²	

Note:

Risk calculations performed using EPA methodology.

Abbreviations and Acronyms:

EPA – U.S. Environmental Protection Agency HHRA – human health risk assessment

Source:

(ERRG, 2004)

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Assuming no domestic drinking water use, benzene contributed approximately 95 percent of the cancer risk, and benzene and naphthalene combined contributed approximately 98 percent of the non-cancer risks; the remainder of the risk was attributable to other contaminants. These calculations rely on multiple conservative assumptions and overestimate the actual risks posed by the site.

7.2 SCREENING LEVEL APPROACH FOR ECOLOGICAL RISK

ERAs have been conducted quantitatively and qualitatively for Alameda Point and FISCA.

A screening level ERA was conducted for Alameda Point. The screening-level ERA uses existing data and is intended to be a conservative estimate. The primary objective is to determine whether complete exposure pathways exist for soil and groundwater and to estimate risk from chemicals through these complete exposure pathways. The results were published as part of the Data Summary Report for Alameda Point OU-2, which included the parcels currently identified as OU-5 (TtEMI, 1999c). The Alameda Point ERA included identification of potentially complete exposure pathways, COPCs for soil based on a comparison to screening benchmarks, and refinement of the contaminants list through evaluation of risk to two upper-trophic level receptors likely to occur in the limited habitat in Alameda Point's OU-5.

A qualitative ERA of FISCA terrestrial habitat and a quantitative ERA were conducted to evaluate the possible effects of storm water discharges into the nearby Oakland Inner Harbor, which were presented in the final FISCA RI (PRC and Versar, 1996).

Results of the previous ERAs conducted for both Alameda Point and FISCA concluded that there is no significant risk to terrestrial ecological receptors, and there is no ecological risk to the Bay due to lateral groundwater movement or storm sewer system discharge. A large factor in the ERAs was the marginal quality of the general area with respect to terrestrial ecological receptors. Based on current reuse plans, this can be assumed to be true for future scenarios as well.

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8.0 REMEDIAL ACTION OBJECTIVES

The HHRA results identified potential carcinogenic risks associated with groundwater usage as a non-drinking water source within OU-5/IR-02. Additionally, carcinogenic and non-carcinogenic risks were associated with groundwater usage as a drinking water source. Therefore, remedial action objectives (RAOs) were developed for OU-5/IR-02 groundwater. RAOs are medium-specific (soil, groundwater, or air) goals for protecting human health or the environment and include risk-based remedial goals that are chemical concentration limits providing a quantitative means of identifying areas for potential remedial action, screening types of appropriate technologies, and assessing a remedial action's potential for achievement of the RAOs.

RAOs for OU-5/IR-02 were developed to guide the development and evaluation of remedial alternatives for the groundwater plume. The DON proposes to reduce contaminant concentrations as a risk management decision, which was made in coordination with the regulatory agencies (DON, 2006). The RAOs for groundwater are to protect human health by preventing exposure of potential residents and occupational workers to benzene and naphthalene present within groundwater at OU-5/IR-02. The chemical concentration limits are risk-based remedial goals.

The risk-based remedial goals, as presented in the RI/FS (ERRG, 2004) are:

- **Benzene** 1.0 μ g/L, which is equivalent to the State MCL and lower than the EPA drinking water standard.
- **Naphthalene** 100 μ g/L, which is equivalent to the EPA health advisory for naphthalene. It is likely when the benzene goal is achieved, the concentrations of the co-located naphthalene will be reduced to less than the health advisory concentration.

These risk-based remedial goals provide for unrestricted site use, once the goals have been achieved, which is expected to occur within eight years based on the evaluation in the RI/FS report (ERRG, 2004).

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9.0 DESCRIPTION OF ALTERNATIVES

The development of groundwater alternatives for OU-5/IR-02 followed the requirements identified in CERCLA, as amended by SARA of 1986, 42 USC Section 9601, et seq. and the NCP. Six alternatives were developed and were presented in the RI/FS (ERRG, 2004). The evaluation of the technologies and screening process that led to the development of these alternatives is also documented in the RI/FS report.

The alternatives, which are described in the following sections include:

- Alternative 1 No Action
- Alternative 2 MNA and ICs
- Alternative 3 Biosparging, Soil Vapor Extraction (SVE), MNA, and ICs
- Alternative 4 Biosparging, SVE, Nutrient/Microorganism Enhancement, MNA, and ICs Selected Remedy
- Alternative 5 Air Sparging, SVE, MNA, and ICs
- Alternative 6 Pump and Treat, MNA, and ICs

Some common elements among these alternatives include MNA, ICs, biosparging, and SVE.

MNA would be conducted to document the reduction in contaminant concentrations and verify the stability of the plumes. MNA is detailed in Section 12.4.

ICs include land use restrictions that would be established to limit human exposure to contaminated shallow groundwater until the response action is complete. Specifics of ICs are discussed further in Section 12.5.

Biosparging involves injection of air into the saturated zone, similar to air sparging, but at lower pressures to minimize the possibility of volatizing contaminants that could pass through the vadose zone. Biosparging enhances in-situ biodegradation by increasing dissolved oxygen in the saturated zone. Biosparging is designed to push air (oxygen) into the saturated zone to promote treatment via biodegradation. Injection pressure is optimized to overcome hydraulic head, and radius of influence is driven by oxygen diffusion into the formation. Because air injection rates are optimized to promote biodegradation in the saturated zone, fugitive emissions are minimized. Biosparging is detailed in Section 12.1.

SVE would be used as an engineering control to capture potential fugitive emissions. SVE is detailed in Section 12.2.

Air sparging is designed to push volatilized contaminants through the vadose zone for subsequent collection and treatment. Air sparging involves injecting air into the saturated zone at a high pressure thereby potentially accelerating clean-up time but increases fugitive gas emissions from the groundwater.

Nutrient/microorganism enhancement introduces microorganisms and/or nutrients into contaminated areas to stimulate and accelerate natural biodegradation processes that degrade (metabolize) subsurface contaminants. The addition of inoculated microorganisms and nutrients can be conducted on an as-needed basis by injecting a liquid base. Nutrient/microorganism enhancement is detailed in Section 12.3.

Pump and treat involves the extraction and treatment of contaminated groundwater. It is a more conventional technique, as opposed to air sparging or biosparging, which is considered a more innovative, in situ technology, and therefore may be considered an alternative technology. New groundwater extraction wells would be required as part of the remedy.

9.1 ALTERNATIVE 1 – NO ACTION

In this alternative, no actions are performed. This alternative provides a baseline for comparing all other alternatives. There is no cost associated with this alternative.

9.2 ALTERNATIVE 2 – MNA AND ICs

Alternative 2, MNA and ICs, consists of performing groundwater monitoring to evaluate natural attenuation, along with implementation of ICs. A long-term monitoring program, including periodic reviews, would track plume migration and the cleanup process. Long-term monitoring would also track variations in groundwater conditions, document reduction in plume concentrations over time, and verify plume stability. MNA would be required for approximately 50 years.

ICs are legal and administrative mechanisms used to implement land use and access restrictions that are used to limit the exposure of future landowner(s) and/or user(s) of the property to hazardous substances and to maintain the integrity of the remedial action until remediation is complete and remedial goals have been achieved. Monitoring and inspections are conducted to assure that the ICs are being followed. Additional information on the ICs is provided in Section 12.5.

9.3 ALTERNATIVE 3 – BIOSPARGING, SVE, MNA, AND ICs

In the RI/FS biosparging was determined to be an effective treatment for reducing contaminant concentrations in groundwater and the vadose zone (ERRG, 2004). It could potentially reduce

risk levels to allow use of the shallow groundwater as a drinking water source. Alternative 3 would be expected to reach cleanup goals in nine years and includes the following:

- Biosparging to add oxygen to the subsurface environment and accelerate biodegradation;
- SVE to ensure protection of site residents from possible fugitive soil emissions;
- MNA to track the natural degradation processes, which will continue to address any contamination not remediated by biosparging; and
- Land use controls to limit the potential exposure of property users to groundwater contamination and maintain the integrity of the remedial action until remedial goals have been achieved.

9.4 ALTERNATIVE 4 – BIOSPARGING, SVE, NUTRIENT/MICROORGANISM ENHANCEMENT, MNA, AND ICs (SELECTED REMEDY)

Alternative 4 is similar to Alternative 3, with the addition of nutrient enhancement to potentially accelerate the timeframe for cleanup. Alternative 4 would be expected to reach cleanup goals within eight years and includes the following:

- Biosparging to add oxygen to the subsurface environment and accelerate biodegradation;
- SVE to ensure protection of site residents from possible fugitive soil emissions;
- Nutrient/microorganism injection, as required, to enhance natural degradation and accelerate the timeframe for cleanup;
- MNA to track the natural degradation processes, which will continue to address any contamination not remediated by biosparging; and
- Land use controls to limit the potential exposure of property users to groundwater contamination and maintain the integrity of the remedial action until remedial goals have been achieved.

9.5 ALTERNATIVE 5 – AIR SPARGING, SVE, MNA, AND ICs

Air sparging involves injecting air into the saturated zone at a high pressure (compared to biosparging), thereby potentially accelerating cleanup time but increasing fugitive gas emissions from the groundwater. Alternative 5 would be expected to reach cleanup goals in eight years and includes the following:

- Air sparging to add oxygen to the subsurface environment, accelerating biodegradation and increasing volatilization of dissolved contaminants;
- SVE to capture and treat contaminants volatilized from the groundwater;

- MNA to track the natural degradation processes, which will continue to address any contamination not remediated by air sparging; and
- Land use controls to limit the potential exposure of property users to groundwater contamination and maintain the integrity of the remedial action until remedial goals have been achieved.

9.6 ALTERNATIVE 6 – PUMP AND TREAT, MNA, AND ICs

Pump and treat is a conventional remediation technology that involves extracting and treating contaminated groundwater. This alternative has been included to compare conventional technology with more innovative, in-situ technologies such as biosparging and air sparging. Alternative 6 would be expected to reach cleanup goals in 15 years and includes the following:

- Extraction of groundwater at the plume centers, to remove contamination dissolved in groundwater;
- MNA to track the natural degradation processes, which will continue to address any contamination not remediated by pump and treat; and
- Land use controls to limit the potential exposure of property users to groundwater contamination and maintain the integrity of the remedial action until remedial goals have been achieved.

10.0 COMPARATIVE ANALYSIS OF ALTERNATIVES

This section summarizes the comparative analysis that was conducted to evaluate the relative performance of each remedial alternative in relation to the nine criteria outlined in CERCLA Section 121 (b), as amended. The purpose of the comparative analysis is to identify the relative advantages and disadvantages of each alternative. Alternatives were rated on a scale ranging from low to high. Comparative ratings were developed within the RI/FS (ERRG, 2004) to assist with the screening assessment. The evaluation criteria are based on requirements promulgated in the NCP. As stated in the NCP (40 C.F.R. 300.430[f]), the evaluation criteria are arranged in a hierarchical manner that is then used to select a remedy for the site based on the following categories:

- Threshold criteria
 - Overall protection of human health and the environment
 - Compliance with ARARs
- Primary balancing criteria
 - Long-term effectiveness and permanence
 - Reduction of toxicity, mobility, or volume through treatment
 - Short-term effectiveness
 - Implementability
 - Cost-effectiveness
- Modifying criteria
 - State acceptance
 - Community acceptance

Table 10-1 provides a summary of the primary balancing criteria for each of the six alternatives.

10.1 OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

Alternative 1 is not fully protective of human health and the environment because plume stability and contaminant degradation are not verified and because there is no basis for determining that present risk of the groundwater will not remain. Alternative 2 is protective of human health and the environment, provided that water usage remains only for non-drinking water purposes. Alternatives 3, 4, 5, and 6 meet the threshold criteria for overall protection of human health and the environment and provide a broad range of alternatives for consideration.

10.2 COMPLIANCE WITH ARARs

Compliance with identified ARARs is not required for Alternative 1 because ARARs apply to "any removal or remedial action conducted entirely on-site." The no action alternative is not considered a removal or remedial action (CERCLA Section 121[e], 42 USC Section 9621[e]). Alternatives 2, 3, 4, 5, and 6 meet the threshold criteria of compliance with ARARs (see Section 13.2).

10.3 LONG-TERM EFFECTIVENESS AND PERMANENCE

Alternative 1, no action, received a rating of none in long-term effectiveness and permanence because the effectiveness of natural attenuation processes could not be verified, and plume migration patterns would not be monitored to demonstrate protectiveness. Alternatives 2, 3, 4, 5, and 6 would each be effective in the long term. Alternatives 3, 4, 5, and 6 would actively reduce concentrations in the most contaminated areas. Alternatives 2 through 6, using MNA, would likely reduce residual concentrations to below cleanup goals for the domestic use of groundwater by residents and workers. Alternatives 4 and 5 would achieve the long-term effectiveness and permanence goals within the shortest estimated time frame (eight years), and would have a high performance relative to this criterion. Alternative 3, projected to achieve the cleanup goals within an estimated nine years, would perform moderately well relative to this criterion. Alternative 6, projected to achieve the cleanup goals within an estimated 50 years, would perform at a low level relative to this criterion.

10.4 REDUCTION OF TOXICITY, MOBILITY, OR VOLUME

Alternatives 3, 4, 5, and 6 would each be effective in reducing the toxicity, mobility, or volume of groundwater contamination through treatment. Alternative 1 provides no active treatment and no method of monitoring; therefore, it is not considered effective. Alternative 2 is rated low because although MNA should reduce mobility, toxicity, and volume of VOCs, no active treatment is provided. Alternatives 3 and 4 would accelerate the natural degradation processes occurring at the site. Benzene and naphthalene naturally degrade in an aerobic environment. As these compounds degrade, carbon is cleaved out and various intermediate metabolites, primarily organic acids, are sequentially formed (Ellis, Roe, and Wackett, 2006; Cozzarelli, 1993). Complete degradation results in carbon dioxide and water as the final degradation end products. Alternative 5 and, to a lesser extent, Alternative 6 would also accelerate the natural degradation

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TABLE 10-1

COMPARATIVE ANALYSIS OF REMEDIAL ALTERNATIVES BY BALANCING CRITERIA

Alternative	Long-Term Effectiveness and Permanence	Reduction in Toxicity, Mobility, or Volume Through Treatment	Short-Term Effectiveness	Implementability	Cost ¹
Alternatives 1, 2, 3, 4, 5, and 6	 Parameters considered: The expected long- term reduction in risk posed by the site; The level of effort needed to maintain the remedy and monitor the area for changes in site conditions; The compatibility of the remedy with planned future use of the site; and Adequacy and reliability, including reliance on land disposal, potential need to replace components, and risks posed should components need replacement. 	 Parameters considered: Treatment processes used; The amount of hazardous materials destroyed, recycled, or treated; The degree of expected reduction in toxicity, mobility, or volume and the inherent hazard posed by principal threats at the site; The degree to which the benefits of the remedial alternative are irreversible; and The types, quantities, persistence, toxicity, and propensity to bioaccumulate treatment residuals that remain following treatment. 	 Parameters considered: Protection of the community during the remedial alternative; Protection of workers during the remedial alternative; Environmental impacts during remediation; and Time required to achieve protection. 	 Parameters considered: Technical and administrative feasibility; and Availability of required resources. 	 Parameters considered: Capital costs; Operations and maintenance costs; Costs for long-term monitoring; Costs for developing and maintaining institutional controls; and Net present value.

COMPARATIVE ANALYSIS OF REMEDIAL ALTERNATIVES BY BALANCING CRITERIA

Alternative	Long-Term Effectiveness and Permanence	Reduction in Toxicity, Mobility, or Volume Through Treatment	Short-Term Effectiveness	Implementability	Cost ¹
Alternative 1 – No Action	None	None	None	None	\$0
	Under this alternative, there would be no method of addressing long-term effectiveness and permanence.	No treatment is performed. No means are available to assess reduction of toxicity, mobility, or volume.	RAOs are not met under the existing site conditions; however, risks to community and workers would be minimized, provided that water continues to be used as a non- drinking water source only. Plume stability would not be verified.	Easy to implement; however, no ability to monitor effectiveness.	No costs incurred.
Alternative 2 – MNA and	Low	Low	Moderate	High	\$2.2M
ICs	The estimated time period to achieve cleanup levels is 50 years ² , which is considerably longer than the other alternatives and would require a longer period of well maintenance and management of ICs.	Contaminant levels are reduced via natural attenuation processes; however, no active treatment is provided. Although contaminant concentrations are reduced by natural processes, it is not "treatment."	Risks to community and workers should be minimal during installation of new groundwater wells; however, it requires the longest time to achieve RGs.	Easy to implement because alternative requires only additional monitoring wells and will only minimally affect site residents.	Present value cost is significantly less than Alternatives 3, 4, 5, and 6.

COMPARATIVE ANALYSIS OF REMEDIAL ALTERNATIVES BY BALANCING CRITERIA

Alternative	Long-Term Effectiveness and Permanence	Reduction in Toxicity, Mobility, or Volume Through Treatment	Short-Term Effectiveness	Implementability	Cost ¹
Alternative 3 –	Moderate	Moderate	Moderately-high	High	\$8.0M
Biosparging, SVE, MNA, and ICs	RGs would be met within 9 years. ² This duration is only slightly longer than other alternatives because MNA would theoretically occur at a reduced rate.	Contaminant levels are reduced via natural attenuation processes, which are enhanced through the use of biosparging.	This alternative performs at a lower level than Alternative 4 because of the slightly longer time frame (9 years).	Easy to implement. Would require a similar number of wells as Alternative 2.	Present value cost is similar to Alternatives 4 and 5, but lower than Alternative 6.
Alternative 4 –	High	High	High	Moderate	\$8.1M
Biosparging, SVE, Nutrient/Microorganism Enhancement, MNA, and ICs	Most or all of the contamination would be eliminated within the estimated 8 years ² ; therefore, only a limited timeframe would be necessary for IC implementation and enforceability to protect human health.	Contaminant levels are reduced via natural attenuation processes, which are enhanced through the use of biosparging. The addition of nutrient/microorganism enhancement causes a faster reduction than Alternative 3.	The risk of fugitive emissions is less than Alternative 5, because of the injection of air at lower pressure as well as the presence of an SVE system.	More complex to implement than Alternatives 2, 3, and 5 because of an increased level of effort required to control potential fouling of biosparge wells.	Present value cost is similar to Alternatives 3 and 5, but lower than Alternative 6.
Alternative 5 – Air	High	High	Low	High	\$8.0M
Sparging, SVE, MNA, and ICs	Would perform similarly to Alternative 4 with regards to long-term effectiveness and permanence.	Contaminant levels would be lowered by MNA; however, the alternative would rely on the extraction and treatment of the contaminated waste stream.	Alternative 5 carries the greatest risk due to the potential for soil vapor releases. The SVE would mitigate this risk to an extent.	Easy to implement. Would require larger equipment to accommodate the higher injection pressures of air sparging.	Present value cost is similar to Alternatives 3 and 4, but lower than Alternative 6.

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COMPARATIVE ANALYSIS OF REMEDIAL ALTERNATIVES BY BALANCING CRITERIA

Alternative	Long-Term Effectiveness and Permanence	Reduction in Toxicity, Mobility, or Volume Through Treatment	Short-Term Effectiveness	Implementability	Cost ¹
Alternative 6 – Pump and	Moderately-low	Moderately-low	Moderate	Moderate	\$11.1M
Treat, MNA, and ICs	The assumed duration of treatment for this alternative (15 years) ² is longer than that assumed for Alternatives 3, 4, and, 5 and would require a longer period of well maintenance/repair and management of ICs.	Similar to Alternative 5; however, a residual volume would remain for a longer time frame.	No significant vapor emissions are anticipated; however, an accidental release of contaminated groundwater could impact site occupants and receptors in the Oakland Inner Harbor.	More complex to implement than Alternatives 2, 3, and 5 because separate water discharge zones would be required for each treatment zone, which could be difficult to identify.	Present value cost is higher than all other alternatives.

Notes:

In millions of dollars as estimated in the RI/FS (ERRG, 2004), and rounded to the nearest hundred thousand. As estimated in the RI/FS (ERRG, 2004). 1

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Abbreviations and Acronyms:

ERRG – Engineering/Remediation Resources Group, Inc.
FS – Feasibility Study
IC – institutional control
M – million
MNA – monitored natural attenuation

RAO - remedial action objective RG – Remedial Goal RI - Remedial Investigation SVE – soil vapor extraction

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processes by increasing oxygen concentrations in the saturated zone; however, both alternatives would rely on the extraction and treatment of contaminated waste streams versus in-situ treatment. According to cleanup duration estimates made within the RI/FS (ERRG, 2004), Alternatives 4 and 5 would reduce the contaminant volume within the shortest estimated time frame (eight years), and would have a high performance relative to this criterion. Alternative 3, projected to reduce contamination to the cleanup goals within an estimated nine years, would perform moderately well relative to this criterion. Alternative 6, projected to achieve the cleanup goals within an estimated 15 years, would leave a residual volume for a longer time frame and would perform at a moderately low level relative to this criterion. Alternative 2 uses MNA and ICs only, requiring the longest timeframe to provide reduction of toxicity, mobility, and volume of contaminants, and therefore performs at a low level relative to this criterion.

10.5 SHORT-TERM EFFECTIVENESS

Short-term effectiveness is a measure of the benefits seen by implementation of a remedial alternative and the risks associated with its implementation. Alternatives 2, 3, 4, 5, and 6 each would involve some short-term risks associated with construction or operation of the remediation system; however, these risks could be mitigated through proper engineering design and controls. Possible fugitive vapor emissions from the subsurface is a potential risk associated with sparging operations specified in Alternatives 3, 4, and 5.

These risks would be mitigated by the use of vapor extraction and treatment systems over the sparging zone; although, the potential risk among these alternatives would be greatest for Alternative 5, because air sparging involves injecting air at higher pressures relative to biosparging. Alternative 6 is not anticipated to cause any significant vapor emissions or other exposure to groundwater contamination, assuming that the treatment system operates properly. However, an accidental release of contaminated groundwater from a pump and treat system could pose a risk to site occupants and ecological receptors in the Oakland Inner Harbor.

Alternative 4 would have a high performance relative to this criterion because of its lower potential risk to site occupants via fugitive emissions compared with Alternative 5, and would provide the greater benefit in the short term, achieving contaminant mass reduction within an estimated eight years.

Alternative 3 would perform at a moderately high level relative to this criterion for the same reasons as Alternative 4, albeit achieving contaminant reduction within a slightly longer time frame (nine years).

Alternative 6 would perform moderately well relative to this criterion because, although its implementation will not result in significant vapor emissions, the treatment of a contaminated water stream poses a potential risk to human and ecological receptors, and contaminant reduction would involve a longer time frame (15 years).

Alternative 2 would also perform moderately well because it involves minimal additional risks during installation of new groundwater wells and monitoring activities; however, it would require the longest time frame (50 years) to reach risk-based cleanup goals.

Alternative 5 would perform at a low level relative to this criterion because the increased volatilization could pose increased risk to site occupants that would not be outweighed by a significant reduction in cleanup time.

10.6 IMPLEMENTABILITY

Alternative 1 does not require any cleanup technology and is therefore easy to implement; however, there is no way to monitor effectiveness. Alternatives 2, 3, 4, 5, and 6 all consist of remediation technologies that are readily implementable, and each would involve subsurface construction in an active residential community. Alternative 2 would require only additional monitoring wells and would have the least impact on site residents. Alternatives 3, 4, and 5 would each involve a similar number of sparging wells and vapor extraction wells within each treatment zone, while Alternative 5 would require larger equipment to accommodate the higher injection pressures of air sparging. Alternative 4 would involve the addition of nutrients to the subsurface, as required, which would increase biological activity and potentially foul the biosparging wells (via algal growth) unless controlled. Alternative 6 would require fewer extraction wells to treat each zone, but a separate water discharge point would need to be established for each treatment zone. Because of the space limitation caused by the current site use, it may be difficult to identify an appropriate discharge point for each treatment zone.

Alternatives 2, 3, and 5 would have a high performance relative to this criterion.

Alternatives 4 and 6 would perform moderately well relative to this criterion, considering the increased level of effort likely required to control potential fouling of the biosparging wells (Alternative 4) and to identify discharge points for treated groundwater (Alternative 6).

10.7 COST

Cost estimates are based on the RI/FS estimates (ERRG, 2004), and adjusted for the increased size of the plume centers (where biosparging/SVE is planned) based on recent sampling data, including the data collected during the Sites 30 and 31 RIs (Bechtel, 2005; CDM, 2007). No

costs are incurred for Alternative 1, making it the lowest cost. Alternative 2 is approximately \$2.2 million, and did not change from the RI/FS because this cost is not affected by increased plume center size. The estimated total costs of Alternatives 3, 4, and 5 are similar at approximately \$8 million, and Alternative 6 would cost approximately \$11 million.

Estimated costs for the six alternatives are provided in Table 10-2.

10.8 STATE ACCEPTANCE

The State of California concurs with the DON's selected remedial alternative (Alternative 4).

10.9 COMMUNITY ACCEPTANCE

The Proposed Plan (DON, 2006) was presented to the community and discussed in a public meeting. Comments were received from four individuals. The responsiveness summary portion of this ROD addresses the public's comments and concerns about the selected remedy for OU-5/IR-02 groundwater and is presented as Appendix D.

10.10 CONCLUSION

Based on the comparative analysis, the State of California concurs with the selection of Alternative 4 as the remedy for OU-5/IR-02 because it received the best overall rating, based on the nine evaluation criteria in the NCP. Alternatives 1 and 2 are unacceptable because they do not provide adequate protection for human health and the environment, and the remaining alternatives scored lower than Alternative 4, based on the balancing criteria in the NCP.

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REMEDIAL ALTERNATIVES COST COMPARISON

Alternative	Cost ¹
Alternative 1 – No Action	\$0
Alternative 2 – MNA and ICs	\$2,226,000
Alternative 3 – Biosparging, SVE, MNA, and ICs	\$7,976,000
Alternative 4 – Biosparging, SVE, Nutrient/Microorganism Enhancement, MNA, and ICs	\$8,076,000
Alternative 5 – Air Sparging, SVE, MNA, and ICs	\$8,026,000
Alternative 6 – Pump and Treat, MNA and ICs	\$11,113,000

Notes:

¹ All costs were rounded to the nearest thousand.

Abbreviations and Acronyms:

IC – institutional control MNA – monitored natural attenuation SVE – soil vapor extraction This page intentionally left blank.

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11.0 PRINCIPAL THREAT WASTE

Principal threat wastes are those source materials considered to be highly toxic or highly mobile that can generally not be contained in a reliable manner or would present a significant risk to human health or the environment should exposure occur. Contaminated groundwater is not generally considered to be source material unless it has the potential to be mobile. Based on this, the contaminated groundwater does not constitute a principal threat waste.

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12.0 SELECTED REMEDY

Based on the RI/FS (ERRG, 2004) and Administrative Record (Appendix A) for OU-5/IR-02 as well as an evaluation of all comments (Appendix D) on the Proposed Plan (DON, 2006) submitted by interested parties during the public comment period, the DON has selected Alternative 4 as the remedy for groundwater. Alternative 4 includes the following components:

- Introducing air as an oxygen source (biosparging) to accelerate biodegradation of contaminants;
- Capturing and treating potential escaping vapors by SVE during biosparging to prevent site occupants from being exposed to vapors;
- Nutrient/Microorganism injection to enhance the natural degradation process, as required;
- MNA to track the biodegradation; and
- Land use controls to limit the potential exposure of property users to groundwater contamination and maintain the integrity of the remedial action until risk-based remedial goals have been achieved.

The DON, in coordination with the regulatory agencies, has made a risk management decision that remedial action is warranted for shallow groundwater at OU-5/IR-02, and accordingly, the DON selected Alternative 4 because it reduces the mobility, toxicity, and volume of VOCs in the groundwater by implementing an expedient and proven treatment strategy. The cleanup goals selected for the project are risk-based remedial goals, which are equivalent to the state MCL for benzene and the EPA Health Advisory for naphthalene. Alternative 4 has a relatively low cost, high effectiveness, and moderate implementability while fully protecting human health and the environment and complying with all environmental regulations and laws. As estimated within the RI/FS (ERRG, 2004), Alternative 4 is expected to achieve the RAOs within approximately eight years. During that time, ICs will be implemented to protect human health. Figure 12-1 shows the area requiring ICs and is based on available HydroPunch[®] and well data through May 2006. The IC boundary may be updated throughout the remedial program based on additional data collection. The data and the basis for the IC boundary will be presented in the RD and other pertinent documents, as appropriate.

The remediation costs (approximately \$8 million) for Alternative 4, which includes capital costs and operation and maintenance costs, are presented as Table 12-1.

12.1 BIOSPARGING

Biosparging is an in-situ remediation technology that uses indigenous microorganisms to biodegrade organic constituents in the saturated zone. Biosparging involves the controlled injection of a flow of air (or oxygen) and nutrients (if needed) into the saturated zone to enhance the biological activity of the indigenous microorganisms. Biosparging can be used to reduce concentrations of petroleum constituents that are dissolved in groundwater, adsorbed to soil below the water table, and within the capillary fringe.

At OU-5/IR-02, benzene and naphthalene are the groundwater contaminants. They are petroleum hydrocarbon constituents, which have been shown to be readily biodegradable given oxygen sources and subsurface microbes and nutrients.

Because air injection rates are optimized to promote biodegradation in the saturated zone, fugitive emissions are minimized. However, due to the proximity to site residents, vapor extraction/recovery and treatment will be implemented at OU-5/IR-02 to ensure protection of the nearby residents from potential fugitive emissions.

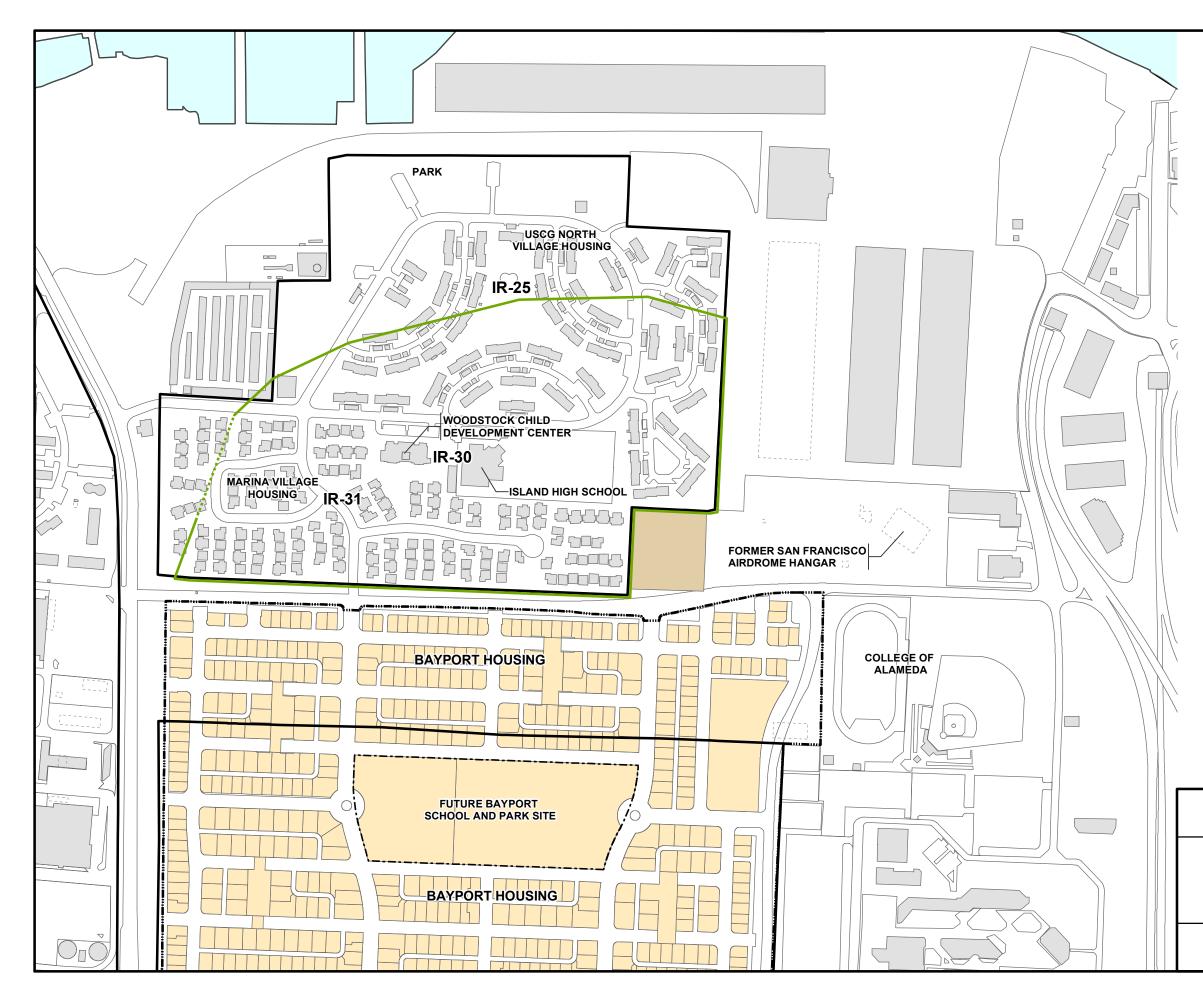
A pilot study will be performed to provide system design criteria and estimates of time required until remedial goals are achieved. Once a biosparging system has been designed and modified to optimize site conditions, the total time required for contaminant remediation can be better estimated.

The goal at OU-5/IR-02 is to reach remedial goals in eight years or less with a combination of an active biosparge/SVE system and MNA. To achieve this goal, the active system will be optimized and operated for as long as required to reduce contaminant concentrations to the point where the active system can be shut off and MNA used to achieve the remedial goals within the eight-year period.

Following implementation of the selected remedy, the DON, in collaboration with the regulatory agencies, will determine if the performance objectives (including the RAOs) have been achieved. If it is determined the RAOs have not been achieved, and that treatment is no longer cost-effective, the DON will conduct a remedy performance analysis and restoration timeframe analysis to evaluate the practicability of continued groundwater restoration. This remedy performance analysis could include:

- Data and information on source removal and reduction;
- Groundwater data collected from sources inside and outside the plume to evaluate mass reduction and plume migration or containment;
- Operations history of the treatment system;

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LEGEND

ROAD

INSTITUTIONAL CONTROL BOUNDARY, DASHED WHERE INFERRED

ALAMEDA POINT BOUNDARY

BAYPORT HOUSING BOUNDARY

BAYPORT DEVELOPMENT

39 - UNIT HOUSING AREA

BUILDING

FORMER BUILDING

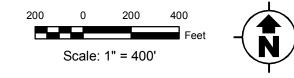
WATER

NOTE:

FISCA - FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND, ALAMEDA FACILITY/ALAMEDA ANNEX

IR - INSTALLATION RESTORATION (PROGRAM)

USCG - UNITED STATES COAST GUARD



BASE REALIGNMENT AND CLOSURE PROGRAM MANAGEMENT OFFICE WEST SAN DIEGO, CA FINAL RECORD OF DECISION

OPERABLE UNIT 5/IR-02 GROUNDWATER

FIGURE 12-1

INSTITUTIONAL CONTROL BOUNDARY DELINEATION ALAMEDA, CALIFORNIA

REVISION: 0 AUTHOR: RKH DCN: ECSD-2201-0011-0001 FILE NUMBER: 071703L1945.mxd



TETRATECH EC. INC.

TABLE 12-1

COST ESTIMATE SUMMARY FOR ALTERNATIVE 4

Item No.	Description	Quantity	Unit	Unit Cost	Total Cost
Item No.	Description	Quantity	Umt	(\$)	(\$)
DIRECT (COSTS				
1	Pre-Design Investigation				
	Develop Pre-Design and Pilot Test Work Plans	1	LS	260,000	260,000
	Pre-Design Sampling and Analysis	1	LS	550,000	550,000
	Biosparge/SVE Pilot Test	1	LS	417,000	417,000
	Reporting	1	LS	80,000	80,000
2	Remedial Design				
	Develop Work Plans	1	LS	140,000	140,000
	Develop RD/RA Plans	1	LS	220,000	220,000
	Develop Post Closure MNA Program	1	LS	80,000	80,000
	Establish ICs (LUCIP)	1	LS	90,000	90,000
3	Remedial Action Field Work				,
-	Install Additional Monitoring Wells	10	EA	2,400	24,000
	Install Soil Gas Monitoring Probes	30	EA	800	24,000
	Install Biosparge Wells	150	EA	1,200	180,000
	Install SVE Wells	45	EA	1,000	45,000
	Biosparge and SVE Equipment &	-15	1.111	1,000	45,000
	Installation	1	LS	2,665,000	2,665,000
	Construction Completion Report	1	LS	130,000	130,000
	r r r r r r			Subtotal:	4,905,000
INDIREC	T COSTS	-		<u></u>	, ,
1	Project Management & Administration	10%			490,500
2	Legal, License, Permits	1%			49,050
	8, ,		Capital	Costs Total:	5,444,550
O&M CO	STS Active Treatment (2 years)	-	<u> </u>		, ,
1	O&M Equipment (3 systems)	1			
	Parts and Equipment	2	Annual	36,000	72,000
	Vapor Phase Carbon	2	Annual	24,000	48,000
	Operator/ Sampler/ Repair Tech	2	Annual	210,000	420,000
2	Electricity	2	Annual	90,000	180,000
3	Performance/Compliance Monitoring	2	Annual	106,000	212,000
4	Reporting				2
	Annual (includes 5-yr review)	2	Annual	85,000	170,000
5	Project Management & Administration	2	Annual	50,000	100,000
	Total Active O&M - Unadjusted (2 years)			2 0,000	1,202,000
	Total Active O&M - Net Present Value (2)	vears): ¹			1,155,000
MNA COS	STS (6 years)	, 			1,100,000
1	Monitoring/ ICs	6	Annual	38,000	228,000
2	Reporting	6	Annual	45,000	220,000
	5 GW ROD ECSD-2201-0011-0001	0	2 1111441	<i>,</i>	Record of Decision

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TABLE 12-1

COST ESTIMATE SUMMARY FOR ALTERNATIVE 4

Item No.	Description	Quantity	Unit	Unit Cost	Total Cost
Item 100.		Quantity	Omt	(\$)	(\$)
3	Project Management	6	Annual	15,000	90,000
	Total MNA - Unadjusted (6 years)				588,000
	Total MNA – Net present value (6 years): ¹				508,000
	Well Abandonment at Completion – Net Pr	esent Value ((8 years) ¹		
	Biosparge Wells	150	EA	1,200	180,000
	SVE Wells	45	EA	800	36,000
	Vapor Probes	30	EA	200	6,000
	Monitoring Wells	10	EA	1,200	12,000
	Subtotal O&M, MNA, and Well Abandonn	nent Net Pres	ent Value an	d	
	Capital Cost				7,341,550
	10% Contingency				734,155
	TOTAL PRESENT VALUE COST OF AL	TERNATIVI	E		8,075,705

Notes:

¹ Nominal discount rate of 2.7% per OMB Circular A-94.

Abbreviations and Acronyms:

EA - each IC - institutional control LS - lump sum LUCIP - Land Use Control Implementation Plan MNA - monitored natural attenuation O&M - operation and maintenance RA - remedial action RD - remedial design SVE - soil vapor extraction YR - year

- A projected timeframe for achieving the remedial goal by continuing treatment;
- Estimates of cost to continue treatment;
- Determination whether there is another alternative that is more cost-effective; and/or
- Whether further remedial actions are necessary to protect human health and the environment.

The DON, in collaboration with the regulatory agencies, will develop an Explanation of Significant Differences or a ROD amendment if the analysis shows it is still practicable to continue groundwater restoration but any further remedial action might represent a significant or fundamental change in the cleanup approach for OU-5/IR-02. If it is determined that it is not practicable to continue groundwater restoration, the DON, in collaboration with the regulatory agencies will develop alternative remedial strategies that meet the remedial action objective. This decision will be made in accordance with EPA's *Guidance for Evaluating Technical Impracticability of Ground-water Restoration* (EPA, 1993).

To estimate the timing for ceasing active biosparge/SVE and switching to MNA, modeling will be performed shortly after system startup and approximately semi-annually to annually thereinafter using the current site monitoring data. Appropriate models include, but are not limited to the following:

- The United States Geologic Survey (USGS) ModFlow transport model coupled with the MT3D or RT3D contaminant module to estimate the fate and transport of benzene and naphthalene within the fill aquifer. This model can be used to estimate the amount of time the biosparge system will run to reduce concentrations to a specific concentration.
- The Virginia Tech/USGS Natural Attenuation Software can be used to estimate the amount of time necessary for MNA to reduce the in-situ residual concentrations to the remedial goals.

Field data input values, required to run the model and calculate when biosparging can be terminated, will be collected during pre-design sampling. The results will be provided in the RD.

12.2 SOIL VAPOR EXTRACTION

Alternative 4 includes a vapor extraction and treatment system to mitigate potential human health risk from possible fugitive emissions during biosparging, although this risk is minimal based on benzene and naphthalene concentrations in groundwater and the low pressure of the injected air. The SVE system will operate when the biosparging system is operating.

12.3 NUTRIENT/MICROORGANISM ENHANCEMENT

Nutrient/microorganism enhancement introduces microorganisms and/or nutrients into contaminated areas to stimulate and accelerate natural biodegradation processes that degrade (metabolize) subsurface contaminants. The addition of inoculated microorganisms and nutrients can be conducted on an as-needed basis by injecting a liquid base. The liquid can be injected through specially designed wells or with direct push technology. Other amendments may be added to the liquid base to enhance bioremediation and contaminant desorption from subsurface materials.

Nutrient/microorganism enhancement will be performed at OU-5/IR-02 as appropriate based on site-specific conditions. During the pre-design sampling event, biomarker analysis will be conducted to evaluate the effectiveness of nutrient or microbial enhancement.

12.4 MONITORED NATURAL ATTENUATION

MNA will be conducted as part of the OU-5/IR-02 remedy to track the biodegradation. MNA will be used to evaluate the natural attenuation progress and contaminant reductions due to natural attenuation and the biosparging/SVE. The objective at OU-5/IR-02 is to reach the remedial goals in eight years or less with a combination of an active biosparge/SVE system and MNA.

12.5 INSTITUTIONAL CONTROLS

ICs are legal and administrative mechanisms used to implement land use and access restrictions that are used to limit the exposure of future landowner(s) and/or user(s) of the property to hazardous substances and to maintain the integrity of the remedial action until remediation is complete and remedial goals have been achieved. Legal mechanisms include proprietary controls such as restrictive covenants, negative easements, equitable servitudes, lease restrictions, and deed notices. Administrative mechanisms include notices, adopted local land use plans and ordinances, construction permitting, or other existing land use management systems that may be used to ensure compliance with use restrictions. Monitoring and inspections are conducted to assure that the ICs are being followed.

ICs shall limit the exposure of user(s) of the property to hazardous substances and protect and maintain the integrity of the remedial action until remediation is complete and remedial goals are achieved. The IC objectives are to prevent access or use of the groundwater until cleanup levels are met and to maintain the integrity of any current or future remedial or monitoring system, such as monitoring wells, injection and vapor extraction wells, etc.

The ICs will remain in place until the following risk-based remedial goals have been achieved:

- Benzene 1 μ g/L
- Naphthalene $100 \mu g/L$

The area requiring ICs at OU-5 is shown on Figure 12-1. The groundwater being remediated underlies: 1) property currently owned by DON at Alameda Point (OU-5), and 2) property adjacent to Alameda Point formerly but no longer owned by DON and known as FISCA (IR-02). The groundwater being remediated may also underlie property never owned by the federal government (College of Alameda). It is necessary to use differing approaches to institutional controls for each of these three scenarios.

The first subsection 12.5.1 below addresses Existing Institutional Controls for Alameda Point property that is still owned and controlled by the Navy as well as property already conveyed to non-federal entities at FISCA. The following subsection 12.5.2 addresses Future Institutional Controls to be established at the time of conveyance of Alameda Point property to both non-federal and federal entities and to potentially address non-federal property owned by the College of Alameda.

12.5.1 Existing Institutional Controls for Alameda Point

The following Existing Institutional Controls are currently in force and effect pursuant to specific DON and DTSC legal instruments. They are incorporated into this ROD as an integral component of this final CERCLA remedial action and to confirm that they are sufficiently protective to serve as components of this final CERCLA ROD and remedial action and otherwise comply with CERCLA and the NCP.

12.5.1.1 Interim Lease to City of Alameda and USCG Use Agreement

Currently the three IR sites (Sites 25, 30, and 31) overlaying OU-5 are occupied as described in Section 1.3. Site 30 is currently leased to the City of Alameda School District (DON, 1997) with planned final conveyance taking place by means of a Public Benefit Conveyance through the United States Department of Education. Site 31 comprises housing occupied by USCG personnel, and Site 25 housing is vacant. An Interim Use Agreement for property being used by the USCG is in place and contains provisions consistent with the ICs for the selected remedial alternative.

The DON has determined that it will rely upon proprietary controls in the form of lease restrictions in the lease to the school district and the USCG Interim Use Agreement until the property is conveyed to either a federal or non-federal entity (see below). These controls will

continue until the property is conveyed to either a non-federal entity with environmental restrictive covenants as provided in the "Memorandum of Agreement Between the United States Department of the Navy and the California Department of Toxic Substances Control" (hereinafter referred to as "Navy/DTSC MOA") (DON and DTSC, 2000) and attached covenant models or to a federal entity pursuant to a MOA with the federal transferee or a similar agreement. More specifically, the lease and Use Agreement will serve as interim ICs between the time the ROD is signed and the date upon which the Navy transfers the property. Through the lease and Use Agreement, the Navy will maintain conditions that are consistent with the IC objectives for the chosen remedial alternative.

Currently the lease contains provisions that the Alameda School District shall not conduct operations, nor make any alterations, that would interfere with or otherwise restrict DON operations or environmental clean-up or restoration actions by the DON, the EPA, the State of California, or their contractors. In addition, the Alameda School District lease incorporates the environmental restrictions set forth in the DON's Finding of Suitability to Lease (FOSL) for the property (DON, 1996b). Specific pertinent provisions of the FOSL include restrictions against using the groundwater for any purpose without prior approval from the DON and the Water Board (restriction no. 5, page 8) as well as any form of digging soil or disturbing soil or pavement without prior approval from the DON (restriction no. 3, page 8). Finally, the lease states that the DON's and regulators' environmental clean-up activities take priority over the users' activities on the property when a conflict arises between the two. In summary, the lease prohibits any activity that could result in exposure to contaminated soil or groundwater, unless the DON is contacted and approves that activity with appropriate protective measures so that human health and the environment are protected. Therefore, the lease is fully protective of the health of property users and the environment. No revisions of the lease are necessary.

The Interim Use Agreement contains provisions that prohibit any land disturbing activity without written approval from the DON and prohibit any alteration, disturbance or removal of any component of a response or cleanup. There are currently no groundwater wells on this portion of the property (other than monitoring wells); therefore, the prohibition on land-disturbing activities will serve to prevent access to or use of the groundwater until cleanup levels are met.

12.5.1.2 Institutional Controls at Former DON Property Adjacent to Alameda Point

In the summer of 2000, the DON transferred to the City of Alameda, two parcels of land managed by the DON and commonly known as FISCA and East Housing. These two parcels abut Alameda Point property, which is currently owned by the DON. The groundwater plume addressed in the OU-5/IR-2 ROD extends beneath both Alameda Point and FISCA.

The FISCA deed recorded as Document No. 2000215933, July 20, 2000, (City of Alameda, 2000b) was subject to a deferral of Section 120(h)(3)(C) of CERCLA. The deed contains a groundwater use restriction consisting of a prohibition against constructing any wells screened to the shallow aquifer and another prohibition against using groundwater for anything other than construction dewatering, irrigation, or emergency use such as firefighting. Any groundwater collected from dewatering is subject to any Water Board requirements before being disposed. The FISCA deed prevents the property owner from engaging in activities that will disrupt required remedial actions or oversight activities on the property.

In addition, the FISCA deed contains a restriction covering Area 1 (generally known as IR-02). This restriction states that "Area 1 shall not be used for residential purposes and construction activities shall not begin until the DON and DTSC determine that soils having polychlorinated biphenyls and cadmium concentrations do not pose an unacceptable risk to human health or safety or the environment..."

The groundwater use restriction and the limitations on residential housing construction in Area 1 contained in the FISCA deed were further buttressed by an "Interim Covenant to Restrict the Use of Property" (DON, 2001) recorded as Document No. 2000 215932, July 20, 2000. This Interim Covenant entered into by the DON and DTSC provided DTSC with the authority to protect human health and the environment.

Also, on the same day, DTSC entered into a "Covenant to Restrict the Use of Property (Environmental Restrictions)", which was recorded as Document No. 2000215936, July 20, 2000, (City of Alameda, 2000a). This covenant between DTSC and the City of Alameda and its reuse authority covered both parcels of land transferred by deed and contained groundwater-related restrictions. These prohibitions include a ban on well construction for wells screened to the shallowest groundwater zone. Extraction of groundwater from the same zone was prohibited for all uses except irrigation and emergency firefighting. Groundwater flowing from construction site activity was subject to Water Board requirements prior to any disposal.

On October 3, 2006, DTSC concurrently released 2.51 acres located in the western one-third of IR-02 from the Interim Covenant, and entered into another Covenant with the Community Improvement Commission of the City of Alameda (DTSC, 2006). This new covenant prohibits buildings from being constructed on the [property] unless the owner has certified to DTSC that a sub-slab depressurization system (SSDS), identified in the Removal Action Work Plan, has been installed and is operating properly. Further, the covenant prohibits the owner from disabling or altering any component of the SSDS without approval, except for maintenance.

In parallel with DTSC's release of the October 3, 2006 covenant, the Navy executed an amendment to the FISCA deed in accordance with Paragraphs II.F.4.a and II.F.4.a.ii.(d) of the deed. The amendment covered a 2.5-acre parcel on the western one-third of IR02. The amendment required that prior to any residential use of the parcel, the property owner must certify the installation and proper operation of a passive sub-slab depressurization system for the 39-unit residential structure planned for the parcel. The specific components of this requirement were provided in DTSC's Removal Action Work Plan, dated October 3, 2006.

During September 2006, public comment on the Draft Removal Action Work Plan was solicited, and a public meeting to discuss the Plan was held on September 21, 2006. The Removal Action Work Plan included the following:

- An initial gas barrier membrane placed on the soil sub grade
- A continuous gravel blanket beneath the floor slab and continuous interior footings
- Inlet pipes to allow fresh air to enter the gravel blanket
- Outlet pipes to collect fresh air from the inlet pipes and soil gas and direct it to the roof
- A membrane constructed on top of the floor slab to mitigate the potential for gas movement into the living spaces
- A concrete topping slab to protect the membrane, and
- Wind-driven turbines

Based on the groundwater restrictions in the FISCA deed and the restrictions contained both in the covenants between DTSC and the DON and DTSC and the City of Alameda, as well as the current enforcement of the groundwater restrictions, the DON finds that the existing controls currently in place meet the objectives of protecting future residents and users on the former DON property at FISCA and East Housing from unacceptable risk to human health, safety, or the environment due to exposures to contaminated soils on the property or contaminated groundwater while the OU5/IR-02 response action is being undertaken. No additional institutional controls are necessary.

12.5.2 Future Institutional Controls

12.5.2.1 Conveyance to a Non-federal Entity

When the Alameda Point property is to be transferred to a non-federal entity, the IC objectives to be achieved through land use restrictions for this site will be incorporated into the following legal mechanisms:

- 1. If the property is transferred, restrictive covenants will be included in one or more Quitclaim Deeds from the DON to the property recipient.
- 2. Restrictive covenants will be included in a "Covenant to Restrict Use of Property"¹ entered into by the DON and DTSC as provided in the Navy/DTSC MOA (Navy and DTSC, 2000) and consistent with the substantive provisions of Title (tit.) 22 Cal. Code Regs. Section 67391.1.

The "Covenant to Restrict Use of Property" will incorporate the land use restrictions into environmental restrictive covenants that run with the land and that are enforceable by DTSC and the DON against future transferees. The Quitclaim Deed(s) will include the identical land use restrictions in environmental restrictive covenants that run with the land and that will be enforceable by the DON against future transferees.

Detailed land use restrictions will be set forth in the remedial design consistent with the following:

- 1. New construction in the OU-5 area subject to ICs shall not be for any of the following purposes until the risk-based remedial goals in the ROD have been reached unless otherwise approved by the DON and FFA signatories:
 - a. A residence, including any mobile home or factory-built housing, constructed or installed for use as residential human habitation;
 - b. A hospital for humans;
 - c. A school for persons under 21 years of age;
 - d. Daycare facility for children; or
 - e. Any permanently occupied human habitation other than those used for commercial or industrial purposes
- 2. Within the OU-5 area the installation of new groundwater wells of any type will be prohibited without prior review and written approval from the DON, DTSC, EPA, and Water Board until cleanup objectives have been achieved.
- 3. Also prohibited will be the installation of any well that has the potential to affect plume migration.
- 4. The alteration, disturbance, or removal of Navy groundwater monitoring wells, groundwater extraction wells, treatment facilities, and associated piping and equipment, to include any component of the remedial action, will be prohibited

See "Memorandum of Agreement Between the United States Department of the Navy and the California Department of Toxic Substances Control, Use of Model 'Covenant to Restrict Use of Property' at Installations Being Closed and Transferred by the United States Department of the Navy" dated March 10, 2000.

without prior review and written approval from the DON, DTSC, EPA, and Water Board.

12.5.2.2 Conveyance to a Federal Department or Agency

If the property within OU-5 is, in the future, transferred by the DON to a federal department or agency, the IC objectives/land use restrictions set forth in Section 12.5.2.1 will be incorporated into a Memorandum of Agreement or similar agreement.

12.5.2.3 Potential Groundwater Plume Off-Station at the College of Alameda

Currently there is no information to indicate that any institutional controls are necessary to protect future residents and visitors on the College of Alameda property from unacceptable risk to human health, safety, or the environment due to exposure to groundwater. The DON agrees to implement ICs consistent with those for the OU-5 area, in consultation with the FFA signatories, if data collected in support of the remedial design indicates ICs are required. There are currently no existing groundwater wells on College of Alameda property. If future groundwater sampling documents a need for CERCLA institutional controls to prevent exposure to the groundwater, DON will rely on the local permit programs administered by the Alameda County Public Works Agency ("ACPWA") to regulate access to and use of the groundwater. This agency requires that any person planning to construct a water well in the city limits of Alameda must apply to the ACPWA and obtain a permit for construction of such well. The ACPWA is also authorized to include any necessary conditions in the permit to assure adequate protection of public health.

If institutional controls are determined to be necessary, the DON will provide ACPWA with copies of the maps that delineate the off-station groundwater plume. The DON will work with ACPWA to provide updated information annually until cleanup objectives have been achieved.

The ACPWA shall have the lead in assuring that appropriate permits are obtained for construction of new water wells overlying the groundwater plume and taking any necessary enforcement action to assure that such permits are obtained and complied with.

12.5.3 IC Implementation and Oversight

The DON and FFA signatories and their authorized agents, employees, contractors and subcontractors shall have the right to enter upon the OU-5/IR-02 area in order to conduct investigations, tests, or surveys; inspect field activities; or construct, operate, and maintain any response or remedial action as required or necessary under the cleanup program, including but not limited to monitoring wells, pumping wells, and treatment facilities. These access restrictions

will be included in the deed and covenant for property conveyed to a non-federal entity and in the MOA if property is conveyed to a federal entity.

The DON shall address IC implementation and maintenance actions including periodic inspections in the preliminary and final RD Reports to be developed and submitted to the FFA signatories for review and approval pursuant to the FFA (see "Navy Principles and Procedures for Specifying, Monitoring, and Enforcement of Land Use Controls and Other Post-ROD Actions" attached to January 16, 2004 DoD Memorandum titled "Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Record of Decision (ROD) and Post-ROD Policy"). The Preliminary and Final RD Reports are primary documents as provided in Section 10.3 of the FFA. The Preliminary and Final RD Reports shall include a land use control (LUC) RD section to describe required IC implementation actions including:

- Requirements for CERCLA five-year remedy review;
- Frequency and requirements for periodic monitoring or visual inspections and reporting results from monitoring and inspections;
- Notification procedures to the regulators for planned property conveyance, changes, and/or corrective action required for the remedy;
- Development of wording for land use restrictions and parties to be provided copies of the deed language once executed;
- Identification of responsibilities for DON, EPA, DTSC, Water Board, other government agencies, and the new property owner for implementation, monitoring, reporting, and enforcement of ICs;
- A list of ICs with their expected duration; and
- Maps identifying where ICs are to be implemented.

The DON shall be responsible for implementing, inspecting, reporting, maintaining, and enforcing the necessary ICs described in this ROD in accordance with the approved RD Reports. Although the DON may later transfer these procedural responsibilities to another party by contract, property transfer agreement, or other means, the DON shall retain ultimate responsibility for remedy integrity. Should any of the ICs fail, the DON shall ensure that appropriate actions are taken to reestablish protectiveness of the remedy and may initiate legal action to either compel action by a third party(ies) and/or recover the DON's costs for mitigating any discovered IC violation(s). The ICs will remain in place until the concentrations of benzene and naphthalene in groundwater have been reduced to levels that achieve risk-based remedial goals in this ROD and allow for unrestricted site use and exposure.

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Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007

13.0 STATUTORY DETERMINATIONS

Section 121 of CERCLA established five principal requirements for the selection of remedies. Remedies must: 1) protect human health and the environment; 2) comply with ARARs unless a waiver is justified; 3) be cost effective; 4) utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and 5) satisfy a preference for treatment as a principal element. The following sections discuss how the selected remedy meets these statutory requirements and preferences. Complete discussions are found in the RI/FS (ERRG, 2004).

13.1 PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

Results of previous investigations indicate that benzene and naphthalene in shallow groundwater at OU-5/IR-02 pose a potential risk to human health based on current and reasonably anticipated future land uses. For the current and future residential use for most of this site, the carcinogenic risk without using the groundwater for drinking water is within the risk management range. Carcinogenic and non-carcinogenic risks if the groundwater were used for drinking water exceed the risk management range. The ecological risk assessment concluded that there are no unacceptable ecological risks at the site. Additionally, the ecological risk assessment concluded that the site supports only limited habitat, the presence of terrestrial receptors is limited, and future land uses would not create additional ecological habitat.

The selected remedy will protect human health and the environment by reducing the mass of contaminants in groundwater to facilitate biodegradation of benzene and naphthalene and to prevent potential future unacceptable exposures in the unlikely event that the groundwater may be used for drinking water in the future.

13.2 COMPLIANCE WITH ARARs

Section 121(d) of CERCLA (42 United States Code [U.S.C.] Section [§] 9621[d]), as amended, states that remedial actions on CERCLA sites must attain (or the decision document must justify the waiver of) any federal or more stringent state environmental standards, requirements, criteria, or limitations that are determined to be legally applicable or relevant and appropriate.

Applicable requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address the situation at a CERCLA site. The requirement is applicable if the jurisdictional prerequisites of the standard show a direct correspondence when objectively

compared to the conditions at the site. An applicable federal requirement is an ARAR. An applicable state requirement is an ARAR only if it is more stringent than federal ARARs.

If the requirement is not legally applicable, then the requirement is evaluated to determine whether it is relevant and appropriate. Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that, while not applicable, address problems or situations similar to the circumstances of the proposed response action and are well suited to the conditions of the site (EPA, 1988a). A requirement must be determined to be both relevant and appropriate in order to be considered an ARAR.

The criteria for determining relevance and appropriateness are listed in 40 C.F.R. $\S 300.400(g)(2)$ and include the following:

- The purpose of the requirement and the purpose of the CERCLA action.
- The medium regulated or affected by the requirement and the medium contaminated or affected at the CERCLA site.
- The substances regulated by the requirement and the substances found at the CERCLA site.
- The actions or activities regulated by the requirement and the response action contemplated at the CERCLA site.
- Any variances, waivers, or exemptions of the requirement and their availability for the circumstances at the CERCLA site.
- The type of place regulated and the type of place affected by the release or CERCLA action.
- The type and size of structure or facility regulated and the type and size of structure or facility affected by the release or contemplated by the CERCLA action.
- Any consideration of use or potential use of affected resources in the requirement and the use or potential use of the affected resources at the CERCLA site.

According to CERCLA ARARs guidance (EPA, 1988b), a requirement may be "applicable" or "relevant and appropriate," but not both. Identification of ARARs must be done on a site-specific basis and involve a two-part analysis: first, a determination whether a given requirement is applicable; then, if it is not applicable, a determination whether it is nevertheless both relevant and appropriate. It is important to explain that some regulations may be applicable or, if not applicable, may still be relevant and appropriate. When the analysis determines that a

requirement is both relevant and appropriate, such a requirement must be complied with to the same degree as if it were applicable (EPA, 1988b).

Tables 13-1 through 13-3 present each potential ARAR with a determination of ARAR status (i.e., applicable, relevant and appropriate, or not an ARAR). For the determination of relevance and appropriateness, the pertinent criteria were examined to determine whether the requirements addressed problems or situations sufficiently similar to the circumstances of the release or response action contemplated, and whether the requirement was well suited to the site. A negative determination of relevance and appropriateness indicates that the requirement did not meet the pertinent criteria. Negative determinations are documented in the tables and are discussed in the text only for specific cases.

To qualify as a state ARAR under CERCLA and the NCP, a state requirement must be:

- A state law or regulation
- An environmental or facility siting law or regulation
- Promulgated (of general applicability and legally enforceable)
- Substantive (not procedural or administrative)
- More stringent than federal requirements
- Identified in a timely manner
- Consistently applied

To constitute an ARAR, a requirement must be substantive. Therefore, only the substantive provisions of requirements identified as ARARs in this analysis are considered to be ARARs. Permits are considered to be procedural or administrative requirements. Provisions of generally relevant federal and state statutes and regulations that were determined to be procedural or non-environmental, including permit requirements, are not considered to be ARARs. CERCLA Section 121(e)(1), 42 U.S.C. § 9621(e)(1), states that "No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely on-site, where such remedial action is selected and carried out in compliance with this section." The term *on-site* is defined for purposes of this ARARs discussion as "the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action" (40 C.F.R. § 300.5).

Nonpromulgated advisories or guidance issued by federal or state governments are not legally binding and do not have the status of ARARs. Such requirements may, however, be useful, and are "to be considered" (TBC). TBC (40 C.F.R. § 300.400[g][3]) requirements complement

ARARs but do not override them. They are useful for guiding decisions regarding cleanup levels or methodologies when regulatory standards are not available.

Pursuant to EPA guidance (EPA, 1988b), ARARs are generally divided into three categories: chemical-specific, location-specific, and action-specific requirements. This classification was developed to aid in the identification of ARARs; some ARARs do not fall precisely into one group or another. ARARs are identified on a site basis for remedial actions where CERCLA authority is the basis for cleanup.

As the lead federal agency, the DON has primary responsibility for identifying federal ARARs at OU-5/IR-02 within Alameda Point and FISCA. Compliance with location-specific, action-specific, and chemical-specific ARARs is described in the following subsections.

Remedial action performed under CERCLA must comply with all ARARs. The selected remedy was found to comply with all ARARs, as presented in Tables 13-1 through 13-3.

13.2.1 Chemical-specific ARARs

Chemical-specific ARARs are health- or risk-based numerical values or methodologies that, when applied to site-specific conditions, establish the acceptable amount or concentration of a chemical that may be found in, or discharged to, the ambient environment. Chemical-specific ARARs for the selected remedy are presented in Table 13-1 and are described below by medium.

13.2.1.1 Federal Chemical-specific ARARs

One of the significant issues in identifying ARARs for groundwater under the Safe Drinking Water Act (SDWA) and the RCRA is whether the groundwater at the site can be classified as a source of drinking water. EPA groundwater policy is set forth in the preamble to the NCP (55 Fed. Reg. 8666, 8752–8756 [1990]). This policy uses the groundwater classification system set forth in the draft *EPA Guidelines for Groundwater Classification Under the EPA Groundwater Protection Strategy* (EPA, 1996). Under this policy, groundwater is classified in one of three categories (Class I, II, or III), based on ecological importance, replaceability, and vulnerability considerations. Irreplaceable groundwater currently used by a substantial population or groundwater that supports a vital habitat is considered to be Class I. Class II consists of groundwater that cannot be used for drinking water due to insufficient quality (e.g., high salinity or widespread, naturally occurring contamination) or quantity is considered to be Class III. The EPA guidelines define Class III groundwater as groundwater with TDS concentrations over 10,000 mg/L and a yield of less than 150 gallons per day (EPA, 1996). Class III

FEDERAL AND STATE CHEMICAL-SPECIFIC^a ARARs FOR GROUNDWATER

Requirement	Prerequisite	Citation ^b	ARAR Determination	Comments					
FEDERAL – GROUNDWATER									
Safe Drinking Water Act (42 U.S.C., ch. 6A,	§ 300[f]–300[j]-26) ^c								
National primary drinking water standards are health-based standards for public water systems (MCLs).	Public water system	40 C.F.R. § 141.61(a)	Not an ARAR	The primary drinking water standards are not considered applicable because the point of compliance is the tap of a public water system. The DON does not consider the MCLs to be relevant and appropriate because the groundwater is unlikely to be used as a drinking water supply. A discussion of site groundwater as a potential drinking water source is presented in Section 13.2.1.1.					
MCLGs pertain to known or anticipated adverse health effects (also known as recommended MCLs).	Public water system	40 C.F.R. § 141.50	Not an ARAR	There are no non-zero MCLGs for COPCs at the site.					
Resource Conservation and Recovery Act (4	2 U.S.C., ch. 82, §§ 6901–	6991[i]) ^c							
Groundwater protection standards: Owners/operators of RCRA treatment, storage, or disposal facilities must comply with conditions in this section that are designed to ensure that hazardous constituents entering the groundwater from a regulated unit do not exceed the concentration limits for contaminants of concern set forth under Cal. Code Regs. tit. 22, § 66264.94 in the uppermost aquifer underlying the waste management area of concern at the POC.	A regulated unit that receives or has received hazardous waste before July 26, 1982, or regulated units that ceased receiving hazardous waste prior to July 26, 1982, where constituents in or derived from the waste may pose a threat to human health or the environment.	Cal. Code Regs. tit. 22, § 66264.94, (a)(1), (a)(3), (c), (d), and (e)	Relevant and Appropriate	These standards are not applicable because OU-5/IR- 02 does not contain a RCRA waste management unit and the wastes being addressed by OU-5/IR-02 actions are not classified as RCRA hazardous wastes. However, substantive provisions of Cal. Code Regs. tit. 22 § 66264.94(a)(1), (a)(3), (c), (d), and (e) are relevant and appropriate groundwater ARARs at OU- 5/IR-02 because the wastes at the site are similar or identical to RCRA hazardous wastes.					

FEDERAL AND STATE CHEMICAL-SPECIFIC^a ARARs FOR GROUNDWATER

Requirement	Prerequisite	Citation ^b	ARAR Determination	Comments				
Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C., ch. 103, §§ 9601–9675) ^c								
ACLs using a point of exposure beyond the facility boundary.	Known or projected points of entry from groundwater to surface water	CERCLA Section 121(d)(2) (B)(ii) 42 U.S.C., ch. 103, § 9621	Not an ARAR	Groundwater from the site has not migrated to the Oakland inner harbor, resulting in a discharge. Additionally, there are no known or projected points of entry into surface water. Therefore, exposure-based CERCLA ACLs are not considered ARARs.				
	FEDERAL – HAZARDOUS WASTE							
Resource Conservation and Recovery Act (4	2 USC, ch. 82, §§ 6901–69	991[i]) ^c						
Defines RCRA hazardous waste. A solid waste is characterized as toxic, based on the TCLP, if the waste exceeds the TCLP maximum concentrations.	Waste Cal. Code Regs. tit. A 22, § 66261.21, 66261.22(a)(1), 66261.23, 66261.24(a)(1), and 66261.100		Applicable	Applicable for determining whether waste is hazardous.				
		FEDERAL – AIR						
Clean Air Act (42 U.S.C., ch. 85§§ 7401-767	1)							
NAAQS: Primary and secondary standards for ambient air quality to protect public health and welfare (including standards for particulate matter and lead).	Contamination of air affecting public health and welfare	40 C.F.R. §50.4- 50.12	Not an ARAR	Not enforceable and therefore not an ARAR.				

FEDERAL AND STATE CHEMICAL-SPECIFIC^a ARARs FOR GROUNDWATER

Requirement	Prerequisite	Citation ^b	ARAR Determination	Comments					
	STATE – GROUNDWATER								
Cal/EPA Department of Toxic Substances	Control ^c								
State MCL list. Source of drinking water		Cal. Code Regs. tit. 22, §§ 64431 and 64444	Not an ARAR	The State MCLs are not considered applicable because the point of compliance is the tap of a public water system. The DON does not consider the MCLs to be relevant and appropriate because the groundwater is unlikely to be used as a drinking water supply, as defined within SWRCB Res. 88-63 due to high TDS and low well yields. A discussion of site groundwater as a potential drinking water source is presented in Section 13.2.1.1 EPA considers the State benzene MCL to be an ARAR for this action but, because the cleanup level is equivalent to that number, is not disputing this ROD. The Water Board considers the State benzene MCL to be an ARAR for this action at Alameda Point, but not for groundwater below FISCA.					
State and Regional Water Quality Control	Boards ^c								
Authorizes the SWRCB and Water Board to establish in water quality control plans beneficial uses and numerical and narrative standards to protect both surface water and groundwater quality. Authorizes regional boards to issue permits for discharges to land or surface or groundwater that could affect water quality, including NPDES permits, and to take enforcement action to protect water		Cal. Water Code, div. 7, §§ 13241, 13243, 13263(a), 13269, and 13360 (Porter-Cologne Water Quality Control Act)	Applicable	The DON accepts the substantive provisions of §§ 13241, 13243, 13263(a), 13269, and 13360 of the Porter-Cologne Act enabling legislation, as implemented through the beneficial uses, WQOs, waste discharge requirements, promulgated policies of the Basin Plan for the San Francisco Bay region as ARARs.					

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FEDERAL AND STATE CHEMICAL-SPECIFIC^a ARARs FOR GROUNDWATER

Requirement	Requirement Prerequisite Citation		ARAR Determination	Comments
quality.				
Describes the water basin in the San Francisco Bay Region, establishes beneficial uses of groundwater and surface water, establishes WQOs, including narrative and numerical standards, establishes implementation plans to meet WQOs and protect beneficial uses, and incorporates statewide water quality control plans and policies.		Comprehensive Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) Chapters 2 and 3 (Cal. Water Code § 13240)	Applicable	Substantive requirements pertaining to beneficial uses, WQOs, and certain statewide water quality control plans are potential State ARARs for the groundwater components of this response action.
Incorporated into all regional board basin plans. Designates all groundwater and surface waters of the state as drinking water except where the TDS is greater than 3,000 ppm, the well yield is less than 200 gpd from a single well, the water is a geothermal resource or in a water conveyance facility, or the water cannot reasonably be treated for domestic use using either best management practices or best economically achievable treatment practices.		SWRCB Res.88-63 (Sources of Drinking Water Policy)	Applicable	This resolution is an ARAR for groundwater at OU-5/IR-02.

FEDERAL AND STATE CHEMICAL-SPECIFIC^a ARARs FOR GROUNDWATER

Requirement	Prerequisite	Citation ^b	ARAR Determination	Comments
Establishes the policy that high-quality waters of the state "shall be maintained to the maximum extent possible" consistent with the "maximum benefit to the people of the State." It provides that whenever the existing quality of water is better than that required by applicable water quality policies, such existing high-quality water will be maintained until it has been demonstrated to the state that any change will be consistent with maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies. It also states that any activity that produces or may produce a waste or increased volume or concentration of waste and that discharges or proposes to discharge to existing high-quality waters will be required to meet waste-discharge requirements that will result in the best practicable treatment or control of the discharge.		Statement of Policy With Respect to Maintaining High Quality of Waters in California, SWRCB Res. 68-16	Not an ARAR	The DON has determined that SWRCB Res. 68-16 is not a chemical-specific ARAR for determining remedial action goals, but it is an action-specific ARAR for regulating discharged treated groundwater to surface water. This remedial action does not include discharge of treated groundwater to surface water. The DON has determined that further migration of VOCs through groundwater is not a discharge governed by the language in Res. 68-16. More specifically, the language of SWRCB Res. 68-16 indicates that it is prospective in intent, applying to new discharges in order to maintain existing high-quality waters. It is not intended to apply to restoration of waters that are already degraded. Section 13.2.1.2 provides additional information on the DON's and State of California's positions.
Describes requirements for Water Board oversight of investigation and cleanup and abatement activities resulting from discharges of hazardous substances. The Water Board may decide on cleanup and abatement goals and objectives for the protection of water quality and beneficial uses of water within each region. Establishes		Policies and procedures for investigation and cleanup and abatement of discharges under Cal.	Not an ARAR	SWRCB Res. 92-49 is not an ARAR for groundwater cleanup because the provisions of Cal. Code Regs. tit. 22, § 66264.94 (a)(1), (a)(3), (c), (d), and (e) have been determined to be a federal ARAR and SWRCB Res. 92-49 is not more stringent. Section 13.2.1.2 provides additional information on the DON's and State of California's positions.

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FEDERAL AND STATE CHEMICAL-SPECIFIC^a ARARs FOR GROUNDWATER

Requirement	Prerequisite	Citation ^b	ARAR Determination	Comments
criteria for "containment zones" where cleanup to established water-quality goals is not economically or technically practicable.		Water Code § 13304, SWRCB Res. 92-49		

Notes:

^a Action-specific ARARs may contain chemical-specific limitations; if so, they are addressed in the action-specific ARAR tables.

- ^b Only the substantive provisions of the requirements cited in this table are potential ARARs.
- ^c Statutes and policies, and their citations, are provided as headings to identify general categories of proposed ARARs for the convenience of the reader; listing the statutes and policies does not indicate that the DON accepts the entire statutes or policies as potential ARARs; specific proposed ARARs are addressed in the table below each general heading; only pertinent substantive requirements of the specific citations are considered proposed ARARs.

Abbreviations and Acronyms:

ACL - alternate concentration limit ARAR - Applicable or Relevant and Appropriate Requirement Cal. – California Cal. Code Regs. - California Code of Regulations Cal/EPA - California Environmental Protection Agency CERCLA - Comprehensive Environmental Response Compensation, and Liability Act C.F.R. – Code of Federal Regulations ch. - chapterCOPC - chemical of potential concern div. – division DON - Department of the Navy EPA – United States Environmental Protection Agency FISCA - Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex gpd – gallon per day IR - Installation Restoration MCL - Maximum Contaminant Level MCLG - Maximum Contaminant Level Goal NAAQS - National Ambient Air Quality Standards

NPDES - National Pollutant Discharge Elimination System OU – Operable Unit POC – point of compliance ppm – parts per million RCRA - Resource Conservation and Recovery Act Res. – Resource ROD – Record of Decision \S – Section SWRCB - State Water Resources Control Board TCLP - Toxicity Characteristic Leaching Procedure TDS - total dissolved solids tit. – title U.S.C. - United States Code VOC - volatile organic compound Water Board - San Francisco Bay Water Board WQO - Water Quality Objective

groundwater can also be classified based on economic or technological treatability tests as well as quality or quantity (both criteria are not needed, just one or the other).

Safe Drinking Water Act

Substantive requirements of 40 C.F.R. Section 141.61(a) and 141.50 pertaining to MCLs and maximum contaminant level goals (MCLGs) have been determined not to be federal chemical-specific ARARs for groundwater. The DON does not consider the MCLs to be relevant and appropriate because the groundwater is unlikely to be used as a drinking water source. With regards to OU-5, The DON's groundwater beneficial use determination report states, "For the purpose of CERCLA clean up decisions, groundwater in the western and central regions of Alameda Point is unlikely to be used as a potential drinking water source" (TtEMI, 2000a).

Federal MCLs and MCLGs are not ARARs for remedial action conducted at OU-5/IR-02.

Concentration Limits for Contaminants

Groundwater concentration limits for RCRA-regulated units are promulgated at Cal. Code Regs. tit. 22, § 66264.94. For corrective action programs, Cal. Code Regs. tit. 22, § 66264.94(c) states that the concentrations of compounds must not exceed the background level of that constituent in groundwater or, if achieving background is shown to be technologically or economically infeasible, some higher concentration limit that is set as part of the corrective action program. In no event shall a concentration limit greater than background exceed MCLs established under the federal SDWA (Cal. Code Regs. tit. 22, §§ 64431 and 64444).

These standards are not "applicable" because OU-5/IR-02 does not contain a RCRA waste management unit, and the wastes being addressed by the OU-5/IR-02 actions are not classified as RCRA hazardous wastes.

However, substantive provisions of Cal. Code Regs. tit. 22, § 66264.94(a)(1), (a)(3), (c), (d), and (e) are "relevant and appropriate" federal ARARs for groundwater at OU-5/IR-02 because the wastes at the site are similar or identical to RCRA hazardous wastes.

Resource Conservation and Recovery Act – Hazardous Waste

The federal RCRA requirements at 40 C.F.R. pt. 261 do not apply in California because the state RCRA program is authorized. The authorized state RCRA requirements are therefore considered potential federal ARARs. The applicability of RCRA requirements depends on whether the waste is a RCRA hazardous waste, whether the waste was initially treated, stored, or disposed after the effective date of the particular RCRA requirement, and whether the activity at the site

constitutes treatment, storage, or disposal as defined by RCRA. However, RCRA requirements may be relevant and appropriate even if they are not applicable. Examples include activities similar to the definition of RCRA treatment, storage, or disposal for waste similar to RCRA hazardous waste.

The determination of whether a waste is a RCRA hazardous waste can be made by comparing the site waste to the definition of RCRA hazardous waste. The RCRA requirements at Cal. Code Regs. tit. 22, § 66261.21, 66261.22(a)(1), 66261.23, 66261.24(a)(1), and 66261.100 are potential ARARs because they define RCRA hazardous waste. A waste can meet the definition of hazardous waste if it has the toxicity characteristic of hazardous waste. This determination is made by using the Toxicity Characteristic Leaching Procedure (TCLP). The maximum concentrations allowable for the TCLP listed in § 66261.24(a)(1)(B) are potential federal ARARs for determining whether the site has hazardous waste. If the site waste has concentrations exceeding these values, it is determined to be a characteristic RCRA hazardous waste.

Clean Air Act: National Ambient Air Quality Standards

The Clean Air Act (CAA) establishes the National Ambient Air Quality Standards (NAAQSs) in 40 C.F.R. § 50.4–50.12. NAAQSs are not enforceable in and of themselves; they are translated into source-specific emissions limitations by the state (EPA, 1990). Therefore NAAQSs are not an ARAR for OU-5/IR-02.

13.2.1.2 State Chemical-specific ARARs

State Drinking Water Standards

In June 1999, the Water Board issued a letter that states that the shallow groundwater at FISCA meets the exemption criteria in the SWRCB Resolution No. 88-63 and Water Board Resolution No. 89-39, so it is unlikely that the shallow groundwater would be used as a source of drinking water (RWQCB, 1999). In July 2000, the DON issued the groundwater beneficial use determination report, which stated "For the purpose of CERCLA clean up decisions, groundwater in the western and central regions (including Site 25) of Alameda Point is unlikely to be used as a potential drinking water source." Based on the DON's July 2000 groundwater beneficial use determination report for Alameda Point and the Water Board's determination for FISCA, the DON does not consider state MCLs as ARARs for remedial action at OU-5/IR-02. EPA considers the State benzene MCL to be an ARAR for this action but, because the cleaning level is equivalent to that number, is not disputing this ROD. In December 2006, the Water

Board stated that they considered the state MCLs applicable for the groundwater below OU-5 but not below FISCA.

Porter Cologne Water Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) became Division 7 of the California Water Code in 1969. The Porter-Cologne Act requires each regional board to formulate and adopt Basin Plans for all areas within the region (Cal. Water Code § 13240). It also requires each regional board to establish water quality objectives (WQOs) that will protect the beneficial uses of the water basin (Cal. Water Code § 13241) and to prescribe waste discharge requirements that would implement the Basin Plan for any discharge of waste to the waters of the state (Cal. Water Code § 13263[a]).

Other sections of the Porter-Cologne Act include Cal. Water Code § 13243, which allows regional boards to specify conditions or areas where waste discharge is not permitted. Cal. Water Code § 13269 provides the boards authority for waivers for reports or compliance with requirements as long as it is not against the public interest. Cal. Water Code § 13360 specifies circumstances for regional boards to order compliance in a specific manner.

The DON accepts the substantive provisions of Cal. Water Code §§ 13241, 13243, 13263(a), 13269, and 13360 of the Porter-Cologne Act as enabling legislation as implemented through the beneficial uses, WQOs, waste discharge requirements, and promulgated policies of the Water Quality Control Plan (WQCP) for the San Francisco Bay Region, as state ARARs. Where waste discharge requirements are specified in general permits, the substantive requirements in the permits, but not the permits themselves, are potential ARARs.

Cal. Water Code § 13304 sets forth enforcement authority and an enforcement process (orders issued by the state) and is procedural in nature. It does not constitute an ARAR because it does not itself establish or contain substantive environmental "standards, requirements, criteria, or limitations" (CERCLA Section 121 [42 U.S.C. § 9621]) and is not in itself directive in intent. Through its enforcement authority and procedures, substantive state environmental standards set forth in other statutes, regulations, plans, and orders are enforced. In addition, Cal. Water Code § 13304 is no more stringent than the substantive requirements of the potential state ARARs identified in the above paragraphs or potential federal ARARs for groundwater.

Comprehensive Water Quality Control Plan for San Francisco Bay (Basin Plan)

The Basin Plan for the San Francisco Bay was prepared and implemented by the Water Board to protect and enhance the quality of the waters in the San Francisco Bay. The Basin Plan establishes location-specific beneficial uses and WQOs for the surface water and groundwater of the region and is the basis of the Water Board's regulatory programs. The Basin Plan includes both numeric and narrative WQOs for specific groundwater subbasins. The WQOs are intended to protect the beneficial uses of the waters of the region and to prevent nuisance.

The DON accepts the substantive provisions in Chapters 2 and 3 of the Basin Plan for the Water Board, including beneficial use, WQOs, and waste discharge requirements, as potential ARARs. The Basin Plan states that "potential beneficial uses applicable to groundwater in the Region include municipal use (MUN), industrial water supply (IND), industrial process water supply (PROC), agriculture water supply (AGR), and freshwater replenishment to surface waters (FRESH). Except for the replenishment scenario (which was considered in the ecological risk assessment), the other four potential beneficial uses were subject to a Tier 2 HHRA.

The DON accepts the substantive provisions in Chapters 2 and 3 of the Basin Plan for the San Francisco Bay Water Board, including beneficial use, WQOs, and waste discharge requirements, as potential ARARs.

SWRCB Resolution 88-63

State Water Resources Control Board Res. 88-63, Adoption of Policy Entitled "Sources of Drinking Water" (SWRCB, 1988) establishes criteria to help Water Boards identify potential sources of drinking water. According to this resolution, all groundwater in California is considered suitable or potentially suitable for domestic or municipal freshwater supply except in cases where any one of the following water quality and production criteria cannot be met.

- TDS exceed 3,000 mg/L (or electrical conductivity is greater than 5,000 microhms per centimeter) and the Water Board does not reasonably expect the groundwater to supply a public supply system.
- Groundwater is contaminated, either by natural processes or by human activity unrelated to a specific pollution incident, and cannot reasonably be treated for domestic use either by best management practices or best economically available treatment practices.
- Groundwater does not provide sufficient water to supply a single well capable of producing an average sustained yield of 200 gallons per day.

Resolution 88-63 is considered applicable to OU-5/IR-02; however, as indicated in Section 13.2.1.1, OU-5/IR-02 does not meet the TDS and yield criteria and is therefore not considered a suitable or potentially suitable drinking water supply. In December 2006, the Water Board stated that they consider state MCLs applicable for the groundwater below OU-5 but not below FISCA.

The DON's Position Regarding SWRCB Resolutions 92-49 and 68-16

The DON and the state of California have not agreed whether SWRCB Res. 92-49 and Res. 68-16 are ARARs for the remedial action at OU-5/IR-02. Therefore, this ROD documents each party's position but does not attempt to resolve the issue.

The DON recognizes that the key substantive requirements of Cal. Code Regs. tit. 22, § 66264.94 (and the identical requirements of Cal. Code Regs. tit. 23, § 2550.4 and Section III.G of SWRCB Res. 92-49) require cleanup of constituents to background levels unless that is technologically or economically infeasible and an alternative cleanup level will not pose a substantial present or potential hazard to human health or the environment (SWRCB, 1992). In addition, the DON recognizes that these provisions are more stringent than the corresponding provisions of 40 C.F.R. § 264.94, and although they are federally enforceable under RCRA, they are also independently based on state law to the extent that they are more stringent than the federal regulations.

The DON has also determined that SWRCB Res. 68-16 is not a chemical-specific ARAR for determining remedial action goals, but it is an action-specific ARAR for regulating discharged treated groundwater to surface water. The DON has determined that further migration of VOCs through groundwater is not a discharge governed by the language in Res. 68-16. More specifically, the language of SWRCB Res. 68-16 indicates that it is prospective in intent, applying to new discharges in order to maintain existing high-quality waters. It is not intended to apply to restoration of waters that are already degraded.

The DON's position is that SWRCB Res. 68-16 and Res. 92-49 and Cal. Code Regs. tit. 23, § 2550.4 do not constitute chemical-specific ARARs for this remedial action because they are state requirements and are not more stringent than the federal ARAR provisions of Cal. Code Regs. tit. 22, § 66264.94. The NCP set forth in 40 C.F.R. § 300.400(g) provides that only state standards more stringent than federal standards may be ARARs (see also CERCLA Section 121[d][2][A][ii]).

The substantive technical standard in the equivalent state requirements (i.e., Cal. Code Regs. tit. 23, Division (div.) 3, Chapter (ch.) 15 and SWRCB Res. 92-49 and Res. 68-16) is identical to the substantive technical standard in Cal. Code Regs. tit. 22, § 66264.94. This section of Cal.

Code Regs. tit. 22 will likely be applied in a manner consistent with equivalent provisions of other regulations, including SWRCB Res. 92-49 and Res. 68-16.

State of California's Position Regarding SWRCB Resolutions 92-49 and 68-16

The state does not agree with the DON determination that SWRCB Res. 92-49 and Res. 68-16 and certain provisions Cal. Code Regs. tit. 23, div. 3, ch. 15 are not ARARs for this response action. SWRCB has interpreted the term "discharges" in the California Water Code to include the movement of waste from soils to groundwater and from contaminated to uncontaminated water (SWRCB, 1994). However, the state agrees that the proposed action would comply with SWRCB Res. 92-49 and Res. 68-16, and compliance with Cal. Code Regs. tit. 22 provisions should result in compliance with Cal. Code Regs. tit. 23 provisions. The state does not intend to dispute the ROD, but reserves its rights if implementation of the Cal. Code Regs. tit. 23 provisions. Because the Cal. Code Regs. tit. 22 regulation is part of the state's authorized hazardous waste control program, it is also the state's position that Cal. Code Regs. tit. 22, § 66264.94 is a state ARAR and not a federal ARAR (*United States v. State of Colorado*, 990 F.2d 1565 [1993]).

Whereas the DON and the state of California have not agreed on whether SWRCB Res. 92-49 and Res. 68-16 and Cal. Code Regs. tit. 23, § 2550.4 are ARARs for this response action, this ROD documents each of the parties' positions on the resolutions but does not attempt to resolve the issue.

13.2.2 Location-specific ARARs

Location-specific ARARs are restrictions on the concentrations of hazardous substances or on conducting activities solely because they are in specific locations. Hydrologic resources, biological resources, and coastal zone management are the resource categories relating to location-specific requirements potentially affected by the OU-5/IR-02 activities. Location-specific ARARs for the selected remedy are presented in Table 13-2.

13.2.2.1 Federal Location-specific ARARs

Endangered Species Act of 1973

The Endangered Species Act (ESA) of 1973 (16 U.S.C. §§ 1531–1543) is not an ARAR because there are no threatened or endangered species in the remediation areas.

Migratory Bird Treaty Act of 1972

The Migratory Bird Treaty Act (16 U.S.C. §§ 703–712) prohibits at any time, using any means or manner, the pursuit, hunting, capturing, and killing or attempting to take, capture, or kill any migratory bird. This act also prohibits the possession, sale, export, and import of any migratory bird or any part of a migratory bird, as well as nests and eggs. A list of migratory birds for which this requirement applies is found at 50 C.F.R. § 10.13. It is the DON's position that this act is not legally applicable to DON actions. However, it may be considered relevant and appropriate.

Migratory bird species are present near Alameda Point and FISCA; however, previous investigations determined that site habitat is not suitable for biological receptors.

Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) (16 U.S.C. §§ 1451–1464) specifically excludes federal lands from the coastal zone (16 U.S.C. § 1453[1]). Therefore, the CZMA is not applicable to OU-5/IR-02. The CZMA was evaluated and determined to be relevant and appropriate. Section 1456(a)(1)(A) requires each federal agency activity within or outside the coastal zone that affects any land or water use or natural resource to conduct its activities in a manner that is consistent to the maximum extent practicable with enforceable policies of approved state management policies. A state coastal zone management program is developed under state law guided by the CZMA and its accompanying implementing regulations in 15 C.F.R. § 930. A state program sets forth objectives, policies, and standards to guide public and private uses of lands and water in the coastal zone.

Because OU-5/IR-02 is not discharging contaminated groundwater to the coastal zone and active remedial activities do not involve any planned impacts to coastal zones, no impacts to the coastal zone are anticipated.

13.2.2.2 State Location-specific ARARs

California Endangered Species Act

The California Endangered Species Act is codified in the California Fish and Game Code (Cal. Fish & Game Code) §§ 2050–2116. It is the DON's position that the requisite federal sovereign immunity waiver does not exist to authorize applicability of the California Endangered Species Act. Nevertheless, this act is considered a relevant and appropriate requirement for the DON's CERCLA response actions at OU-5/IR-02. Cal. Fish & Game Code § 2080 prohibits the take of endangered species.

Several endangered species are known to exist at Alameda Point; however, OU-5/IR-02 remedial activities should not affect any areas that support special-status species or habitat.

California Coastal Act of 1976

The California Coastal Act is codified at Public Resources Code (Cal. Pub. Res. Code) §§ 30000–30900 and Cal. Code Regs. tit. 14, §§ 13001–13666.4. These sections regulate activities associated with development to control direct significant impacts on coastal waters and to protect state and national interests in California coastal resources. Since federal lands are specifically excluded from the definition of coastal zone, the California Coastal Act is not applicable to OU-5/IR-02, but was determined to be a relevant and appropriate requirement.

Because OU-5/IR-02 is not discharging contaminated groundwater to the coastal zone and active remedial activities do not involve any planned impacts to coastal zones, no impacts to the coastal zone are anticipated.

13.2.3 Action-specific ARARs

Action-specific ARARs are technology- or activity-based requirements or limitations for remedial activities. These requirements are triggered by the particular remedial activities conducted at the site. Federal and state action-specific ARARs for the selected remedy are presented in Table 13-3.

13.2.3.1 Federal Action-specific ARARs

Resource Conservation and Recovery Act – Hazardous Waste

Waste streams created in the course of implementing the remedial action would be subject to RCRA requirements for determining whether wastes would be classified as hazardous. Hazardous waste determinations for the soil cuttings generated from the installation of the monitoring wells and the spent carbon generated from the off-gas treatment would be made at the time the waste is generated. If these wastes are determined to be hazardous, then the appropriate requirements for storing, manifesting, and transporting these materials for final disposal would need to be followed.

Substantive requirements applicable to generators of hazardous waste include the following: Title 22 CCR Sections 66262.10(a); 66262.11; 66264.13(a) and (b); 66262.34, 66264.171 to 174; 66264.175(a) and (b); and 66264.178.

Resource Conservation and Recovery Act – Groundwater Monitoring Requirements

This section discusses the substantive provisions of the general monitoring requirements considered to be relevant and appropriate for the response action at OU-5/IR-02.

FEDERAL AND STATE LOCATION-SPECIFIC^a ARARs

Location	Requirement	Prerequisite	Citation	ARAR Determination	Comments				
	FEDERAL – BIOLOGICAL RESOURCES								
Endangered Species Act of	1973 (16 U.S.C. §§ 1531–1543) ^b								
Habitat upon which endangered species or threatened species depend.	Federal agencies may not jeopardize through any taking the continued existence of any listed species or cause the destruction or adverse modification of a critical habitat. The Endangered Species Committee may grant an exemption for agency action if reasonable mitigation and enhancement measures such as propagation, transplantation, and habitat acquisition and improvement are implemented.	Determination of effect upon endangered or threatened species or its habitat. Critical habitat upon which endangered species or threatened species depend.	16 U.S.C. § 1536(a), (h)(1)(B)	Not an ARAR	There are no endangered or threatened species in the OU-5/IR- 02 remediation area.				
Migratory Bird Treaty Act	of 1972 (16 U.S.C. §§ 703) ^b								
Migratory bird area	Protects almost all species of native migratory birds in the U.S. from unregulated "take," which can include poisoning at hazardous waste sites.	Presence of migratory birds	16 U.S.C. §§ 703- 712	Relevant and Appropriate	Migratory birds are not likely to be exposed to any contaminated groundwater or affected by remedial activities.				
	FEDERAL – COASTAL RESOURCES								
Coastal Zone Management	Act (16 U.S.C. § 1456, 15 C.F.R	. § 930) ^b							
Adjacent to coastal zone	Conduct activities in a	Activities affecting the	16 U.S.C. §	Relevant and	Remedial activities at OU-5/IR-02				

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FEDERAL AND STATE LOCATION-SPECIFIC^a ARARs

Location	Requirement	Prerequisite	Citation	ARAR Determination	Comments
	manner consistent with approved State management programs.	coastal zone, including lands thereunder and adjacent shore land.	1456(c) 15 C.F.R. § 930	Appropriate	are not anticipated to impact the coastal zone.
		FEDERAL - HIST	TORIC		
National Historic Preservati	ion Act of 1966, as Amended (1	6 U.S.C. § 470–470x-6) ^b			
Historic project owned or controlled by federal agency	Action to preserve historic properties; planning of action to minimize harm to properties listed on or eligible for listing on the National Register of Historic Places.	Property included in or eligible for the National Register of Historic Places.	16 U.S.C. § 470– 470x-6 36 C.F.R. pt. 800 40 C.F.R. § 6.301(b)	Not an ARAR	There are no historic properties located on OU-5/IR-02.
	0	STATE – BIOLOGICAL	RESOURCES		
		b	RESOURCES		
California Endangered Spe	cies Act (Cal. Fish & Game Cod	le §§ 2050–2116)			
Endangered Species Habitat	No person shall import, export, take, possess, or sell any endangered or threatened species or part or product thereof.	Threatened or endangered species determination on or before 01 January 1985 or a candidate species with proper notification.	Cal. Fish & Game Code § 2080	Not an ARAR	There are no endangered or threatened species present in the OU-5/IR-02 remediation area.
		STATE – COASTAL R	ESOURCES		
California Coastal Act of 19	76 ^b				
Coast	Regulates activities associated with development to control direct significant impacts on coastal waters and	Any activity which could impact coastal waters and resources.	Cal. Pub. Res. Code §§ 30000– 30900 and	Not an ARAR	Remedial activities at OU-5/IR-02 are not anticipated to impact the coastal zone.

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FEDERAL AND STATE LOCATION-SPECIFIC^a ARARs

Location	Requirement	Prerequisite	Citation	ARAR Determination	Comments
	to protect state and national interests in California coastal resources.		Cal. Code Regs. tit. 14, §§ 13001– 13666.4		

Notes:

^b Statutes and policies, and their citations, are provided as headings to identify general categories of proposed ARARs for the convenience of the reader; listing the statutes and policies does not indicate that the DON accepts the entire statutes or policies as proposed ARARs; specific proposed ARARs are addressed in the table below each general heading; only substantive requirements of the specific citations are considered proposed ARARs.

Abbreviations and Acronyms:

ARAR – Applicable or Relevant and Appropriate Requirement Cal. – California C.F.R. – Code of Federal Regulations DON – Department of the Navy IR – Installation Restoration OU – Operable Unit pt. - part Pub. – Public Regs. – Regulation Res. – Resource § – Section tit. – title U.S. – United States U.S.C. – United States Code

^a Only the substantive provisions of the requirements cited in this table are proposed ARARs.

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Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001August 2007 Section 66264.97(b)(5) requires that "The sampling interval of each monitoring well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative groundwater samples."

Section 66264.97(b)(6) requires that "For each monitoring well the annular space (i.e., the space between the borehole and well casing) above and below the sampling interval shall be appropriately sealed to prevent entry of contaminants from the surface, entry of contaminants from the unsaturated zone, cross contamination of saturated zones, and contamination of samples."

Section 66264.97(b)(7) requires that "All monitoring wells shall be adequately developed to enable collection of representative groundwater samples."

Section 66264.97(e)(12)(A)(3) requires that "The number and kinds of samples collected shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that . . . effectiveness of the corrective action program will be determined."

Section 66264.97(e)(13) requires that "The groundwater portion of the monitoring program shall include an accurate determination of the groundwater surface elevation and field parameters (temperature, electrical conductivity, turbidity and pH) at each well each time groundwater is sampled."

The substantive provisions of the following corrective action monitoring requirements are potential ARARs. Substantive provisions of Cal. Code Regs. tit. 22, § 66264.100(d) require that "In conjunction with the corrective action measures, the owner or operator shall establish and implement a water quality monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program . . . shall be effective in determining compliance . . . and in determining the success of the corrective action measures . . . "

Substantive provisions of Cal. Code Regs. tit. 22, § 66264.100(g)(1) require that "After terminating the corrective action measures, . . . The owner or operator shall remain in the corrective action program until: (1) . . . the regulated unit is in compliance . . . based on the results of sampling and analysis for all constituents of concern for a period of one year . . . "

Safe Drinking Water Act – Underground Injection Control

(42 USC Sections 300[f]-300[j]-26), Title 40 C.F.R. Parts 144.12(a), 144.82(a)(1), 146.12(d), and general narrative provisions of the underground injection control that disallow violation of

MCLs as a result of injecting nutrients or microorganisms are substantive requirements relevant and appropriate to remedial action at OU-5/IR-02.

Resource Conservation and Recovery Act – Air Emission Requirements

RCRA air emissions standards at Cal. Code Regs. tit. 22, § 66264.1030-66264.1034, excluding .1030(c), .1033(j), .1034(c)(2), and .1034(d)(2), and at Cal. Code Regs. tit. 22, § 66264.1050-66264.1063, excluding 66264.1050(c) and (d), 66264.1057(g)(2), 66264.1060, and 66264.1063(d)(3), for vents or equipment leaks pertain to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight. Because no hazardous wastes are present, or will be generated that contain greater than 10 percent organic concentration by weight, the RCRA air emission standards are not an ARAR.

Clean Air Act

Direct discharge of emissions from the SVE system to the atmosphere must comply with the Bay Area Air Quality Management District (BAAQMD) rules. The BAAQMD rules are federal ARARs because the EPA delegated them into the State Implementation Plan (SIP) under the CAA, 42 USC, Sections 7401 to 7671.

SIP provisions approved by EPA under Section 110 of the CAA (42 USC, Section 7410 and portions of 40 C.F.R., Part 52.220) are considered ARARs for the selected remedy. Substantive provisions of Regulation 2-301; Regulation 6-301; and Regulation 8-47-301, -302, -500, -600 are applicable.

13.2.3.2 State Action-specific ARARs

For Alameda Point, OU-5, substantive provisions of the following state statutes have been accepted by DON as relevant and appropriate ARARs for implementing institutional controls and entering into a Covenant to Restrict Use of Property with DTSC:

- California Civil Code Land Use Controls Section 1471 (Cal.Civ. Code § 1471)
- California Health and Safety Code Land Use Controls Sections 25202.5, 25222.1, 25233(c), 25234, and 25355.5.

DTSC promulgated a regulation on April 19, 2003 regarding "Requirements for Land-Use Covenants" at Cal. Code Regs., tit. 22, § 67391.1. The substantive provisions of this regulation have been determined to be "relevant and appropriate" state ARARs by DON.

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments				
	FEDERAL – HAZARDOUS WASTE								
Resource Conse	ervation and Recovery Act (42 U.S.C. §§	6901–6991[i]) [*]							
On-site waste generation	Person who generates waste shall determine if that waste is a hazardous waste.	Generator of waste	Cal. Code Regs. tit. 22, § 66262.10(a), 66262.11	Applicable	Applicable for any operation where hazardous waste is generated. There is a potential for groundwater from one or more on-site monitoring wells to be classified as RCRA hazardous waste due to localized concentrations of benzene. The determination of whether groundwater and/or other wastes generated during the remedial activities, such as excess soil cuttings from well installation and treatment residues, are hazardous will be made at the time the wastes are generated.				
	Requirements for analyzing waste for determining whether waste is hazardous.	Generator of waste	Cal. Code Regs. tit. 22, § 66264.13 (a) and (b)	Applicable	Analytical results from generated wastes will be compared to the TCLP limits to determine if the wastes are RCRA hazardous wastes.				
Hazardous waste accumulation	On-site hazardous waste accumulation is allowed for up to 90 days as long as the waste is stored in containers in accordance with Cal. Code § 66262.171–178 or in tanks, on drip pads, inside buildings, is labeled and dated, etc.	Accumulate hazardous waste	Cal. Code Regs. tit. 22, § 66262.34	Applicable	All hazardous wastes generated will be characterized and disposed of appropriately within 90 days of generation at an off-site facility.				

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Container storage	 Containers of RCRA hazardous waste must be: Maintained in good condition, Compatible with hazardous waste to be stored, and Closed during storage except to add or remove waste. 	Storage of RCRA hazardous waste not meeting small- quantity generator criteria before treatment, disposal, or storage elsewhere, in a container	Cal. Code Regs. tit. 22, § 66264.171, .172, .173	Applicable	Substantive provisions are applicable if waste is determined to be RCRA hazardous.
	Inspect container storage areas weekly for deterioration.		Cal. Code Regs. tit. 22, § 66264.174	Applicable	Substantive provisions are applicable if waste is determined to be RCRA hazardous.
	Place containers on a sloped, crack-free base, and protect from contact with accumulated liquid. Provide containment system with a capacity of 10 percent of the volume of containers of free liquids. Remove spilled or leaked waste in a timely manner to prevent overflow of the containment system.	Storage in a container of RCRA hazardous waste not meeting small-quantity generator criteria before treatment, disposal, or storage elsewhere.	Cal. Code Regs. tit. 22, § 66264.175 (a) and (b)	Applicable	Substantive provisions are applicable if waste is determined to be RCRA hazardous.
	At closure, remove all hazardous waste and residues from the containment system, and decontaminate or remove all containers and liners.		Cal. Code Regs. tit. 22, § 66264.178	Applicable	Substantive provisions are applicable if waste is determined to be RCRA hazardous.

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments					
Safe Drinking W	ife Drinking Water Act (42 U.S.C. § 300[f]–300[j]-26)*									
Injection	The UIC program prohibits injection activities that allow movement of contaminants into underground sources of drinking water that may result in violations of primary drinking water standards, other health based standards, or adversely affect health.	Any underground injections are prohibited unless permitted.	40 C.F.R. § 144.12 (a), 146.12(d), and 144.82 (a)(1)	Applicable	Substantive provisions of 40 C.F.R. § 144.12 (a) and 144.82 (a)(1) are potentially applicable for injecting air into the groundwater. Injection wells for biosparging would be Class V wells under the UIC program. The injection of air would not cause the shallow groundwater at OU-5/IR- 02 to violate primary drinking water standards, other health based standards, or adversely affect human health.					
Resource Conser	vation and Recovery Act Air Emissions	Requirements (42 U.S.	C., ch. 82, §§ 6901–69	991[i]) [*]						
Use of equipment that contacts hazardous waste with organic concentrations greater than 10 percent by weight.	Air emission standards for process vents or equipment leaks.	Equipment that contains or contacts hazardous waste with organic concentrations of at least 10 percent by weight or process vents associated with specified operations that manage hazardous wastes with organic concentrations of at least 10 ppm.	Cal. Code Regs. tit. 22, § 66264.1030– 66264.1034, excluding .1030(c), .1033(j), .1034(c)(2), .1034(d)(2) Cal. Code Regs. tit. 22, § 66264.1050– 66264.1063, excluding .1050(c), (d), .1057(g)(2), .1060, .1063(d)(3)	Not an ARAR	No hazardous wastes are present or will be generated through remedial activities at the site with organic concentrations of at least 10 percent by weight.					

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Clean Air Act (4	2 U.S.C. §§ 7401–7671)				
Discharge to air	Provisions of SIP approved by EPA under Section 110 of CAA.	Major sources of air pollutants.	42 U.S.C. § 7410; portions of 40 C.F.R. § 52.220	Applicable	These rules are considered applicable when the vapor extraction and treatment system is used as part of the biosparging or air sparging alternatives.
BAAQMD Regu	lation Title 8				
Discharge to air	BACT shall be applied to any new source or modified source that results in an emission with the potential to emit 10.0 pounds or more per highest day of precursor organic compounds, nonprecursor organic compounds, nitrogen oxides, sulfur dioxide, PM ₁₀ , or carbon monoxide.	New source or modified source	BAAQMD Regulation 2, Rule 2-301	Applicable	Injection of air into the subsurface may cause increased emissions from soil gas at the site. This will be mitigated by use of a vapor extraction system, and this ARAR would be considered applicable.
	A person shall not emit from any source for a period or periods aggregating more than 3 minutes in any hour a visible emission which is as dark as or darker than No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view to an equivalent or greater degree.	Visible emissions from a source	BAAQMD Regulation 6-301	Applicable	When the vapor extraction and treatment system is operational, this ARAR would be considered applicable.

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Air stripping or SVE	Any air stripping and SVE operations that emit benzene, vinyl chloride, perchloroethylene, methylene chloride, and/or trichloroethylene shall be vented to a control device that reduces emissions to the atmosphere by at least 90 percent by weight.	Emission of benzene, vinyl chloride, tetrachloroethene, methylene chloride, and/or trichloroethene	BAAQMD Regulation 8-47- 301	Applicable	When the vapor extraction and treatment system is operational, this requirement would be applicable.
	Any air stripping and SVE operations with a total organic compound emission greater than 15 pounds per day shall be vented to a control device that reduces the total organic compound emission to the atmosphere by at least 90 percent by weight.	Emission of organic compounds greater than 15 pounds per day	BAAQMD Regulation 8-47- 302	Applicable	When the vapor extraction and treatment system is operational, this requirement would be applicable.
	Any air stripping or SVE operation shall meet the monitoring and record keeping requirements.	Air stripping operations being conducted	BAAQMD Regulation 8-47- 500	Applicable	When the vapor extraction and treatment system is operational, this ARAR would be considered applicable.
	Any air stripping or SVE operation shall follow the manual of procedures for sampling, analysis, and emissions.	Air stripping operations being conducted	BAAQMD Regulation 8-47- 600	Applicable	When the vapor extraction and treatment system is operational, this ARAR would be considered applicable.
		FEDERAL – GROUN	DWATER MONITO	DRING	
Resource Conse	ervation and Recovery Act - Groundwate	er Monitoring			
Monitoring	The sampling interval of each monitoring well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative groundwater samples.		Cal. Code Regs. tit. 22, § 66264.97(b)(5).	Relevant and Appropriate	

FEDERAL AND STATE ACTION-SPECIFIC ARARs

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Monitoring (continued)	For each monitoring well the annular space (i.e., the space between the borehole and well casing) above and below the sampling interval shall be appropriately sealed to prevent entry of contaminants from the surface, entry of contaminants from the unsaturated zone, cross contamination of saturated zones and contamination of samples.		Cal. Code Regs. tit. 22, § 66264.97(b)(6)	Relevant and Appropriate	
	All monitoring wells shall be adequately developed to enable collection of representative groundwater samples.		Cal. Code Regs. tit. 22, § 66264.97(b)(7)	Relevant and Appropriate	
	The number and kinds of samples collected shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that effectiveness of the corrective action program will be determined.		Cal. Code Regs. tit. 22, § 66264.97(e)(12)(A)(3)	Relevant and Appropriate	
	The groundwater portion of the monitoring program shall include an accurate determination of the groundwater surface elevation and field parameters (temperature, electrical conductivity, turbidity and pH) at each well each time groundwater is sampled.		Cal. Code Regs. tit. 22, § 66264.97(e)(13)	Relevant and Appropriate	
	The owner or operator shall establish and implement, in conjunction with the		Cal. Code Regs. Tit. 22, §	Relevant and	

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FEDERAL AND STATE ACTION-SPECIFIC ARARs

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
	corrective action measures, a water quality monitoring program that will demonstrate the effectiveness of the corrective action program and be effectivce in determioning compliance with the water quality protection standard and in determining the success of the corrective action measures.		66264.100(d)	Appropriate	
	After terminating the corrective action measures The owner or operator shall remain in the corrective action program until: (1) the regulated unit is in compliancebased on the results of sampling and analysis for all constituents of concern for a period of one year.		Cal. Code Regs. Tit. 22, § 66264.100(g)(1)	Relevant and Appropriate	
		STATE – INSTITU	UTIONAL CONTRO	DLS	
Cal/EPA Depa	rtment of Toxic Substances Control [*]				
Land use covenants	A land use covenant imposing appropriate limitations on land use shall be executed and recorded when	Property transfer by federal government to nonfederal entity.	Cal. Code Regs., tit. 22, § 67391.1	Relevant and Appropriate	Substantive provisions are relevant and appropriate when the DON is transferring property to a non-federal agency.
	facility closure, corrective action, remedial or removal action, or other response actions are undertaken and hazardous materials, hazardous wastes, or constituents, or hazardous substances will remain at the property at levels which are not suitable for unrestricted use of the land.				EPA considers the following portions of 22 CCR 67391.1 to be relevant and appropriate for this ROD: $(a)(1)(a)(2)$, (d) , $(e)(1)$, and $(e)(2)$. DTSC considers all of the cited statute to be applicable for this ROD.
Land use controls	Allows DTSC to enter into an agreement with the owner of a	Transfer property from the DON to a	California Health & Safety Code §	Applicable	The substantive provisions of Cal. Civ. Code § 1471 are the following general

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FEDERAL AND STATE ACTION-SPECIFIC ARARs

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
	hazardous waste facility to restrict present and future land uses.	nonfederal agency.	25202.5		narrative standard: " to do or refrain from doing some act on his or her own land where: (c) Each such act relates to the use of land and each such act is reasonably necessary to protect present or future human health or safety of the environment as a result of the presence on the land of hazardous materials, as defined in § 25260 of the Health and Safety Code." DTSC considers all of the cited statute to be applicable for this ROD.

FEDERAL AND STATE ACTION-SPECIFIC ARARs

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
	Provides a streamlined process to be used to enter into an agreement to restrict specific use of property in order to implement the substantive use restrictions of California Health & Safety Code § 25232(b)(1)(A)-(E).	Transfer property from the DON to a nonfederal agency.	California Health & Safety Code §§ 25222.1 and 25355.5(a)(1)(C)	Relevant and appropriate	California Health and Safety Code §§ 25222.1 and California Health and Safety Code 25355.5(a)(1)(C) provide the authority for the state to enter into voluntary agreements to establish land-use covenants with the owner of property. The substantive requirements of the following California Health and Safety Code § 25222.1 provisions are "relevant and appropriate": (1) the general narrative standard: "restricting specified uses of the property, …" and (2) " the agreement is irrevocable, and shall be recorded by the owner, … as a hazardous waste easement, covenant, restriction or servitude, or any combination thereof, as appropriate, upon the present and future uses of the land." The substantive requirements of the following California Health and Safety Code § 25355.5(a)(1)(C) provisions are "relevant and appropriate": " execution and recording of a written instrument that imposes and easement, covenant, restriction, or servitude, or combination thereof, as appropriate, upon the present and future uses of the land." DTSC considers all of the cited statutes to be applicable for this ROD.

FEDERAL AND STATE ACTION-SPECIFIC ARARs

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
California Civi	l Code [*]				
Land use controls	Provides conditions under which land use restrictions will apply to successive owners of land.	Transfer property from the DON to a nonfederal agency.	Cal. Civ. Code § 1471	Applicable	The substantive provisions of Cal. Civ. Code § 1471 are the following general narrative standard: " to do or refrain from doing some act on his or her own land where: (c) Each such act relates to the use of land and each such act relates to the use of land and each such act is reasonably necessary to protect present or future human health or safety of the environment as a result of the presence on the land of hazardous materials, as defined in § 25260 of the Health and Safety Code." This narrative standard would be implemented through incorporation of restrictive environmental covenants in the deed at the time of transfer. DTSC considers all of the cited statute to
					be applicable for this ROD.
	Provides processes and criteria for obtaining written variances from a land use restriction and for removal of the land use restrictions.	Transfer property from the DON to a nonfederal agency	California Health & Safety Code §§ 25233(c) and 25234	Relevant and Appropriate	California Health and Safety Code § 25233(c) sets forth "relevant and appropriate" substantive criteria for granting variances from prohibited uses based upon specified environmental and health criteria. California Health and Safety Code § 25234 sets for the following "relevant and appropriate" substantive criteria for the removal of a land use restriction on the grounds that " the waste no longer creates a significant existing or potential hazard to present or future public health or safety."

FEDERAL AND STATE ACTION-SPECIFIC ARARs

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
					DTSC considers all of the cited statutes to be applicable for this ROD.

Notes:

Statutes and policies, and their citations, are provided as headings to identify general categories of proposed ARARs for the convenience of the reader. Listing the statutes and policies does not indicate that the DON accepts the entire statutes or policies as proposed ARARs; specific proposed ARARs are addressed in the table below each general heading; only substantive requirements of specific citations are considered proposed ARARs.

Abbreviations and Acronyms:

ARAR – Applicable or Relevant and Appropriate requirement BAAQMD – Bay Area Air Quality Management District BACT – Best Available Control Technology CAA – Clean Air Act Cal. Civ. – California Civil Code Cal. Code Regs. – California Code of Regulations Cal/EPA – California Environmental Protection Agency C.F.R. – Code of Federal Regulations Ch. – Chapter DON – Department of the Navy DTSC – Department of Toxic Substances Control EPA – U.S. Environmental Protection Agency IR – Installation Restoration $\begin{array}{l} MCL - maximum \ contaminant \ level \\ No. - Number \\ PM_{10} - particulate \ matter \ 10 \ microns \ or \ less \ in \ diameter \\ ppm - parts \ per \ million \\ RCRA - Resource \ Conservation \ and Recovery \ Act \\ ROD - Record \ of \ Decision \\ \$ - section \\ SIP - State \ Implementation \ Plan \\ SVE - soil \ vapor \ extraction \\ TCLP - toxicity \ characteristic \ leaching \ procedure \\ tit. - title \\ UIC - underground \ injection \ control \\ U.S.C. - United \ States \ Code \end{array}$

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The substantive provisions of Cal. Civ. Code § 1471 are the following general narrative standard: "... to do or refrain from doing some act on his or her own land ... where ...: (c) Each such act relates to the use of land and each such act is reasonably necessary to protect present or future human health or safety of the environment as a result of the presence on the land of hazardous materials, as defined in § 25260 of the Health and Safety Code." This narrative standard would be implemented through incorporation of restrictive environmental covenants in the deed at the time of transfer. These covenants would be recorded with the Covenant to Restrict Use of Property and run with the land.

The substantive provision of California Health and Safety Code § 25202.5 is the general narrative standard to restrict "present and future uses of all or part of the land on which the ...facility ... is located" This substantive provision will be implemented by incorporation of restrictive environmental covenants in the Covenant to Restrict Use of Property at the time of transfer for purposes of protecting present and future public health and safety.

California Health and Safety Code §§ 25222.1 and California Health and Safety Code 25355.5(a)(1)(C) provide the authority for the state to enter into voluntary agreements to establish land-use covenants with the owner of property. The substantive requirements of the following California Health and Safety Code § 25222.1 provisions are "relevant and appropriate": (1) the general narrative standard: "restricting specified uses of the property, ..." and (2) "... the agreement is irrevocable, and shall be recorded by the owner, ... as a hazardous waste easement, covenant, restriction or servitude, or any combination thereof, as appropriate, upon the present and future uses of the land." The substantive requirements of the following California Health and Safety Code § 25355.5(a)(1)(C) provisions are "relevant and appropriate": "... execution and recording of a written instrument that imposes an easement, covenant, restriction, or servitude, or combination thereof, as appropriate, upon the present and future uses of the appropriate, upon the present and future uses of the appropriate instrument that imposes an easement, covenant, restriction, or servitude, or combination thereof, as appropriate, upon the present and future uses of the appropriate instrument that imposes an easement, covenant, restriction, or servitude, or combination thereof, as appropriate, upon the present and future uses of the appropriate."

The DON will comply with the substantive requirements of California Health and Safety Code \S 25222.1 and 25355.5 (a)(1)(C) by incorporating CERCLA use restrictions into the DON's deed of conveyance in the form of restrictive covenants under the authority of Cal. Civ. Code \S 1471. The substantive provisions of California Health and Safety Code \S 25222.1 and 25355.5 (a)(1)(C) may be interpreted in a manner consistent with the substantive provisions of Cal. Civ. Code \S 1471. The covenants shall be recorded with the deed and run with the land.

California Health and Safety Code § 25233(c) sets forth "relevant and appropriate" substantive criteria for granting variances from prohibited uses based upon specified environmental and health criteria. California Health and Safety Code § 25234 sets for the following "relevant and

appropriate" substantive criteria for the removal of a land-use restriction on the grounds that "... the waste no longer creates a significant existing or potential hazard to present or future public health or safety."

In addition to being implemented through the Covenant to Restrict Use of Property between the DON and DTSC, the appropriate and relevant portions of California Health and Safety Code §§ 25202.5, 25222.1, 25233(c), 25234, and 25355.5(a)(1)(C) and Cal. Civ. Code § 1471 shall also be implemented through the deed between the DON and the transferee.

EPA considers the following portions of 22 CCR 67391.1 to be relevant and appropriate for this ROD: (a)(1), (a)(2), (d), (e)(1), and (e)(2). DTSC's position is that all of the state statutes and regulations referenced in this section are ARARs.

13.3 COST-EFFECTIVENESS

The remedial goals at OU-5/IR-02 provide for unrestricted site use because future land use is primarily residential. Because costs among several of the proposed remedies were comparable, cost was not a major determining factor in selecting Alternative 4.

The DON has concluded that Alternative 4, the selected remedy, would provide overall effectiveness proportional to its cost; it is therefore considered cost-effective. The present value cost for Alternative 4 is approximately \$8,076,000 (see Table 12-1). Alternative 4 effectively provides a level of protection to human health and the environment similar to Alternatives 3, 5, and 6. All of the technologies included in the selected remedy are readily implementable and have been widely used and demonstrated to be effective.

13.4 USE OF PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT TECHNOLOGIES (OR RESOURCE RECOVERY TECHNOLOGIES) TO THE MAXIMUM EXTENT PRACTICABLE

The DON has determined that the selected remedy represents the maximum extent practicable to which permanent solutions and alternative treatment technologies can be used in a cost-effective manner for OU-5/IR-02. Of all the alternatives that are protective of human health and the environment and comply with ARARs, the DON has concluded that the selected remedy would provide the best balance of tradeoffs among the short-term effectiveness, long-term effectiveness and permanence, implementability, and cost. The selected remedy is an alternative treatment technology, which is expected to be permanent and effective over the long-term land use.

13.5 PREFERENCE FOR TREATMENT AS A PRINCIPAL ELEMENT

This remedy satisfies the statutory preference for treatment as a principal element of the remedy (that is, reduces the toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants as a principal element through treatment).

13.6 FIVE-YEAR REVIEW REQUIREMENTS

A five-year review pursuant to CERCLA Section 121 and the NCP is required if the selected remedy results in hazardous waste or contaminants remaining at the site above levels allowing unrestricted use of the site. Because both benzene and naphthalene are not expected to achieve RAOs within five years, five-year reviews will be conducted until RAOs are achieved.

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14.0 DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan for OU-5/IR-02 (DON, 2006) was released for public comment on March 6, 2006 (DON, 2006). The Proposed Plan recommended Alternative 4 as the preferred remedial alternative for groundwater. Alternative 4 consists of biosparging, SVE, nutrient/microorganism enhancement as required, MNA (monitoring the natural degradation processes), and ICs.

The DON has reviewed all written and oral comments submitted during the public comment period and has responded to comments in the Responsiveness Summary, included as Appendix D. Upon review of these comments, it was determined that no significant changes to the selected remedial action, as it was originally identified in the Proposed Plan (DON, 2006), were necessary or appropriate. This page intentionally left blank.

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APPENDIX A

ADMINISTRATIVE RECORD INDEX

Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007

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ALAMEDA ANNEX

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

DOCUMENTS RELATED TO SITES 1, 2 AND 3

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject		Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68619 / 000001 WORK ORDER NO 400.31 RPT N62474-D-5627 00021	11-24-1999 04-09-1987 NONE 00.0	ERM WEST NAVFAC - EFA WEST	HEALTH AND SAFETY PLAN (HASP) FOR CONTAMINATED SITE INVESTIGATION (S AT SCREENING LOT AND SCRAPYARD A		HASP SI	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070129-01 41031875
N68619 / 000002 WORK ORDER NO 400.31 RPT N62474-D-5627 00000	11-24-1999 04-14-1987 NONE 00.0	ERM WEST NAVFAC - EFA WEST	SAMPLING PLAN (SP) FOR CONTAMINAT SITE INVESTIGATION (SI) AT SCREENING LOT AND SCRAPYARD AREA		SI SP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070129-01 41031875
N68619 / 000003 REPO NONE 00000	11-24-1999 09-01-1987 00000 00.0	ERM WEST	SITE INVESTIGATION (SI) REPORT FOR SCREENING LOT AND SCRAPYARD ARE	ADMIN RECORD	SI	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070413-02 41031875

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68619 / 000010 RPT NONE 00000	11-24-1999 05-01-1988 00000 00.0	ERM WEST	PHASE II SITE INVESTIGATION (SI) AT WAREHOUSE AREA	ADMIN RECORD	SI	001	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070413-02 41031875
N68619 / 000012 LETT NONE 00000	11-24-1999 07-12-1988 00000 00.0	NAVY	SUBMISSION OF SITE INVESTIGATION (SI) REPORTS FOR SCREENING LOT, SCRAPYARD, AND WAREHOUSE AREA	INFO REPOSITORY	SI	001 002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070413-02 41031875
N68619 / 000016 EFAW SER 1813BD/00543 CORRESP NONE 00001	11-24-1999 11-29-1990 NONE 00.0	NAVFAC - EFA WEST R. SERAYDARIAN VARIOUS AGENCIES	TRANSMITTAL OF DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) - WORK PLAN (WP), FIELD SAMPLING PLAN (FSP), QUALITY ASSURANCE PROJECT PLAN (QAPP) AND HEALTH AND SAFETY PLAN (HSP) FOR SCREENING LOT AND SCRAPYARD (***SEE COMMENTS)	ADMIN RECORD INFO REPOSITORY	FSP HSP QAPP RI/FS WP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070209-01 41031875
N68619 / 000017 NONE COMMENTS NONE 00001	11-24-1999 01-12-1991 NONE 00.0	SF BAY CONSERV. & DEV. COMMISS C. SMITH NAVFAC - EFA WEST R. SERAYDARIAN	COMMENTS ON DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) - WORK PLAN (WP), FIELD SAMPLING PLAN (FSP), QUALITY ASSURANCE PROJECT PLAN (QAPP) AND HEALTH AND SAFETY PLAN (HSP) [***SEE COMMENTS]	ADMIN RECORD	FS RI	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070209-01 41031875

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68619 / 000018 NONE COMM NONE 00001	11-24-1999 02-28-1991 NONE 00.0	SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION C. SMITH NAVFAC - EFA WEST B. DIZON	COMMENTS ON THE DRAFT COMMUNITY RELATIONS PLAN (CRP)	ADMIN RECORD	CRP FS RI	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070413-02 41031875
N68619 / 000023 NONE RPT N62474-88-D-5086 00100	11-24-1999 05-30-1991 00011 00.0	PRC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) FIELD SAMPLING PLAN (FSP), SCREENING LOT AND SCRAPYARD AREA (SEE AR #115 - FINAL RI/FS PHASE II FSP ADDENDUM AND AR #143 - DRAFT FINAL RI/FS INTERIM REMEDIAL ACTIONS FSP ADDENDUM)	ADMIN RECORD	FSP PCB RI/FS SVOC VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070209-01 41031875
N68619 / 000024 NONE RPT N62474-88-D-5086 00080	11-24-1999 05-30-1991 00011 00.0	PRC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORK PLAN (WP), SCREENING LOT AND SCRAPYARD AREA (SEE AR #114 - FINAL RI/FS PHASE II WP ADDENDUM AND AR #142 - DRAFT FINAL RI/FS INTERIM REMEDIAL ACTIONS WP ADDENDUM)	ADMIN RECORD	BTEX PCB RI/FS WP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070209-01 41031875
N68619 / 000025 NONE RPT N62474-88-D-5086 00060	11-24-1999 05-30-1991 00011 00.0	PRC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) QUALITY ASSURANCE PROJECT PLAN (QAPP), SCREENING LOT AND SCRAPYARD AREA (SEE AR #116 - FINAL RI/FS PHASE II QAPP ADDENDUM AND AR #145 - DRAFT FINAL RI/FS INTERIM REMEDIAL ACTIONS QAPP ADDENDUM)	ADMIN RECORD	PCB QAPP RI/FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070209-01 41031875

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UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject		Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68619 / 000026 NONE RPT N62474-88-D-5086 00050	11-24-1999 05-30-1991 00011 00.0	RPC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/ HEALTH AND SAFETY PLAN (HSP), SCREENING LOT AND SCRAPYARD ARE (SEE AR #129 - DRAFT RI/FS IRA HSP ADDENDUM AND AR #144 - DRAFT FINAL RI/FS IRA HSP ADDENDUM)	, A	HSP IRA RI/FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070223-01 41031875
N68619 / 000083 EFAW SER T4E2EG/L3401 RPT NONE 00007	11-24-1999 07-21-1993 NONE 00.0	NAVFAC - EFA WEST M. PASCUA JR. DTSC - BERKELEY C. CHOU	PROPOSED RADIOLOGICAL INVESTIGATION, SCREENING LOT AND SCRAPYARD AREA (INCLUDES EFA WES TRANSMITTAL LETTER BY M. PASCUA JI		RADIOLOGICAL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 3 OF 14 SW070209-01 41031875
N68619 / 000136 EFAW SER T4A2EG/L4148 CORRESP NONE 00002	11-24-1999 02-25-1994 NONE 00.0	NAVFAC - EFA WEST M. PASCUA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/ REMOVAL ACTION (RA) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) F PCB AND LEAD-CONTAMINATED SOILS (W/OUT ENCLOSURE) [***SEE COMMENT	DR	CA EE FS LEAD OM PCB RI	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875
N68619 / 000137 REPO NONE 00000	11-24-1999 02-25-1994 00000 00.0	PRC	DRAFT RI/FS REMOVAL ACTION (RM) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR PCB AND LEAD CONTAMINATED SOILS	REMOVED	CA EE FS LEAD OM PCB RI	002	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N68619 / 000139 EFAW SER T4A2EG/L4180 CORRESP NONE 00002	11-24-1999 03-31-1994 NONE 00.0	NAVFAC - EFA WEST H.GEE DTSC - BERKELEY J. CHOU	NOTIFICATION OF DISCOVERY OF LOW LEVEL RADIOACTIVE WASTE AT SCREENING LOT AND SCRAPYARD	INFO REPOSITORY	RADIOACTIVE	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070223-01 41031875
N68619 / 000140 NONE COMMENTS NONE 00006	11-24-1999 03-31-1994 NONE 00.0	DTSC - BERKELEY C. CHOU NAVFAC - EFA WEST E. GALANG	COMMENTS ON DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REMOVAL ACTION (RA), ENGINEERING EVALUATION AND COST ANALYSIS (EE/CA) FOR PCB AND LEAD-CONTAMINATED SOILS (INCLUDES COMMENTS BY CRWQCB DATED 31 MARCH 1994)	ADMIN RECORD	COMMENTS EE/CA LEAD PCB RA RI/FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875
N68619 / 000148 EFAW SER T4A2EG/L4189 RESPONSE NONE 00009	11-24-1999 04-13-1994 NONE 00.0	NAVFAC - EFA WEST M. PASCUA VARIOUS AGENCIES	RESPONSE TO AGENCY COMMENTS ON DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REMOVAL ACTION (RM) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR POLYCHLORINATED BIPHENYL (PCB) AND LEAD CONTAMINATED SOILS	ADMIN RECORD	CA EE FS LEAD PCB RI RM	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070316-01 41031875
N68619 / 000157 NONE COMMENTS NONE 00002	11-24-1999 06-10-1994 NONE 00.0	DTSC - BERKELEY C. CHOU NAVFAC - EFA WEST E. GALANG	COMMENTS ON REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REMOVAL ACTION (RM) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR SOIL REMOVAL	ADMIN RECORD	CA EE FS RI RM	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070316-01 41031875

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N68619 / 000161 EFAW SER 09ER2EG/L4293 CORRESP NONE 00003	11-24-1999 07-06-1994 NONE 00.0	NAVFAC - EFA WEST E. GALANG DTSC - BERKELEY J. CHOU	REQUEST TO IDENTIFY STATE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)	ADMIN RECORD	ARAR RI/FS	002 003 004 005 006 007 008	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070316-01 41031875
N68619 / 000163 EFAW SER 09ER2EG/L4307 CORRESP NONE 00002	11-24-1999 07-14-1994 NONE 00.0	NAVFAC - EFA WEST E. GALANG VARIOUS AGENCIES	TRANSMITTAL OF DRAFT FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REMOVAL ACTION (RA) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR PCB AND LEAD-CONTAMINATED SOIL (W/OUT ENCLOSURE) [***SEE COMMENTS]	ADMIN RECORD INFO REPOSITORY	EE/CA LEAD PCB RA RI/FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875
N68619 / 000172 NONE RPT N62474-88-D-5086 00080	11-24-1999 08-26-1994 00255 00.0	PRC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REMOVAL ACTION (RA) ENGINEERING EVALUATION AND COST ANALYSIS (EE/CA) FOR PCB AND LEAD-CONTAMINATED SOILS (SEE AR #283 - FINAL REMOVAL ACTION EE/CA ADDENDUM)	ADMIN RECORD	CA EE FS LEAD PCB RI RM	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875
N68619 / 000171 EFAW SER 09ER2EG/L4372 CORRESP NONE 00002	11-24-1999 08-29-1994 NONE 00.0	NAVFAC - EFA WEST E. GALANG VARIOUS AGENCIES	TRANSMITTAL OF FINAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) REMOVAL ACTION (RA) ENGINEERING EVALUATION AND COST ANALYSIS (EE/CA) FOR PCB AND LEAD-CONTAMINATED SOILS (W/OUT ENCLOSURE) [SEE AR #172 - FINAL RI/FS REMOVAL ACTION EE/CA]	ADMIN RECORD INFO REPOSITORY	EE/CA LEAD PCB RA RI/FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875

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N68619 / 000174 NONE PUB NOTICE NONE 00003	11-24-1999 08-31-1994 NONE 00.0	ALAMEDA JOURNAL PUBLIC INTEREST	PUBLIC NOTICE OF THE PUBLIC COMMENT PERIOD 31 AUGUST TO 30 SEPTEMBER 1994 FOR ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) REPORT PUBLISHED IN THE ALAMEDA JOURNAL	ADMIN RECORD INFO REPOSITORY	CA EE NEWSART PUBNOT	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070316-01 41031875
N68619 / 000761 NONE PUB NOTICE NONE 00001	02-27-2007 08-31-1994 NONE	THE OAKLAND TRIBUNE PUBLIC INTEREST	PUBLIC NOTICE OF THE COMMENT PERIOD AUGUST 31 TO SEPTEMBER 30, 1994 FOR ENGINEERING EVALUATION/COST ANALYSIS REPORT PUBLISHED IN THE OAKLAND TRIBUNE	O ADMIN RECORD	COMMENTS EE/CA NEWSART PCB PUBNOT RAP SOIL	002	CHOICE IMAGING SOLUTIONS SW070413-03
N68619 / 000762 NONE PUB NOTICE NONE 00001	02-27-2007 08-31-1994 NONE	ALAMEDA TIMES- STAR PUBLIC INTEREST	PUBLIC NOTICE OF THE COMMENT PERIOD AUGUST 31 TO SEPTEMBER 30, 1994 FOR ENGINEERING EVALUATION/COST ANALYSIS REPORT PUBLISHED IN THE ALAMEDA TIMES - STAR	ADMIN RECORD	COMMENTS EE/CA NEWSART PCB PUBNOT RAP SOIL	002	CHOICE IMAGING SOLUTIONS SW070413-03
N68619 / 000177 NONE PUB NOTICE NONE 00001	11-24-1999 09-09-1994 NONE 00.0	ALAMEDA JOURNAL PUBLIC INTEREST	PUBLIC NOTICE OF THE PUBLIC COMMENT PERIOD 31 AUGUST TO 30 SEPTEMBER 1994 FOR ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) REPORT PUBLISHED IN THE ALAMEDA JOURNAL	ADMIN RECORD INFO REPOSITORY	CA EE NEWSART PUBNOT	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070316-01 41031875

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N68619 / 000183 EFAW SER 09ER2EG/L5025 RPT N62474-88-D-5086 00023	11-24-1999 10-21-1994 00255 00.0	RPC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	DRAFT ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, PCB AND LEAD CONTAMINATED SOILS REMOVAL ACTION (RA) [INCLUDES EFA WEST TRANSMITTAL LETTER BY E. GALANG]	ADMIN RECORD	AM LEAD PCB RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875
N68619 / 000193 NONE COMMENTS NONE 00002	11-24-1999 11-16-1994 NONE 00.0	DTSC - BERKELEY C. CHOU NAVFAC - EFA WEST E. GALANG	COMMENTS ON DRAFT ACTION MEMORANDUM (AM), SCREENING LOT ANI SCRAPYARD AREA, PCB AND LEAD CONTAMINATED SOILS REMOVAL ACTION (RA)	ADMIN RECORD	AM LEAD PCB RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 4 OF 14 SW070209-01 41031875
N68619 / 000199 EFAW SER 09ER2EG/L5114 CORRESP NONE 00002	11-24-1999 01-09-1995 NONE 00.0	NAVFAC - EFA WEST E. GALANG VARIOUS AGENCIES	TRANSMITTAL OF FINAL ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, PCB AND LEAD CONTAMINATED SOIL NON-TIME CRITICAL REMOVAL ACTION (NTCRA) [W/OUT ENCLOSURE] {SEE AR #200 - FINAL ACTION MEMORANDUM}		AM LEAD NTCRA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 5 OF 14 SW070209-01 41031875
N68619 / 000200 NONE RPT NONE 00040	11-24-1999 01-09-1995 00255 00.0	PRC ENVIRONMENTAL MGMT INC. NAVFAC - EFA WEST	FINAL ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, PCB AND LEAD CONTAMINATED SOIL NON TIME CRITICAL REMOVAL ACTION (NTCRA) [SEE AR #199 - EFA WEST TRANSMITTAL LETTER BY E. GALANG]		ACTMEMO LEAD NTCRA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 5 OF 14 SW070209-01 41031875

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N68619 / 000235 LETT NONE 00002	11-24-1999 01-19-1995 00000 00.0	NAVY GALANG, ERNESTO DTSC CHOU, C. JOSEPH	SUBMISSION OF FINAL ACTION MEMORANDUM (AM), SITE 02 - SCREENING LOT AND SCRAPYARD AREA PCB AND LEA CONTAMINATED SOIL NON-TIME CRITICAL REMOVAL ACTION (RM) DATED		AM LEAD PCB RM	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 6 OF 14 10/10/06 41031875
N68619 / 000227 EFAW SER 1842.3AT/L0001 CORRESP NONE 00002	11-24-1999 04-19-1995 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF DRAFT WORK PLAN (WP CONTRACTOR QUALITY CONTROL PLAN (QCP) SITE HEALTH AND SAFETY PLAN (HASP) SCREENING LOT AND SCRAPYARD AREA PCB, AND LEAD-CONTAMINATED SOILS NON-TIME CRITICAL REMOVAL ACTION (R/A) [W/OUT ENCLOSURE] {SEE AR# 706 - DRAFT}		LEAD PCB RM WP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070209-01 41031875
N68619 / 000215 EWAF SER 1842.3AT/L0003 CORRESP NONE 00000	11-24-1999 04-21-1995 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF STANDARD OPERATING PROCEDURES FOR DRAFT WORK PLAN DATED 01 APRIL 1995 (W/OUT ENCLOSURE [SEE AR #706 - DRAFT WORK PLAN, REVISION 0] {SEE COMMENTS}	ADMIN RECORD	LEAD PCB RM WP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070209-01 41031875
N68619 / 000256 NONE RPT N62474-93-D-2151 00286	11-24-1999 05-01-1995 00023 00.0	IT CORPORATION D. MARINI NAVFAC - EFA WEST A. TACTAY	WORK PLAN (WP) SCREENING LOT AND SCRAPYARD AREA, PCB- AND LEAD- CONTAMINATED SOILS, NON-CRITICAL REMOVAL ACTION (RM), REVISION 1 (INCLUDES SITE HEALTH AND SAFETY PLAN, REV 1 DATED 01 MAY 1995) [SEE AR #706 - REV 0, AND AR # 228 - EFAW TRANSMITTAL LETTER BY	ADMIN RECORD	LEAD PCB RM WP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070209-01 41031875

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N68619 / 000223 EFAW SER 1842.3/5079 CORRESP NONE 00002	11-24-1999 06-19-1995 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY J. CHOU	REQUESTING DTSC TO RE-SOLICIT IDENTIFICATION OF STATE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) AT VARIOUS SITES	ADMIN RECORD	ARAR RI/FS	002 003 004 005 006 007 008	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070209-01 41031875
N68619 / 000228 EFAW SER 1842.3/5100 CORRESP NONE 00002	11-24-1999 07-07-1995 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF FINAL WORK PLAN (WP) SCREENING LOT AND SCRAPYARD AREA PCB- AND LEAD-CONTAMINATED SOILS NON-TIME CRITICAL REMOVAL ACTION (RA), REVISION 1 (W/OUT ENCLOSURE) [SEE AR #256 - WORK PLAN, REV. 1]	ADMIN RECORD	LEAD PCB RM WP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070209-01 41031875
N68619 / 000255 LETT N62474-93-D-2151 00002	11-24-1999 07-07-1995 00023 00.0	NAVY TACTAY, ANTONIO DTSC CHOU, C. JOSEPH	SUBMISSION OF FINAL WORK PLAN (WP) FOR THE REMOVAL ACTION (RM) AT SITE 02 SUBMITTED BY IT CORPORATION DATED MAY 1995	ADMIN RECORD	RM WP	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 6 OF 14 10/10/06 41031875
N68619 / 000233 REPO N62474-88-D-5086 00071	11-24-1999 08-01-1995 00255 00.0	PRC SHAFER, DANIEL NAVY TACTAY, ANTONIO	DRAFT ENGINEERING EVALUATION AND COST ANALYSIS (EE/CA) ADDENDUM FOR PCB CONTAMINATED SOILS; REMEDIAL INVESTIGATION/FEASIBILITY STUDY REMOVAL ACTION (RI/FS)(RM); S	REMOVED	CA EE FS PCB RI RM	002	SOUTHWEST DIVISION - BLDG. 1

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

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N68619 / 000232 EFAW SER 1842.3/5152 CORRESP NONE 00002	11-24-1999 08-08-1995 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF DRAFT ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) ADDENDUM FOR PCB CONTAMINATED SOIL NON-TIME CRITICAL REMOVAL ACTION (RA) [W/OUT ENCLOSURE] {***SEE COMMENTS}	ADMIN RECORD	EE/CA PCB RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070209-01 41031875
N68619 / 000259 EFAW SER 1842.3/6047 LETT NONE 00002	11-24-1999 1 2-04-1995 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	NOTIFICATION OF REMEDIAL PROJECT MANAGERS (RPM) MEETING FOR 05 DECEMBER 1995	ADMIN RECORD	RPM	002	CHOICE IMAGING SOLUTIONS 181-03-0183 6 OF 14 SW070316-02 41031875
N68619 / 000283 NONE RPT N62474-88-D-5086 00063	11-24-1999 03-01-1996 00255 00.0	PRC ENVIRONMENTAL MGMT INC. G. SMALL NAVFAC - EFA WEST	FINAL REMOVAL ACTION (RA) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) ADDENDUM FOR PCB- CONTAMINATED SOILS AND SUMP REMOVAL (SEE AR #172 - FINAL RI/FS REMOVAL ACTION EE/CA) [SEE AR #282 - EFA WEST TRANSMITTAL LETTER BY A. TACTAY]	ADMIN RECORD	EE/CA PCB RA TPH	002	CHOICE IMAGING SOLUTIONS 181-03-0183 7 OF 14 SW070209-02 41031875
N68619 / 000282 EFAW SER 1842.3/6156 CORRESP NONE 00002	11-24-1999 03-29-1996 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF FINAL REMOVAL ACTION (RA) ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) ADDENDUM FOR PCB- CONTAMINATED SOILS AND SUMP REMOVAL (W/OUT ENCLOSURE) [SEE AR #283 - FINAL REMOVAL ACTION EE/CA ADDENDUM]	ADMIN RECORD	EE/CA PCB RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 7 OF 14 SW070209-02 41031875

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N68619 / 000316 EFAW SER 1842.3/6395 CORRESP NONE 00003	11-24-1999 09-19-1996 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) FOR THE INTERIM REMOVAL ACTION (IRA), SCRAPYARD/SCREENING LOT	INFO REPOSITORY	ARAR IRA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 7 OF 14 SW070223-03 41031875
N68619 / 000327 NONE RPT N62474-88-D-5086 00340	11-24-1999 10-18-1996 00200 00.0	PRC ENVIRONMENTAL MGMT INC. G. SMALL NAVFAC - EFA WEST	QUARTERLY GROUNDWATER MONITORING REPORT (FIRST INTERIM QUARTER, JANUARY 1996) [SEE AR #326 - EFA WEST TRANSMITTAL LETTER BY A. TACTAY]	ADMIN RECORD	GW SVOC TPH TPH-D TPH-G VOC	002 003 004 005 006 007 AOC 1 AOC 2 AOC 3 SWMU 1 SWMU 3 SWMU 4	CHOICE IMAGING SOLUTIONS 181-03-0183 7 OF 14 SW070223-03 41031875
N68619 / 000325 REPO N62474-88-D-5086 00051	11-24-1999 11-01-1996 00255 00.0	PRC SMALL, GAIL NAVY TACTAY, ANTONIO	FINAL ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR PCB CONTAMINATED SOILS AND SUMP REMOVAL	REMOVED	CA EE PCB	002	SOUTHWEST DIVISION - BLDG. 1
N68619 / 000324 EFAW SER 1842.3/7037 CORRESP NONE 00002	11-24-1999 11-13-1996 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF THE FINAL ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR PCB CONTAMINATED SOILS AND SUMP REMOVAL (W/OUT ENCLOSURE) [***SEE COMMENTS]	ADMIN RECORD	EE/CA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 7 OF 14 SW070209-02 41031875
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N68619 / 000337 NONE RPT N6247-88-D-5086 00500	11-24-1999 02-01-1997 00255 00.0	PRC ENVIRONMENTAL MGMT. INC. SMALL, GAIL NAVFAC - EFA WEST A. TACTAY	OF POLYCHLORI AND LEAD CONT	L ACTION (RM) N REPORT FOR REMOVAL NATED BIPHENYL (PCB) AMINATED SOILS, AND SCRAPYARD AREA	ADMIN RECORD	LEAD PCB RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070223-03 41031875
N68619 / 000336 EFAW SER 1842.3/7104 CORRESP NONE 00002	11-24-1999 02-03-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	ACTION (RA) IMP FOR REMOVAL C BIPHENYL (PCB) CONTAMINATED AND SCRAPYARI ENCLOSURE) [SE	SOILS, SCREENING LOT	ADMIN RECORD	LEAD PCB RA SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070223-03 41031875
N68619 / 000345 NONE RPT N62474-88-D-5086 00068	11-24-1999 03-01-1997 00255 00.0	PRC ENVIRONMENTAL MGMT INC. G. SMALL NAVFAC - EFA WEST	ANALYSIS (EE/CA CONTAMINATED REMOVAL (SEE A	RING EVALUATION/COST A) FOR PCB- SOILS AND SUMP AR #344 - EFA WEST ETTER BY A. TACTAY)	ADMIN RECORD	CA EE PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875
N68619 / 000342 EFAW SER 1842.3/7149 CORRESP NONE 00003	11-24-1999 03-19-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY J. CHOU	APPLICABLE OR APPROPRIATE R	DENTIFICATION OF STATE RELEVANT AND EQUIREMENTS (ARAR) ILITY STUDY (FS)	ADMIN RECORD	ARAR FS	002 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875

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N68619 / 000344 EFAW SER 1842.3/7164 CORRESP NONE 00002	11-24-1999 03-31-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF FINAL ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) FOR PCB-CONTAMINATED SOILS AND SUMP REMOVAL (W/OUT ENCLOSURE) [SEE AR #345 - FINAL EE/CA]	ADMIN RECORD	EE/CA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875
N68619 / 000369 NONE COMM NONE 00002	11-24-1999 04-25-1997 NONE 00.0	DTSC - BERKELEY C. CHOU NAVFAC - EFA WEST A. TACTAY	REVIEW AND COMMENTS ON THE DRAFT REMOVAL ACTION (RA) IMPLEMENTATION REPORT FOR REMOVAL OF POLYCHLORINATED BIPHENYL (PCB) AND LEAD CONTAMINATED SOILS	ADMIN RECORD	LEAD PCB RA SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070223-03 41031875
N68619 / 000354 EFAW SER 1842.3/L7190 CORRESP NONE 00002	11-24-1999 07-22-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF THE PROPOSED PLAN (PP) FOR FOUR INSTALLATION RESTORATION (IR) SITES (W/OUT ENCLOSURE) [SEE AR # 355 - PROPOSED PLAN FOR FOUR INSTALLATION RESTORATION SITES]	ADMIN RECORD	IR PP	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070316-02 41031875
N68619 / 000358 EFAW SER 1842.3/L7204 CORRESP NONE 00002	11-24-1999 08-19-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF THE DRAFT FEASIBILITY STUDY (FS), SCRAPYARD/SCREENING LOT (W/OUT ENCLOSURE) [DRAFT DATED 8/15/97 IS SUPERSEDED BY FINAL FS (AR #509)]	ADMIN RECORD	FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875

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N68619 / 000364 LETT NONE 00002	11-24-1999 08-19-1997 00000 00.0	NAVY TACTAY, ANTONIO DTSC CHOU, C. JOSEPH	SUBMISSION OF THE DRAFT FEASIBILITY STUDY (FS), SITE 00002 SCRAPYARD/SCREENING LOT - AUGUST 1997	ADMIN RECORD	FS	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 8 OF 14 10/10/06 41031875
N68619 / 000362 EFAW SER 1842.3/L7216 CORRESP NONE 00002	11-24-1999 09-02-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF REPLACEMENT PAGES CONVERTING THE DRAFT DATED FEBRUARY 1997 TO FINAL REMOVAL ACTION IMPLEMENTATION REPORT FOR REMOVAL OF PCB AND LEAD- CONTAMINATED SOILS, SCREENING LOT AND SCRAPYARD AREA (W/OUT ENCLOSURE) [SEE COMMENTS]	ADMIN RECORD	IRA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070223-03 41031875
N68619 / 000377 NONE CORRESP NONE 00002	11-24-1999 10-10-1997 NONE 00.0	USEPA - SAN FRANCISCO J. RICKS JR. NAVFAC - EFA WEST A. TACTAY	NOTIFICATION THAT USEPA AND DTSC HAVE AGREED TO TEMPORARILY SUSPEND REVIEW OF THE DRAFT FEASIBILITY STUDY (FS) DATED AUGUST 1997 PENDING DISCUSSIONS AT THE 14 OCTOBER BCT MEETING	ADMIN RECORD	FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875
N68619 / 000392 COMM NONE 00002	11-24-1999 10-10-1997 00000 00.0	USEPA RICKS, JAMES A. NAVY TACTAY, ANTONIO	USEPA AND DTSC TO SUSPEND REVIEW OF THE DRAFT FEASIBILITY STUDY (FS), SITE 00002 SCRAP/SCREENING LOT - AUGUST 1997	ADMIN RECORD	FS	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 9 OF 14 10/10/06 41031875

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

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N68619 / 000383 REPO N62474-94-D-7609 00100	11-24-1999 10-14-1997 00255 00.0	TETRA TECH EM INC. REISIG, MARK R. NAVY TACTAY, ANTONIO	ACTION MEMORANDUM (AM), IR02 SCREENING LOT AND SCRAPYARD AREA PCB-CONTAMINATED SOILS AND SUMP REMOVAL, NON-TIME CRITICAL REMOVAL ACTION (RM)	REMOVED	AM PCB RM	002	SOUTHWEST DIVISION - BLDG. 1
N68619 / 000382 EFAW SER 612.2/L8007 CORRESP NONE 00002	11-24-1999 10-16-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF DRAFT ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, POLYCHLORINATED BIPHENYL (PCB) CONTAMINATED SOILS AND SUMP REMOVAL, NON-TIME CRITICAL REMOVAL ACTION (NTCRA) [W/OUT ENCLOSURE] {***SEE COMMENTS}	ADMIN RECORD	AM NTCRA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875
N68619 / 000378 NONE CORRESP NONE 00003	11-24-1999 10-21-1997 NONE 00.0	DTSC - BERKELEY C. CHOU NAVFAC - EFA WEST A. TACTAY	SUMMARIZE DISCUSSION BETWEEN THE NAVY AND REGULATORY AGENCIES REGARDING THE DRAFT FEASIBILITY STUDY (FS), SCRAPYARD/SCREENING LOT ON 14 OCTOBER 1997	ADMIN RECORD	FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 8 OF 14 SW070209-02 41031875
N68619 / 000393 LETT NONE 00003	11-24-1999 10-21-1997 00000 00.0	DTSC CHOU, C. JOSEPH NAVY TACTAY, ANTONIO	SUMMARIZE DISCUSSION REGARDING THE DRAFT FEASIBILITY STUDY (FS), SITE 00002 SCRAPYARD/SCREENING LOT		FS	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 9 OF 14 10/10/06 41031875

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N68619 / 000384 EFAW SER 612.2/L8013 CORRESP NONE 00012	11-24-1999 1 0-28-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY J. CHOU	ACKNOWLEDGEMENT OF RECEIPT O OCTOBER 1997 LETTER WHICH SUMMARIZED DISCUSSION REGARDI DRAFT FEASIBILITY STUDY (FS) AND SUBMITTAL OF SAMPLING AND ANAL PLAN (SAP) IN LETTER REPORT FOR	NG YSIS	CHROMIUM FS SAP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000394 NONE COMMENTS NONE 00004	11-24-1999 11-07-1997 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE DRAFT ACTION MEMORANDUM (AM), SCREENING LO SCRAPYARD AREA, POLYCHLORINAT BIPHENYL (PCB) CONTAMINATED SO AND SUMP REMOVAL, NON-TIME CRI REMOVAL ACTION (NTCRA)	'ED ILS	AM NTCRA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000388 EFAW SER 612.2/L8030 CORRESP NONE 00004	11-24-1999 11-25-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY H. WONG	RESPONSE TO CONCERNS REGARDI THE CHROMIUM CONCENTRATIONS PRESENTED IN THE REMEDIAL INVESTIGATION (RI) REPORT AND TO PRESENT THE SAMPLING LOCATIONS THAT SHOULD BE RE-SAMPLED AND ANALYZED FOR HEXAVALENT CHROM	5	CHROMIUM FS HEXAVALENT RI	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000395 NONE CORRESP NONE 00002	11-24-1999 12-01-1997 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	NOTIFICATION OF RECEIPT OF 28 OCTOBER 1997 AND 25 NOVEMBER 1 LETTERS REGARDING HEXAVALENT CHROMIUM SAMPLING; DTSC CONCL WITH THE NAVY'S PROPOSAL		CHROMIUM HEXAVALENT	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875

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N68619 / 000396 EFAW SER 612.2/L8033 COMMENTS NONE 00006	11-24-1999 12-03-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY H. WONG	RESTORATION ADVISORY BOARD (RAB) FOCUS GROUP COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS), SCRAPYARD/SCREENING LOT	ADMIN RECORD	COMMENTS FS RAB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000389 EFAW SER 612.2/L8035 CORRESP NONE 00002	11-24-1999 12-05-1997 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF THE ECOLOGICAL RISK ASSESSMENT (ERA) REPORT OF SEDIMENT AT OUTFALL NO. 1, IR 08 STORMWATER SYSTEM	ADMIN RECORD	ERA SEDIMENT	001	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 9 OF 14 10/10/06 41031875
N68619 / 000399 NONE RESPONSE NONE 00007	11-24-1999 01-01-1998 NONE 00.0	NAVFAC - EFA WEST VARIOUS AGENCIES	RESPONSE TO COMMENTS ON DRAFT ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, POLYCHLORINATED BIPHENYL (PCB) CONTAMINATED SOILS AND SUMP REMOVAL, NON-TIME CRITICAL REMOVAL ACTION (NTCRA)	ADMIN RECORD	AM IR02 IRA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000409 NONE RPT N62474-94-D-7609 00032	11-24-1999 01-01-1998 00255 00.0	TETRA TECH EM INC. M. REISIG NAVFAC - EFA WEST	FINAL ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, POLYCHLORINATED BIPHENYL (PCB) CONTAMINATED SOILS AND SUMP REMOVAL, NON-TIME CRITICAL REMOVAL ACTION (NTCRA) [SEE AR #400 - EFA WEST TRANSMITTAL LETTER BY A. TACTAY]	ADMIN RECORD	AM PCB RM	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875

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N68619 / 000400 EFAW SER 612.2/L8055 CORRESP NONE 00002	11-24-1999 01-16-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF FINAL ACTION MEMORANDUM (AM), SCREENING LOT AND SCRAPYARD AREA, POLYCHLORINATED BIPHENYL (PCB) CONTAMINATED SOILS AND SUMP REMOVAL, NON-TIME CRITICAL REMOVAL ACTION (NTCRA) [W/OUT ENCLOSURE] {SEE AR #409 - FINAL ACTION MEMORANDUM}		AM NTCRA PCB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000408 LETT N62474-94-D-7609 00002	11-24-1999 01-16-1998 00255 00.0	NAVY TACTAY, ANTONIO DTSC WONG, HENRY	SUBMISSION OF THE FINAL ACTION MEMORANDUM (AM), IR02 SCREENING LOT AND SCRAPYARD AREA, POLYCHLORINATED BIPHENYL- CONTAMINATED SOILS AND SUMP REMOVAL, NONTIME-CRITI	ADMIN RECORD	AM PCB RM	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 9 OF 14 10/10/06 41031875
N68619 / 000403 EFAW SER 612.2/L8065 CORRESP NONE 00002	11-24-1999 01-30-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF THE DRAFT FEASIBILITY STUDY (FS) [W/OUT ENCLOSURE] {DRAFT DATED 1/30/98 IS SUPERSEDED BY FINAL FEASIBILITY STUDY (AR #509)]	ADMIN RECORD	FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000634 NONE RPT N62474-93-D-2151 00100	06-20-2001 05-01-1998 DO 75	IT CORPORATION NAVFAC - EFA WEST	DRAFT PROJECT COMPLETION REPORT, POLYCHLORINATED BIPHENYL (PCB) CONTAMINATED SOIL REMOVAL	ADMIN RECORD	PCB REMOVAL SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070223-03 41031875

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N68619 / 000437 NONE COMMENTS NONE 00008	11-24-1999 05-11-1998 NONE 00.0	USEPA - SAN FRANCISCO J. RICKS JR. NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS) FOR SOIL AT SWMU 1 AND DRAFT FEASIBILITY FOR SWMU 4/AOC 2 AND AOC 8	ADMIN RECORD	AOC COMMENTS FS SWMU	002 004 006 008 AOC 2 AOC 8 SWMU 1 SWMU 4	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000438 NONE COMMENTS NONE 00005	11-24-1999 05-11-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS)	ADMIN RECORD	FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000430 NONE RPT NONE 00074	11-24-1999 06-22-1998 NONE 00.0	NAVFAC - EFA WEST NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL ACTION PLAN (RAP) [SE AR # 429 - EFAW TRANSMITTAL LETTER BY A. TACTAY}		IR RA RAP	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070316-02 41031875
N68619 / 000427 EFAW SER 612.2/L8170 CORRESP NONE 00002	11-24-1999 06-25-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY VARIOUS AGENCIES	TRANSMITTAL OF DRAFT FINAL CUMULATIVE GROUNDWATER MONITORING REPORT AND DRAFT ON- SCENE COORDINATOR (OSC) REPORT OF THE INTERIM REMOVAL ACTION (RA) [W/OUT ENCLOSURES] {***SEE COMMENTS	ADMIN RECORD	OSC RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875

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N68619 / 000428 REPO N62474-88-D-5086 00056	11-24-1999 06-26-1998 00255 00.0	TETRA TECH EM INC. REISIG, MARK R. NAVY TACTAY, ANTONIO	DRAFT ON-SCEN REPORT REMOV INSTALLATION R SCREENING LOT RAILROAD SUMF	AL ACTION (RM ESTORATION S AND SCRAP Y/	l), SITE 2 (IR02)	REMOVED	RM	002	SOUTHWEST DIVISION - BLDG. 1
N68619 / 000429 EFAW SER 612.2/L8177 LETT NONE 00002	11-24-1999 07-08-1998 NONE 00.0	NAVY TACTAY, ANTONIO DTSC WONG, HENRY	TRANSMITTAL O FOUR INSTALLA SITES AND 2) DR PLAN (RAP) {W/C AR# 355 - ENCLC ENCLOSURE 2]	TION RESTORA AFT REMEDIAL OUT ENCLOSUR	TION (IR) . ACTION ES} [SEE	ADMIN RECORD	IR RA RAP	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070316-02 41031875
N68619 / 000455 NONE COMMENTS NONE 00002	11-24-1999 07-27-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON COORDINATOR	-	SCENE	ADMIN RECORD	COMMENTS OSC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875
N68619 / 000456 EFAW SER 612.2/L8203 RPT N62474-94-D-7609 00050	11-24-1999 08-14-1998 00209 00.0	TETRA TECH EM INC. M. REISIG NAVFAC - EFA WEST	FINAL ON-SCENI REPORT, REMO' SCREENING LOT RAILROAD SUMF TRANSMITTAL LI	/AL ACTION (RA AND SCRAP YA (INCLUDES EF	A), ` ARD AREA 'A WEST	ADMIN RECORD	OSC PCB RA	002	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070209-02 41031875

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N68619 / 000431 NONE PUB NOTICE NONE 00006	11-24-1999 08-19-1998 NONE 00.0	NAVFAC - EFA WEST PUBLIC INTEREST	PUBLIC NOTICE ANNOUNCEMENT OF REVIEW AND COMMENT ON THE RESULTS OF ENVIRONMENTAL INVESTIGATIONS ANE THE PROPOSED NO ACTION PLAN FOR FOUR INSTALLATION RESTORATION (IR) SITES	ADMIN RECORD	IR	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 9 OF 14 SW070316-02 41031875
N68619 / 000458 NONE COMMENTS NONE 00002	11-24-1999 08-20-1998 NONE 00.0	DTSC - BERKELEY H. WONG CRWQCB - OAKLAND J. NUSRALA	LETTER CONFIRMING THE TELEPHONE CONVERSATION REGARDING THE DRAFT REMEDIAL ACTION (RA) PLAN	ADMIN RECORD	IR RA RAP	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070316-02 41031875
N68619 / 000460 NONE COMMENTS NONE 00005	11-24-1999 08-24-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE DRAFT PROPOSED PLAN AND DRAFT REMEDIAL ACTION (RA) PLAN FOR INSTALLATION RESTORATION (IR) SITES 01, 03, 05 AND 07 - 22 JUNE 1998	ADMIN RECORD	IR RA RAP	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070316-02 41031875
N68619 / 000482 NONE COMMENTS NONE 00005	11-24-1999 08-24-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE DRAFT PROPOSED PLAN AND DRAFT REMEDIAL ACTION PLAN (RAP)	ADMIN RECORD	IR RA RAP	001 003 005 007	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 10 OF 14 10/10/06 41031875

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N68619 / 000466 EFAW SER 612.2/L8192 RESPONSE NONE 00002	11-24-1999 08-28-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY H. WONG	RESPONSE TO COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS) [LETTER RECEIVED IN THE ADMINISTRATIVE RECORDS W/OUT ENCLOSURE]	ADMIN RECORD	COMMENTS FS RESPONSE	002	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875
N68619 / 000478 NONE RPT N62474-88-D-5086 00500	11-24-1999 09-01-1998 00210 00.0	TETRA TECH EM INC. M. REISIG NAVFAC - EFA WEST	DRAFT FINAL FEASIBILITY STUDY (FS) FOR SOIL	ADMIN RECORD	BTEX FS PAH PCB PVC SVOC TPH VOC	002 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875
N68619 / 000479 EFAW SER 612.2/L8225 CORRESP NONE 00010	11-24-1999 09-02-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY H. WONG	ADDITIONAL INFORMATION REGARDING FRUIT BEARING TREE ROOTS (ENCLOSED IS ATTACHMENT A - EVALUATION OF POTENTIAL EXPOSURE OF RESIDENTS TO CHEMICALS DETECTED IN GROUNDWATER THROUGH THE INGESTION OF HOMEGROWN FRUITS)	ADMIN RECORD	TCE VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875
N68619 / 000467 NONE COMMENTS NONE 00002	11-24-1999 09-23-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON NAVY'S RESPONSE TO COMMENTS ON THE DRAFT FEASIBILITY STUDY (FS) DATED JANUARY 1998 AND HAS NO ADDITIONAL COMMENTS EXCEPT FOR ONE REMAINING ISSUE REGARDING FRUIT BEARING TREE ROOTS	ADMIN RECORD	COMMENTS FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875

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N68619 / 000483 COMM NONE 00002	11-24-1999 09-23-1998 00000 00.0	DTSC WONG, HENRY NAVY TACTAY, ANTONIO	COMMENTS ON THE FEASIBILITY STUDY (FS) FOR INSTALLATION RESTORATION SITE 02	ADMIN RECORD	FS	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 10 OF 14 10/10/06 41031875
N68619 / 000485 EFAW SER 612.2/L9003 RESPONSE NONE 00012	11-24-1999 10-06-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY H. WONG	RESPONSE TO COMMENTS ON THE DRAFT FINAL CUMULATIVE GROUNDWATER MONITORING REPORT AND DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD) AND PROPOSED PLAN	ADMIN RECORD	GW RA RAP ROD	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875
N68619 / 000477 NONE RPT N62474-94-D-7609 00100	11-24-1999 10-07-1998 NONE 00.0	NAVFAC - EFA WEST NAVFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD)	ADMIN RECORD	RA RAP ROD	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070316-02 41031875
N68619 / 000473 NONE COMMENTS NONE 00003	11-24-1999 10-08-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON 2 SEPTEMBER 1998 NAVY'S LETTER AND IT'S ATTACHMENT A - THE POTENTIAL EXPOSURE PATHWAY VIA FRUIT INGESTION	ADMIN RECORD	BHHRA COMMENTS FS	002 004 006 008	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875

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N68619 / 000486 NONE COMMENTS NONE 00003	11-24-1999 10-08-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE POTENTIAL EXPOSURE PATHWAY VIA FRUIT INGESTION (SEE NOTE)	ADMIN RECORD	FRUIT INGESTION PATHWAY	002 004 006 008	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 10 OF 14 10/10/06 41031875
N68619 / 000489 NONE COMMENTS NONE 00002	11-24-1999 10-16-1998 NONE 00.0	USEPA - SAN FRANCISCO J. RICKS NAVFAC - EFA WEST A. TACTAY	COMMENTS ON FEASIBILITY STUDY (FS) REGARDING 2 SEPTEMBER 1998 NAVY'S LETTER AND IT'S ATTACHMENT A	ADMIN RECORD	COMMENTS FS TCE VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875
N68619 / 000498 NONE PUB NOTICE NONE 00014	11-24-1999 11-01-1998 NONE 00.0	NAVFAC - EFA WEST A. TACTAY PUBLIC INTEREST	FACT SHEET: PROPOSED PLAN FOR FOUR INSTALLATION RESTORATION SITES IR02, IR04, IR06, AND IR08	INFO REPOSITORY	IR	002 004 006 008	CHOICE IMAGING SOLUTIONS 181-03-0183 11 OF 14 SW070223-03 41031875
N68619 / 000494 NONE COMMENTS NONE 00008	11-24-1999 11-06-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE PROPOSED PLAN AND DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD) (W/ ENCLOSURES		IR RA RAP ROD	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070316-02 41031875

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N68619 / 000495 EFAW SER 612B/L9024 RESPONSE NONE 00010	11-24-1999 11-09-1998 NONE 00.0	NAVFAC - EFA WEST D. HEGARTY DTSC - BERKELEY H. WONG	RESPONSE TO ADDITIONAL COMMENTS ON THE FEASIBILITY STUDY (FS) REGARDING FRUIT TREE GROUNDWATER UPTAKE	ADMIN RECORD	BTEX FS GW TCE TDS VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070209-03 41031875
N68619 / 000476 NONE PUB NOTICE NONE 00006	11-24-1999 12-01-1998 NONE 00.0	NAVFAC - EFA WEST PUBLIC INTEREST	PUBLIC NOTICE FOR THE PUBLIC COMMENT ON THE PROPOSED PLAN FOR FOUR INSTALLATION RESTORATION (IR) SITES	ADMIN RECORD	IR	001 003 005 007	CHOICE IMAGING SOLUTIONS 181-03-0183 10 OF 14 SW070316-02 41031875
N68619 / 000502 NONE COMMENTS NONE 00002	11-24-1999 12-04-1998 NONE 00.0	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST A. TACTAY	COMMENTS ON THE DRAFT FINAL FEASIBILITY STUDY (FS) AND RESPONSE TO COMMENTS DATED 1/9/98; DTSC HAS NO FURTHER COMMENT AND USEPA CONCURS WITH DTSC'S CONCLUSION	ADMIN RECORD	BHHRA COMMENTS FS RESPONSE	002	CHOICE IMAGING SOLUTIONS 181-03-0183 11 OF 14 SW070209-03 41031875
N68619 / 000515 EFAW SER 612.2/L9077 CORRESP NONE 00002	11-24-1999 01-21-1999 NONE 00.0	NAVFAC - EFA WEST A. TACTAY DTSC - BERKELEY H. WONG	TRANSMITTAL OF THE FINAL FEASIBILITY STUDY (FS) IR FOR SCRAPYARD/SCREENING LOT (W/OUT ENCLOSURE)	ADMIN RECORD	FS	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 11 OF 14 10/10/06 41031875

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N68619 / 000509 NONE RPT N62474-94-D-7609 00500	11-24-1999 01-22-1999 00210 00.0	TETRA TECH EM INC. M. REISIG NAVFAC - EFA WEST	FINAL FEASIBILITY STUDY (FS) FOR SOIL AT SWMU (SOLID WASTE MANAGEMENT UNIT) 1 (SEE AR #508 - EFA WEST TRANSMITTAL LETTER BY A. TACTAY)	ADMIN RECORD	FS SWMU	002 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 11 OF 14 SW070209-03 41031875
N68619 / 000545 EFAW SER 612.2/L9207 MM N62474-94-D-7609 00025	04-26-2000 09-02-1999 NONE	NAVFAC - SOUTHWEST DIVISION D. HEGARTY VARIOUS AGENCIES	10 AUGUST 1999 REMEDIAL PROJECT MANAGER (RPM)/BASE REALIGNMENT AND CLOSURE CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA FOR 14 SEPTEMBER 1999, SIGN-IN SHEETS AND VARIOUS HANDOUTS)	ADMIN RECORD		002 004 006 008 WELL S27	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000550 NONE CORRESP NONE 00003	04-27-2000 11-23-1999 NONE	DTSC - BERKELEY M. CASSA NAVFAC - EFA WEST R. HEGARTY	DISCUSSION OF TECHNICAL ISSUES TO BE RESOLVED FOR EARLY TRANSFER OF THE FISC OAKLAND, ALAMEDA ANNEX	ADMIN RECORD	GW PAH	001 004 006 008	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000547 NONE CORRESP NONE 00002	04-27-2000 11-29-1999 NONE	DTSC - BERKELEY M. CASSA NAVFAC - EFA WEST R. HEGARTY	CORRECTION TO DTSC LETTER DATED 23 NOVEMBER 1999 REGARDING TECHNICAL ISSUES TO BE RESOLVED	ADMIN RECORD		001 002 PARCEL 29 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875

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N68619 / 000031 TC.0116.10437 MM N62474-94-D-7609 00012	08-14-2000 12-14-1999 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	14 DECEMBER 1999 BASE REALIGNMENT AND CLOSURE CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS	ADMIN RECORD INFO REPOSITORY	BCT FOSET FS MTBE MTG MINS PAH RAP RISK ASSESSMEN ROD TPH	002 004 005 006	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070316-01 41031875
N68619 / 000567 TC.0116.10437 MM N62474-94-D-7609 00016	08-14-2000 12-14-1999 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	14 DECEMBER 1999 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS) {PORTION OF THE SIGN-IN SHEET IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS PAH RAB	002	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875

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N68619 / 000537 ALSO CTO 245 RPT N62474-94-D-7609 00000	01-07-2000 00236 04.2	TETRA TECH EM INC. M. REISIG NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL FEASIBILITY STUDY FOR THE MARSH CRUST AND GROUNDWATER AT THE FISC OAKLAND ALAMEDA FICILITY (INCLUDES TRANSMITTAL LETTER TO DTSC, BERKELEY, CA)	ADMIN RECORD	FS	002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 0U 1 0U 2 0U 3 SWMU 3 SWMU 4	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070129-01 41031875

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TC.0116.10437 01	1-11-2000 0116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	MEETING (INCLU SHEETS, & HAND	IUARY 11, 2000 - DVISORY BOARD (RA DES AGENDA, SIGN-II IOUTS - PORTIONS OF E CONFIDENTIAL) (W	N N F THE	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW MONITORING MTG MINS RAB ROD	002 004 006	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 12 OF 14 10/10/06 41031875
NONE 01	1-14-2000	NEWFIELDS INC L. SHULL NAVFAC - EFA WEST	TRANSMITTAL LE DRAFT RISK ASS 1999, AGENCY CO RECOMMENDATI	HRA) [INCLUDES EFA TTER BY D. HEGART ESSMENT DATED 07	∖W ϓ, JULY ∖L	ADMIN RECORD INFO REPOSITORY	GW HHRA RI VOC	001 002 003 004 005 006 AOC 1 AOC 2 AOC 3 SWMU 1 SWMU 3 SWMU 4	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-02 41031875
NONE 01	IONE	ENVIRONMENTAL RESOURCES MGMT. J. MCLAUGHLIN NAVFAC - SOUTHWEST DIVISION R. HEGARTY	APPROACH FOR INSTALLATION R AREAS AND EAS	UNDWATER SAMPLIN FISC WAREHOUSE, ESTORATION (IR) SITI T HOUSING AREA IN (W/ ENCLOSURES)	-	ADMIN RECORD	IR	002	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875

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N68619 / 000555 RPT NONE 00075	04-27-2000 01-14-2000 NONE	NEWFIELDS, INC. L. SHULL NAVFAC - EFA WEST	BASELINE HUMAN HEALTH RISK ASSESSMENT (HHRA) REPORT	ADMIN RECORD		002 003 004 005 006 AOC 1 AOC 2 AOC 3 SWMU 1 SWMU 3 SWMU 4	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 12 OF 14 10/10/06 41031875
N68619 / 000538 NONE RPT N62474-94-D-7609 00027	02-15-2000 01-31-2000 00289	TETRA TECH EM INC. M. REISIG NAVFAC - EFA WEST T. TACTAY	DRAFT DESIGN BASIS REPORT; REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	FS PCB RI SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-02 41031875
N68619 / 000554 EFAW SER 612B/L0038 COMMENTS NONE 00002	04-27-2000 02-02-2000 NONE	NAVFAC - EFA WEST R. HEGARTY ENVIRONMENTAL RESOURCES MGMT. M. QUILLIN	NAVY COMMENTS ON THE PROPOSED SAMPLING APPROACH FOR FISC WAREHOUSE AREA AND ALAMEDA POINT EAST HOUSING AREA	ADMIN RECORD	COMMENTS SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000597 TC.0271.10613 COMMENTS N62474-94-D-7609 00010	11-15-2000 02-07-2000 00271	DTSC, BERKELEY, CA M. CASSA NAVFAC - SOUTHWEST DIVISION L. OCAMPO	REVIEW AND COMMENTS ON THE DRAFT FINAL FEASIBILITY STUDY (FS) FOR THE MARSH CRUST AND GROUNDWATER AND MARSH CRUST AND FORMER SUBTIDAL AREA	ADMIN RECORD INFO REPOSITORY	COMMENTS FS GW VOC	002 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070129-01 41031875

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N68619 / 000046 TC.0116.10437 MM N62474-94-D-7609 00023	08-14-2000 02-08-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	MINUTES OF FEBRUARY 8, 2000 - BASE REALIGNMENT AND CLOSURE CLEANUP TEAM (BCT) MEETING (INCLUDES AGENDA, SIGN-IN SHEETS, & NAVY'S RESPONSE TO DTSC & EPA COMMENTS ON THE DRAFT FINAL BASEWIDE FEASIBILITY STUDY - BWFS) (WITH ATTACHMENTS)	ADMIN RECORD INFO REPOSITORY	BCT COMMENTS FS MTBE MTG MINS ROD	002 004 005 006 OU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070413-02 41031875
N68619 / 000569 TC.0116.10437 MM N62474-94-D-7609 00020	08-14-2000 02-08-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	08 FEBRUARY 2000 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS) {PORTION OF THE SIGN-IN SHEET IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	FOSET MTG MINS PAH RAB ROD	002 004 005 006	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070413-02 41031875
N68619 / 000553 NONE COMMENTS NONE 00013	04-27-2000 02-17-2000 NONE	CLEARWATER REVIVAL COMPANY P. LYNCH NAVFAC - WESTERN DIVISION R. HEGARTY	REVIEW AND COMMENTS ON DRAFT FINAL FEASIBILITY STUDY MARSH CRUST, SUB- TIDAL AREA AND GROUNDWATER (INCLUDES COMMENTS ON BASE-WIDE FEASIBILITY STUDY FOR MARSH CRUST & SUB-TIDAL WETLANDS DATED 19 MARCH 1999	ADMIN RECORD	COMMENTS GW RI/FS	003 007 OU 1 OU 2 OU 3	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070129-01 41031875
N68619 / 000563 TC.0116.10437 MM N62474-94-D-7609 00032	08-14-2000 03-14-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	14 MARCH 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEETS, REVISION PAGE AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	BCT GW MTBE MTG MINS PAH RISK ASSESSMEN	002 005	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875

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N68619 / 000541 NONE RPT N62474-94-D-7609 00200	04-26-2000 03-31-2000 236 & 245	TETRA TECH EM INC. M. REISIG NAVFAC - SOUTHWEST DIVISION	FINAL FEASIBILITY STUDY FOR THE MARSH CRUST AND GROUNDWATER	ADMIN RECORD	BRAC PAH PCB ROD SVOC TPH UST VOC	002 003 004 005 006 007 OU 1 OU 2 OU 3	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070129-01 41031875
N68619 / 000564 TC.0116.10437 MM N62474-94-D-7609 00020	08-14-2000 04-11-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	11 APRIL 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	BCT FS MTG MINS	002 004 006 OU 2	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000571 TC.0116.10437 MM N62474-94-D-7609 00040	08-14-2000 04-11-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	11 APRIL 2000 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS) (PORTION OF THE SIGN-IN SHEET IS SENSITIVE)	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS PAH RAB	002 004 006	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875

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N68619 / 000542 NONE RPT N62474-94-D-7609 00100	04-26-2000 04-21-2000 00288	TETRA TECH EM INC. M. REISIG NAVFAC - SOUTHWEST DIVISION	DRAFT WELL CLOSURE REPORT FOR ABANDONMENT OF WELLS	ADMIN RECORD	PVC	001 002 004 006 MW-10 MW-11 MW-12 WELL S14 WELL S17 WELL S18 WELL S20 WELL S21 WELL S22 WELL S25 WELL S28 WELL S32 WELL S34	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000565 TC.0116.10437 MM N62474-94-D-7609 00008	08-14-2000 05-03-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	03 MAY 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA AND SIGN-IN SHEETS)	ADMIN RECORD INFO REPOSITORY	BCT GW MTG MINS PAH RAP ROD	002 005	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000558 NONE RPT N62474-94-D-7609 00060	06-15-2000 05-05-2000 00271	TETRA TECH EM, INC. M. REISIG NAVFAC - SOUTHWEST DIVISION L. OCAMPO	INTERNAL DRAFT RECORD OF DECISION/REMEDIAL ACTION PLAN (ROD/RAP) FOR THE MARSH CRUST AND GROUNDWATER AND FOR THE MARSH CRUST AND FORMER SUBTIDAL AREA	ADMIN RECORD	HHRA PAH PCB ROD SVOC TDS TPH VOC	002 003 004 005 006 OU 1 OU 2 OU 3 OU 4 WELL S27	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070129-01 41031875

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N68619 / 000572 TC.0116.10437 MM N62474-94-D-7609 00008	08-14-2000 05-09-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	09 MAY 2000 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND SCHEDULE) (PORTION OF THE SIGN-IN SHEET IS SENSITIVE)	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS RAB RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000557 NONE RPT N62474-94-D-7609 00100	06-15-2000 05-31-2000 00116	TETRA TECH EM INC. M. REISIG NAVFAC - SOUTHWEST DIVISION	INTERNAL DRAFT SUPPLEMENTAL REMEDIAL INVESTIGATION FOR POLYNUCLEAR AROMATIC HYDROCARDON CONTAMINATED SOIL	ADMIN RECORD	HHRA PAH PCB SVOC TPH VOC	002	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 12 OF 14 10/10/06 41031875
N68619 / 000556 NONE RPT N62474-94-D-7609 00100	06-15-2000 06-12-2000 00116	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT SUPPLEMENTAL REMEDIAL INVESTIGATION (RI) FOR POLYNUCLEAR AROMATIC HYDROCARBON (PAH) CONTAMINATED SOIL	ADMIN RECORD	HHRA PAH PCB RI SVOC TPH VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875
N68619 / 000566 TC.0116.10437 MM N62474-94-D-7609 00042	08-14-2000 06-13-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	13 JUNE 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	BCT CLOSURE GW MTG MINS PAH SOIL TPH VOC WELLS	002 005	CHOICE IMAGING SOLUTIONS 181-03-0183 12 OF 14 SW070316-03 41031875

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N68619 / 000004 NONE CORRESP NONE 00004	08-07-2000 07-14-2000 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENTS ON THE DRAFT SUPPLEMENTAL REMEDIAL INVESTIGATIO (RI) FOR POLYNUCLEAR AROMATIC HYDROCARBON (PAH) CONTAMINATED SOIL	ADMIN RECORD NINFO REPOSITORY	COMMENTS PAH RI SALVAGE YARD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070316-01 41031875
N68619 / 000617 NONE CORRESP NONE 00030	03-26-2001 07-17-2000 NONE	NAVFAC - SOUTHWEST DIVISION W. CARSILLO DTSC, SACRAMENTO, CA A. LANDIS	INTERIM COVENANT TO RESTRICT USE O PROPERTY, ENVIRONMENTAL RESTRICTION	F ADMIN RECORD INFO REPOSITORY	FFSRA PAH PCB SOIL	002 004 006	SOUTHWEST DIVISION - BLDG. 110 181-03-0183 13 OF 14 10/10/06 41031875
N68619 / 000014 DS.0116.14756 RPT N62474-94-D-7609 00075	07-21-2000 07-18-2000 00116	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT SITE MANAGEMENT PLAN (SMP), REVISION 0	ADMIN RECORD	SMP	001 002 003 004 005 006 007 008	CHOICE IMAGING SOLUTIONS 181-03-0183 1 OF 14 SW070316-01 41031875
N68619 / 000577 NONE COMMENTS NONE 00003	09-07-2000 08-24-2000 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENTS ON THE DRAFT SITE MANAGMENT PLAN {SEE AR #14 - PLAN}	ADMIN RECORD INFO REPOSITORY	COMMENTS FFSRA MANAGEMENT PL RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875

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N68619 / 000682 NONE CORRESP NONE 00003	02-06-2003 09-11-2000 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS STATING THAT NO CHANGES ARE REQUIRED TO THE DRAFT PRELIMINARY ASSESSMENT/SITE INSPECTION/ACTION LEVEL DECISION DOCUMENT, DATED 14 AUGUST 2000	ADMIN RECORD INFO REPOSITORY	FISC PAH RME	003 005 013 014 015 016 025 026 034 038 045	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001

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N68619 / 000588 TC.0271.10553 MM N62474-94-D-7609 00020	10-12-2000 09-12-2000 00116	TETRA TECH EM INC. VARIOUS AGENCIES	ADVISORY BOAR MINUTES (INCLU SHEET, AND VAR	RTION OF THE SIGN	IN-IN	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS PAH PCB RAB RAP ROD SVOC VOC	001 003 004 005 006 007 008 012 AOC AOC 3 AOC 3 AOC 8 BLDG. 1 BLDG. 10 BLDG. 12 BLDG. 13 BLDG. 16 BLDG. 17 BLDG. 2 BLDG. 25 BLDG. 26 BLDG. 361 BLDG. 364 BLDG. 366 BLDG. 368 BLDG. 368 BLDG. 370 BLDG. 4 BLDG. 7 BLDG. 8	
Thursday, May 24, 2	007	This Admini bibliographi	strative Record (AR) c citations are consid	Index includes references in the part of this	rences to do is AR but m	cuments which cite bibli ay not be cited separate	ography sources. These ly in the index.	BLDG. 9 Pa	age 38 of 60

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						SWMU 1 SWMU 3 SWMU 4	
N68619 / 000589 TC.0271.10554 MM N62474-94-D-7609 00015	10-12-2000 09-12-2000 00116	TETRA TECH EM INC. VARIOUS AGENCIES	12 SEPTEMBER 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INLCUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	BCT FFSRA MTG MINS PAH PCB RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000594 TC.0116.10660 MM N62474-94-D-7609 00011	11-15-2000 10-10-2000 00116	TETRA TECH EM INC. VARIOUS AGENCIES	10 OCTOBER 2000 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS) {PORTIO OF THE SIGN-IN SHEET IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS RAB	002 004 005 006	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000595 TC.0116.10661 MM N62474-94-D-7609 00014	11-15-2000 10-10-2000 00116	TETRA TECH EM INC. VARIOUS AGENCIES	10 OCTOBER 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	BCT GW MTG MINS PAH PCB RAP ROD	002 004 006 WELL S-27	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000591 DS.0288.15588 RPT N62474-94-D-7609 00050	10-27-2000 10-25-2000 00288	TETRA TECH EM INC. M. REISIG NAVFAC - SOUTHWEST DIVISION	FINAL MONITORING WELL ABANDONMENT CLOSURE REPORT	ADMIN RECORD INFO REPOSITORY	GW IR MW PVC SOIL	001 002 003 004 005 006 007 008	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070316-03 41031875

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N68619 / 000593 SWDIV SER 06CA.LO/0902 CORRESP NONE 00007	11-08-2000 11-01-2000 NONE	NAVFAC - SOUTHWEST DIVISION L. OCAMPO DTSC - BERKELEY M. CASSA	QUARTERLY PROGRESS REPORT FOR MAY THROUGH AUGUST 2000 (INCLUDES SWDIV TRANSMITTAL LETTER BY L. OCAMPO) {PORTION OF THE MAILING LIST IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW MONITORING MTBE PAH PCB RAP ROD TPH VOC WELLS	002 004 006 WELL S-27	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000596 DS.0116.14757 RPT N62474-94-D-7609 00050	11-15-2000 11-09-2000 00116	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT FINAL SITE MANAGEMENT PLAN (SMP), REVISION 0	ADMIN RECORD INFO REPOSITORY	PAH PCB SMP SVOC TPH	001 002 003 004 005 006 007 008	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070316-03 41031875
N68619 / 000605 TC.0116.10733 MM N62474-94-D-7609 00016	01-05-2001 11-14-2000 00116	TETRA TECH EM INC. VARIOUS AGENCIES	14 NOVEMBER 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	GW MTG MINS RAP ROD	002 004 005 006	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000606 TC.0116.10734 MM N62474-94-D-7609 00008	01-05-2001 11-14-2000 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	14 NOVEMBER 2000 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA AND SIGN-IN SHEET)	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH RAB RAP ROD	002 004 005 006 WELL S27	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875

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N68619 / 000607 TC.0116.10761 MM N62474-94-D-7609 00014	01-05-2001 12-12-2000 00116	TETRA TECH EM INC. VARIOUS AGENCIES	12 DECEMBER 2000 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA AND SIGN-IN SHEET)	ADMIN RECORD INFO REPOSITORY	CAP GW MTG MINS PAH PCB RAP ROD	002 004 005 006 WELL S27	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000608 SWDIV SER 06CA.LO\0017 CORRESP NONE 00004	01-10-2001 01-04-2001 NONE	NAVFAC - SOUTHWEST DIVISION L. OCAMPO DTSC - BERKELEY M. CASSA	QUARTERLY PROGRESS REPORT FOR SEPTEMBER THROUGH NOVEMBER 2000	ADMIN RECORD INFO REPOSITORY	PAH PCB RAP ROD	002 004 005 006	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000612 TC.0116.10786 MM N62474-94-D-7609 00019	02-08-2001 01-09-2001 00116	TETRA TECH EM INC. VARIOUS AGENCIES	09 JANUARY 2001 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS) {PORTION OF THE SIGN-IN SHEET IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	FS GW MTG MINS PAH PCB RAB RI	001 002 003 004 005 006 007 008 WELL S27	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875
N68619 / 000613 TC.0116.10787 MM N62474-94-D-7609 00012	02-08-2001 01-09-2001 00116	TETRA TECH EM INC. VARIOUS AGENCIES	09 JANUARY 2001 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	BCT CAP FS GW MONITORING MTG MINS PAH RAP RI ROD	002 004 006 025 PARCEL 178	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070330-01 41031875

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N68619 / 000611 NONE CORRESP NONE 00002	01-30-2001 01-12-2001 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION L. OCAMPO	REVIEW AND COMMENTS ON THE DRAFT FINAL SUPPLEMENTAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) FOR POLYNUCLEAR AROMATIC HYDROCARBON (PAH) CONTAMINATION	ADMIN RECORD INFO REPOSITORY	COMMENTS PAH RI/FS	002	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070316-03 41031875
N68619 / 000600 DS.0116.15519-01 & DS.0116.15707-01 RPT N62474-94-D-7609 00160	11-20-2000 & 01-31-2001 00116	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT FINAL SUPPLEMENTAL REMEDIAL INVESTIGATION (RI) AND DRAFT FEASIBILITY STUDY (FS) FOR POLYNUCLEAR AROMATIC HYDROCARBON (PAH) CONTAMINATED SOIL (INCLUDES REVISION PAGES)	ADMIN RECORD INFO REPOSITORY	FS PAH RI SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 13 OF 14 SW070316-03 41031875
N68619 / 000628 TC.0116.10884 MM N62474-94-D-7609 00024	04-11-2001 02-13-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	13 FEBRUARY 2001 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS) {PORTION OF MAILING LIST IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW MTG MINS PAH PCB RAB RAP ROD SOIL	002 003 004 005 006 007 008	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000629 TC.0116.10885 MM N62474-94-D-7609 00040	04-11-2001 02-13-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	13 FEBRUARY 2001 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	GW MONITORING MTG MINS PAH RAP ROD WELLS	002 004 005 006 025	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875

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N68619 / 000624 NONE RPT N62474-97-D-1512 00100	04-05-2001 03-01-2001 DO 0007	ENVIRONMENTAL CHEMICAL CORP K. SPALA NAVFAC - WESTERN DIVISION	DRAFT WORK PLAN, EXCAVATION OF POLYCHLORINATED BIPHENYL (PCB) AND CADMIUM CONTAMINATED SOIL (INCLUDES DRAFT QUALITY CONTROL PLAN DATED MARCH 2001)	ADMIN RECORD INFO REPOSITORY	PAH PCB SOIL TPH VOC	002 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000625 NONE RPT N62474-97-D-1512 00120	04-05-2001 03-01-2001 DO 0007	ENVIRONMENTAL CHEMICAL CORP D. OSAKI NAVFAC - EFA WEST	DRAFT SITE SAFETY AND HEALTH PLAN, EXCAVATION OF POLYCHLORINATED BIPHENYL (PCB) AND CADMIUM CONTAMINATED SOIL	ADMIN RECORD INFO REPOSITORY	H&SP PCB SOIL	002 SWMU 1	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000630 TC.0116.10912 MM N62474-94-D-7609 00014	04-11-2001 03-13-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	13 MARCH 2001 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET AND VARIOUS HANDOUT) {PORTION OF THE SIGN-IN SHEET IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW MTG MINS PAH PCB RAB RAP ROD	001 002 003 004 005 006 007 008 WELL S27	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000631 TC.0116.10913 MM N62474-94-D-7609 00020	04-11-2001 03-13-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	13 MARCH 2001 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MEETING MINUTES (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUT)	ADMIN RECORD INFO REPOSITORY	CAP GW MTG MINS PAH PCB RAP ROD SOIL VOC WORK PLAN	002 004 006	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875

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N68619 / 000622 DS.0116.14766 PUB NOTICE N62474-94-D-7609 00011	04-04-2001 04-01-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	FINAL PROPOSED PLAN FOR THE CONTAMINATED SOIL (INCLUDES PUBLIC NOTICE OF THE PUBLIC MEETING AND COMMENT PERIOD FOR THE PROPOSED PLAN AND DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD) FOR SOIL REMEDIATION	ADMIN RECORD INFO REPOSITORY	FS PUBNOT RAP RI ROD SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000623 DS.0116.14763 RPT N62474-94-D-7609 00140	04-04-2001 04-02-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD)	ADMIN RECORD INFO REPOSITORY	PAH PCB RAP ROD SVOC TPH VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070129-01 41031875
N68619 / 000626 DS.0289.17028 RPT N62474-94-D-7609 00070	04-05-2001 04-04-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT FINAL REMEDIAL DESIGN, SPECIFICATIONS, AND DRAWINGS - REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	FS PCB SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000627 DS.0289.17031 RPT N62474-94-D-7609 00090	04-09-2001 04-04-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT FIELD SAMPLING PLAN/QUALITY ASSURANCE PROJECT PLAN (FSP/QAPP), PROJECT PLAN REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	DQO FSP PCB QAPP SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875

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N68619 / 000635 NONE COMMENTS NONE 00003	06-20-2001 04-12-2001 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION L. OCAMPO	REVIEW AND COMMENTS ON THE FOUR REMEDIAL DESIGN AND IMPLEMENTATION REPORTS	ADMIN RECORD INFO REPOSITORY	COMMENTS FSP H&SP QAPP WORK PLAN	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000636 NONE MM NONE 00002	06-20-2001 04-23-2001 NONE	TETRA TECH EM INC. M. GOULD NAVFAC - SOUTHWEST DIVISION L. OCAMPO	07 MARCH 2001 CONFERENCE CALL MEETING MINUTES	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH PCB RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000637 NONE CORRESP NONE 00001	06-20-2001 04-25-2001 NONE	ALAMEDA UNIFIED SCHOOL DIST A. DAILEY NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENT ON THE PROPOSED PLAN AND DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD) FOR SOIL REMEDIATION	ADMIN RECORD INFO REPOSITORY	COMMENTS PROPOSED PLAN RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070129-01 41031875
N68619 / 000638 NONE MM NONE 00001	06-20-2001 04-27-2001 NONE	TETRA TECH EM INC. M. GOULD NAVFAC - SOUTHWEST DIVISION L. OCAMPO	26 APRIL 2001 CONFERENCE CALL MEETING MINUTES	ADMIN RECORD INFO REPOSITORY	MTG MINS PCB RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875

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N68619 / 000639 NONE CORRESP NONE 00002	06-20-2001 04-30-2001 NONE	DTSC, BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION L. OCAMPO	REQUEST TO RE INDUSTRIAL CLE POLYCHLORINA SOIL IN THE DR/ PLAN/RECORD (EANUP LEVEL FO TED BIPHENYLS	DR 5 (PCB) IN ACTION	ADMIN RECORD INFO REPOSITORY	PCB SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000640 95-3013-01 COMMENTS NONE 00005	06-20-2001 05-01-2001 NONE	CLEARWATER REVIVAL COMPANY P. LYNCH NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENTS ON FOR CONTAMIN) PLAN (PP)	ADMIN RECORD INFO REPOSITORY	PP SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000641 95-3013-01 COMMENTS NONE 00003	06-20-2001 05-01-2001 NONE	ALAMEDA POINT COLLABORATIVE T. CHAPLER NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENTS ON FOR CONTAMIN) PLAN (PP)	ADMIN RECORD INFO REPOSITORY	COMMENTS PCB PP RAP ROD SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000644 SWDIV SER 06CA.MM\0506 RPT N62474-97-D-1512 00130	06-20-2001 05-01-2001 DO 0007	ENVIRONMENTAL CHEMICAL CORP. D. OSAKI NAVFAC - SOUTHWEST DIVISION	FINAL SITE SAFE EXCAVATION OF BIPHENYL (PCB) CONTAMINATED TRANSMITTAL L	F POLYCHLORIN AND CADMIUM SOIL (INCLUDE	ATED S SWDIV	ADMIN RECORD INFO REPOSITORY	H&SP PCB SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875

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N68619 / 000645 SWDIV SER 06CA.MM\0506 RPT N62474-97-D-1512 00120	06-20-2001 05-01-2001 DO 0007	ENVIRONMENTAL CHEMICAL CORP. K. SPALA NAVFAC - SOUTHWEST DIVISION	FINAL WORK PLAN AND FINAL QUALITY CONTROL PLAN, EXCAVATION OF POLYCHLORINATED BIPHENYL (PCB) AND CADMIUM CONTAMINATED SOIL (INCLUDES SWDIV TRANSMITTAL LETTER BY M. MCCLELLAND AND RESPONSE TO COMMENTS ON THE DRAFT WORK PLAN AND QUALITY CONTROL PLAN)	ADMIN RECORD INFO REPOSITORY	PAH PCB QAPP SOIL TPH VOC WORK PLAN	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000642 NONE COMMENTS NONE 00003	06-20-2001 05-02-2001 NONE	EAST BAY MUNICIPAL UTILITY DIS J. SCHROETER NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	REVIEW AND COMMENTS ON THE DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD)	ADMIN RECORD INFO REPOSITORY	COMMENTS PAH RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000643 NONE COMMENTS NONE 00002	06-20-2001 05-02-2001 NONE	ARC ECOLOGY S. BLOOM NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENTS ON THE PROPOSED PLAN FOR CONTAMINATED SOIL	ADMIN RECORD INFO REPOSITORY	COMMENTS PAH PCB PROPOSED PLAN SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
N68619 / 000646 SWDIV SER 06CA.LO\0510 CORRESP NONE 00004	06-20-2001 05-14-2001 NONE	NAVFAC - SOUTHWEST DIVISION L. OCAMPO VARIOUS AGENCIES	TRANSMITTAL OF FINAL FIELD SAMPLING PLAN/QUALITY ASSURANCE PROJECT PLAN (FSP/QAPP) AND FINAL REMEDIAL DESIGN (RD) SPECIFICATIONS AND DRAWINGS FOR REMEDIATION OF CONTAMINATED SOIL (W/OUT ENCLOSURES)	ADMIN RECORD INFO REPOSITORY	FSP PCB QAPP	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875

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N68619 / 000647 DS.0289.17032 RPT N62474-94-D-7609 00140	06-20-2001 05-14-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	FINAL FIELD SAMPLING PLAN/QUALITY ASSURANCE PROJECT PLAN (FSP/QAPP), REMOVAL OF CONTAMINATED SURFACE SOIL [SEE AR #646 - SWDIV TRANSMITTAL LETTER BY L. OCAMPO, #657 - DRAFT FINAL ADDENDUM, DATED 09/13/01 & #670 - FINAL ADDENDUM 2, DATED 09/28/01]	ADMIN RECORD INFO REPOSITORY	FSP PAH PCB QAPP SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000648 DS.0289.17050 RPT N62474-94-D-7609 00050	06-20-2001 05-14-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	FINAL REMEDIAL DESIGN, SPECIFICATIONS AND DRAWINGS - REMOVAL OF CONTAMINATED SURFACE SOIL [SEE AR #646 - SWDIV TRANSMITTAL LETTER BY L. OCAMPO]	ADMIN RECORD INFO REPOSITORY	PCB SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000650 DS.0116.14764 RPT N62474-94-D-7609 00150	07-25-2001 06-01-2001 00116	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	FINAL REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD) FOR SITE 2, FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND ALAMEDA FACILITY (FISC) [SEE COMMENTS]	ADMIN RECORD INFO REPOSITORY	PAH PCB RAP ROD SVOC TPH VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070129-01 41031875
N68619 / 000649 NONE COMMENTS NONE 00003	06-20-2001 06-04-2001 NONE	CA DEPT OF FISH & GAME C. HUANG NAVFAC - SOUTHWEST DIVISION L. OCAMPO	REVIEW AND COMMENTS ON THE DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (RAP/ROD)	ADMIN RECORD INFO REPOSITORY	COMMENTS PCB RAP ROD	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070129-01 41031875

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	25-2001 DTSC - BERKELEY 26-2001 M. CASSA NE NAVFAC - SOUTHWEST DIVISION L. OCAMPO	REVIEW AND APPROVAL OF THE FINAL REMEDIAL DESIGN FOR SITE 02	ADMIN RECORD INFO REPOSITORY	PCB REMEDIAL DESIG SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875
	08-2001 TETRA TECH EM 27-2001 INC. 89 J. WRIGHT NAVFAC - SOUTHWEST DIVISION L. OCAMPO	RESPONSE TO ENVIRONMENTAL CHEMICAL CORPORATION'S REQUEST FOR INFORMATION REGARDING THE REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	REMOVAL SOIL	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
	24-2001 NAVFAC - 21-2001 SOUTHWEST DIVISION L. OCAMPO DTSC - BERKELEY H. WONG	ADDENDUM NO. 1 TO THE FINAL WORK PLAN, EXCAVATION OF PCB AND CADMIUM CONTAMINATED SOIL (INCLUDES SWDIV TRANSMITTAL LETTER BY L. OCAMPO) {PORTION OF THE MAILING LIST IS SENSITIVE} [SEE AR #645 - FINAL WORK PLAN AND QUALITY CONTROL PLAN]	ADMIN RECORD INFO REPOSITORY SENSITIVE	CADMIUM PCB QAPP SOIL WORK PLAN	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
	24-2001 NAVFAC - 21-2001 SOUTHWEST DIVISION L. OCAMPO DTSC - BERKELEY H. WONG	QUARTERLY PROGRESS REPORTS FOR DECEMBER 2000 THROUGH FEBRUARY 2001 AND MARCH THROUGH MAY 2001 (W/ ENCLOSURES) [INCLUDES SWDIV TRANSMITTAL LETTER BY L. OCAMPO] {PORTION OF THE MAILING LIST IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW PAH RAP ROD UST	002 004 005 006 WELL S27 WELL S28	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070330-01 41031875

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N68619 / 000656 NONE CORRESP NONE 00002	09-24-2001 08-27-2001 NONE	DTSC - BERKELEY H. WONG NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENT AND CONCURRENCE WITH THE ADDENDUM NO. 1 TO THE FINAL WORK PLAN, EXCAVATION OF PCB AND CADMIUM CONTAMINATED SOIL	ADMIN RECORD INFO REPOSITORY	CADMIUM COMMENTS PCB QAPP SOIL WORK PLAN	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000657 TC.0289.11175 MISC N62474-94-D-7609 00017	09-24-2001 09-13-2001 00289	TETRA TECH EM INC. J. WRIGHT NAVFAC - SOUTHWEST DIVISION N. ANCOG	DRAFT FINAL ADDENDUM TO THE FIELD SAMPLING PLAN/QUALITY ASSURANCE PROJECT PLAN (FSP/QAPP) [SEE AR #647 - FINAL FSP/QAPP]	ADMIN RECORD INFO REPOSITORY	FSP PCB QAPP SOIL VOC	002	CHOICE IMAGING SOLUTIONS 181-03-0183 14 OF 14 SW070316-03 41031875
N68619 / 000670 TC.0289.11176 MISC N62474-94-D-7609 00020	12-21-2001 09-28-2001 00289	TETRA TECH EM INC. J. WRIGHT NAVFAC - SOUTHWEST DIVISION N. ANCOG	FINAL FIELD SAMPLING PLAN (FSP) AND QUALITY ASSURANCE PROJECT PLAN (QAPP) ADDENDUM 2, REMOVAL OF CONTAMINATED SURFACE SOIL {SEE AR #647 - FINAL FSP/QAPP}	ADMIN RECORD INFO REPOSITORY	DQO FSP PCB QAPP REMOVAL SOIL VOC	002	CHOICE IMAGING SOLUTIONS SW070316-03
N68619 / 000661 TC.0289.11277 RPT N62474-94-D-7609 00032	11-30-2001 11-01-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL INVESTIGATION OF VOLATILE ORGANIC CONTAMINATION (VOC) IN GRID SQUARE 2 - REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	AAL PCB PID PRG SOIL VOC	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001

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N68619 / 000662 DS.0289.17214 RPT N62474-94-D-7609 00078	11-30-2001 11-12-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT CLOSEOUT REPORT - REMOVAL OF CONTAMINATED SURFACE SOIL {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	DISPOSAL LF PCB ROD SOIL VOC	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000663 DS.0271.17420 MEMO N62474-94-D-7609 00250	12-03-2001 11-20-2001 00271	TETRA TECH EM INC. J. WRIGHT NAVFAC - SOUTHWEST DIVISION	DRAFT GROUNDWATER TECHNICAL MEMORANDUM (INCLUDES SWDIV TRANSMITTAL LETTER) [PORTION OF MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	BTEX CANCER DATA GW METALS MW SOIL SOIL BORING TECH MEMO VOC WELLS	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401
N68619 / 000664 TC.0289.11283 RPT N62474-94-D-7609 00068	12-03-2001 11-20-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION	DRAFT RISK ASSESSMENT SUMMARY OF POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) IN SOIL {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	CANCER CHAR DATA NCP PAH PCB RISK SOIL TECH MEMO	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000665 NONE CORRESP NONE 00002	12-03-2001 11-27-2001 NONE	DTSC - BERKELEY H. WONG NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENTS ON THE DRAFT RISK ASSESSMENT SUMMARY OF POLYNUCLEAR AROMATIC HYDROCARBONS IN SOIL; DTSC PROVIDED COMMENTS DURING CONFERENCE CALL OF 15 NOVEMBER AND HAS NO ADDITIONAL COMMENTS	ADMIN RECORD INFO REPOSITORY	COMMENTS PAH SOIL	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
Thursday, May 24, 2	2007		strative Record (AR) Index includes references to c citations are considered to be part of this AR but i			P	age 51 of 60

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N68619 / 000667 NONE CORRESP NONE 00003	12-12-2001 12-03-2001 NONE	DTSC - BERKELEY H. WONG NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENTS ON THE DRAFT CLOSEOUT REPORT ON THE REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	CADMIUM COMMENTS PAH PCB RAP ROD SOIL VOC	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000669 NONE CORRESP NONE 00002	12-20-2001 12-14-2001 NONE	DTSC - BERKELEY H. WONG NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENTS ON THE DRAFT CLOSEOUT REPORT ON THE REMOVAL OF CONTAMINATED SURFACE SOIL	ADMIN RECORD INFO REPOSITORY	COMMENTS SOIL	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000674 2700.0 PLAN N62474-98-D-2076 00516	01-04-2002 12-18-2001 00078	IT CORPORATION J. MCGUIRE NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	DRAFT WORK PLAN FOR BASEWIDE GROUNDWATER MONITORING PROGRAM, REVISION 0	ADMIN RECORD INFO REPOSITORY	BTEX DCA DCE DQO DVE GW LEAD MONITORING MTBE PAH PCB PCE SVE SVOC TCA TCE TPH VOC WORK PLAN	001 003 004 005 006 007 008 009 010 011 012 014 016 021 025 026 027	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001

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N68619 / 000671 TC.0289.11284 & SWDIV SER 06CA.LO/1325 RPT N62474-94-D-7609 00062	01-03-2002 12-20-2001 00116	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	FINAL TECHNICAL MEMORANDUM ON THE POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) IN SOIL AT EASTERN PORTION OF SITE	ADMIN RECORD INFO REPOSITORY	PAH PCB SOIL TECH MEMO	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000673 DS.0289.17216-1 & SWDIV SER 06CA.LO/1324 & 0131 RPT N62474-94-D-7609 00140	01-03-2002 12-26-2001 00289	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	FINAL CLOSEOUT REPORT - REMOVAL OF CONTAMINATED SURFACE SOIL AT SITE 02 REVISION 1 - INCLUDES SWDIV TRANSMITTAL LETTER BY L. OCAMPO [MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	PAH PCB RAP REMOVAL ROD SOIL VOC	002	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68619 / 000672 DS.0271.17421 & SWDIV SER 06CA.LO/1326 RPT N62474-94-D-7609 00038	01-03-2002 12-27-2001 00271	TETRA TECH EM INC. S. GEYER NAVFAC - SOUTHWEST DIVISION L. OCAMPO	FINAL TECHNICAL MEMORANDUM ON THE GROUNDWATER AND BENZENE SOIL GAS INVESTIGATION (PORTION OF THE MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD INFO REPOSITORY SENSITIVE	BENZENE GAS GW RAP ROD SOIL TECH MEMO VOC	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000680 NONE CORRESP NONE 00004	09-20-2002 09-13-2002 NONE	ALAMEDA POINT COLLABORATIVE R. JAULUS NAVFAC - SOUTHWEST DIVISION G. CLARK	REQUEST TO BE PLACED ON THE APPROPRIATE DISTRIBUTION LIST FOR THE ANNEX RESTORATION ADVISORY BOARD (RAB) MEETINGS IN ORDER TO MONITOR PROGRESS AND STANDARDS FOR CLEAN UP {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	BRAC RAB REMEDIAL ACTIO	002	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001

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N68619 / 000689 SWDIV SER 06CA.RW/1360 RPT NONE 00296	11-25-2003 10-08-2003 NONE	ERRG A. TALAMANTEZ NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	DRAFT GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	BTEX FS MTBE PAH RI SVOC TCE TDS TPH VOC	002 025	SOUTHWEST DIVISION - BLDG. 1 SW05071401 IMAGED AANX_001
N68619 / 000692 NONE CORRESP NONE 00002	11-26-2003 11-13-2003 NONE	DHS - SACRAMENTO J. MCGURK DTSC - SACRAMENTO R. MOSS	CONCURRENCE ON RELEASE SINCE LEVELS OF RADIOACTIVITY ARE INDISTINGUISHABLE FROM BACKGROUND	ADMIN RECORD INFO REPOSITORY		002	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68619 / 000695 FILE NO. 2199.9284 (JCH) LTR NONE 00002	05-05-2004 4 04-20-2004 NONE	CRWQCB - SAN FRANCISCO J. HUANG CATELLUS DEV. CORPORATION S. STEVENS	LETTER CONFIRMING THE COMPLETION OF SITE REGARDING NO FURTHER ACTION, PETROLEUM IMPACTED SOIL, FORMER BUILDING 370 (DOCUMENT WAS NOT SUBMITTED TO ADMINISTRATIVE RECORDS)	ADMIN RECORD INFO REPOSITORY	GW MTBE PETROLEUM SOIL TPH	001 BLDG. 370	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68619 / 000703 NONE LTR NONE 00003	10-21-2004 06-18-2004 NONE	DTSC - BERKELEY H. WONG CITY OF ALAMEDA D. POTTER	REVIEW AND CONCURRANCE WITH THE REMOVAL ACTIVITIES AS PRESENTED IN THE DISCOVERY OF PETROLEUM IMPACTED SOIL FOR FORMER BUILDING 370 (DOCUMENT WAS NOT SUBMITTED TO ADMINISTRATIVE RECORDS)	ADMIN RECORD INFO REPOSITORY	PETROLEUM	001 BLDG. 370	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET

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N68619 / 000698 NONE CORRESP NONE 00002	08-24-2004 08-13-2004 NONE	DTSC - BERKELEY H. WONG ENVIRONMENTAL RESOURCES MGMNT M. BLANCHARD	REVIEW AND COMMENTS ON RESIDENTIAL PHASE II AFFORDABLE HOUSING PROJECT, POST-GRADING SOIL ANALYTICAL RESULTS		COMMENTS GW SOIL WATER	001	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68619 / 000700 NONE MISC NONE 00003	09-24-2004 09-09-2004 NONE	DTSC - BERKELEY H. WONG NAVFAC - EFA WEST M. BLANCHARD	NO FURTHER COMMENTS AND CONCURRANCE ON THE RESPONSE TO COMMENTS ON THE POLYCYCLIC AROMATIC HYDROCARBON (PAH) SAMPLING DATA	ADMIN RECORD INFO REPOSITORY	COMMENTS PAH	001	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68619 / 000702 SWDIV SER 06CA.DN/0932 & SWDIV SER BPMOW/0026 MISC NONE 00350	09-24-2004 10-18-2004 NONE	ERRG C. LECOMPTE NAVFAC - SOUTHWEST DIVISION D. NEWTON	FINAL GROUNDWATER REMEDIAL INVESTIGATION (RI)/FEASIBILITY STUDY (FS) FOR ALAMEDA POINT SITE 25 AND ALAMEDA ANNEX IR-02 [INCLUDES TRANSMITTAL LETTER BY T. MACCHIARELLA & R. PLASEIED] {PORTION OF MAILING LIST IS CONFIDENTIAL;CD COPY ENCLOSED}	ADMIN RECORD INFO REPOSITORY SENSITIVE	BTEX DCE GW MTBE PAH SOIL SVOC TPH VOC	002 025	SOUTHWEST DIVISION - BLDG. 1 PROBLEM FILE CABINET
N68619 / 000712 RPT N68711-00-D-0004 00125	02-01-2006 08-01-2005 00090	BROWN AND CALDWELL NAVFAC - SOUTHWEST DIVISION	DRAFT STATUTORY FIVE-YEAR REVIEW REPORT FOR THE FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND, AND MARSH CRUST AT THE FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND [CD COPY ENCLOSED] (SEE AR # 717 - BRAC PMOW TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD INFO REPOSITORY	ARAR BCT COC COPC PCB ROD SVOC TPH VOC	002	CHOICE IMAGING SOLUTIONS SW070330-01

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N68619 / 000714 NONE PUB NOTICE NONE 00004	02-01-2006 08-01-2005 NONE	BRAC PMOW T. MACCHIARELLA PUBLIC INTEREST	DRAFT FACT SHEET: FIVE-YEAR REVIEW FOR TWO NAVY SITES [SEE AR #717 - BRAC TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD INFO REPOSITORY	BRAC CADMIUM LUC/RD PCB SVOC	002	CHOICE IMAGING SOLUTIONS SW070330-01
N68619 / 000717 BRAC SER BPMOW.LO1179 CORRESP NONE 00002	02-07-2006 08-31-2005 NONE	BRAC PMOW T. MACCHIARELLA DTSC - BERKELEY H. WONG	TRANSMITTAL OF DRAFT STATUTORY FIVE- YEAR REVIEWS AND DRAFT FACT SHEET OF AUGUST 2005 (W/OUT ENCLOSURES) [SEE AR #712 - DRAFT STATUTORY FIVE- YEAR REVIEWS AND AR # 714 - DRAFT FACT SHEET: FIVE-YEAR REVIEW FOR TWO NAVY SITES] {***SEE COMMENTS}	INFO REPOSITORY SENSITIVE	FACT SHEET	002	CHOICE IMAGING SOLUTIONS SW070330-01
N68619 / 000713 PUB NOTICE NONE 00008	02-01-2006 09-01-2005 NONE	BRAC PMOW T. MACCHIARELLA PUBLIC INTEREST	FACT SHEET: FIVE YEAR REVIEW FOR FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND (FISCO) AND MARSH CRUST AT FISCO, AND FORMER SUBTIDAL AREA	ADMIN RECORD INFO REPOSITORY	CERCLA LUC RD SARA	002	CHOICE IMAGING SOLUTIONS SW070330-01
N68619 / 000715 NONE COMMENTS NONE 00004	02-01-2006 10-06-2005 NONE	CITY OF ALAMEDA D. POTTER BRAC PMOW T. MACCHIARELLA	REVIEW AND COMMENTS ON AUGUST 2005 DRAFT STATUTORY FIVE-YEAR REVIEW REPORT	ADMIN RECORD INFO REPOSITORY	CADMIUM PCB SVOC TPH VOC	002	CHOICE IMAGING SOLUTIONS SW070330-01

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N68619 / 000711 NONE COMMENTS NONE 00009	12-12-2005 1 0-27-2005 NONE	DTSC - BERKELEY H. WONG BRAC PMOW T. MACCHIARELLA	REVIEW AND COMMENTS ON THE STATUTORY FIVE-YEAR REVIEW REPORT (PORTION OF THE MAILING LIST IS SENSITIVE)	ADMIN RECORD INFO REPOSITORY SENSITIVE	ARARS FISCA GW PCB	002	CHOICE IMAGING SOLUTIONS SW070330-01
N68619 / 000716 BRAC SER BPMOW.LO0041 COMMENTS NONE 00026	02-01-2006 01-18-2006 NONE	BRAC T. MACCHIARELLA VARIOUS AGENCIES	DRAFT RESPONSES TO COMMENTS ON THE DRAFT STATUTORY FIVE-YEAR REVIEW REPORT	ADMIN RECORD INFO REPOSITORY	CADMIUM PAH PCB PRG RAP/ROD SMP	002	CHOICE IMAGING SOLUTIONS SW070330-01
N68619 / 000719 NONE COMMENTS NONE 00004	03-06-2006 02-02-2006 NONE	DTSC - BERKELEY H. WONG BRAC PMOW T. MACCHIARELLA	RESPONSE TO NAVY RESPONSES TO COMMENTS (RTC) ON THE STATUTORY FIVE-YEAR REVIEW REPORT	ADMIN RECORD INFO REPOSITORY	BRAC CADMIUM PCB RTC	002	CHOICE IMAGING SOLUTIONS SW070330-01
N68619 / 000718 NONE COMMENTS NONE 00002	02-28-2006 02-13-2006 NONE	USEPA - SAN FRANCISCO A. COOK BRAC PMOW T. MACCHIARELLA	RESPONSE TO NAVY RESPONSE TO COMMENTS ON THE DRAFT STATUTORY FIVE-YEAR REVIEW REPORT	ADMIN RECORD INFO REPOSITORY	BCT RAP/ROD RI/FS	002	CHOICE IMAGING SOLUTIONS SW070330-01

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NONE 05	5-18-2006 ONE	BROWN AND CALDWELL PUBLIC INTEREST		ANNOUNCING FIRST FIVE-YEAR REVIEW HED IN THE OAKLAND	ADMIN RECORD INFO REPOSITORY		002	CHOICE IMAGING SOLUTIONS SW070413-03
BRAC SER 09	9-01-2006 0011	BRAC PMO WEST VARIOUS AGENCIES	GROUNDWATER ENCLOSED} [SEE	OF DECISION (ROD), (GW) {CD COPY E AR# 765 - BRAC PMO TAL LETTER BY T.	ADMIN RECORD INFO REPOSITORY	CERCLA CERCLIS CFR FFA FFSRA FWBZ GW ICS IR MNA NCP OU RCRA ROD SVE	002 OU 5	SOUTHWEST DIVISION - BLDG. 1
BRAC SER 09	9-08-2006 0011	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES NONE	DECISION (ROD),	F DRAFT RECORD OF GROUNDWATER (GW) JRE) [SEE AR# 766 -	ADMIN RECORD INFO REPOSITORY	FFA GW IR OU ROD	002 OU 5	SOUTHWEST DIVISION - BLDG. 1

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N68619 / 000757 1127.01 RPT NONE 00045	12-08-2006 10-03-2006 NONE	NORTHGATE ENVIROMENTAL DTSC - BERKELEY	REMOVAL ACTION (RA) WORKPLAN, 39- UNIT APARTMENTS, WESTERN ONE-THIRD OF INSTALLATION RESTORATION (IR) SITE 02	ADMIN RECORD	AST HDPE PAH PCB PCE PPE RA RAP ROD TCA TCE TPH VOC WORK PLAN	002	CHOICE IMAGING SOLUTIONS SW070413-03
N68619 / 000750 BRAC SER BPMOW.MEP/0053 CORRESP NONE 00003	10-25-2006 10-20-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT PRE-DESIGN WORK PLAN (WP) [W/OUT ENCLSOURE] {PORTION OF THE MAILING LIST IS SENSITIVE} (SEE AR #751 - DRAFT WP)	ADMIN RECORD INFO REPOSITORY SENSITIVE	SOIL SVE WORK PLAN	002 OU 5	CHOICE IMAGING SOLUTIONS SW070413-03
N68619 / 000751 ECSD-RACIV-06- 0282 RPT N62473-06-D-2201 00350	10-25-2006 10-20-2006 00011	TETRA TECH EC, INC. P. EVERDS BRAC PMO WEST	DRAFT PRE-DESIGN WORK PLAN (WP) [CD COPY ENCLOSED] {SEE AR #750 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA}	ADMIN RECORD INFO REPOSITORY	GROUNDWATER HDPE PVC SAP SOIL SVE SVOC TOC VOC WMP WORK PLAN	002 OU 5	CHOICE IMAGING SOLUTIONS SW070413-03

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N68619 / 000768 BRAC SER BPMOW.MEP/0538 CORRESP NONE 00003	05-18-2007 05-11-2007 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF FINAL PRE-DESIGN WORK PLAN (WP) FOR FORMER NAVAL AIR STATION ALAMEDA AND FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND (W/OUT ENCLOSURE) [SEE AR #769 - FINAL PRE-DESIGN WORK PLAN] {PROTION OF MAILING LIST IS SENSITIVE}	SENSITIVE		002 OU 5	SOUTHWEST DIVISION - BLDG. 1
N68619 / 000769 ECSD-RACIV-07- 0136 RPT N62473-06-D-2201 01000	05-18-2007 05-11-2007 00011	TETRA TECH EC, INC. P. EVERDS BRAC PMO WEST	FINAL PRE-DESIGN WORK PLAN (WP) FOR FORMER NAVAL AIR STATION ALAMEDA AND FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND (CD COPY IS ENCLOSED) [SEE AR #768 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD		002 OU 5	SOUTHWEST DIVISION - BLDG. 1
Total Estima	ted Record	Page Count:	10,253				
Total - Admir	nistrative F	Records:	220				
[UIC NUMBER]='N6i No Keywords Sites=001:002:003	8619'						

Sites=001;002;003 No Classification

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N00236 / 000696 TC.A021.10075 MM N68711-00-D-0005 00010	06-16-2003 04-21-1998 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	21 APRIL 1998 TRACKING MEETING MINUTES FOR ENVIRONMENTAL ACTIONS [MISSING ATTACHMENT A]	ADMIN RECORD INFO REPOSITORY	MTG MINS	025 OU 1	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 14 OF 17 SW060629-02 41031858 IMAGED APNT_007
N00236 / 000702 TC.A021.10075 MM N68711-00-D-0005 00025	06-16-2003 09-15-1998 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	15 SEPTEMBER 1998 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING MINUTES FOR AFTER ACTION REPORT (INLCUDES ATTENDANCE SHEET, AGENDA, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS	014 025 OU 1	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 14 OF 17 SW060629-02 41031858 IMAGED APNT_007
N00236 / 001563 NONE RPT N62474-94-D-7609 00148	11-24-1999 10-01-1998 00122 00.0	TETRA TECH EM INC. N. HUTCHISON NAVFAC - EFA WEST P. MCFADDEN	FINAL FIELD SAMPLING PLAN (FSP) SITE 14 GROUNDWATER INVESTIGATION AND SITE 25 REMEDIAL INVESTIGATION (RI)	ADMIN RECORD	FSP GW RI	014 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 40 OF 46 SW060420-02 41074200 IMAGED APNT_009

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 000343 EFAW SER 612.6/9083 RPT N62474-94-D-7609 00250	02-26-2002 01-29-1999 00122	TETRA TECH EM INC. N. HUTCHISON NAVFAC - WESTERN DIVISION P. MCFADDEN	DATA SUMMARY REPORT REMEDIAL INVESTIGATION (INCLUDES EFA WEST TRANSMITTAL LETTER BY P. MACFADDEN)	ADMIN RECORD INFO REPOSITORY	BTEX DATA PAH PCB RI SVOC TPH VOC	025	CHOICE IMAGING SOLUTIONS 181-03-0188 1 OF 17 SW060601-01 41031858
N00236 / 000709 TC.A021.10075 MM N68711-00-D-0005 00002	06-16-2003 04-20-1999 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	20 APRIL 1999 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (MEETING AGENDA IS MISSING)	ADMIN RECORD INFO REPOSITORY	MTG MINS	025 OU 2 OU 3	CHOICE IMAGING SOLUTIONS 181-03-0188 14 OF 17 SW061023-01 41031858
N00236 / 000711 TC.A021.10075 MM N68711-00-D-0005 00010	06-16-2003 05-18-1999 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	18 MAY 1999 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING MINUTES FOR ENVIRONMENTAL ACTIONS (INCLUDES ATTENDANCE LIST, AGENDA, AND VARIOUS HANDOUTS)		MTG MINS PAH	001 004 005 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 14 OF 17 SW060629-02 41031858 IMAGED APNT_007
N00236 / 000712 TC.A021.10075 MM N68711-00-D-0005 00037	06-16-2003 06-15-1999 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	15 MAY 1999 BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING MINUTES FOR ENVIRONMENTAL ACTIONS (INCLUDES ATTENDANCE LIST, AGENDA, AND VARIOUS HANDOUTS)		MTG MINS PAH	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 14 OF 17 SW060629-02 41031858 IMAGED APNT_007

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N00236 / 001680 NONE MM NONE 00071	01-21-2000 07-06-1999 NONE 10.4	NAVFAC - WESTERN DIVISION NAVFAC - WESTERN DIVISION	06 JULY 1999 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA, HANDOUTS AND SIGN-IN SHEETS) [PORTION OF THE SIGN-IN SHEET IS CONFIDENTIAL]	ADMIN RECORD SENSITIVE	FS RAB RI TECH MEMO TPH UST	001 002 006 007 008 015 016 017 025 BLDG. 400 BLDG. 5 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 45 OF 46 SW060504-02 41074200 IMAGED APNT_009

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N00236 / 001679 NONE MM NONE 00029	01-21-2000 08-03-1999 NONE 10.4	NAVFAC - WESTERN DIVISION NAVFAC - WESTERN DIVISION	BOARD (RAB) ME (INCLUDES AGE	RESTORATION ADVISOR EETING SUMMARY NDA, HANDOUTS AND SI RTION OF THE SIGN-IN DENTIAL]	SENSITIV		36 40 41 BL BL DI OI OI OI	02 03 04 05 09 10 13 14 17 19 20 21 22 23 24 25 112 60 00	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 45 OF 46 SW060504-02 41074200 IMAGED APNT_009

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N00236 / 001678 NONE MM NONE 00085	01-21-2000 09-07-1999 NONE 10.4	NAVFAC - WESTERN DIVISION RAB MEMBERS	7 SEPTEMBER 1999 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUT MATERIALS) [PORTION OF ATTACHMENT C IS CONFIDENTIAL]	ADMIN RECORD SENSITIVE	BTEX EBS PAH PCB RAB SVOC TPH VOC	003 004 005 009 010 011 012 013 014 015 019 021 022 023 025 BLDG. 14 BLDG. 400 BLDG. 5 BLDG. 530 OU 2	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 45 OF 46 SW060615-04 41074200 IMAGED APNT_006
N00236 / 001677 NONE MM NONE 00020	01-21-2000 10-05-1999 NONE 10.4	NAVFAC - EFA WEST VVARIOUS AGENCIES	05 OCTOBER 1999 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA, VARIOUS HANDOUTS AND SIGN-IN SHEETS)	ADMIN RECORD	BTEX FFA RAB TDS UST	001 002 005 010 014 025 BLDG. 400 BLDG. 5 OU 1 OU 2 OU 3	CHOICE IMAGING SOLUTIONS 181-03-0179 45 OF 46 SW070511-02 41074200

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N00236 / 000716 TC.A021.10075 MM N68711-00-D-0005 00049	06-16-2003 10-19-1999 DO 021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	19 OCTOBER 1999 BAS AND CLOSURE (BRAC) (BCT) MONTHLY TRAC AFTER ACTION REPOR ATTENDANCE LIST AN HANDOUT MATERIALS	CLEANUP TEAM KING MEETING IT (INCLUDES D VARIOUS	ADMIN RECORD INFO REPOSITORY	MTG MINS	004 005 025 OU 2 OU 3	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060629-02 41031858 IMAGED APNT_007
N00236 / 001676 NONE MM NONE 00030	01-21-2000 11-11-1999 NONE 10.4	NAVFAC - SOUTHWEST DIVISION VARIOUS AGENCIES	11 NOVEMBER 1999 DF ADVISORY BOARD (RA SUMMARY (INCLUDES HANDOUTS AND SIGN-	B) MEETING AGENDA, VARIOUS	ADMIN RECORD	EBS EIS FFA FOSET FOST GW PCB RAB UXO VOC	001 002 004 006 007 008 010 012 015 016 017 018 020 024 025 BLDG. 400 BLDG. 5 OU 1 OU 2 OU 3 OU 4	CHOICE IMAGING SOLUTIONS 181-03-0179 45 OF 46 SW070427-02 41074200

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N00236 / 000511 TC.A021.10074 MM N68711-00-D-0005 00026	06-11-2003 01-04-2000 DO 21	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	04 JANUARY 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	B(A)P MTG MINS RAB	001 002 005 010 014 025 BLDG. 400 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 001681 NONE MM NONE 00008	02-15-2000 01-04-2000 NONE	NAVFAC - WESTERN DIVISION NAVFAC - SOUTHWEST DIVISION	04 JANUARY 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (WITH ENCLOSURES)	ADMIN RECORD INFO REPOSITORY	CAP CEQA FS MTG MINS OU RAB UST	001 002 005 010 025 BLDG. 400 BLDG. 5 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 110 181-03-0179 45 OF 46 BOX 45 - 04/05/06 41074200
N00236 / 000512 TC.A021.10074 MM N68711-00-D-0005 00014	06-11-2003 02-01-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	01 FEBRUARY 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS)	ADMIN RECORD	MTG MINS PAH RAB	001 025 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 110 181-03-0188 13 OF 17 BOX 13 - 05/09/06 41031858

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N00236 / 001685 NONE MM NONE 00040	03-28-2000 02-01-2000 NONE	NAVFAC - SOUTHWEST DIVISION	DRAFT RAB MEETING SUMMARY FOR 1 FEBRUARY 2000	ADMIN RECORD	FOST FS PAH RAB UXO	001 025 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 110 181-03-0179 46 OF 46 BOX 46 - 04/05/06 41074200
N00236 / 000515 TC.A021.10074 MM N68711-00-D-0005 00014	06-11-2003 03-07-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	07 MARCH 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (PORTION OF SECTION VII IS SENSITIVE) [ATTENDANCE LIST IS MISSING]	ADMIN RECORD SENSITIVE	MTG MINS RAB	025 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000554 TC.A021.10074 MM N68711-00-D-0005 00011	06-11-2003 05-02-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	06 JUNE 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY [ATTENDANCE LIST IS MISSING]	ADMIN RECORD	MTG MINS RAB	006 014 015 016 025 OU 1 OU 2 OU 3 OU 4	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000560 TC.A021.10074 MM N68711-00-D-0005 00009	06-11-2003 06-06-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	06 JUNE 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY [ATTENDANCE LIST IS MISSING]	ADMIN RECORD	MTG MINS PCB RAB	001 025 OU 1 OU 2 OU 4	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007

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N00236 / 000723 TC.A021.10075 MM N68711-00-D-0005 00007	06-16-2003 06-20-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	20 JUNE 2000 DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES MEETING AGENDA)	ADMIN RECORD INFO REPOSITORY	MTG MINS	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000568 TC.A021.10074 MM N68711-00-D-0005 00012	06-11-2003 07-11-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	11 JULY 2000 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY	ADMIN RECORD	MTG MINS RAB VOC	015 023 025 OU 2 OU 2A OU 2B OU 2C OU 3 OU 4 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000724 TC.A021.10075 MM N68711-00-D-0005 00006	06-16-2003 07-18-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	18 JULY 2000 DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT	ADMIN RECORD INFO REPOSITORY	MTG MINS	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000003 NONE COMMENTS NONE 00009	08-07-2000 07-19-2000 NONE	ARC ECOLOGY K. KLOC NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	COMMENTS ON THE DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION AND THE PROPOSED PLAN FOR THE MARSH CRUST & GROUNDWATER (FISC-ALAMEDA ANNEX) AND FOR THE MARSH CRUST & FORMER SUBTIDAL AREA (ALAMEDA POINT) [INCLUDES RESOLUTION OF THE RAB DATED 4/4/00]	ADMIN RECORD INFO REPOSITORY	GW REMEDIAL ACTIO ROD	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 1 OF 46 SW060123-01 41074200 IMAGED APNT_002

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N00236 / 000590 TC.A021.10074 MM N68711-00-D-0005 00019	06-11-2003 10-03-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	03 OCTOBER 2000 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES (MISSING ATTENDANCE LIST)	ADMIN RECORD	MTG MINS PAH PCB RAB	001 002 005 007 013 025 OU 1 OU 2 OU 2A OU 2A OU 2B OU 2C OU 3 OU 4 OU 5 OU 7	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000727 TC.A021.10075 MM N68711-00-D-0005 00004	06-16-2003 10-18-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	18 OCTOBER 2000 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT	ADMIN RECORD INFO REPOSITORY	MTG MINS	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000027 SWDIV SER 06CA.RW/870 MEMO NONE 00017	10-27-2000 10-20-2000 NONE	NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND NAVFAC - SOUTHWEST DIVISION	ACTION MEMORANDUM (AM) FOR TIME- CRITICAL REMOVAL OF PAH- CONTAMINATED SOIL AT THE CLOWN PARK PLAY AREA [INCLUDES SWDIV TRANSMITTAL LETTER BY R. WEISSENBORN]	ADMIN RECORD INFO REPOSITORY	ACTMEMO PAH REMOVAL SOIL TCRA TPH	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW05072801 IMAGED APNT_001

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N00236 / 000051 NONE COMMENTS NONE 00003	01-05-2001 11-01-2000 NONE	USEPA - SAN FRANCISCO P. RAMSEY NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	EPA REVIEW AND COMMENTS ON THE ACTION MEMORANDUM FOR TIME- CRITICAL REMOVAL ACTION OF PAH- CONTAMINATED SOIL AT CLOWN PARK PLAY AREA	ADMIN RECORD INFO REPOSITORY	ACTMEMO COMMENTS PAH SOIL TCRA	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 1 OF 46 SW060123-01 41074200 IMAGED APNT_002
N00236 / 000728 TC.A021.10075 MM N68711-00-D-0005 00004	06-16-2003 11-21-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	21 NOVEMBER 2000 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH	001 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000042 DS.0202.13653 RPT N62474-94-D-7609 00400	12-18-2000 12-04-2000 00202	TETRA TECH EM INC. N. HUTCHISON NAVFAC - SOUTHWEST DIVISION G. CLARK	DRAFT FINAL STORM SEWER STUDY REPORT {SEE AR #7 - DRAFT FINAL STORM SEWER STUDY REPORT ADDENDUM & #240 - TECHNICAL MEMORANDUM ADDENDUM}	ADMIN RECORD INFO REPOSITORY	AST BCT BRAC BTEX EE/CA IR OU PAH PCB RI RI/FS SVOC TPH UST VOC	OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 5	CHOICE IMAGING SOLUTIONS SW061027-01

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N00236 / 000729 TC.A021.10075 MM N68711-00-D-0005 00007	06-16-2003 12-19-2000 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	19 DECEMBER 2000 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT	ADMIN RECORD INFO REPOSITORY	MTG MINS TPH	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000052 SWDIV SER 06CA.RW/1042 LTR NONE 00003	01-05-2001 12-20-2000 NONE	NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND USEPA - SAN FRANCISCO P. RAMSEY	NAVY'S RESPONSES TO COMMENTS BY EPA ON THE ACTION MEMORANDUM FOR TIME-CRITICAL REMOVAL ACTION OF PAH- CONTAMINATED SOIL AT THE CLOWN PARK PLAY AREA	ADMIN RECORD INFO REPOSITORY	ACTMEMO COMMENTS PAH SOIL TCRA	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 1 OF 46 SW060123-01 41074200 IMAGED APNT_002
N00236 / 000007 TC.0202.10421 & EFAW SER 612.14/L0044 RPT N62474-94-D-7609 00140	08-17-2000 01-15-2001 00202	TETRA TECH EM INC. N. HUTCHISON NAVFAC - SOUTHWEST DIVISION G. CLARK	DRAFT FINAL STORM SEWER STUDY REPORT, TOTAL PETROLEUM HYDROCARBON (TPH) ADDENDUM - INCLUDES SWDIV TRANSMITTAL LETTER BY G. CLARK, RESPONSE TO COMMENTS ON THE DRAFT STORM SEWER STUDY REPORT DATED SEPTEMBER 1999 (*SEE COMMENTS)	ADMIN RECORD INFO REPOSITORY	BTEX GW IR OU RI/FS SITE SVOC TPH	018 OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 5	CHOICE IMAGING SOLUTIONS 181-03-0179 1 OF 46 SW061027-01 41074200
N00236 / 000056 SWDIV SER 06CA.RW/0082 PLAN NONE 00428	01-31-2001 01-19-2001 NONE	NEPTUNE AND COMPANY, INC. NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	DRAFT REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 5 (OU) (INCLUDES SWDIV TRANSMITTAL LETTER BY R. WEISSENBORN)	ADMIN RECORD INFO REPOSITORY	PAH PCB RI SVOC TPH VOC	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 2 OF 46 SW060209-01 41074200 IMAGED APNT_002

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N00236 / 000730 TC.A021.10075 MM N68711-00-D-0005 00011	06-17-2003 02-20-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	20 FEBRUARY 2001 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA)	ADMIN RECORD INFO REPOSITORY	MTG MINS PCB	002 009 011 016 021 OU 4A OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000595 TC.A021.10074 MM N68711-00-D-0005 00008	06-11-2003 03-06-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	06 MARCH 2004 RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (MISSING ATTENDANCE LIST)	ADMIN RECORD	MTG MINS RAB	005 025 PARCEL 125 PARCEL 178	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000073 NONE MISC NONE 00010	03-26-2001 03-20-2001 NONE	U.S. EPA, SAN FRANCISCO, CA P. RAMSEY NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	EPA PRELIMINARY REVIEW AND COMMENTS ON THE DRAFT REMEDIAL ACTION WORK PLAN	ADMIN RECORD INFO REPOSITORY	COMMENTS WORK PLAN	025 OU 5	CHOICE IMAGING SOLUTIONS 181-03-0179 2 OF 46 SW061005-01 41074200
N00236 / 000596 TC.A021.10074 MM N68711-00-D-0005 00019	06-11-2003 04-03-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	03 APRIL 2001 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA AND SIGN-IN SHEETS)	ADMIN RECORD	DDT MTG MINS PAH RAB	014 015 017 024 025 OU 1 OU 2 OU 4	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007

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N00236 / 000082 NONE COMMENTS NONE 00008	04-12-2001 04-04-2001 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	REVIEW AND COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION WORK PLAN (WITH ENCLOSURE)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW ROI WORK PLAN	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 3 OF 46 SW060123-01 41074200 IMAGED APNT_002
N00236 / 000083 NONE COMMENTS NONE 00010	04-12-2001 04-05-2001 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	REVIEW AND COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION WORK PLAN (WITH ENCLOSURE)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW PAH RI SOIL WORK PLAN	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 3 OF 46 SW060123-01 41074200 IMAGED APNT_002
N00236 / 000395 NONE COMMENTS NONE 00007	06-28-2002 04-10-2001 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	TRANSMITTAL OF SUPPLEMENTAL COMMENTS BY THE HUMAN AND ECOLOGICAL RISK DIVISION ON THE DRAFT REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 5 (OU 5), DATED 19 JANUARY 2001 (W/ ENCLOSURE) (PORTION OF THE MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD INFO REPOSITORY SENSITIVE	CANCER COMMENTS COPC GW RI SEDIMENTS	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 3 OF 17 SW060615-01 41031858 IMAGED APNT_004
N00236 / 000604 TC.A021.10074 MM N68711-00-D-0005 00013	06-11-2003 05-01-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	01 MAY 2001 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA AND SIGN-IN SHEETS)	ADMIN RECORD	MTG MINS PAH RAB	025 OU 1 OU 2 OU 3 OU 4 OU 4A	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007

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N00236 / 000393 NONE COMMENTS NONE 00004	06-28-2002 05-11-2001 NONE	DTSC - BERKELEY M. CASSA NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS ON THE DRAFT FINAL REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 5 (OU 5) [PORTIONS OF THE MAILING LIST ARE CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS RI WORK PLAN	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 3 OF 17 SW060615-01 41031858 IMAGED APNT_004
N00236 / 000734 TC.A021.10075 MM N68711-00-D-0005 00011	06-17-2003 05-15-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	15 MAY 2001 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA)	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH	004 005 025 OU 3 OU 6	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000100 SWDIV SER 06CA.RW/0487 & SWDIV SER 06CA.RW\0502 PLAN N68711-00-F-0104 00647	06-27-2001 06-04-2001 00005	NEPTUNE AND COMPANY, INC. D. MICHAEL NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	FINAL REMEDIAL INVESTIGATION WORK PLAN FOR OPERABLE UNIT 5 (OU 5) - INCLUDES NAVY'S RESPONSE TO EPA & DTSC COMMENTS AND SWDIV TRANSMITTAL LETTERS BY R. WEISSENBORN [PORTION OF MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	BTEX COMMENTS DDT DQO PAH PCB RI TPH TRV VOC WORK PLAN	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 3 OF 46 SW060123-02 41074200 IMAGED APNT_002
N00236 / 000737 TC.A021.10075 MM N68711-00-D-0005 00015	06-17-2003 07-17-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	17 JULY 2001 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA AND SIGN-IN SHEET)	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH	015 023 025 026 027 028	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003

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N00236 / 000225 1809 RESPONSE N62474-98-D-2076 00012	08-13-2001 07-24-2001 00076	IT CORPORATION NAVFAC - SOUTHWEST DIVISION	RESPONSE TO COMMENTS ON THE CHEMICAL OXIDATION TREATABILITY STUDY	ADMIN RECORD INFO REPOSITORY	COMMENTS PAH RESPONSE	OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 11 OF 46 SW060323-01 41074200 IMAGED APNT_002
N00236 / 000224 1859 PLAN N62474-98-D-2076 00293	08-13-2001 08-03-2001 00076	IT CORPORATION A. SEARLS NAVFAC - SOUTHWEST DIVISION	FINAL WORK PLAN - CHEMICAL OXIDATION TREATABILITY STUDY, REVISION 0	ADMIN RECORD INFO REPOSITORY	DDT DQO MTBE PAH WORK PLAN	OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 11 OF 46 SW060323-01 41074200 IMAGED APNT_002
N00236 / 000607 TC.A021.10074 MM N68711-00-D-0005 00042	06-11-2003 08-07-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	07 AUGUST 2001 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INLCUDES AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS)	ADMIN RECORD	MTG MINS PAH RAB TCE	025 026	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000240 TC.0202.11178 MEMO N62474-94-D-7609 00050	09-25-2001 08-30-2001 00202	TETRA TECH EM INC. N. HUTCHISON NAVFAC - SOUTHWEST DIVISION G. CLARK	STORM SEWER STUDY - TECHNICAL MEMORANDUM ADDENDUM AND RESPONSE TO CRWQCB, DTSC, & EPA COMMENTS {SEE AR #7 - DRAFT FINAL STORM SEWER STUDY REPORT ADDENDUM & #42 - DRAFT FINAL STORM SEWER STUDY REPORT} (MISSING FIGURES 3-4C AND 3-5C)	ADMIN RECORD INFO REPOSITORY	BTEX COMMENTS MTBE TECH MEMO TPH	018 OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 5	CHOICE IMAGING SOLUTIONS 181-03-0179 12 OF 46 SW061027-01 41074200

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N00236 / 000249 SWDIV SER 06CA.AD\1041 CORRESP NONE 00003	10-11-2001 09-27-2001 NONE	NAVFAC - SOUTHWEST DIVISION A. DICK DTSC, BERKELEY, CA D. MURPHY	NAVY'S REQUEST FOR DTSC TO IDENTIFY POTENTIAL APPLICABLE OR RELEVENT AND APPROPRIATE REQUIREMENTS (ARARS) FOR A PROPOSED TIME CRITICAL REMOVAL ACTION FOR PAH CONTAMINATED SOIL, COAST GUARD HOUSING	ADMIN RECORD INFO REPOSITORY	ARAR PAH SOIL TCRA	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0179 12 OF 46 SW060309-01 41074200 IMAGED APNT_011
N00236 / 000609 TC.A021.10074 MM N68711-00-D-0005 00014	06-11-2003 10-02-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	02 OCTOBER 2001 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA AND SIGN-IN SHEETS)	ADMIN RECORD	MTG MINS RAB	OU 1 OU 2 OU 3 OU 4 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000296 FWSD-RAC-02-0225 MEMO N68711-98-D-5713 00120	12-06-2001 5 11-26-2001 00040	FOSTER WHEELER NAVFAC - SOUTHWEST DIVISION	ACTION MEMORANDUM CERCLA TIME CRITICAL REMOVAL ACTION AT SITE 25, REVISON 0	ADMIN RECORD INFO REPOSITORY	ACTMEMO PAH PCB TCRA VOC	025 OU 5	SOUTHWEST DIVISION - BLDG. 110 181-03-0179 13 OF 46 BOX 13 - 02/07/06 41074200
N00236 / 000297 FWSD-RAC-02-0206 RPT N68711-98-D-5713 01000	12-06-2001 5 11-26-2001 00040	Foster Wheeler A. Eloskof Navfac - Southwest Division	FINAL REMOVAL ACTION WORK PLAN CERCLA TIME CRITICAL REMOVAL ACTION AT SITE 25, REVISION 0 (SEE AR #360 - DRAFT ADDENDUM & #363 - FINAL ADDENDUM) [MISSING FACT SHEETS IN ATTACHMENT 2 OF APPENDIX K]	ADMIN RECORD INFO REPOSITORY	PAH PCB REMOVAL SVOC TCRA TPH VOC WORK PLAN	025 OU 5	CHOICE IMAGING SOLUTIONS 181-03-0179 13 OF 46 SW061106-01 41074200

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N00236 / 000611 TC.A021.10074 MM N68711-00-D-0005 00011	06-11-2003 12-04-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	04 DECEMBER 2001 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA AND SIGN-IN SHEETS)	ADMIN RECORD	MTG MINS RAB	005 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000313 2700.0 PLAN N62474-98-D-2076 00501	01-04-2002 12-18-2001 00078	IT CORPORATION J. MCGUIRE NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	DRAFT WORK PLAN FOR BASEWIDE GROUNDWATER MONITORING PROGRAM, REVISION 0	ADMIN RECORD INFO REPOSITORY	BTEX DCA DCE DQO DVE GW LEAD MONITORING MTBE PAH PCB PCE SVE SVC TCA TCE TPH VOC WORK PLAN	001 003 004 005 006 007 008 009 010 011 012 014 016 021 025 GROUF 026 027	SOUTHWEST DIVISION - BLDG. 1 SW060629-01 IMAGED APNT_007
N00236 / 000741 TC.A021.10075 MM N68711-00-D-0005 00011	06-17-2003 12-18-2001 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	18 DECEMBER 2001 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA)	ADMIN RECORD INFO REPOSITORY	MTG MINS	004 007 013 014 015 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
Thursday, May 24, 2	2007	This Adminis bibliographic	strative Record (AR) Index includes references to d citations are considered to be part of this AR but r	ocuments which cite biblion ay not be cited separate	ography sources. These ly in the index.	Pa	ge 18 of 78

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N00236 / 000315 TC.0386.11301 & SWDIV SER 06CA.GC/1339 RPT N62474-94-D-7609 00300	01-04-2002 12-21-2001 00386	TETRA TECH EM INC. J. HELGE NAVFAC - SOUTHWEST DIVISION G. CLARK	DRAFT WATER TOWER & ANTENNA SITES, LEAD REMOVAL ACTION ENGINEERING EVALUATION AND COST ANALYSIS (EE/CA) [INCLUDES SWDIV TRANSMITTAL LETTER BY G. CLARK] {PORTION OF SECTIONS 4 AND 5 - COST ANALYSES AND THE MAILING LIST ARE CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	EE/CA LEAD REMOVAL	OU 1 OU 2 OU 3 OU 4 OU 5 OU 6 PARCEL 105 PARCEL 106 PARCEL 107 PARCEL 79 PARCEL 98	CHOICE IMAGING SOLUTIONS SW060601-01
N00236 / 001824 SWDIV SER 06CA.RW/1343 RPT NONE 01200	04-30-2004 12-21-2001 NONE	NEPTUNE AND COMPANY, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT OPERABLE UNIT 5 (OU 5) REMEDIAL INVESTIGATION REPORT (CD COPY OF APPENDICES F THROUGH I ENCLOSED) [INCLUDES SWDIV TRANSMITTAL LETTER BY R. WEISSENBORN]	ADMIN RECORD INFO REPOSITORY	BTEX MTBE PAH SVOC TPH VOC	025 OU 5	CHOICE IMAGING SOLUTIONS SW060601-04
N00236 / 000612 TC.A021.10074 MM N68711-00-D-0005 00047	06-12-2003 01-08-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	08 JANUARY 2002 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	B(A)P DDT MTG MINS PCB RAB TPH	005 014 015 025 BLDG. 195	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000742 TC.A021.10075 MM N68711-00-D-0005 00041	06-17-2003 01-15-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	15 JANUARY 2002 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUTS) [PORTION OF THE SIGN-IN SHEET IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS	005 014 015 025 028	CHOICE IMAGING SOLUTIONS 181-03-0188 15 OF 17 SW061005-01 41031858

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N00236 / 000317 FWSD-RAC-02-040 MEMO N68711-98-D-5713 00120	01-23-2002 3 01-18-2002 00040	FOSTER WHEELER NAVFAC - SOUTHWEST DIVISION	FINAL ACTION MEMORANDUM, CERCLA TIME-CRITICAL REMOVAL ACTION AT SITE 25 {SEE AR #355 - EPA CONCURRENCE & #397 & #425 - ADDENDA}	ADMIN RECORD INFO REPOSITORY	ACTMEMO PAH PCB TCRA VOC	025 OU 5	SOUTHWEST DIVISION - BLDG. 110 BX-003
N00236 / 000329 FWSD-RACIII-02- 0467 MISC N68711-98-D-5713 00002	02-26-2002 01-21-2002 00040	ALAMEDA TIMES NAVFAC - SOUTHWEST DIVISION	PUBLIC NOTICE: NOTICE OF AVAILABILITY AND PUBLIC COMMENT PERIOD ON THE ACTION MEMORANDUM FOR CERCLA TIME- CRITICAL REMOVAL ACTION AT SITE 25	ADMIN RECORD INFO REPOSITORY	ACTMEMO PUBNOT TCRA	025	SOUTHWEST DIVISION - BLDG. 1 SW05072801 IMAGED APNT_001
N00236 / 000330 FWSD-RACIII-02- 0467 PUB NOTICE N68711-98-D-5713 00002	02-26-2002 01-21-2002 00040	OAKLAND TRIBUNE N. HART NAVFAC - SOUTHWEST DIVISION	PUBLIC NOTICE: NOTICE OF AVAILABILITY AND PUBLIC COMMENT PERIOD ON THE ACTION MEMORANDUM FOR COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) TIME-CRITICAL REMOVAL ACTION (TCRA)	ADMIN RECORD INFO REPOSITORY	ACTMEMO PUBNOT TCRA	025	CHOICE IMAGING SOLUTIONS SW061120-01
N00236 / 000354 2119.9285 (LMM) COMMENTS NONE 00009	04-10-2002 01-28-2002 NONE	CRWQCB - OAKLAND L. MEILLIER NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS ON THE DRAFT WORK PLAN FOR BASEWIDE GROUNDWATER MONITORING PROGRAM (PORTION OF THE DISTRIBUTION LIST IS SENSITIVE)	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS GW MONITORING MTBE PAH PCB SVOC TPH VOC WORK PLAN	004 005 008 009 016 025 GROUF 026 027 BLDG. 410 OU 1 UST 608-1	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 1 OF 17 SW060629-01 41031858 IMAGED APNT_007

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N00236 / 000616 TC.A021.10074 MM N68711-00-D-0005 00032	06-12-2003 02-05-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	05 FEBRARY 2002 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS) [PORTIONS OF ATTACHMENT C ARE SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS PAH RAB	025 026 BLDG. 162 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000355 NONE LTR NONE 00001	04-10-2002 02-25-2002 NONE	U.S. EPA, SAN FRANCISCO, CA D. JORDAN NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	EPA CONCURRENCE ON THE ACTION MEMORANDUM FOR TIME-CRITICAL REMOVAL ACTION AT SITE 25 {SEE AR #317 - ACTION MEMORANDUM}	ADMIN RECORD INFO REPOSITORY	ACTMEMO TCRA	025 OU 5	SOUTHWEST DIVISION - BLDG. 110 181-03-0188 1 OF 17 BOX 1 - 04/21/06 41031858
N00236 / 000443 NONE COMMENTS NONE 00005	11-13-2002 03-01-2002 NONE	ARC ECOLOGY L. LOIZOS NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 5 (OU 5)	ADMIN RECORD INFO REPOSITORY	COMMENTS RI	025 OU 5	CHOICE IMAGING SOLUTIONS 181-03-0188 6 OF 17 SW060601-02 41031858

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N00236 / 000380 NONE COMMENTS NONE 00007	06-27-2002 03-19-2002 NONE	US EPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 5 (OU 5)	ADMIN RECORD INFO REPOSITORY	BCT BRAC CHARACTERIZATI COMMENTS DATA GW METALS PAH PRG RI SOIL VOC WATER WORK PLAN	025 OU 5 PARCEL 178 PARCEL 181 PARCEL 182	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 3 OF 17 SW060615-01 41031858 IMAGED APNT_004
N00236 / 000746 TC.A021.10075 MM N68711-00-D-0005 00039	06-17-2003 03-26-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	26 MARCH 2002 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER-ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUTS) [PORTION OF THE SIGN-IN SHEET IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTBE MTG MINS TPH	014 015 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW070112-01 41031858 IMAGED APNT_008
N00236 / 000360 FWSD-RAC-02-065 RPT N68711-98-D-5713 00300	04-22-2002 2 03-29-2002 00040	FOSTER WHEELER A. ELOSKOF NAVFAC - SOUTHWEST DIVISION	DRAFT ADDENDUM TO THE REMOVAL ACTION WORK PLAN, CERCLA TIME- CRITICAL REMOVAL ACTION AT SITE 25, REVISION 0 (SEE AR #297 - WORK PLAN & #363 - FINAL ADDENDUM) [MISSING FIGURE A.4-1 IN APPENDIX A]	ADMIN RECORD INFO REPOSITORY	PAH PCB REMOVAL SVOC TCRA TPH VOC WORK PLAN	025 OU 5	CHOICE IMAGING SOLUTIONS 181-03-0188 1 OF 17 SW061106-01 41031858

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N00236 / 000425 FWSD-RACIII-02- 0621 MISC N68711-98-D-5713 00175	09-25-2002 03-29-2002 00040	FOSTER WHEELER NAVFAC - SOUTHWEST DIVISION	ACTION MEMORANDUM ADDENDUM CERCLA TIME-CRITICAL REMOVAL ACTION AT OPERABLE UNIT 5 (OU 5) {SEE AR #317 - ACTION MEMORANDUM}	ADMIN RECORD INFO REPOSITORY	ACTMEMO BGS COST NPL PAH RCRA REMOVAL SOIL TCRA	025 OU 5 PARCEL 181 PARCEL 182 PARCEL 183	SOUTHWEST DIVISION - BLDG. 110 181-03-0188 5 OF 17 02/14/06 41031858
N00236 / 000619 TC.A021.10074 MM N68711-00-D-0005 00040	06-12-2003 04-02-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	02 APRIL 2002 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS) [PORTION OF THE DOCUMENT IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS RAB	025 BLDG. 397	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000359 TC.0386.11452 & TC.0386.11452-1 RESPONSE N62474-94-D-7609 00020	04-10-2002 04-08-2002 00386	NAVFAC - SOUTHWEST DIVISION G. CLARK U.S. EPA, SAN FRANCISCO, CA A. COOK	NAVY'S RESPONSES TO EPA COMMENTS ON THE DRAFT ENGINEERING EVALUATION AND COST ANALYSIS FOR THE NON-TIME CRITICAL LEAD REMOVAL ACTION AT THE WATER TOWER AND ATTENNA SITES [PORTION OF THE MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS EE/CA LEAD REMOVAL ACTIO WATER	OU 1 OU 2 OU 3 OU 4 OU 5 OU 6 PARCEL 105 PARCEL 106 PARCEL 107 PARCEL 79 PARCEL 98	

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F\ 08 06 RI N6	00236 / 000363 WSD-RAC-02- 810 & SWDIV SER 6CA.RW\0401 PT 68711-98-D-5713 0300	04-23-2002 04-19-2002 00040	FOSTER WHEELER A. ELOSKOF NAVFAC - SOUTHWEST DIVISION	FINAL ADDENDU ACTION WORK P CRITICAL REMOV REVISION 0 (INC TRANSMITTAL LE WEISSENBORN) PLAN & #360 - DF PAGE J.1-2 IN AP	LAN, CERCLA T VAL ACTION AT LUDES SWDIV ETTER BY R. [SEE AR #297 - RAFT ADDENDU	TIME- SITE 25, WORK	ADMIN RECORD INFO REPOSITORY	PAH PCB REMOVAL SVOC TCRA TPH VOC WORK PLAN	025	CHOICE IMAGING SOLUTIONS 181-03-0188 2 OF 17 SW061106-01 41031858
N(C(N(00236 / 000392 ONE OMMENTS ONE 0010	06-28-2002 04-22-2002 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS ON INVESTIGATION UNIT 5 (OU 5) (IN DATED 05 APRIL	REPORT FOR C CLUDES GSU C	PERABLE	ADMIN RECORD INFO REPOSITORY	CANCER CHARACTERIZATI COMMENTS COPC CYANIDE GW METALS MTBE MW PAH PCB PESTICIDES REMEDIAL ACTIO RI RISK ROD SOIL SVOC VOC	025 OU 5 PARCEL 181 PARCEL 182 PARCEL 183	3 OF 17

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N00236 / 000620 TC.A021.10074 MM N68711-00-D-0005 00031	06-12-2003 05-01-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	01 MAY 2002 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS RAB	026 OU 1 OU 2 OU 3 OU 4A OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 001808 3834 RPT N62474-98-D-2076 00436	04-22-2004 05-03-2002 00078	IT CORPORATION J. MCGUIRE NAVFAC - SOUTHWEST DIVISION	DRAFT WORK PLAN FOR BASEWIDE GROUNDWATER MONITORING PROGRAM, REVISION 0 (FIGURES 35 AND 66 AND TABLES 15 AND 16 ARE MISSING)	ADMIN RECORD INFO REPOSITORY	BTEX DCA DCE MTBE PAH PCB PCE SVOC TCE TDS TPH VOC	001 003 GROUP 005 GROUP 006 007 008 009 014 016 025 GROUP 026 027	SOUTHWEST DIVISION - BLDG. 1 SW060629-04 IMAGED APNT_008
N00236 / 000366 FWSD-RAC-02-111 RPT N68711-98-D-5713 00143	06-18-2002 9 05-14-2002 00040	FOSTER WHEELER NAVFAC - SOUTHWEST DIVISION	AMBIENT AIR SAMPLING AT INSTALLATION RESTORATION SITE 25	ADMIN RECORD INFO REPOSITORY	AAL AAQS AIR DATA PAH QA QC SOP TSP	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 2 OF 17 SW060504-01 41031858 IMAGED APNT_009

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N00236 / 000364 TC.0386.11571 RPT N62474-94-D-7609 00277	06-17-2002 05-21-2002 00386	TETRA TECH EM INC. J. HELGE NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL WATER TOWER & ANTENNA SITES, LEAD REMOVAL ACTION ENGINEERING EVALUATION AND COST ANALYSIS (EE/CA) [PORTIONS OF SECTIONS 4 AND 5 - COST ESTIMATES ARE CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	ARAR BCT BRAC DUST EBS EE/CA LEAD LF POTW PRG RCRA RI SOIL TANK TPH WATER	008 BLDG. 33 BLDG. 36A BLDG. 36B BLDG. 61 BLDG. 73B BLDG. 88 OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6 PARCEL 105 PARCEL 105 PARCEL 107 PARCEL 79 PARCEL 98	5

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N00236 / 000369 TC.0386.11534 MEMO N62474-94-D-7609 00352	06-18-2002 05-21-2002 00386	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	DRAFT ACTION MEMORANDUM, PARCEL 79, 98, 105, 106, AND 107, LEAD IN SOIL A LEAD BASED PAINT, NON-TIME CRITICAL REMOVAL ACTION (NTCRA) [PORTIONS C SECTION 5, APPENDICES A AND C - ESTIMATED COSTS ARE CONFIDENTIAL]	ND INFO REPOSITORY	ACTMEMO ARAR BCT BRAC COPC EE/CA ERA LBP LEAD NCP NTCRA POTW PRG RCRA REMOVAL RI SARA SOIL TRPH	008 BLDG. 73B OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6 PARCEL 100 PARCEL 100 PARCEL 100 PARCEL 79 PARCEL 98	3
N00236 / 000391 NONE COMMENTS NONE 00008	06-27-2002 05-31-2002 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION R. WEISSENBORN	COMMENTS ON THE DRAFT REMEDIAL INVESTIGATION REPORT - BASELINE HEALTH RISK ASSESSMENT FOR OPERABLE UNIT 5 (OU 5)	ADMIN RECORD INFO REPOSITORY	CANCER COMMENTS GW HHRA METALS PAH PCB RI ROD SOIL TCRA VOC	025 OU 5 PARCEL 180 PARCEL 182 PARCEL 183	3 OF 17 SW060615-01

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N00236 / 001809 4100 RPT N62474-98-D-2076 00600	04-22-2004 06-13-2002 00078	IT CORPORATION R. CONDIT NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL W GROUNDWATEF REVISION 0, [CD INVENTORY]	RMONITORING	PROGRAM,	ADMIN RECORD INFO REPOSITORY	BTEX DCA DCE MTBE PAH PCB PCE SVOC TCE TDS TPH VOC	001 003 GROUP 005 GROUP 006 007 008 009 014 016 025 GROUP 026 027	SOUTHWEST DIVISION - BLDG. 110 06/12/06

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N00236 / 000367 SWDIV SER 06CA.AD/0624 PLAN NONE 00035	06-18-2002 06-14-2002 NONE	NAVFAC - SOUTHWEST DIVISION A. DICK US EPA - SAN FRANCISCO A. COOK	TRANSMITTAL OF DRAFT SITE MANAGEMENT PLAN AMENDMENT (W/ ENCLOSURE) [INCLUDES DRAFT SITE MANAGEMENT PLAN]	ADMIN RECORD INFO REPOSITORY	BCT BRAC CHARACTERIZATI COMMENTS CRP FFA FS GW ORDNANCE RD RESPONSE RI ROD SEDIMENTS SMP SOIL TECH MEMO UXO WORK PLAN	001 002 006 007 008 009 013 014 015 016 017 019 020 022 023 024 025 026 027 028 029 AREA 1 AREA 2 AREA 3 OU 1 OU 2A OU 2B OU 2C OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6	CHOICE IMAGING SOLUTIONS 181-03-0188 2 OF 17 SW070413-01 41031858

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N00236 / 000622 TC.A021.10074 MM N68711-00-D-0005 00012	06-12-2003 07-02-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	02 JULY 2002 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS RAB	025 CAA 13 CAA 6 CAA 7	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000750 TC.A021.10075 MM N68711-00-D-0005 00052	06-17-2003 07-16-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	16 JULY 2002 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUTS) [PORTION OF THE SIGN-IN SHEET IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS PAH	001 002 013 OU 1 OU 2A OU 2B OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060921-01 41031858 IMAGED APNT_005
N00236 / 000405 TC.0386.11651 RESPONSE N62474-94-D-7609 00020	07-29-2002 07-18-2002 00386	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	COMPILED RESPONSE TO COMMENTS ON THE DRAFT ACTION MEMORANDUM NON- TIME CRITICAL REMOVAL ACTION LEAD IN SOIL AND LEAD BASED PAINT [COMMENTS BY DTSC, ARC ECOLOGY - 06/24/02, ALAMEDA POINT COLLABORATIVE - 06/17/02, & THE SIERRA CLUB - 06/23/02] W/ENCLOSURES	ADMIN RECORD INFO REPOSITORY SENSITIVE	ACTMEMO BCT BRAC COC COMMENTS LEAD METALS NTCRA PRG REMOVAL RESPONSE SOIL	008 BLDG. 23 BLDG. 24 BLDG. 73B OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6 PARCEL 106 PARCEL 106 PARCEL 107 PARCEL 98	;

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N00236 / 000397 FWSD-RACIII-02- 1406 MISC N68711-98-D-5713 00150	07-26-2002 07-24-2002 00040	FOSTER WHEELER NAVFAC - SOUTHWEST DIVISION	ACTION MEMORANDUM ADDENDUM CERCLA TIME-CRITICAL REMOVAL ACTION AT OPERABLE UNIT 5 (OU 5) (INCLUDES SWDIV TRANSMITTAL FROM R. WEISSENBORN) {SEE AR #317 - ACTION MEMORANDUM}	ADMIN RECORD INFO REPOSITORY	ARAR COST EBS NCP NPL PAH PRP RCRA SOIL TCRA	025 OU 5	SOUTHWEST DIVISION - BLDG. 110 181-03-0188 3 OF 17 02/14/06 41031858
N00236 / 000407 02-1456 PUB NOTICE N68711-98-D-5713 00002	08-07-2002 08-05-2002 00040	FOSTER WHEELER PUBLIC INTEREST	PUBLIC NOTICE OF AVAILABILITY AND PUBLIC COMMENT PERIOD ON THE ACTION MEMORANDUM ADDENDUM FOR CERCLA TIME-CRITICAL REMOVAL ACTION (TCRA) PUBLISHED IN THE ALAMEDA TIMES	ADMIN RECORD INFO REPOSITORY	NEWSART PAH PUBNOT SOIL TCRA	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 4 OF 17 SW070112-01 41031858 IMAGED APNT_008
N00236 / 002645 02-1456 PUB NOTICE N68711-98-D-5713 00002	01-08-2007 08-05-2002 00040	FOSTER WHEELER PUBLIC INTEREST	PUBLIC NOTICE OF AVAILABILITY AND PUBLIC COMMENT PERIOD ON THE ACTION MEMORANDUM ADDENDUM FOR CERCLA TIME-CRITICAL REMOVAL ACTION (TCRA) PUBLISHED ON THE OAKLAND TRIBUNE	ADMIN RECORD	NEWSART PAH PUBNOT SOIL TCRA	025	SOUTHWEST DIVISION - BLDG. 1 SW070112-03 IMAGED APNT_008
N00236 / 000623 TC.A021.10074 MM N68711-00-D-0005 00029	06-12-2003 08-06-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	06 AUGUST 2002 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS RAB	001 002 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007

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N00236 / 000412	08-29-2002	TETRA TECH EM	DRAFT SUPPLEMENTAL ENVIRONMENTAL	ADMIN RECORD	ASBESTOS	001	SOUTHWEST
TC.0190.11423 -	08-16-2002	INC.	BASELINE SURVEY (SEE AR #1054 - EBS)	INFO	AST	002	DIVISION - BLDG. 1
MOD. 2	00190	G. FOULK		REPOSITORY	BCP	003	181-03-0188
RPT		NAVFAC -			BCT	004	4 OF 17
N62474-94-D-7609		SOUTHWEST DIVISION			BGS	005	BOX 4 OF 17 - CHECKED OUT BY
00400		2			BRAC	006	L. O'CAMPO ON
					CAA	007	9/22/04 (X 2-0969)
					DDT	008	41031858
					EBS	009	
					EIS	010	
					EOD	011	
					FOST	012	
					FS	013	
					GW	014	
					HAZ WASTE	015	
					LUST	016	
					MEK	017	
					NFA	019	
					NPL	020	
					ORDNANCE	021	
					PAH	022	
					PCB	023	
					RCRA	024	
					REMEDIAL ACTIO	025	
					RFA	026	
					RFI	027	
					RI	028	
					ROD	029	
					SOIL	OU 1	
					SVOC	OU 2A	
					SWMU	OU 2B	
					TPH	OU 2C	
					TSCA	OU 3	
					UST	OU 4A	
					VOC	OU 4B	
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					WATER	OU 4C OU 5 OU 6	
N00236 / 000751 NONE MM NONE 00061	06-17-2003 08-20-2002 NONE	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	20 AUGUST 2002 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS	009 011 014 015 016 020 021 028 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060921-01 41031858 IMAGED APNT_005
N00236 / 000410 SWDIV SER 06CA.MM/0847 CORRESP NONE 00020	08-28-2002 08-21-2002 NONE	NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND US EPA, SF & VARIOUS A. COOK & DISTRIBUTION	TRANSMITTAL OF THE FINAL SITE MANAGEMENT PLAN AMENDMENT IN ACCORDANCE WITH THE FEDERAL FACILITIES AGREEMENT FOR ACTIVITY (PORTION OF THE MAILING LIST IS SENSITIVE)	ADMIN RECORD INFO REPOSITORY SENSITIVE	FFA SMP	OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6	CHOICE IMAGING SOLUTIONS 181-03-0188 4 OF 17 SW061120-01 41031858
N00236 / 000411 TC.0386.11669 & SWDIV SER 06CA.GC\0860 RESPONSE N62474-94-D-7609 00009	08-29-2002 08-23-2002 00386	NAVFAC - SOUTHWEST DIVISION G. CLARK US EPA - SAN FRANCISCO A. COOK	TRANSMITTAL OF TETRA TECH RESPONSES TO EPA COMMENTS ON THE DRAFT ACTION MEMORANDUM FOR SITES 9 AND 16, DISSOLVED-PHASE GROUNDWATER CONTAMINANTS, NON- TIME CRITICAL REMOVAL ACTION (W/ ENCLOSURES) [INCLUDES SWDIV TRANSMITTAL LETTER BY G. CLARK]	ADMIN RECORD INFO REPOSITORY SENSITIVE	ACTMEMO ARAR COC COMMENTS GW PCB POTW PRG RESPONSE SOIL TOC VOC	009 016 025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 4 OF 17 SW060615-02 41031858 IMAGED APNT_004
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N00236 / 000624 TC.A021.10074 MM N68711-00-D-0005 00081	06-12-2003 09-10-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	10 SEPTEMBER ADVISORY BOAI SUMMARY (INCI SIGN-IN SHEETS HANDOUTS)	RD (RAB) MEI LUDES MEET	ETING ING AGENDA,	ADMIN RECORD INFO REPOSITORY	B(A)P MTG MINS PAH PCB RAB	014 015 OU 3 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007
N00236 / 000625 TC.A021.10074 MM N68711-00-D-0005 00047	06-12-2003 10-01-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	01 OCTOBER 20 ADVISORY BOA SUMMARY (INCI SIGN-IN SHEETS HANDOUTS)	RD (RAB) MEI LUDES MEET	ETING ING AGENDA,	ADMIN RECORD INFO REPOSITORY	DCA DCE MTG MINS PAH PCB RAB TCE VOC	001 014 015 032 OU 3 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007

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N00236 / 000436 DS.A033.10075 AN SWDIV SER 06CA.LO/0019 RPT N68711-00-D-0005 00300	DO A033	TETRA TECH EM INC. B. KELLY NAVFAC - SOUTHWEST DIVISION L. OCAMPO	DRAFT TECHNICAL MEMORANDUM: EVALUATION OF ISSUES RELATED TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA); FACILITY PERMIT EPA ID CA 2170023236, TIERED PERMITS, AND THE NONPERMITTED AREAS (INCLUDES SWDIV TRANSMITTAL LETTER BY L. OCAMPO)	ADMIN RECORD INFO REPOSITORY SENSITIVE	AOC ARAR AST BCT BRAC EBS GW HAZ WASTE NFA PERMIT RCRA RFA RFI SOIL SWMU TECH MEMO TPH UST WATER WWTP	001 002 003 004 006 007 008 009 013 014 015 016 019 020 022 023 026 027 028 BLDG. 13 OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6	CHOICE IMAGING SOLUTIONS 181-03-0188 6 OF 17 SW060601-02 41031858

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N00236 / 000752 TC.A021.10075 MM N68711-00-D-0005 00028	06-17-2003 10-15-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	15 OCTOBER 2002 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS	005 006 007 011 013 014 015 025 OU 1 OU 2A	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000445 FWSD-RAC-02-1804 RPT N68711-98-D-5713 00527	11-27-2002 11-15-2002 00040	FOSTER WHEELER A. ELOSKOF NAVFAC - SOUTHWEST DIVISION	DRAFT PROJECT CLOSEOUT REPORT, CERCLA TIME-CRITICAL REMOVAL ACTION (TCRA), REVISION 0 (VOLUMES I THROUGH XI OF XI) [TABLE 6-1 - SUMMARY OF COSTS IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY	AIR ARAR BGS BRAC CERCLA COC DATA PAH PCB PID QA QC RAB RCRA SITE CLOSEOUT SOIL SVOC TCRA TPH TSDF VOC	025	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 6-8 OF 17 SW060518-02, -03, 04 41031858 IMAGED APNT_011

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N00236 / 000450 SWDIV SER 06CA.RW\0213 RESPONSE NONE 00080	12-16-2002 12-02-2002 00031	IT CORPORATION NAVFAC - SOUTHWEST DIVISION	RESPONSE TO COMMENTS ON THE DRAFT FINAL REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 5 (OU 5) (COMMENTS BY DTSC, US EPA, RAB OU 5 FOCUS GROUP, & US COAST GUARD) [INCLUDES SWDIV TRANSMITTAL LETTER BY R. WEISSENBORN]	ADMIN RECORD INFO REPOSITORY	BCT BRAC COMMENTS COPC DRINKING WATE GW METALS MTBE MW PAH PCB RESPONSE RI SOIL SVOC TCRA VOC WELLS	025 OU 5 PARCEL 181 PARCEL 182 PARCEL 183	CHOICE IMAGING SOLUTIONS 181-03-0188 9 OF 17 SW060601-02 41031858
N00236 / 000451 SWDIV SER 06CA.RW\0213 RPT NONE 01000	12-16-2002 12-02-2002 00031	IT CORPORATION NAVFAC - SOUTHWEST DIVISION	FINAL REMEDIAL INVESTIGATION REPORT FOR OPERABLE UNIT 5 (OU 5), VOLUMES I & II OF II [INCLUDES SWDIV TRANSMITTAL LETTER BY R. WEISSENBORN]	ADMIN RECORD INFO REPOSITORY	BGS BRAC BTEX CANCER COPC GW MTBE PAH PRG QC REMEDIAL ACTIO RI SOIL SOIL SOIL BORING TCRA TPH VOC	025 OU 5 PARCEL 181	CHOICE IMAGING SOLUTIONS 181-03-0188 9 OF 17 SW060601-02 41031858
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N00236 / 000627 TC.A021.10074 MM N68711-00-D-0005 00021	06-12-2003 12-03-2002 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	03 DECEMBER ADVISORY BOA SUMMARY (INC SIGN-IN SHEET HANDOUTS)	RD (RAB) MEE	TING IG AGENDA,	ADMIN RECORD INFO REPOSITORY	MTG MINS RAB	025 026 031 OU 5	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 13 OF 17 SW060629-01 41031858 IMAGED APNT_007

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 000456 NONE COMMENTS NONE 00007	01-29-2003 12-16-2002 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION L. OCAMPO	COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM: EVALUATION OF ISSUES RELATED TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) FACILITY PERMIT EPA ID CA 217002323G TIERED PERMITS AND THE NONPERMITTED AREAS	ADMIN RECORD INFO REPOSITORY	AOC COMMENTS EBS HAZ WASTE NFA RCRA RFA SWMU TECH MEMO TPH UST	001 002 003 004 006 007 008 009 013 014 015 016 019 020 022 023 027 028 0U 1 0U 2A 0U 2B 0U 2C 0U 2B 0U 2C 0U 3 0U 4A 0U 4B 0U 4C 0U 5 0U 6	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 10 OF 17 SW060615-02 41031858 IMAGED APNT_004

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 000755 NONE MM NONE 00027	06-17-2003 12-17-2002 NONE	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	17 DECEMBER 2002 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH TPH	025 OU 1 OU 2	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060907-01 41031858 IMAGED APNT_003
N00236 / 000470 SWDIV SER 06CA.AD/0357 RPT NONE 00031	02-06-2003 01-16-2003 NONE	NAVFAC - SOUTHWEST DIVISION A. DICK U.S. EPA A. COOK	TRANSMITTAL OF SITE MANAGEMENT PLAN UPDATE (W/ ENCLOSURE)	ADMIN RECORD INFO REPOSITORY	PAH PESTICIDES	017 020 024 025 029 OU 1 OU 2A OU 2B OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 10 OF 17 SW060615-02 41031858 IMAGED APNT_004

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 000995 TC.A021.10125 MM N68711-00-D-0005 00030	08-20-2003 01-21-2003 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	21 JANUARY 2003 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEET, AND HANDOUT MATERIALS) [PORTION OF THE SIGN-IN SHEET IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS PAH PCE TCE VC	001 005 007 009 011 013 014 015 016 017 020 021 027 028 029 OU 5	CHOICE IMAGING SOLUTIONS SW061120-02
N00236 / 000472 5416 AND SWDIV SER 06CA.RW/041 RPT N62474-98-D-2076 00300	5416 AND SWDIV 01-31-2003 SER 06CA.RW/0411 00076 RPT N62474-98-D-2076	2003 CHEMICAL OXIDATION TREATABILITY	ADMIN RECORD INFO REPOSITORY	PAH VOC	BLDG. 534 OU 5	CHOICE IMAGING SOLUTIONS 181-03-0188 10 OF 17 SW060601-03 41031858	
N00236 / 001000 TC.A021.10125 MM N68711-00-D-0005 00033	08-20-2003 04-15-2003 DO 0021	TETRA TECH EM INC. NAVFAC - SOUTHWEST DIVISION	FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING MINUTES AFTER ACTION REPORT FOR THE 15 APRIL 2003 - INCLUDES AGENDA, SIGN-IN SHEET, AND HANDOUT MATERIALS	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH VOC	004 005 014 015 OU 1 OU 2A OU 2B OU 5	SOUTHWEST DIVISION - BLDG. 1 SW05072801 IMAGED APNT_001

UIC No. / Rec. No. Doc. Control No. Prc. Da Record Type Record Contr./Guid. No. CTO N Approx. # Pages EPA C	rd Date Author No. Recipient Affil.	Subject	Classification	Keywords	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. Sites CD No.
N00236 / 000773 08-04-2 FWSD-RAC-03-1088 04-20-2 RPT 00040 N68711-98-D-5713 00648	-2003 WHEELER	DRAFT REMOVAL ACTION WORK PLAN FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) TIME-CRITICAL REMOVAL ACTION (TCRA) AT WEST HOUSING AREA	ADMIN RECORD INFO REPOSITORY	HDPE PAH PCB PVC SVOC TPH VOC	OU 5 SOUTHWEST PARCEL EDC DIVISION - BLDG. 1 PARCEL EDC 181-03-0188 PARCEL EDC 17 OF 17 PARCEL EDC SW060615-03 PARCEL PBC 41031858 IMAGED APNT_004
N00236 / 000493 05-20-2 FWSD-RAC-03- 05-15-2 1360, 03-1361 & 03- 00040 1352 PLAN N68711-98-D-5713 00700	-2003 WHEELER	FINAL REMOVAL ACTION WORK PLAN FOR THE CERCLA TIME-CRITICAL REMOVAL ACTION (TCRA) AT WEST HOUSING AREA, REVISION 0 (INCLUDES FINAL SAMPLING ANALYSIS PLAN (REVISION 2), FINAL SITE- SPECIFIC HEALTH AND SAFETY PLAN AND RESPONSE TO COMMENTS ON DRAFT SAP)	ADMIN RECORD INFO REPOSITORY SENSITIVE	HDPE PAH PCB PVC SVOC TPH VOC	OU 5 PARCEL EDC PARCEL EDC PARCEL EDC PARCEL EDC PARCEL EDC PARCEL EDC PARCEL PBC PARCEL PBC PARCEL PBC

UIC No. / Rec. No. Doc. Control No. Prc. Date Record Type Record Date Contr./Guid. No. CTO No. Approx. # Pages EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords		Location FRC Access. No. RC/SWDIV Box No. RC Warehouse Loc. CD No.
N00236 / 000502 06-03-2003 CTO-0059/0010 & 05-19-2003 SWDIV 00059 06CA.GC/0840 RPT N68711-95-D-7526 00285	BECHTEL ENVIRONMENTAL, INC. E. JOHANSEN NAVFAC - SOUTHWEST DIVISION	DRAFT WORK PLAN FOR ASSESSMENT OF POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) CONTAMINATIONAT SELECTED CERCLA SITES AND EBS PARCELS [INLCUDES SWDIV TRANSMITTAL LETTER BY G. CLARK] {PORTIONS OF FIGURES AND ATTACHMENT C ARE CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	B(A)P DCE MTBE PAH PCB SVOC TCE TPH VOC	003 004 005 006 007 008 009 010 011 012 013 016 019 021 022 023 030 031 032 PARCEL 205 PARCEL 28 PARCEL 51	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 12 OF 17 SW060615-03 41031858 IMAGED APNT_004
N00236 / 000760 07-07-2003 5716 & SWDIV SER 06-30-2003 06CA.RW/0987 00078 PLAN N62474-98-D-2076 00755	SHAW ENVIRONMENTAL, INC. R. CONDIT NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL WORK PLAN FOR BASEWIDE GROUNDWATER MONITORING PROGRAM, REVISION 0 (INCLUDES RESPONSE TO COMMENTS ON THE REVISED DRAFT GROUNDWATER MONITORING WORK PLAN AND SWDIV TRANSMITTAL LETTER BY R. WEISSENBORN) [***SEE COMMENTS]	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS DCA DCE MTBE PAH PCB PCE PVC TCA TCE VOC	002 025 GROUP	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 15 OF 17 SW060629-03 41031858 IMAGED APNT_007

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject		Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 000772 NONE PUB NOTICE NONE 00016	08-04-2003 07-01-2003 NONE	NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND PUBLIC INTEREST	JULY 2003 ALAMEDA POINT FOCUS ENVIRONMENTAL NEWSLETTER	ADMIN RECORD		001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032	SOUTHWEST DIVISION - BLDG. 1 181-03-0188 16 OF 17 SW070112-01 41031858 IMAGED APNT_008

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 001797 TC.B010.10186 MM N68711-03-D-5104 00040	04-22-2004 07-15-2003 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	15 JULY 2003 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING MINUTES AFTER ACTION REPORT (INCLUDES AGENDA, SIGN-IN SHEETS, AND VARIOUS HANDOUTS) [PORTION OF THE SIGN-IN SHEET IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTG MINS	004 007 025	CHOICE IMAGING SOLUTIONS SW060814-01
N00236 / 001988 NONE CORRESP NONE 00006	03-10-2005 07-15-2003 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION G. CLARK	REVIEW AND COMMENTS ON THE DRAFT WORK PLAN (WP) FOR THE ASSESSMENT OF POLYCYCLIC AROMATIC HYDROCARBON (PAH) CONTAMINATION AT SELECTED CERCLA SITES AND ENVIRONMENTAL BASELINE STUDY (EBS) PARCELS (INCLUDES COMMENTS BY HERD DATED 08 JULY 2003)	ADMIN RECORD	CERCLA EBS PAH WP	003 004 005 006 007 008 009 010 011 012 013 014 015 016 019 021 022 023 030 031 032 PARCEL 2 PARCEL 2 PARCEL 5	8

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N00236 / 001803 TC.B010.10187 MM N68711-03-D-5104 00020	04-22-2004 08-05-2003 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	05 AUGUST 2003 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES MEETING AGENDA, SIGN-IN SHEETS AND VARIOUS HANDOUTS) [SIGN-IN SHEETS ARE MISSING	ADMIN RECORD INFO REPOSITORY	MTG MINS	001 002 003 005 006 007 008 009 011 014 016 021 025 026 027 BLDG. 195	CHOICE IMAGING SOLUTIONS SW060814-01
N00236 / 001305 SWDIV SER 06CA.GC/1186 RPT N68711-00-D-0004 00322	08-20-2003 08-15-2003 DO 0038	CDM FEDERAL PROGRAMS CORP. NAVFAC - SOUTHWEST DIVISION	DRAFT SOIL FEASIBILITY STUDY REPORT{PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	PAH SVOC TPH VOC	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW05072801 IMAGED APNT_001
N00236 / 001713 SWDIV SER 06CA.RW/1360 RPT NONE 00400	10-15-2003 10-08-2003 NONE	EERG NAVFAC - SOUTHWEST DIVISION	DRAFT GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR ALAMEDA POINT SITE 25 AND ALAMEDA ANNEX IR-02 [INCLUDES SWDIV TRANSMITTAL LETTER BY M. MCCLELLAND] {CD COPY ENCLOSED}	ADMIN RECORD INFO REPOSITORY	BTEX MTBE PAH SVOC TCE TDS TPH VOC	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 1

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N00236 / 002035 FWSD-RAC-03-364 RPT N68711-98-D-5713 00374	05-13-2005 7 10-31-2003 00040	FOSTER WHEELER A. ELOSKOF NAVFAC - SOUTHWEST DIVISION	FINAL PROJECT CLOSEOUT REPORT, CERCLA TIME CRITICAL REMOVAL ACTION (TCRA) [CD COPY OF APPENDICES A THROUGH J ENCLOSED]	ADMIN RECORD	BHC CERCLA HDPE TPH VOC	025	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003

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N00236 / 001757 SWDIV SER	01-15-2004 11-05-2003	NAVFAC - SOUTHWEST DIVISION	SITE MANAGEMENT PLAN UPDATE - [INCLUDES SWDIV TRANSMITTAL LETTER BY M. MCCLELLAND]	ADMIN RECORD	SMP	001 002	CHOICE IMAGING SOLUTIONS
06CA.AD/1416	NONE	M. MCCLELLAND	BT M. MCCLELLAND	REPOSITORY		003	
RPT		U.S. EPA - SAN				004	C14/0C004.4.04
NONE		FRANCISCO				005	SW060814-01
00030		A. COOK				006	
						007	
						008	
						009	
						011	
						012	
						013	
						014	
						015	
						016	
						018	
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						023	
						024	
						025	
						026	
						027	
						OU 1	
						OU 2A	
						OU 2B	
						OU 2C	
						OU 3	
						OU 4A	
						OU 4B	
						OU 4C	
						OU 5	
						OU 6	
Thursday, May 24, 2	2007	This Admini bibliographi	strative Record (AR) Index includes references to c citations are considered to be part of this AR but	documents which cite biblic may not be cited separatel	ography sources. These ly in the index.	F	Page 48 of 78

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N00236 / 001737 6559 RPT N62474-98-D-2076 00100	11-19-2003 11-11-2003 00103	SHAW ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION (IR) SITE 25 GROUP, SUMMER 2002 TO SPRING 2003 (DOCUMENT WAS ISSUED WITH SECTION 6 ONLY AND REPLACEMENT PAGES) [***SEE COMMENTS]	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW SVOC VOC	025 GROUP	SOUTHWEST DIVISION - BLDG. 110
N00236 / 002451 NONE COMMENTS NONE 00003	08-23-2006 11-17-2003 NONE	CITY OF ALAMEDA D. POTTER NAVFAC - SOUTHWEST DIVISION M. MCCLELLAND	REVIEW AND COMMENTS ON DRAFT SOIL FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD	FS REMOVAL SOIL	025 OU 5	CHOICE IMAGING SOLUTIONS SW061120-04
N00236 / 002450 NONE COMMENTS NONE 00012	08-23-2006 11-18-2003 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD	ARAR FS PAH SOIL	025 OU 5	CHOICE IMAGING SOLUTIONS SW061120-04
N00236 / 001880 SWDIV SER. 06CA.CD/1492 MISC NONE 00002	10-18-2004 11-24-2003 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA EPA - SAN FRANCISCO M. RIPPERDA	OFFICIAL TRANSMISSION LETTER OF THE WINTER 2002 QUARTERLY GROUNDWATER MONITORING REPORTS	ADMIN RECORD INFO REPOSITORY	COMMENTS GW	001 002 003 005 006 007 008 009 014 016 025 GROUP 027	SOUTHWEST DIVISION - BLDG. 110 08/09/06

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

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N00236 / 002449 NONE COMMENTS NONE 00005	08-23-2006 12-23-2003 NONE	CITY OF ALAMEDA D. POTTER NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT GROUNDWATER REMEDIAL INVESTIGATION, FEASIBILITY STUDY (RI/FS)	ADMIN RECORD	FS GW RI	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 110 10/05/06
N00236 / 002480 NONE COMMENTS NONE 00019	08-28-2006 01-08-2004 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT GROUNDWATER REMEDIAL INVESTIGATION (RI) FEASIBILITY STUDY (FS)	ADMIN RECORD	FS GW MONITORING PAH RI SOIL SVOC TOC	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 110 10/05/06
N00236 / 002481 NONE COMMENTS NONE 00045	08-28-2006 02-24-2004 NONE	DTSC - BERKELEY H. WONG NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT GROUNDWATER REMEDIAL INVESTIGATION (RI) FEASIBILITY STUDY (FS) (INCLUDES HERD COMMENTS DATED 23 JANUARY 2004, GSU COMMENTS DATED 20 JANUARY 2004, AND ESU COMMENTS DATED 22 JANUARY 2004)	ADMIN RECORD	FS GW RI SOIL	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 110 10/05/06
N00236 / 001781 6705 & SWDIV SEF 06CA.CG/0222 RPT N62474-98-D-2076 00150	03-02-2004 02-27-2004 00103	SHAW ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION SITE 25 GROUP, SUMMER 2002 TO SPRING 2003 (DOCUMENT WAS ISSUED WITH ORIGINAL SECTIONS 7 & 8 ONLY AND REPLACEMENT PAGES) [***SEE COMMENTS]	ADMIN RECORD INFO REPOSITORY	GW SVOC VOC	025 GROUP	SOUTHWEST DIVISION - BLDG. 110

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N00236 / 001841 NONE PUB NOTICE NONE 00004	06-15-2004 03-01-2004 NONE	PUBLIC INTEREST	NEWSLETTER REGARDING CLEANUP OPTIONS BEING EVALUATED	ADMIN RECORD IR-READY	GW PAH SOIL	005 009 014 015 016 025 026	SOUTHWEST DIVISION - BLDG. 1 SW060921-01 IMAGED APNT_005
N00236 / 001812 CTO-0059/0127 OR SWDIV SER 06CA.DN/0379 RPT N68711-95-D-7526 00127	04-22-2004 03-30-2004 00059	BECHTEL ENVIRONMENTAL, INC. E. JOHANSEN NAVFAC - SOUTHWEST DIVISION	FIELD ACTIVITY REPORT ASSESSMENT OF POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) CONTAMINATION AT SELECTED CERCLA SITES AND EBS PARCELS (CD COPY OF APPENDICES B THROUGH D AND ATTACHMENT E-1 IS ENCLSOED) [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD INFO REPOSITORY SENSITIVE	PAH PCB	003 004 005 006 007 008 009 010 011 012 013 016 019 021 022 023 030 031 032 PARCEL 20 PARCEL 20 PARCEL 51	3

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N00236 / 001830 7788.0, 7789 & SWDIV SER 06CA.CD/0507 MISC N62474-98-D-2076 00004	05-11-2004 05-07-2004 00103	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA U.S. EPA - SAN FRANCISCO A. COOK	WINTER AND FALL 2003 QUARTERLY GROUNDWATER MONITORING DATA REPORTS (COMPACT DISC (CD) FORMAT ONLY)	ADMIN RECORD INFO REPOSITORY	GW	001 002 003 005 006 007 008 009 014 016 025 GROU	CHOICE IMAGING SOLUTIONS SW060814-01
N00236 / 001872 TC.B010.10254 MM N68711-03-D-5104 00016	09-27-2004 07-01-2004 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	1 JULY 2004 FINAL RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	MTG MINS PAH VOC	001 002 003 004 009 011 013 019 021 022 023 025	CHOICE IMAGING SOLUTIONS SW061023-03
N00236 / 001884 SWDIV SER 06CA.DN\0739 CORRESP NONE 00003	10-20-2004 07-19-2004 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA U.S. EPA - SAN FRANCISCO A. COOK	TRANSMITTAL OF DRAFT WORK PLAN FOR REMEDIAL INVESTIGATION (PORTION OF THE MAILING LIST IS SENSITIVE) (LETTER RECEIVED IN THE ADMINISTRATIVE RECORDS W/OUT ENCLOSURE)	ADMIN RECORD INFO REPOSITORY SENSITIVE		030	CHOICE IMAGING SOLUTIONS SW070413-01

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N00236 / 001873 TC.B010.10260 MM N62474-03-D-5104 00037	09-27-2004 07-20-2004 00013	SULTECH NAVFAC - SOUTHWEST DIVISION	FINAL BRAC CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, 15 JUNE 2004 MEETING MINUTES AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	GW MTG MINS PAH REPORT SOIL	030 PARCEL 5	SOUTHWEST DIVISION - BLDG. 1 SW060907-02 IMAGED APNT_003
N00236 / 002387 NONE COMMENTS NONE 00002	08-15-2006 07-28-2004 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	ACKNOWLEDGEMENT OF RECEIPT OF FINAL PROJECT CLOSEOUT REPORT, CERCLA TIME-CRITICAL REMOVAL ACTION (TCRA) [PORTION OF THE MAILING LIST IS SENSITIVE]	ADMIN RECORD SENSITIVE	TCRA	025	CHOICE IMAGING SOLUTIONS SW061106-02
N00236 / 002534 NONE COMMENTS NONE 00015	09-19-2006 08-03-2004 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT REMEDIAL INVESTIGATION (RI) WORKPLAN (INCLUDES SACRAMENTO SCHOOLS UNIT COMMENTS BY C. KAO DATED 08 JULY 2004, GSU COMMENTS BY M. VEST DATED 28 JULY 2004 AND HERD COMMENTS BY J. CHRISTOPHER DATED 14 JULY 2004)	ADMIN RECORD SENSITIVE	COPC GROUNDWATER OCP PCB RI SOIL SVOC TPH VOC WORK PLAN	030	CHOICE IMAGING SOLUTIONS SW061120-04
N00236 / 001894 TC.B010.10255 MM N68711-03-D-5104 00068	11-22-2004 08-05-2004 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	05 AUGUST 2004 DRAFT RESTORATION ADVISORY BOARD (RAB) MEETING SUMMARY (INCLUDES AGENDA AND VARIOUS HANDOUTS) [CD COPY ENCLOSED] {PORTION OF THE MAILING LIST FOR ATTACHMENT B-1 IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY	GW PAH SOIL TPH	025 030 BLDG. 1 OU 1 OU 2A OU 2B	SOUTHWEST DIVISION - BLDG. 1 SW060907-02 IMAGED APNT_003

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N00236 / 001863 SWDIV SER. 06CA.DN/0831 RPT N68711-00-D-0004 01000	08-18-2004 08-13-2004 DO 0038	CDM FEDERAL PROGRAM CORP. P. BLOISA NAVFAC - SOUTHWEST DIVISION	REVISED DRAFT SOIL FEASIBILITY STUDY REPORT - VOLUMES 1-2 OF 2, FOLDERS 1 OF 1 [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA] {PORTION OF MAILING LIST IS CONFIDENTIAL} (SEE AR# 1305 DRAFT SOIL FEASIBILITY REPORT)	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTBE PAH REPORT SOIL SVOC TPH VOC	025 OU 5	CHOICE IMAGING SOLUTIONS SW061005-02
N00236 / 001892 TC.B010.10261 MM N68711-03-D-5104 00026	11-22-2004 08-17-2004 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	17 AUGUST 2004 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA, 07/20/04 MEETING MINUTES AND VARIOUS HANDOUTS) [CD COPY ENCLOSED]	ADMIN RECORD INFO REPOSITORY	GW MTG MINS TPH VOC	026 030 BLDG. 20 BLDG. 23 OU 1 OU 2A OU 2B	SOUTHWEST DIVISION - BLDG. 1 SW060907-02 IMAGED APNT_003
N00236 / 001885 SWDIV SER 06CA.DN\0851 LTR NONE 00002	10-20-2004 08-25-2004 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA U.S. EPA - SAN FRANCISCO A. COOK	TRANSMITTAL OF POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SUMMARY REPORT FOR PUBLIC BENEFIT CONVEYANCE (PBC) 3 AND ECONOMIC DEVELOPMENT CONVEYANCE (EDC) 21 {PORTION OF THE MAILING LIST IS SENSITIVE} [LETTER RECEIVED IN THE ADM. RECORDS W/OUT ENCLOSURE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	РАН	030 031 EDC 21 PBC 3	CHOICE IMAGING SOLUTIONS SW070413-01
N00236 / 001874 CTO-072/0022 & SWDIV SER. 06CA.DN/0972 RPT N68711-95-D-7526 00251	09-27-2004 09-01-2004 00072	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	FINAL WORK PLAN FOR REMEDIAL INVESTIGATION (RI) {INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA} [PORTION OF MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW PAH PCB PLAN SOIL SVOC VOC	030	SOUTHWEST DIVISION - BLDG. 1 SW060921-01 IMAGED APNT_005

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N00236 / 001876 SWDIV SER. 06CA.GL/0942 RPT NONE 00043	09-27-2004 09-14-2004 NONE	NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA USEPA - SAN FRANCISCO	FINAL SITE MANAGEMENT PLAN FOR FISCAL YEAR 2005 [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA] {PORTION OF MAILING LIST IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS GW PAH PLAN SOIL	OU 1 OU 2A OU 2C OU 3 OU 4A OU 4B OU 4C OU 5 OU 6	SOUTHWEST DIVISION - BLDG. 1 SW060907-02 IMAGED APNT_003
N00236 / 002479 NONE COMMENTS NONE 00010	08-28-2006 1 0-13-2004 NONE	DTSC - BERKELEY H. WONG BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT FINAL GROUNDWATER REMEDIAL INVESTIGATION (RI) FEASIBILITY STUDY (FS) (PORTION OF THE MAILING LIST IS SENSITIVE)	ADMIN RECORD SENSITIVE	FS GW RI SOIL	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 110 10/05/06
N00236 / 002478 FILE NO. 2199- 9285(JCH) AND 2199.9284(JCH) COMMENTS NONE 00003	08-28-2006 1 0-14-2004 NONE	CRWQCB - OAKLAND J. HUANG NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT FINAL GROUNDWATER REMEDIAL INVESTIGATION (RI) FEASIBILITY STUDY (FS) [PORTION OF THE MAILING LIST IS SENSITIVE]	ADMIN RECORD SENSITIVE	FS GW RI	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 110 10/05/06
N00236 / 001910 TC.B010.10263 MM N68711-03-D-5104 00022	12-29-2004 10-19-2004 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	19 OCTOBER 2004 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING MINUTES FOR THE AFTER ACTION REPORT (INCLUDES AGENDA AND VARIOUS HANDOUTS)	ADMIN RECORD INFO REPOSITORY	PAH PAHS PCB ROD	013 015 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060907-02 IMAGED APNT_003

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

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N00236 / 001887 SWDIV SER BPMOW/0026 LTR NONE 00005	10-25-2004 10-20-2004 NONE	NAVFAC - SOUTHWEST DIVISION R. PLASEIED U.S. EPA - SAN FRANCISCO A. COOK	REPLACEMENT PAGES FOR THE DRAFT FINAL GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR ALAMEDA POINT SITE 25 AND ALAMEDA ANNEX IR-02 (DRAFT FINAL DOCUMENT WAS NOT SUBMITTED TO ADMINISTRATIVE RECORDS)	ADMIN RECORD INFO REPOSITORY MISSING @ SWDIV	FS GW RI	002 025 GROUP OU 5	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002672 NONE COMMENTS NONE 00011	01-25-2007 11-15-2004 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON REVISED DRAFT SOIL FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD INFO REPOSITORY	CERCLA FFA FS GW OU SOIL TCRA	025	SOUTHWEST DIVISION - BLDG. 1
N00236 / 001957 NONE RESPONSE NONE 00009	02-15-2005 11-16-2004 NONE	CDM FEDERAL PROGRAMS CORP. L. DAVIDSON U.S. EPA - SAN FRANCISCO A. COOK	RESPONSE TO COMMENTS ON THE REVISED DRAFT SOIL FEASIBILITY STUDY REPORT FOR OPERABEL UNIT 5 (OU 5)	ADMIN RECORD INFO REPOSITORY	COMMENTS	025 OU 5	CHOICE IMAGING SOLUTIONS SW061005-02
N00236 / 002006 TC.B010.10264 MM N68711-03-D-5104 00057	04-12-2005 11-16-2004 00010	SULTECH BRAC PMO WEST	16 NOVEMBER 2004 FINAL BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP TEAM (BCT) MONTHLY TRACKING MEETING AFTER ACTION REPORT (INCLUDES AGENDA AND VARIOUS HANDOUT MATERIALS)	ADMIN RECORD INFO REPOSITORY	ARSENIC BCT COPPER LEAD MTG MINS PCB VOC	025 028 030 OU 2A OU 2B OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-02 IMAGED APNT_005

Record Type F Contr./Guid. No. C	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient		Subject	Classification	Keywords		Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
NONE 1	08-15-2006 11-16-2004 NONE	RAB L. LOIZOS NAVFAC - SOUTHWEST T. MACCHIARELLA		OVISORY BOARD (RAB) EVISED DRAFT SOIL DY REPORT	ADMIN RECORD	GW MTBE PAH RAB SOIL	025 OU 5	CHOICE IMAGING SOLUTIONS SW061120-04
SWDIV SER 1	12-02-2004 11-22-2004 NONE	NAVFAC - SOUTHWEST DIVISION R. PLASEIED EPA - SAN FRANCISCO	TRANSMITTAL OF REGULATOR COM 2003 ALAMEDA PC GROUNDWATER F	IMENTS FOR THE SPRING DINT QUARTERLY	ADMIN RECORD INFO REPOSITORY	GW MTBE VOA VOC	001 002 005 007 008 025	SOUTHWEST DIVISION - BLDG. 110 06/21/06
TC.B010.10259 1	04-12-2005 12-02-2004 00010	SULTECH NAVFAC - SOUTHWEST DIVISION	ADVISORY BOARD	RÝ (INCLUDES AGENDA, T AND VARIOUS	ADMIN RECORD INFO REPOSITORY	MTG MINS	002 030 OU 2A OU 2B	SOUTHWEST DIVISION - BLDG. 1 SW060921-02 IMAGED APNT_005
8833 AND 6983 1	04-29-2004 12-17-2004 00103	SHAW ENVIRONMENTAL, INC. J. MCGUIRE BRAC PMO WEST	FOR SUMMER 200 (INCLUDES REPLA AND SIGNATURE I SUMMER 2003 TO OF MAILING LIST I	MONITORING REPORT 13 TO SPRING 2004 ACEMENT COVER, TITLE PAGES THAT REFLECT SPRING 2004) [PORTION S SENSITIVE; CD COPY A THROUGH D ENCLOSED]	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW PAH VOC WELLS	OU 5	CHOICE IMAGING SOLUTIONS SW060814-01

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	25-2007 DTSC - BERKELEY 21-2004 M. LIAO NE NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON REVISED DRAFT SOIL FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD INFO REPOSITORY	FS GW PAH SOIL	025	SOUTHWEST DIVISION - BLDG. 1
8846 & BRAC SER 12-2	04-2003 SHAW 22-2004 ENVIRONMENTAL, INC. J. MCGUIRE BRAC PMO WEST	GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION SITE 25 GROUP, SUMMER 2002 TO SPRING 2003 (CD COPY OF APPENDICES A AND B ENCLOSED) [INCLUDES REPLACEMENT PAGES ISSUED ON DIFFERENT DATES WITH DIFFERENT DOCUMENT CONTROL NUMBERS] {***SEE COMMENTS}	ADMIN RECORD INFO REPOSITORY	DCE SVOC TCE TPH VOC	025 GROUP	SOUTHWEST DIVISION - BLDG. 110 181-03-0188 17 OF 17 41031858
8846 & SWDIV SER 12-2	04-2005 SHAW 22-2004 ENVIRONMENTAL, INC. J. MCGUIRE NAVFAC - SOUTHWEST DIVISION	GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION SITE 25 GROUP, SUMMER 2002 TO SPRING 2003 (DOCUMENT WAS ISSUED WITH REVISED SECTIONS 7 & 8 ONLY) [***SEE COMMENTS]	ADMIN RECORD INFO REPOSITORY	GW MONITORING VOC	025 GROUP	SOUTHWEST DIVISION - BLDG. 110
N00236 / 001975 03-0 8875 & SWDIV SER 12-2 BPMOW.CD\0238 0010 RPT NONE 00050	INIC	RESPONSE TO COMMENTS ON THE GROUNDWATER MONITORING REPORTS, SUMMER 2002 TO SPRING 2003 [INCLUDES SWDIV TRANMITTAL LETTER BY T. MACCHIARELLA] {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS GW MONITORING	002 006 008 025 GROUP	SOUTHWEST DIVISION - BLDG. 110 08/09/06

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N00236 / 002447 NONE COMMENTS NONE 00012	08-22-2006 02-09-2005 NONE	DTSC - BERKELEY H. WONG NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION, FEASIBILITY STUDY (RI/FS) FOR GROUNDWATER (INCLUDES HERD COMMENTS BY J. CHRISTOPHER DATED 5 JANUARY 2005) [PORTION OF THE MAILING LIST IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	FS GW RI SOIL	025 GROUP OU 5	CHOICE IMAGING SOLUTIONS SW061120-04
N00236 / 002587 NONE COMMENTS NONE 00010	10-31-2006 02-09-2005 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT FINAL SOIL FEASIBILITY STUDY (FS) REPORT (INCLUDES HERD COMMENTS BY R. SARMIENTO, DATED 4 JANUARY 2005)	ADMIN RECORD INFO REPOSITORY	FS PAH ROD SOIL TCRA	OU 5	SOUTHWEST DIVISION - BLDG. 1
N00236 / 001996 9006 & BRAC SER BPMOW.DN\0498 RPT N62474-98-D-2076 00030	03-18-2005 03-07-2005 00107	SHAW ENVIRONMENTAL, INC. BRAC PMO WEST	DRAFT ACTION MEMORANDUM FOR THE TIME-CRITICAL REMOVAL ACTION AT THE MILLER SCHOOL/WOODSTOCK CHILD DEVELOPMENT CENTER [INCLUDES BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD INFO REPOSITORY	ACTMEMO PAH TCRA	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-03 IMAGED APNT_003
N00236 / 001997 8947 AND BRAC SER BPMOW.DN\0498 RPT N62474-98-D-2076 00107	03-18-2005 03-07-2005 00107	SHAW ENVIRONMENTAL, INC. BRAC PMO WEST	FINAL WORK PLAN FOR THE TIME-CRITICA REMOVAL ACTION (TCRA) AT THE MILLER SCHOOL/WOODSTOCK CHILD DEVELOPMENT CENTER (INCLUDES BRAC PMO WEST TRANMITTAL LETTER BY T. MACCHIARELLA)		PAH TCRA WORK PLAN	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-03 IMAGED APNT_003

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N00236 / 001937 SWDIV SER BPMOW.DN/0499 & BPMOW.DN/0322 RPT N68711-00-D-0004 01500	01-20-2005 03-11-2005 DO 038	CDM FEDERAL PROGRAMS CORP. M. ALLEN NAVFAC - SOUTHWEST DIVISION	FINAL SOIL FEASIBILITY STUDY REPORT, VOLUME 1-2 OF 2 [INCLUDES SWDIV TRANSMITTAL LETTER BY T. MACCHIARELLA] {PORTION OF MAILING LIST IS CONFIDENTIAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	MTBE PAH SVOC TPH VOC	025 OU 5	CHOICE IMAGING SOLUTIONS SW061005-02
N00236 / 002002 CTO-0072/0055 AND BRAC SER BPMOW.DN/0532 RPT N68711-95-D-7526 00437	03-29-2005 03-14-2005 00072	BECHTEL ENVIRONMENTAL, INC. E. JOHANSEN BRAC PMO WEST	DRAFT SOIL REMEDIAL INVESTIGATION REPORT - VOLUMES I - II OF II, FOLDERS 1- OF 2 (INCLUDES BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA) [CD COPY OF APPENDICES ENCLOSED] {PORTION OF THE MAILING LIST IS SENSITIVE}	ADMIN RECORD ² INFO REPOSITORY SENSITIVE	BHC BTEX MTBE PAH PCB SVOC TPH VOC	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-03 IMAGED APNT_003
N00236 / 002031 BRAC SER BPMOW.DN/0598 RPT N68711-00-D-0004 00258	05-04-2005 04-11-2005 DO 0086	CDM FEDERAL PROGRAMS BRAC PMO WEST	DRAFT WORK PLAN (WP) FOR THE REMEDIAL INVESTIGATION (RI) [INCLUDES SAMPLING AND ANALYSIS PLAN (SAP) & SITE HEALTH AND SAFETY PLAN (SHSP)] {INCLUDES BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA} (CD COPY OF ATTACHMENT 1 ENCLOSED)	ADMIN RECORD INFO REPOSITORY SENSITIVE	PAH PCB RI SAP SHSP SVOC VOC WP	031	SOUTHWEST DIVISION - BLDG. 1 SW060921-02 IMAGED APNT_005
N00236 / 002442 NONE COMMENTS NONE 00002	08-22-2006 04-12-2005 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT ACTION MEMORANDUM, TIME CRITICAL REMOVAL ACTION (TCRA), MILLER SCHOOL/WOODSTOCK CHILD DEVELOPMENT CENTER	ADMIN RECORD INFO REPOSITORY	ARAR PAH TCRA	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003

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N00236 / 002383 NONE CORRESP NONE 00001	08-15-2006 05-16-2005 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REQUEST FOR THIRTY (30) DAY EXTENSION FOR REVIEW OF DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT	ADMIN RECORD	RI	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003
N00236 / 002043 9335 & BRAC SER BPMOW.DN/0767 RPT N62474-98-D-2076 00032	06-03-2005 05-26-2005 00107	SHAW ENVIRONMENTAL, INC. BRAC PMO WEST	DRAFT FINAL ACTION MEMORANDUM (AM) FOR THE TIME-CRITICAL REMOVAL ACTION (TCRA) AT THE MILLER SCHOOL/WOODSTOCK CHILD DEVELOPMENT CENTER (INCLUDES BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA)	REPOSITORY	AM PAH TCRA	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003
N00236 / 002198 BRAC SER BPMOW.DN\0765 CORRESP NONE 00005	01-31-2006 05-27-2005 NONE	BRAC PMO WEST T. MACCHIARELLA USEPA - SAN FRANCISCO A. COOK	TRANSMITTAL OF DRAFT PROPOSED PLAN FOR SOIL AND GROUNDWATER ESTUARY PARK AND THE COAST GUARD HOUSING AREA (W/OUT ENCLOSURE) [SEE AR #2129 DRAFT PROPOSED PLAN]		BCT FS LUC MNA SVE	002 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002129 NONE RPT NONE 00023	10-07-2005 05-31-2005 NONE	CDM FEDERAL PROGRAMS CORP. NAVFAC - SOUTHWEST DIVISION	DRAFT PROPOSED PLAN FOR SOIL AND GROUNDWATER, ESTUARY PARK AND THE COAST GUARD HOUSING AREA (COAST GUARD HOUSING/ANNEX [FISC]) [SEE AR #2198 - BRAC PMOW TRANSMITTAL LETTE BY T. MACCHIARELLA]	REPOSITORY	OU PAH VOC	002 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-03 IMAGED APNT_006

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N00236 / 002434 NONE COMMENTS NONE 00008	08-22-2006 06-16-2005 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD INFO REPOSITORY	HHRA SOIL WELLS	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003
N00236 / 002422 NONE COMMENTS NONE 00024	08-22-2006 06-17-2005 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT (INCLUDES GSU COMMENTS DATED 16 JUNE 2005 AND HERD COMMENTS DATED 28 APRIL 2005)	ADMIN RECORD INFO REPOSITORY	PAH RI SOIL VOC	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003
N00236 / 002471 NONE COMMENTS NONE 00013	08-28-2006 06-20-2005 NONE	DTSC - BERKELEY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT WORKPLAN FOR REMEDIAL INVESTIGATION (RI) (INCLUDES GSU COMMENTS DATED 14 JUNE 2005 AND HERD COMMENTS DATED 20 JUNE 2005)	ADMIN RECORD INFO REPOSITORY	GW PAH RI SOIL VOC WP	031	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002386 BRAC SER BPMOW.DN\0891 CORRESP NONE 00002	08-15-2006 06-28-2005 NONE	BRAC PMO WEST T. MACCHIARELLA USEPA - SAN FRANCISCO A. COOK	REQUEST FOR FIFTEEN (15) DAY EXTENSION FOR REVIEW OF DRAFT PROPOSED PLAN FOR SOIL AND GROUNDWATER, ESTUARY PARK AND THE COAST GUARD HOUSING AREA (COAST GUARD HOUSING/ANNEX [FISC])	ADMIN RECORD INFO REPOSITORY	GW SOIL	002 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006

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N00236 / 002470 NONE COMMENTS NONE 00007	08-28-2006 06-30-2005 NONE	USEPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT WORK PLAN FOR REMEDIAL INVESTIGATION (RI)	ADMIN RECORD INFO REPOSITORY	GW RI SOIL VOC WP	031	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002400 FILE NOS. 2199.9284(JCH) AND 2199.9285(JCI COMMENTS NONE 00003	08-21-2006 07-15-2005 NONE H	CRWQCB - OAKLAND J. HUANG BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT PROPOSED PLAN FOR SOIL AND GROUNDWATER, ESTUARY PARK AND COAST GUARD HOUSING AREA (PORTION OF THE MAILING LIST IS SENSITIVE)	ADMIN RECORD SENSITIVE	ARAR GW	002 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002433 NONE COMMENTS NONE 00017	08-22-2006 07-15-2005 NONE	USEPA - SAN FRANCISCO A. COOK NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT PROPOSED PLAN (PP) FOR SOIL AND GROUNDWATER, ESTUARY PARK AND THE COAST GUARD HOUSING AREA	ADMIN RECORD	GW PAH PCB PP RAP ROD SOIL VOC	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002399 NONE COMMENTS NONE 00016	08-21-2006 07-16-2005 NONE	DTSC - BERKELEY H. WONG BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT PROPOSED PLAN FOR SOIL AND GROUNDWATER, ESTUARY PARK AND THE COAST GUARD HOUSING AREA (INCLUDES COMMENTS BY R. PERRY DATED 15 JULY 2005) [PORTION OF THE MAILING LIST IS SENSITIVE]	ADMIN RECORD SENSITIVE	GW MONITORING WE PAH	002 025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006

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N00236 / 002079 9454 & BRAC SER BPMOW.DN/1002 RPT N62474-98-D-2076 00060	08-16-2005 07-27-2005 00107	SHAW ENVIRONMENTAL, INC. BRAC PMO WEST	FINAL ACTION MEMORANDUM (AM) FOR THE TIME-CRITICAL REMOVAL ACTION (TCRA) AT THE MILLER SCHOOL/WOODSTOCK CHILD DEVELOPMENT CENTER, REVISION 0 (INCLUDES BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD INFO REPOSITORY	ACTMEMO PAH TCRA	030	CHOICE IMAGING SOLUTIONS SW061005-03
N00236 / 002154 NONE COMMENTS NONE 00001	11-15-2005 09-22-2005 NONE	USEPA - SAN FRANCISCO K. JOHNSON BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE FINAL ACTION MEMORANDUM, TIME CRITICAL REMOVAL ACTION AT THE MILLER SCHOOL/WOODSTOCK CHILD DEVELOPMENT CENTER	ADMIN RECORD INFO REPOSITORY	BRAC COMMENTS IR PAH TCRA	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003
N00236 / 002127 NONE RPT N68711-00-D-0004 00322	10-07-2005 09-28-2005 DO 0086	CDM FEDERAL PROGRAMS CORP. H. CARTER BRAC PMO WEST	DRAFT FINAL WORK PLAN FOR REMEDIAL INVESTIGATION	ADMIN RECORD INFO REPOSITORY	PAH PCB SVOC VOC	031	SOUTHWEST DIVISION - BLDG. 1 SW060921-03 IMAGED APNT_006
N00236 / 002141 NONE COMMENTS NONE 00014	10-27-2005 10-17-2005 NONE	DTSC-BERKELY M. LIAO NAVFAC - SOUTHWEST DIVISION T. MACCHIARELLA	DTSC COMMENTS ON DRAFT FINAL SOIL REMEDIAL INVESTIGATION REPORT. (INCLUDES DTSC COMMENTS ON DRAFT FINAL REMEDIAL INVESTIGATION WORKPLAN DATED 10/17/05 W/HERD MEMORANDUM DATED 10/06/05 (PORTION OF THE MAILING LIST IS SENSITIVE)	ADMIN RECORD INFO REPOSITORY SENSITIVE	COMMENTS EPC GW	030 031	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003

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N00236 / 002125 CTO-0072/0074, CTO-0072/0074-1 AND CTO- 0072/0074-2 RPT N68711-95-D-7526 02500	10-07-2005 10-24-2005 00072	BECHTEL ENVIRONMENTAL, INC. E. JOHANSEN BRAC PMO WEST	FINAL SOIL REMEDIAL INVESTIGATION REPORT, VOLUMES I AND II OF II (CD COPY ENCLOSED) [PORTION OF THE MAILING LIST IS SENSITIVE] {INCLUDES REPLACEMENT PAGES CONVERTING THE DRAFT FINAL DATED SEPTEMBER 2005 TO FINAL}	ADMIN RECORD INFO REPOSITORY SENSITIVE	BTEX MTBE PAH PCB SVOC TPH VOC	030	CHOICE IMAGING SOLUTIONS SW061120-03
N00236 / 002153 NONE COMMENTS NONE 00001	11-15-2005 10-27-2005 NONE	USEPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT FINAL SOIL REMEDIAL INVESTIGATION REPORT	ADMIN RECORD INFO REPOSITORY	BRAC COMMENTS EPA GW OU RI SOIL	030	SOUTHWEST DIVISION - BLDG. 1 SW060907-04 IMAGED APNT_003
N00236 / 002145 BRAC SER BPMOW.MEP/1330 RPT N68711-00-D-0004 00328	11-02-2005 10-28-2005 DO 0086	CDM FEDERAL PROGRAMS CORP H. CARTER BRAC PMO WEST	FINAL WORK PLAN FOR REMEDIAL INVESTIGATION (INCLUDES BRAC TRANSMITTAL LETTER BY T. MACCHIARELLA) [CD COPY OF ATTACHMENT 2 ENCLOSED] {PORTION OF THE MAILING LIST IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	EBS HHRA PAH PCB SVOC VOC	031	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002199 NONE RPT NONE 00047	02-08-2006 10-31-2005 NONE	BRAC PMO WEST PUBLIC NOTICE	DRAFT PROPOSED PLAN (INCLUDES DRAFT RESPONSES TO AGENCY COMMENTS) [SEE AR # 2200 - BRAC PMOW TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD	ARAR BCT BGS FS HQ MTBE PAH RME SVE	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006

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N00236 / 002200 BRAC SER BPMOW.MEP/1345 CORRESP NONE 00003	02-08-2006 1 0-31-2005 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT PROPOSED PLAN (SEE AR #2199 - DRAFT PROPOSED PLAN)	ADMIN RECORD	BRAC PP RI/FS	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002203 NONE CORRESP NONE 00001	02-08-2006 12-12-2005 NONE	US EPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REQUEST FOR A FOURTEEN (14) DAY EXTENSION FOR THE REVIEW OF THE DRAFT PROPOSED PLAN	ADMIN RECORD	BRAC COMMENTS	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002179 BRAC SER BPMOW.MEP/1464 RPT N68711-00-D-004 00068	12-22-2005 12-14-2005 DO 0038	CDM FEDERAL PROGRAMS BRAC PMO WEST	DRAFT PROPOSED PLAN FOR INSTALLATION RESTORATION (IR) SITE SOIL {INCLUDES BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA AND DRAFT RESPONSES TO AGENCY COMMENTS}	ADMIN RECORD	ARARS EPCRA ERA HHRA HQ IC PAH PCB	025	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002204 NONE COMMENTS NONE 00005	02-08-2006 12-14-2005 NONE	US EPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT PROPOSED PLAN	ADMIN RECORD	BRAC COMMENTS	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006

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FILE NO: 2199.9285	02-08-2006 12-15-2005 NONE	CRWQCB - SAN FRANCISCO J. HUANG BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT PROPOSED PLAN	ADMIN RECORD	COMMENTS GW	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
NONE	02-08-2006 12-16-2005 NONE	DTSC - BERKELEY D. MURPHY BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT PROPOSED PLAN	ADMIN RECORD	BGS COMMENTS GW	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
FILE NO. 2199.9285	02-08-2006 12-21-2005 NONE	CRWQCB - OAKLAND J. HUANG BRAC PMO WEST T. MACCHIARELLA	REQUEST FOR COMMENT DEADLINE EXTENSIONS ON DRAFT PROPOSED PLAN AND DRAFT FEASIBILITY STUDY	ADMIN RECORD	COMMENTS FS PP	002 027 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
NONE	03-10-2006 01-12-2006 NONE	DTSC - BERKELEY M. LIAO BRAC PMO WEST T. MACCHIARELLA	REQUEST FOR COMMENT DEADLINE EXTENSION ON DRAFT PROPOSED PLANS	ADMIN RECORD	BRAC COMMENT FFA	025	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED

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N00236 / 002216 NONE COMMENTS NONE 00006	02-15-2006 01-18-2006 NONE	US EPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT PROPOSED PLAN	ADMIN RECORD	ARAR COMMENTS PAH ROD	025	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002231 BRAC SER BPMOW.TH/0039 CORRESP NONE 00003	03-10-2006 01-18-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	REQUEST FOR EXTENSION ON SUBMITTAL DATES FOR THE FOLLOWING DRAFT FINAL PROPOSED PLANS (PP): SITE 14, SITE 17, SITE 28, OPERABLE UNIT 1 AND OPERABLE UNIT 5	ADMIN RECORD	BRAC FFA PP	014 017 028 OU 1 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002201 NONE RPT NONE 00032	02-08-2006 01-30-2006 NONE	BRAC PMO WEST PUBLIC INFORMATION	DRAFT FINAL PROPOSED PLAN [INCLUDES RESPONSE TO COMMENTS ON DRAFT PROPOSED PLAN] (SEE AR #2202 - BRAC TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD	ARARS BGS EPC HHRA HQ PAH SVE	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002202 BRAC SER BPMOW.MEP/0063 CORRESP NONE 00003	02-08-2006 01-30-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT FINAL PROPOSED PLAN (SEE AR # 2201 - DRAFT FINAL PROPOSED PLAN)	ADMIN RECORD	BRAC PP RI/FS	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006

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N00236 / 002225 NONE COMMENTS NONE 00005	03-02-2006 02-15-2006 NONE	DTSC - BERKELEY M. LIAO BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT PROPOSED PLAN (PORTION OF THE MAILING LIST IS SENSITIVE)	ADMIN RECORD SENSITIVE	ICL PAH RAO ROD	025 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-04 IMAGED APNT_006
N00236 / 002294 NONE RPT N68711-00-D-004 00016	05-04-2006 03-01-2006 DO 0038	CDM FEDERAL PROGRAMS CORP. PUBLIC INFORMATION	PROPOSED PLAN (PP) FOR OPERABLE UNIT (OU) 5/IR-02 GROUNDWATER (SEE AR # 2295 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD INFO REPOSITORY	BRAC PP ROD SVE	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002295 BRAC SER BPMOW.MEP/0187 CORRESP NONE 00003	05-04-2006 03-03-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF PROPOSED PLAN FOR OPERABLE UNIT (OU) 5/IR-02 GROUNDWATER (SEE AR #2294 - PROPOSED PLAN)	ADMIN RECORD	BRAC GW	002 OU 5	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002310 NONE COMMENTS NONE 00005	05-19-2006 03-23-2006 NONE	DTSC - BERKELEY H. WONG BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON THE DRAFT FINAL PROPOSE PLAN	ADMIN RECORD	COMMENTS GW OU	002 OU 5	CHOICE IMAGING SOLUTIONS SW061005-05

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N00236 / 002414 BRAC SER BPMOW.MEP0306 CORRESP NONE 00002	08-21-2006 03-29-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	FEDERAL FACILITY AGREEMENT (FFA) EXTENSION FOR DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA	025	CHOICE IMAGING SOLUTIONS SW061120-04
N00236 / 002515 NONE COMMENTS NONE 00001	09-06-2006 04-03-2006 NONE	RAB MEMBER G. HUMPHREYS BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON PROPOSED PLAN (PP), GROUNDWATER (PORTION OF THE DOCUMENT IS SENSITIVE - PRIVATE CITIZEN'S HOME ADDRESS IS ON THE HEADER)	ADMIN RECORD	GW PP RAB SOIL	002 OU 5	CHOICE IMAGING SOLUTIONS SW061005-05
N00236 / 002280 CTO-0080/0009 RPT N68711-95-D-7526 00311	04-26-2006 04-18-2006 00080	BECHTEL ENVIRONMENTAL, INC. BRAC PMO WEST	DRAFT SOIL FEASIBILITY STUDY REPORT (SEE AR #2300 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA) [PORTION OF THE MAILING LIST IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	ARAR BGS COPC HHRA PAH PCB TPH VOC	030	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006

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N00236 / 002275 NONE RPT N68711-00-D-0004 00300	04-25-2006 04-21-2006 DO 0086	CDM FEDERAL PROGRAMS CORP. BRAC PMO WEST	DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT, MARINA VILLAGE HOUSING [SEE AR #2276 - BRAC TRANSMITTAL LETTER BY T. MACCHIARELLA AND AR# 2622 - DRAFT SOIL RI REPORT - REVISION I]	ADMIN RECORD INFO REPOSITORY	BGS BWT COPC COPEC EDC HHRA MTBE PAH PCB TCE TOC TPH VOC	031	CHOICE IMAGING SOLUTIONS SW070316-04
N00236 / 002276 BRAC SER BPMOW.MEP/0369 CORRESP NONE 00002	04-25-2006 04-21-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT, MARINA VILLAGE HOUSING (PORTION OF THE MAILING LIST IS CONFIDENTIAL) [SEE AR #2275 - DRAFT SOIL REMEDIAL INVESTIGATION REPORT, MARINA VILLAGE HOUSING]	ADMIN RECORD INFO REPOSITORY SENSITIVE	BRAC RI	031	CHOICE IMAGING SOLUTIONS SW070316-04
N00236 / 002300 BRAC SER BPMOW.MEP/0368 CORRESP NONE 00005	05-11-2006 04-21-2006 NONE	BRAC PMO WEST T. MACCHIARELLA USEPA - SAN FRANCISCO A. COOK	TRANSMITTAL OF DRAFT SOIL FEASIBILITY STUDY (FS) REPORT (SEE AR #2280 - DRAFT SOIL FEASIBILITY STUDY REPORT) [PORTION OF THE MAILING LIST IS CONFIDENTIAL]	ADMIN RECORD INFO REPOSITORY SENSITIVE	BRAC FS	030	SOUTHWEST DIVISION - BLDG. 1 SW060921-05 IMAGED APNT_006
N00236 / 002313 BRAC SER BPMOW.MEP/0410 CORRESP NONE 00003	05-19-2006 05-03-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	SUBMITTAL OF EXTENSION LETTER FOR THE DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA	025	CHOICE IMAGING SOLUTIONS SW061005-05
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N00236 / 002314 BRAC SER BMPOW.MEP/0403 CORRESP	05-19-2006 05-03-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF WORKING DRAFT FINAL PROPOSED PLAN (SEE AR #2315 - WORKING DRAFT FINAL PROPOSE PLAN)	ADMIN RECORD	SOIL	025	SOUTHWEST DIVISION - BLDG. 1
NONE 00003							SW060921-05 IMAGED APNT_006
N00236 / 002315 NONE RPT	05-19-2006 05-04-2006 NONE	BRAC PMO WEST VARIOUS AGENCIES	WORKING DRAFT FINAL PROPOSED PLAN (SEE AR #2314 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD	SOIL	025	SOUTHWEST DIVISION - BLDG. 1
NONE 00013		AGENCIES					SW060921-05 IMAGED APNT_006
N00236 / 002341 BRAC SER BPMOW.MP/0493	06-19-2006 06-01-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	REQUEST FOR AN EXTENSION ON SUBMITTAL OF THE DRAFT RECORD OF DECISION (ROD) FOR OPERABLE UNIT 5/IR 02 GROUNDWATER	ADMIN RECORD INFO REPOSITORY	ROD	002 OU 5	SOUTHWEST DIVISION - BLDG. 1
CORRESP NONE 00003		AGENCIES					SW070112-03 IMAGED APNT_008
N00236 / 002613 NONE CORRESP NONE 00001	11-22-2006 06-22-2006 NONE	USEPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REQUEST FOR THIRTY (30) DAY EXTENSION FOR REVIEW OF DRAFT SOIL FEASIBILITY STUDY (FS) REPORT AND DRAFT REMEDIAL INVESTIGATION (RI) REPORT	ADMIN RECORD INFO REPOSITORY	FS RI SOIL	030 031	SOUTHWEST DIVISION - BLDG. 1

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N00236 / 002614 11011.10 COMMENTS NONE 00003	11-22-2006 06-23-2006 NONE	US COAST GUARD R.L. SMITH BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT, MARINA VILLAGE HOUSING	ADMIN RECORD INFO REPOSITORY	PAH RI SOIL	031	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002361 BRAC SER BPMOW.MEP/0588 CORRESP NONE 00005	07-14-2006 07-05-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT FINAL PROPOSED PLAN (INCLUDES RESPONSES TO INFORMAL AGENCY COMMENTS ON THE WORKING DRAFT FINAL PROPOSED PLAN) [SEE AR #2362 - DRAFT FINAL PROPOSED PLAN]	ADMIN RECORD	PROPOSED PLAN ROD	025	CHOICE IMAGING SOLUTIONS SW061023-03
N00236 / 002362 NONE RPT N68711-00-D-0004 00014	07-14-2006 07-06-2006 DO 0038	CDM FEDERAL PROGRAMS CORP. BRAC PMO WEST	DRAFT FINAL PROPOSED PLAN (SEE AR #2361 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD	PAH PCB PROPOSED PLAN	025	CHOICE IMAGING SOLUTIONS SW061023-03
N00236 / 002636 NONE COMMENTS NONE 00014	12-20-2006 07-24-2006 NONE	USEPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD INFO REPOSITORY	FS PAH PCB SOIL	030	SOUTHWEST DIVISION - BLDG. 1

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N00236 / 002638 NONE COMMENTS NONE 00025	12-20-2006 07-26-2006 NONE	DTSC - SACRAMENTO D. LOFSTROM BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL FEASIBILITY STUDY (FS) REPORT [INCLUDES HERD COMMENTS BY J. POLISINI DATED 31 MAY 2006 AND GSU COMMENTS BY K. SIGLOWIDE DATED 22 JUNE 2006] {SEE COMMENTS}	ADMIN RECORD INFO REPOSITORY SENSITIVE	FS GW PLUME RAO SOIL VOC	030	CHOICE IMAGING SOLUTIONS SW070330-03
N00236 / 002665 NONE COMMENTS NONE 00030	01-23-2007 07-31-2006 NONE	DTSC - SACRAMENTO D. LOFSTROM BRAC PMO WEST T. MACCHIARELLA	REVIEW AND COMMENTS ON DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT, MARINA VILLAGE HOUSING (INCLUDES HERD COMMENTS BY J. POLISINI DATED 06/26/2006 AND GSU COMMENTS BY M. DALRYMPLE DATED 06/26/2006) [PORTION OF THE MAILING LIST IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	GW HHRA PAH RI SOIL VOC	031	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002466 7574 RPT N68711-00-D-0004 00015	08-23-2006 08-01-2006 DO 0038	CDM L. DAVIDSON BRAC PMO WEST M. PARKER	PROPOSED PLAN (PP), SOIL (SEE AR #2465 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA)	ADMIN RECORD INFO REPOSITORY	ARAR FS HHRA PAH PCB PP RI ROD SOIL	025	CHOICE IMAGING SOLUTIONS SW061023-04
N00236 / 002465 BRAC SER BPMOW.MEP/0705 CORRESP NONE 00002	08-23-2006 08-18-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF FINAL PROPOSED PLAN (PP), SOIL (W/OUT ENCLOSURE) [SEE AR #2466 - FINAL PP]	ADMIN RECORD INFO REPOSITORY	PP SOIL	025	CHOICE IMAGING SOLUTIONS SW061023-04

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

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N00236 / 002552 NONE COMMENTS NONE 00003	10-03-2006 09-19-2006 NONE	RAB MEMBER G. HUMPHREYS BRAC PMO WEST T. MACCHIARELLA	REVIEW AND ACCUMULATED COMMENTS ON PROPOSED PLAN (PP) [PORTION OF THE DOCUMENT IS SENSITIVE]	ADMIN RECORD SENSITIVE	PROPOSED PLAN RAB SOIL TCRA	025	CHOICE IMAGING SOLUTIONS SW061120-04
N00236 / 002622 NONE RPT N68711-00-D-0004 00300	12-06-2006 11-01-2006 00086	CDM FEDERAL PROGRAMS CORP. C. ZAKOWSKI BRAC PMO WEST	DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT - REVISION I FOR MARINA VILLAGE HOUSING (CD COPY ENCLOSED) [SEE AR# 2621 - BRAC TRANSMITTAL LETTER BY T. MACCHIARELLA AND AR# 2275 - DRAFT SOIL RI REPORT]	ADMIN RECORD INFO REPOSITORY	BTEX DDD DDE DDT MTBE PAH PCB PVC RI TCE VOC	031	CHOICE IMAGING SOLUTIONS SW070316-04
N00236 / 002621 BRAC SER BPMOW.MEP/0155 CORRESP NONE 00002	12-06-2006 11-30-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT - REVISION I FOR MARINA VILLAGE HOUSING (W/OUT ENCLOSURE) [SEE AR# 2622 - DRAFT SOIL RI REPORT - REVISION I] {PORTION OF MAILING LIST IS SENSITIVE}	ADMIN RECORD INFO REPOSITORY SENSITIVE	RI SOIL	031	CHOICE IMAGING SOLUTIONS SW070316-04

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N00236 / 002634 ECSD-RACIV-07- 0139 RPT N62473-06-D-2201 00170	12-20-2006 12-01-2006 00011	TETRA TECH EC, INC. BRAC PMO WEST	DRAFT RECORD OF DECISION (ROD), SOIL [CD COPY ENCLOSED] {SEE AR #2635 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA}	ADMIN RECORD INFO REPOSITORY	AM ARAR BRAC CERCLA COC COPC HHRA PAH PCB RAB RCRA ROD SMP SOIL SVOC SWMU TCRA TPH-E TPH-P VOC	025	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002635 BRAC SER BPMOW.MEP/0203 CORRESP NONE 00002	12-20-2006 12-19-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF DRAFT RECORD OF DECISION (ROD), SOIL [W/OUT ENCLOSURE] {SEE AR #2634 - DRAFT ROD}	ADMIN RECORD INFO REPOSITORY	FS RI ROD SOIL	025	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002644 BRAC SER BPMOW.TM\0209 CORRESP NONE 00004	01-05-2007 12-19-2006 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	FEDERAL FACILITY AGREEMENT (FFA) EXTENSION FOR SUBMITTAL OF REVISED DRAFT FEASIBILITY STUDY (FS) REPORT	ADMIN RECORD INFO REPOSITORY	FFA FS	030	SOUTHWEST DIVISION - BLDG. 1
Thursday, May 24, 2	2007	This Adminis bibliographic	strative Record (AR) Index includes references to citations are considered to be part of this AR but	documents which cite biblio may not be cited separatel	ography sources. These ly in the index.	Pa	age 76 of 78

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 002697 NONE CORRESP NONE 00002	02-27-2007 02-08-2007 NONE	DTSC - SACRAMENTO D. LOFSTROM BRAC PMO WEST T. MACCHIARELLA	REQUEST FOR THIRTY (30) DAY EXTENSION FOR REVIEW OF DRAFT SOIL REMEDIAL INVESTIGATION (RI) REPORT, REVISION 1 [PORTION OF THE MAILING LIS IS SENSITIVE]	ADMIN RECORD INFO REPOSITORY SENSITIVE	RI SOIL	031	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002707 BRAC BPMOW.MEP/0381 CORRESP NONE 00002	03-14-2007 02-26-2007 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	FEDERAL FACILITY AGREEMENT (FFA) EXTENSION FOR GROUNDWATER RECORD OF DECISION (ROD)	ADMIN RECORD INFO REPOSITORY	FFA OU ROD	002 OU 5	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002755 NONE COMMENTS NONE 00011	05-14-2007 04-18-2007 NONE	US EPA - SAN FRANCISCO A. COOK BRAC PMO WEST T. MACCHIARELLA	COMMENTS ON DRAFT RECORD OF DECISION (ROD), SOIL	ADMIN RECORD INFO REPOSITORY		025	SOUTHWEST DIVISION - BLDG. 1
N00236 / 002758 BRAC SER BPMOW.MEP/0538 CORRESP NONE 00003	05-18-2007 05-11-2007 NONE	BRAC PMO WEST T. MACCHIARELLA VARIOUS AGENCIES	TRANSMITTAL OF FINAL PRE-DESIGN WORK PLAN (WP) FOR FORMER NAVAL AIR STATION ALAMEDA AND FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND (W/OUT ENCLOSURE) [SEE AR #2759 - FINAL PRE-DESIGN WORK PLAN] {PORTION OF MAILING LIST IS SENSITIVE}	REPOSITORY SENSITIVE		002 OU 5	SOUTHWEST DIVISION - BLDG. 1

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. FRC/SWDIV Box No. FRC Warehouse Loc. CD No.
N00236 / 002759 ECSD- RACIV-07- 0136 RPT N62473-06-D-2201 01000	05-18-2007 05-11-2007 00011	TETRA TECH EC, INC. P. EVERDS BRAC PMO WEST	FINAL PRE-DESIGN WORK PLAN (WP) FOR FORMER NAVAL AIR STATION ALAMEDA AND FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND (CD COPY IS ENCLOSED) [SEE AR #2758 - BRAC PMO WEST TRANSMITTAL LETTER BY T. MACCHIARELLA]	ADMIN RECORD INFO REPOSITORY		002 OU 5	SOUTHWEST DIVISION - BLDG. 1
Total Estima	ited Record	Page Count:	26,856				
Total - Administrative Records:		232					
[UIC NUMBER]='N0 No Keywords Sites=025;025 GRC No Classification		5					

APPENDIX B

PUBLIC NOTICES

Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007

CTO 011 Final OU-5 GW ROD ECSD-2201-0011-0001

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CTO 011 Final OU-5 GW ROD ECSD-2201-0011-0001

WORLD



NOTICE OF PROPOSED PLAN AND PUBLIC COMMENT PERIOD



Former Naval Air Station Alameda and Alameda Annex

The U.S. Navy, in coordination with state and environmental regulatory agencies, encourages the public to comment on its Proposed Plan to clean up contaminated shallow groundwater at Operable Unit 5/IR-02 located on the former Naval Air Station Alameda (Alameda Point) and the Alameda Annex, in Alameda, California.

The Operable Unit 5/IR-02 area is located east of Main Street. The contaminated groundwater underlies portions of the United States Coast Guard Housing, the George P. Miller Elementary School, the Woodstock Child Development Center, and adjacent Alameda Annex areas including portions of the Bayport development. There are no drinking water wells in these areas. Water service is supplied by the East Bay Municipal Utility District, from a separate source. There is no immediate risk to children, residents, or others in these areas. Benzene and naphthalene are the groundwater contaminants. The Proposed Plan provides a summary of investigations and evaluations performed at the site, including a remedial investigation and human health and ecological risk assessments. Based on data collected and analyzed for the site, the Navy proposes to clean up contaminated groundwater to address potential long-term risks.

PUBLIC COMMENT PERIOD

The Navy invites interested members of the public to review and comment on the Proposed Plan during the 30-day public comment period, which is from March 6th through April 4th, 2006. Public comments must be submitted in writing and postmarked or e-mailed no later than April 4, 2006, or provided during the public meeting on March 15, 2006. Please send all comments to: Mr. Thomas Macchiarella, BRAC Environmental Coordinator, BRAC Program Management Office West, 1455 Frazee Road, Suite 900, San Diego, California 92108, <u>Thomas.macchiarella@navy.mil</u>, (619) 532-0907, fax (619) 532-0940.

PUBLIC MEETING

The Navy will host a public meeting to discuss the Proposed Plan, answer questions and accept public comments. Date: Wednesday, March 15, 2006 Time: 6:30 p.m. to 8:00 p.m. Location: Alameda Point, 950 West Mall Square, Building 1, Room 201, Alameda, CA

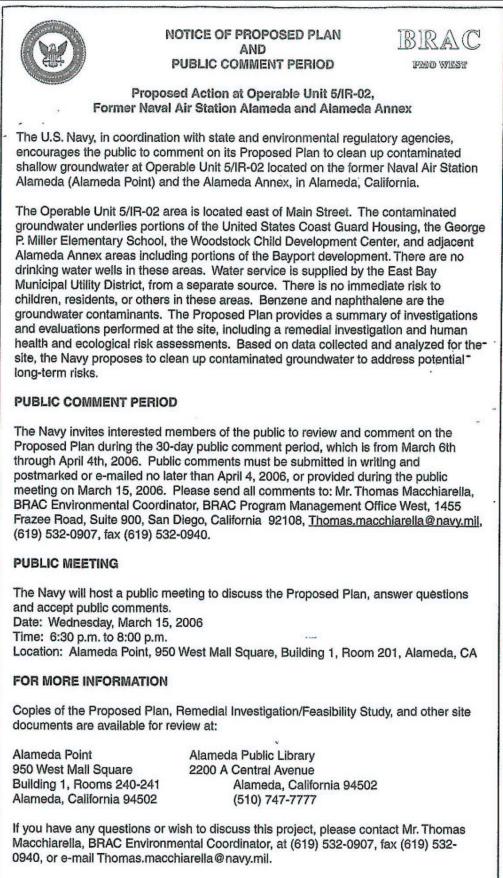
FOR MORE INFORMATION

Copies of the Proposed Plan, Remedial Investigation/Feasibility Study, and other site documents are available for review at:

Alameda Point 950 West Mall Square Building 1, Rooms 240-241 Alameda, California 94502 Alameda Public Library 2200 A Central Avenue Alameda, California 94502 (510) 747-7777

If you have any questions or wish to discuss this project, please contact Mr. Thomas Macchiarella, BRAC Environmental Coordinator, at (619) 532-0907, fax (619) 532-0940, or e-mail <u>Thomas.macchiarella@navy.mil</u>.

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APPENDIX C

PROPOSED PLAN PUBLIC MEETING

Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007

CTO 011 Final OU-5 GW ROD ECSD-2201-0011-0001

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CTO 011 Final OU-5 GW ROD ECSD-2201-0011-0001

Sign-In Sheet Public Meeting for Former NAS Alameda and Alameda Annex Operable Unit 5/Annex IR-02, Alameda Point, California – March 15, 2006

	Address (Optional)		How Did you Hear About this Meeting? (✓)					
Name Resident or Affiliation		Mailer	Notice in the Alameda Journal	Notice in the Oakland Tribune	Word of Mouth	Other (Please list)		
Name Thomas Macchiurella	Street							
us Navy	City, State and Zip							
Mary Parker	Street							
Navy	City, State and Zip	1999-94 (A)						
Michael Allen	Street							
2pm Mq5	City, State and Zip	1						
Name Anna. Marie Cook	Street							
USEPA	City, State and Zip							
Name Dot Lofstrom	Street							
DTSC	City, State and Zip							
Name Tuda C. Hugh Ka	Street			· · · · · · · · · · · · · · · · · · ·				
SF Roy RIJACR	City, State and Zip							
Judy C. HUANG SF BAY RWOCB Name PETER RUSSEL	Street							
RRI for City/Acto	City, State and Zip							
Name Robert Ter Berg	Street							
CDM .	City, State and Zip							
Name Mihbel	Street							
Atampa Tormel	City, State and Zip							

Sign-In Sheet Public Meeting for Former NAS Alameda and Alameda Annex Operable Unit 5/Annex IR-02, Alameda Point, California – March 15, 2006

		How Did you Hear About this Meeting? (✓)					
Name Resident or Affiliation			Notice in the Alameda Journal	Notice in the Oakland Tribune	Word of Mouth	Other (Please list)	
Name Cherie Zakowski COM	Street City, State and Zip						
Name Henry Wing DTSC Name	Street 700 Heinz Ave City, State and Zip Berkeley, CA 94710						
Name Lica Lowis	Street 410 Bryant Ave. City, State and Zip Alameda CA 94501						
Name	Street City, State and Zip						
Name	Street City, State and Zip						
Name	Street City, State and Zip						
Name	Street City, State and Zip						
Name	Street						
Name	City, State and Zip Street						
	City, State and Zip						

Alameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT

DEPARTMENT OF THE NAVY

BRAC PMO WEST

--000--

PUBLIC MEETING RE:PROPOSED PLAN FOR)OPERABLE UNIT 5/IR-02 GROUNDWATER AT)ALAMEDA POINT AND ALAMEDA ANNEX, CALIFORNIA)

Alameda Point Main Office Building, Room 201 950 West Mall Square Alameda, California

_)

--000--WEDNESDAY, MARCH 15, 2006 6:47 P.M. --000--

REPORTED BY:

DORIS M. BAILEY, CSR, RPR, CRR CSR License Number 8751 DOUCETTE & ASSOCIATES 1219 Marin Street Vallejo, California 94590 (707) 554-9970

DOUCETTE & ASSOCIATES

APPEARANCES

1 2

3 HEARING OFFICER:

Alameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT THOMAS MACCHI ARELLA 4 5 BRAC Environmental Coordinator BRAC Program Management Office West 6 1455 Frazee Road, Suite 900 7 8 San Diego, California 92108-4310 9 10 MARY PARKER, U.S. Navy 11 Project Manager 12 13 NAVY CONTRACTORS: 14 MICHAEL ALLEN, CDM 15 CHERIE ZAKOWSKI, CDM 16 17 **REGULATORY AGENCY REPRESENTATIVES:** 18 ANNA-MARIE COOK, U.S. EPA 19 DOT LOFSTROM, DTSC 20 JUDY HUANG, RWQCB 21 HENRY WONG, DTSC 22 23 ALSO PRESENT: 24 LISA LEWIS, Bayport Resident 25 JEFF MITCHELL, Al ameda Journal 2 DOUCETTE & ASSOCIATES INDEX 1 2 3 Page

5 Introduction and Overview of the Navy's

4

- 6 Installation Restoration (IR) Program
 - Page 2

4

Alameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT Proposed Plan Summary Clarifying Questions Public Comment Closing Remarks/Adjournment Certificate of Certified Shorthand Reporter --000--DOUCETTE & ASSOCIATES MARCH 15, 2006 6:47 P.M. PROCEEDINGS --000--HEARING OFFICER MACCHIARELLA: Hello, everybody, and thank you for coming. My name is Thomas Macchiarella. I'm the Navy's BRAC Environmental Coordinator for Alameda Point. Tonight we're focused on Operable Unit 5 and Installation Restoration Site 2 at FISCA. But I think it's important to generally Page 3

Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT 11 describe the Navy's installation restoration program so 12 you can better understand the current phase of this 13 project in the overall process.

Before we go any further, let me walk throughthe agenda.

We already had a poster board viewing session.
Now we're going through an introduction by me,
and an overview of the Navy's installation restoration
program.

20 After that we'll have a detailed summary of our 21 proposed plan.

And then clarifying questions from the public. And then a public comment period where the Navy will go into listening mode, and we'll record your comments, and respond to them in the record of decision.

4

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1 Our main purpose tonight is to list the 2 community comments and input on our proposed plan. Bear 3 in mind this meeting is recorded, and a transcript of it 4 will be kept in our administrative record and record of 5 decision.

6 So, who manages the installation restoration 7 program? The installation restoration program for Alameda Point is managed by the BRAC program management 8 9 office west, which is in San Diego, with support from 10 the Navy's southwest division naval facilities 11 engineering command. BRAC PMO West reports directly to 12 the Deputy Assistant Secretary of the Navy for installations and environment. 13

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Al ameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT For the BRAC PMO West, I'm the BRAC environmental coordinator for Alameda Point, and I have the responsibility and authority to conduct the IR program. I am also the Navy's representative on the BRAC

19 cleanup team which is composed of Navy and regulatory
20 agencies working collaboratively towards completing the
21 installation and restoration program, and satisfying the
22 necessary regulatory requirements.

The purpose of the Navy's Installation
Restoration Program is to identify, investigate, assess,
characterize, and clean up hazardous substances. And to

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reduce the risk to human health and the environment from
 past waste operations or hazardous material spills.

3 It is also consistent with the Comprehensive
4 Environmental Response Compensation and Liability Act,
5 sometimes known as Superfund in the commercial sector.
6 And the goal is to move all of the sites in the program
7 to site closure.

8 Here's a diagram showing the CERCLA process or 9 the installation restoration program. This is a 10 step-wise approach to the program. I'll walk through 11 each of the steps briefly.

12 The preliminary assessment site inspection 13 phase is generally the site discovery phase. It 14 involves interviews, records research, and initial 15 samplings such as soil and groundwater sampling. 16 The next step would be the remedial 17 investigation feasibility study which includes detailed Page 5 Alameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT 18 investigations and characterization of sites, as well as 19 an analysis of alternatives for cleanup.

20 Either of these first few steps may indicate 21 that cleanup is or a remedy is necessary.

If at these first few steps it's determined that an action is not necessary, then the program can stop. Otherwise we move onto the proposed plan, which is where we are now for the sites tonight.

6

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1 Each of these phases could take a couple years And once again, where we are tonight is the 2 each. 3 proposed plan or remedy selection for Operable Unit 5. The record of decision, the step following, is 4 where we document -- where the Navy documents the 5 selected alternative. We will select the alternative 6 after we receive community input tonight and for the 7 rest of the public comment period. And our record of 8 decision will include a response addressing all of the 9 10 community and public comments received.

After the record of decision is what's called the remedial design or remedial action phase. That's where we do the actual cleanup work. Depending on the type of site, cleanup could occur over weeks or months, or it could take many years.

At a glance, the installation restoration program at Alameda Point. There are 35 sites in the program. It's listed on the National Priorities list. Therefore, the United States EPA is the lead regulatory agency. Al ameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT The BRAC cleanup team is composed of the United States EPA, the Navy, the California Department of Toxic Substances Control, and the San Francisco Bay Regional Water Quality Control Board.

25 The BCT meets at least monthly, and the members 7

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1 of the BCT are present this evening.

2 We have a federal facilities agreement between 3 the BRAC cleanup team members and the Navy. Basically 4 the FFA describes the roles and responsibilities of each 5 party.

6 The FFA and the BCT are two concepts which
7 streamline the cleanup process by ensuring timely and
8 thorough coordination between the parties.

9 We also have a site management plan, which is 10 essentially a detailed schedule of all the Alameda Point 11 sites. It's a road map detailing the schedules and 12 milestones of each site and is based on input from 13 regulatory agencies, community, the Navy, and available 14 resources.

15 So again, back to where we are tonight.

16The current phase for the Operable Unit 5 and17IR-02 proposed plan provides for community involvement.

18 The proposed plan summarizes the environmental19 efforts to date;

20 Proposes a decision;

21 And leads to the record of decision.

22 After the ROD is complete, the Navy will

23 prepare a remedial design package and conduct the work.

24 The public comment period is March 6th to April Page 7 Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT

25 4th. And comments can be sent to me in a variety of

8

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ways listed in the proposed plan itself. 1 2 Before we move onto a detailed presentation of 3 the proposed plan, do we have any questions on the 4 general process? 5 Just on the previous slide. MS. LEWIS: HEARING OFFICER MACCHIARELLA: 6 Yes. 7 MS. LEWIS: You mentioned there were 35 specific sites. And I'm looking at this map here which 8 9 is the same here, and it lists a few numbers. Are these 10 only the numbers that are of concern? Or are all 35 --11 is there a map that shows where all 35 are? Or are we just looking at 31, 30, and 25? 12 13 HEARING OFFICER MACCHIARELLA: Tonight we're 14 focused on those shown in the proposed plan, and that map is focused on one specific area of the base. 15 16 MS. LEWIS: What about the other 32? 17 HEARING OFFICER MACCHIARELLA: Those are not 18 the focus of tonight, and I can certainly talk with you 19 about those after the meeting. 20 MS. LEWIS: You said 35, there are only three 21 that are being proposed for remediation at this point? 22 HEARING OFFICER MACCHIARELLA: Actually it's 23 one called Operable Unit 5, and that operable unit 24 overlies a few other sites as shown in the map that

25 you're looking at.

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So what about all the other sites? 1 MS. LEWIS: 2 HEARING OFFICER MACCHIARELLA: The other sites 3 are not ready for a proposed remedy tonight. Those are in other stages of the process. 4 5 MS. LEWIS: But do you have some map you can 6 show us that shows the general terms where all the stuff 7 is? Lisa Lewis. 8 9 HEARING OFFICER MACCHIARELLA: Any other questions on the general program before we move onto the 10 11 specific presentation? 12 I'd like now to introduce Okay. Thank you. 13 Ms. Mary Parker, the Navy's project manager for the Operable Unit 5 and Installation Restoration Site 2. 14 15 MS. PARKER: Thank you, Thomas. My name is 16 Mary Parker, and I am the Navy's project manager for 17 this site. 18 We are going to talk tonight about the proposed 19 plan for Operable Unit 5, IR-02 groundwater. And this covers the former NAS Naval Air Station Alameda and the 20 21 Alameda Annex, which is also sometimes called FISCA. 22 The topics we are going to discuss include: 23 A brief summary of the purpose; 24 Some background information on this site; 25 Some information on the remedial investigation 10

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 feasibility study; which includes a number of elements,
 including risk assessment, the proposed remedial goals,
 and development of alternatives for cleanup. Page 9 Alameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT 4 We will then talk about the preferred

5 alternative and community involvement.

6 The purpose is to present the preferred 7 alternative cleanup of groundwater to the public. It 8 summarizes investigations and work that we've conducted 9 to date, and provides an opportunity for the public to 10 give us input on our plan.

11 It also is an opportunity for the public to
12 meet the federal and state regulatory agencies that are
13 working with the Navy, who do agree with this preferred
14 alternative.

A little bit of background information on the location. This is shallow groundwater beneath six sites at former NAS Alameda, which is sometimes called Alameda Point and the Annex. The Woodstock Child Development Center, George P. Miller Elementary School, and portions of U.S. Coast Guard Marina Village residential housing, and portions of Bayport are in this area.

This is a map -- which is also on a poster in back -- which shows the sites we're discussing tonight. The sites in color are the sites that are part of Alameda Point or former NAS Alameda. And the sites 11

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one, two, and three, are sites that are part of the
 former Alameda Annex.

And the dashed line here shows the approximate
extent of the groundwater contamination in this area
that we are currently investigating.

6 The contaminants in the shallow groundwater are

Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT 7 benzene and naphthalene. And evaluations do show that 8 there is no immediate risk to children, residents, or 9 others in this area. And the groundwater is not 10 currently used by the public.

11 Water usage is by East Bay Just to restate. 12 Municipal Utility District. And they provide the water 13 service for this entire area. So there's no drinking water used or other use of the shallow groundwater. 14 15 The depth of this groundwater when we talk 16 about shallow, it ranges from two to ten feet below the ground surface. And in this area there's high salinity 17 or salt, which limits the potential use of the 18 groundwater for drinking water in the future. 19 20 I want to point out again the same slide which Thomas mentioned earlier about CERCLA or the 21 22 Comprehensive Environmental Response Compensation and 23 This is a process that we must Liability Act process. 24 follow for sites to get to clean up and site closure at 25 the end.

12

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If you look at the slide, I'll talk a little
 bit about the previous steps in the proposed plan which
 is the remedial investigation feasibility study or
 RI/FS.

I want to mention at this point that the RI/FS
is a detailed evaluation, and we have regulatory
agencies for both state and federal which are involved
in the review and oversight of this process and work
with us in the evaluation of the data.
For the state we have the Regional Water Page 11

Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT 11 Quality Control Board. And the contact is Ms. Judy 12 Huang who is here tonight. 13 For the Department of Toxic Substances Control, 14 DTSC, we have Mr. Henry Wong, who's here tonight, as 15 well as Ms. Dot Lofstrom. 16 And for the U.S. Environmental Protection Agency, which is EPA, we have Ms. Anna-Marie Cook. 17 18 The RI/FS, which is Remedial Investigation Feasibility Study, was completed in October, 2004. 19 Thi s characterized the conditions of the site for the 20 21 groundwater, which is what we're talking about tonight. 22 It also provided detailed evaluation of the 23 data, including risk assessment. 24 Proposed what our goals were for cleanup. 25 And provided the alternatives for groundwater

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clean up including the analysis and comparison of these
 alternatives.

3 Let's talk about some of the elements in this 4 RI/FS report. One of these is the risk assessment. And 5 briefly, risk is the likelihood and probability that a 6 hazardous substance, when released to the environment, 7 will cause adverse effects to exposed human or 8 ecological receptors.

9 For this site there are no unacceptable10 non-cancer risks.

And the cancer risk is in the risk management
 range when groundwater is not used for drinking water,
 as it is not here.

Al ameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT And what this means is this is a range where we look at all of the data to decide together as a team with the regulatory agencies what we're going to propose at the site. And there's also no significant risk to ecological receptors, so there's no problems with the ecological receptors. MS. LEWIS: What does that mean?

MS. PARKER: This means that there's no risk or contaminants present that would be harmful to anything in the environment such as birds or any other environmental ecological type receptors; plants, birds, whatever the receptors may be.

14

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1 The proposed remedial goals are proposed to 2 protect receptors, which basically means either humans 3 or environmental receptors such as, you know, different 4 types of animals, from future unacceptable risk 5 exposures.

And the second reason we have as included is to
assess the alternative's ability to achieve the site
cleanup.

9 So we're looking for a way to compare the
10 alternative and remedial goals as a way to evaluate the
11 ability of the cleanup.

And we listed these proposed goals in our
proposed plan. They are, for benzene, one microgram
per liter, which is basically one part per billion.
And this is a number which is equivalent to the state's
drinking water standard.
And for naphthalene, one hundred micrograms per

Page 13

Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT 18 liter or, again, parts per billion, which is equivalent 19 to the U.S. EPA health advisory for naphthalene. 20 As Thomas mentioned earlier, the next step 21 after the proposed plan is the record of decision. And 22 at that point the remedial goals which are proposed now 23 will be finalized.

A little bit about the development of
alternatives. There is screening as well as detailed
15

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analysis in our RI/FS. We have a detailed evaluation of
 six alternatives that are compared to the criteria
 called NCP or National Oil and Hazardous Substances Plan
 criteria.

5 The next slide shows you what these different 6 alternatives are. These are also spelled out in the 7 proposed plan.

8 Alternative one is no action.

9 Alternative two is what's called monitored10 natural attenuation and institutional controls.

Alternative three is biosparging, soil vapor
extraction -- also called SVE -- monitoring of
institutional controls, or IC's.

Alternative four, biosparging, SVE -- which is,
again, soil vapor extraction -- nutrients and

16 microorganism enhancement, monitoring, and institutional17 controls.

18 Alternative five, air sparging, SVE,

19 monitoring, and IC.

20 And alternative six, pump and treat,

Page 14

Al ameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT monitoring, and IC's. Each of these was evaluated and detailed during the RI/FS. And this proposed plan puts forth to the public the proposed or preferred alternative which we've selected as a team with the regulatory agencies.

16

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1 So the preferred alternative is alternative 2 number four. This is our biosparging with soil vapor extraction, nutrient or microorganism enhancement as 3 required, then monitoring, and institutional controls. 4 A little bit about this technology. 5 What biosparging is -- biosparging we'll discuss a little bit 6 more in the next slide -- but it's technology which will 7 reduce the time needed for remediation by very slowly 8 injecting air into the saturated zone -- or the zone 9 10 below the water table which is what the saturated zone And it maximizes the biodegradation or destruction 11 is. 12 of the contaminants, while minimizing any release of any 13 type of volatiles into the environment. 14 This is the conceptual design. If you start at 15 the left you can see there is a blower compressor. And this is basically an element of the 16 17 biosparging where we talked about earlier, the air is 18 injected. 19 And then this is the area where it's called 20 bioreactor where, basically the area where there's 21 influence to enhance the destruction of the contaminants

22 which are in the groundwater. There are probes to check 23 for any soil gas or any vapors.

24 There's soil vapor extraction wells which would Page 15 Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT 25 then come up through there.

17

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1 And we wouldn't have drums, it would be a contai ned area. But basically it will be treated at the 2 surface then, and released. 3 4 And then we also have additional monitoring probes for soil gas before we get to the housing. 5 6 This is a conceptual design. The detailed 7 design will be worked out later in the process. 8 It's estimated that it will take approximately 9 eight years to clean up the site to the proposed 10 remedial goal which is the one PPB. 11 The institutional controls will be in place to 12 prevent any exposure to groundwater until these goals 13 are met. 14 So just a restatement of the alternative. Again, there is no immediate threat or risk to human 15 16 health. The Navy, in conjunction with the regulatory agencies, has made a risk management decision to take 17 action which will reduce the mass of contaminants in the 18 19 groundwater, and therefore prevent any other future 20 potential unacceptable exposure. 21 And we are here today to discuss and answer any 22 questions. The end of the public comment period is not 23 until April 4th, so that is the last date for 24 postmarking a letter or sending an e-mail or fax which 25 goes to Mr. Macchiarella.

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1 We also have monthly RAB meetings the first 2 Thursday of each month. And the public is welcome to attend these meetings. These are also in this 3 4 bui I di ngs. 5 And we have information repositories at both the public library, which is on Central Avenue, as well 6 as this building on the floor here just down the hall. 7 8 HEARING OFFICER MACCHIARELLA: Okay. Thank 9 you, Mary -- Ms. Parker. 10 Do we have any questions on -- that we can 11 clarify regarding the technology or the proposed plan overall? Clarifying questions? 12 13 MR. MITCHELL: Jeff Mitchell, Alameda Journal. 14 I was curious about the -- where the chemicals 15 came from, and if you'd be able to pinpoint that? HEARING OFFICER MACCHIARELLA: 16 Mary. 17 MS. PARKER: It may have come from multiple 18 sources or different areas. There were, especially in 19 the area on the map that's the IR-02 area, there's a 20 scrapyard or called DR movement where the Navy had its 21 potential source. 22 There are also potential sources related to the Marsh Crest -- which you may have heard of -- which 23 24 basically ties back to the history in the 1800's and 25 early 1900's of the different gas and oil refining 19

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facilities in the area and their releases, which are
 part of the subsurface and also affecting the
 groundwater.
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Alameda 03 15 06 0U5 GW Public Meeting 031506AL.TXT 4 Did you want to add anything else to that, 5 Thomas? HEARING OFFICER MACCHIARELLA: 6 Good job. 7 Any other questions before we move on to public 8 comments? 9 Okay. Are there any comments from the public on this proposed plan -- the proposed remedial goals? 10 11 MS. LEWIS: I have a question, not so much 12 about your proposed remediation, which sounds fine. 13 I'm not a scientist. To my background it 14 sounds like the most logical course of action. 15 I have questions about, in general, the benzene 16 and the nature of the existence of it. And I don't know 17 if this is the appropriate forum for this or not. But 18 if it's not, perhaps someone would be willing to talk to 19 me afterwards? Because I just have questions in general 20 about it. 21 I live in Bayport. I'm not above a benzene 22 plume, but I'm obviously in the vicinity, and it's 23 something I would like to know more about. 24 HEARING OFFICER MACCHIARELLA: Sure. That's a 25 pretty big question.

20

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MS. LEWIS: Well, I have some specific
 questions, but that's what I'm asking, is this the
 proper time?
 HEARING OFFICER MACCHIARELLA: Sure. We can
 answer your questions now, or we can discuss them over
 the maps and charts we have in the back too, if that

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Alameda 03 15 06 OU5 GW Public Meeting 031506AL.TXT would be helpful, after the meeting. MS. LEWIS: Okay. Maybe I will do that. HEARING OFFICER MACCHIARELLA: Okay. Any other comments? 0kay. Then this meeting is adjourned. Thank you for coming everybody. (Thereupon the foregoing was concluded at 7:11 p.m.)

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1	CERTIFICATE OF CERTIFIED SHORTHAND REPORTER
2	
3	I, DORIS M. BAILEY, a Certified Shorthand
4	Reporter and Registered Professional Reporter, in and
5	for the State of California, do hereby certify that I am
6	a disinterested person herein; that I reported the
7	foregoing proceedings in shorthand writing; and
8	thereafter caused my shorthand writing to be transcribed
9	by computer.
10	I further certify that I am not of counsel or Page 19

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11	attorney for any of the parties to said proceedings, nor
12	in any way interested in the outcome of said
13	proceedi ngs.
14	IN WITNESS WHEREOF, I have hereunto set my hand
15	as a Certified Shorthand Reporter and Registered
16	Professional Reporter on the 17th day of March, 2006.
17	
18	
19	
20	Doris M. Bailey, CSR, RPR, CRR
21	Certified Shorthand Reporter
22	License Number 8751
23	
24	
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APPENDIX D

RESPONSIVENESS SUMMARY

Final Record of Decision OU-5/IR-02 Groundwater Alameda Point and FISCA DCN: ECSD-2201-0011-0001 August 2007

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Number	Comment	Response
GENERAL	COMMENTS	
Comments	from George Humphreys, RAB member, dated April 3, 2006	
1	My concern after reading the newspaper article on the "public meeting" was that gases generated by the biosparging process could carry benzene, naphthalene, and other hazardous gases up through the soil to the surface. This concern has been addressed by the conceptual design shown in Figure 3. The soil vapor extraction wells, if appropriately located and spaced, should take care of that potential problem.	The risk of soil vapor being released to the surface is very low with biosparging, due to the low pressure at which air is introduced to the subsurface. As an added measure of protection, the soil vapor extraction (SVE) system, which will be installed, is designed to capture and treat any vapors that could potentially migrate to the surface of the soil. The Remedial Design (RD) will determine the most appropriate locations for the SVE wells for capture and treatment of vapors. Section 12.1 of the Record of Decision discusses how air injection rates are optimized to reduce the potential for fugitive emissions from the soil.
2	A remaining concern is that areal extent of the plume. The current map (Figure 2) shows the plume extending into the former warehouse area (IR-01) tangent to the boundary of the former East Housing area (Bayport development) and near the boundary of the College of Alameda. In addition to the Marsh Crust issue, have the residents of new homes in Bayport been informed that their homes may possibly be located over a contaminated groundwater plume?	Yes. Numerous meetings have been conducted between the Department of the Navy (DON), City of Alameda, and the home builders at Bayport describing the nature and location of contaminated groundwater in the area. Disclosure statements informing home buyers of the groundwater contamination were presented to prospective buyers during the sales process. In addition, the DON informed the public of the potential extent of contaminated groundwater through mailings and public notices of the Proposed Plan for Operable Unit 5/Installation Restoration Site 02 (OU-5/IR-02) groundwater and an associated public comment meeting was held on March 15, 2006. Public notices of the document and meeting schedule were placed in local newspapers in March 2006. Section 3.2 of the Record of Decision discusses notification to the public, including residents.

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RESPONSIVENESS SUMMARY FOR THE PROPOSED PLAN FOR OU-5/IR-02 GROUNDWATER DATED MARCH 2006 ALAMEDA, CALIFORNIA

Number	Comment	Response
3	Is it possible that the plume extends under the College of Alameda?	It is possible that the plume extends under a portion of the College of Alameda property, but it is not likely that it extends under any of the College of Alameda buildings. Additional sampling will be conducted during the design of the remediation system to further evaluate the extent of the plume in this area.
4	In the discussion of site background, the proposed plan mentions gas plants, an oil refinery, the San Francisco Bay Airdrome, and the Navy's scrap yard. The presence of MTBE in some samples from the plume indicates that some of the contamination may be of more recent origin. Also, the RAB was told of a burn pit located under Kollman Circle in the Coast Guard Housing area. If organic liquids were dumped into such a pit, some of these liquids could have percolated into the groundwater between burn events.	Thank you for this comment. To supplement previous investigations, additional sampling will be conducted in 2007 to support the design of the treatment system. This pre-design sampling will include further evaluation of the plume centers where there are high concentrations of benzene and naphthalene, including Kollman Circle. Sections 2.5 and 5.3.3 of the Record of Decision discusses the additional actions that will be conducted to further refine the plume boundary.
5	Regarding cleanup levels and human health risks, it is important that risks from the soil, soil gas, and groundwater be added together even though these media have been separated for evaluation purposes.	The risks for groundwater and soil gas are presented in the Remedial Investigation/Feasibility Study (RI/FS) for OU-5/IR-02 (ERRG, 2004). The cumulative risks for soil, soil gas, and groundwater are presented in the <i>Soil Remedial Investigation Report IR Site 30 Alameda</i> <i>Point</i> (Bechtel, 2005) and <i>Soil Remedial Investigation Report IR Site 31, Marina Village</i> <i>Housing, Alameda Point</i> (CDM, 2006). The incremental risks for all media were assessed and used to assist in the development of the Remedial Action Objectives (RAOs) for benzene and naphthalene at the site. The cleanup levels for the OU-5/IR-02 groundwater presented in the Proposed Plan are conservative. Section 7.0 of the Record of Decision discusses the Human Health Risk Assessment (HHRA) and how the risks, by media, were determined.
Comments	from Patrick Lynch, Community Member, dated April 4, 2006	
1	The proposed use of air injection and vapor extraction in an	Safety of the residents and others in these areas is of the utmost importance to the DON. The DON will apply these technologies in a safe and effective manner. The selected remedy

Number	Comment	Response
	inhabited area where groundwater levels have been measured within two feet of the ground surface is not a safe or effective application of these technologies.	includes biosparging combined with soil vapor extraction. Due to the proximity to site residents, vapor extraction / recovery and treatment will be operated in conjunction with biosparging to ensure protection of the nearby residents. Biosparging involves injection of air into the saturated zone, similar to air sparging. The primary difference between biosparging and air sparging is the flow rate of air injected into the subsurface. Air sparging rates are significantly higher than biosparging rates. Air sparging rates can be up to 15 cubic feet per minute per injection well, but air sparging is not the selected remedy. Injection pressure is optimized to overcome hydraulic head, and radius of influence is driven by oxygen diffusion into the formation. In biosparging, airflow is controlled such that volatile constituents are not released into a vapor phase but are biodegraded in the groundwater. When volatile constituents are present in and around sensitive receptors, biosparging is often combined with soil vapor extraction to create a negative pressure in the vadose zone controlling the potential for vapor plume migration.
		Groundwater in the majority of the site occurs between 5 and 12 feet below ground surface. There are variations in biosparge design that can compensate for shallow groundwater elevations, including orientation or design of the injection well. Horizontal wells can be constructed for situations where groundwater is very shallow (less than 5 feet below ground surface).Section 12.1 of the Record of Decision discusses how air injection rates are optimized to reduce the potential for fugitive emissions from the soil.

Number	Comment	Response
2	Quoting from the proposed plan: "Among the possible point sources, it is suspected that the contamination trapped in the Marsh Crust may be contributing to the contaminants observed in OU-5/IR-02 groundwater." (Proposed plan page 2) This statement indicates the inadequacy of the Marsh Crust remedy a fact that should have been identified in the 5-year Review of the Marsh Crust Record of Decision. It also indicates that the Proposed Plan should be applied to the entire area of the Marsh Crust.	The Proposed Plan addresses the entire benzene/naphthalene plume that encompasses the referenced six sites at Alameda Point and Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex (FISCA) (the area detailed in the site descriptions on pages 2 and 3 of the Proposed Plan and shown in Figure 2 on page 2 of the Proposed Plan). Groundwater concentrations collected over approximately the last ten years do not indicate that the Proposed Plan needs to be applied to the entire Marsh Crust area. It is believed that the concentrations of contaminants trapped within the Marsh Crust are highly variable. The Five Year Review of the Marsh Crust Record of Decision was reviewed by the Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC), and San Francisco Bay Water Board (Water Board), and the remedy was found to be adequate.
3	Before housing was built at Site 31, Site 31 was an interim permitted RCRA facility used to manage hazardous waste from Navy installations throughout the Bay Area. The cradle-to-grave records of hazardous waste shipments show thousands of tons in discrepancies between the waste received and the waste shipped from that facility. The Proposed Plan identified Health and Safety Code Section 25232(b)(1)(A)-(E) as an ARAR. Was this ARAR in effect when the housing at Site 31 was built? The Navy is currently violating four of the five prohibited uses of hazardous waste property listed in Section 25232.	The DON was issued a Hazardous Waste Facility Permit for FISCA in 1993 by DTSC for the operation of a storage facility at Building 5 with an effective date from July 24, 1993, to July 24, 2003. Building 5 is not located on Site 31. The DON closed the hazardous waste storage facility at Building 5 in 1999 and obtained clean closure concurrence for the storage facility from DTSC in 1999. There were no Solid Waste Management Units (SWMUs) or areas of concern identified within the area of OU-5 in the Alameda Resource Conservation and Recovery Act (RCRA) permit or any subsequent corrective action requirements stemming from the Alameda RCRA permit. A brief description of the Site 31 history follows. According to the <i>Zone Evaluation Data Summary, Zone 16: Housing Zone</i> (IT, 2001c), Site 31 includes Parcels 178 and 184. Parcel 178 encompasses the majority of Site 31, and there are no RCRA sites or underground storage tanks (USTs) located within the site. Parcel 178 was a wetland prior to filling, and was used for open space storage between 1960 and 1990. Parcel 178 has been used for residential housing and open space since 1992.

Number	Comment	Response
		Building 369 formerly occupied a portion of the southwestern segment of Parcel 178, but was demolished prior to construction of the current residential housing facilities. No chemical storage is documented to have occurred in the current or former buildings on Parcel 178 (IT, 2001d). Parcel 184 is located within the boundaries of Parcel 178 and Building 172 was an equipment storage building. There are no reports of chemical storage, spill, or staining in or around this building (IT, 2001d). There are no RCRA sites or USTs located within Parcel 184.
		Section 25232 of the California Health and Safety Code was enacted in 1980 and amended in 1982. According to the Parcel Evaluation Data Summary for Zone 16, Parcel 178 (also Site 31), Family Housing (IT, 2001j), residential housing currently located on the parcel was built between 1990 and 1992. However, that section applies to property under state jurisdiction and control and not to federal property. At the time housing was built on Site 31, the provisions of Section 25232 would not apply to structures built on federal land and thus no variance or permit is required.
4	An identified ARAR relates to use of money from the State's Hazardous Substance Account. Why would state money be used to cleanup pollution caused by the federal government?	The comment did not address the specific Applicable or Relevant and Appropriate Requirement (ARAR) citation in the OU-5/IR-02 Groundwater Proposed Plan. Review of ARARs presented in the Proposed Plan do not list an ARAR that provides for state funding of implementation of the remedial alternative. The cleanup is being funded by the federal government
5	Why has Health and Safety Code Section 42301.6 not been identified as an ARAR?	The Health and Safety Code Section 42301.6 citation specifies that "prior to approving an application for a permit to construct or modify a source which emits hazardous air emissions, which source is located within 1,000 feet from the outer boundary of a school site, the air pollution control officer shall prepare a public notice in which the proposed project or modification for which the application for a permit is made is fully described."

Number	Comment	Response
		It is assumed that the emission source to be modified as interpreted by the commentor includes the installation and operation of the biosparging/soil vapor extraction system proposed within the Feasibility Study for selected remedy Alternative 4.
		The proposed treatment system will not emit hazardous air emissions. In biosparging, injection pressure is low so that volatile constituents are not released into the vapor phase, but are biograded in the groundwater. In addition, the OU-5/IR-02 remedy includes both biosparging and soil vapor extraction components. To provide a higher level of protection to the public, the soil vapor extraction system will be run when the biosparge system is running to create a negative pressure and control any potential for vapor migration. Therefore, running the treatment system will not contaminate the air. In addition, Section 42301.6 (g), Health and Safety Code states "…notice requirements of this section shall not apply if the air pollution control officer determines that the application to construct or modify a source will result in a reduction or equivalent amount of air contaminants, as defined in Section 39013, or which are hazardous air emissions."
		Public participation notice requirements as required under this section are not considered applicable or relevant and appropriate because the requirement is procedural, rather than substantive. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), only substantive requirements must be met for actions conducted on site. Public notification of activities is an integral part of the CERCLA process, and provides an adequate means for the public to comment on proposed remedial activities.

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Number	Comment	Response
6	Why has the Federal Noise Pollution Control Act, which requires federal agencies to comply with local noise ordinances, not been identified as an ARAR? Navy remediation systems have and continue to violate public health regulations concerning noise. The ongoing violations and lack of enforcement is an environmental justice issue.	There are no relevant or appropriate noise restriction ARARs related to federal law or regulations governing noise pollution. The Federal Noise Pollution Control Act has not been designated as a statute that provides enforceable ordinances that directly protect human health and the environment. Only substantive provisions of requirements are considered to be ARARs. Provisions of generally relevant federal and state statutes and regulations that are determined to be procedural or non-environmental, including permit requirements, are not considered ARARs. Engineering controls for noise suppression associated with the selected remedy technology will be included in the Remedial Design (RD).
7	Existing Navy remediation systems have been constructed using Class I explosion-proof electrical systems. The Navy has used combustible materials, such as plywood and hay bales, that are prohibited in these Class I locations for sound-proofing. Does the Navy plan on creating similar fire hazards in designing the remediation system for OU-5?	Engineering controls for noise suppression associated with the selected remedy technology will be addressed in the RD document. Technical specifications will mandate the necessary restrictions in accordance with Underwriter Laboratories and manufacturers' requirements/recommendations for use of shielding, insulating or noise suppression materials.
8	The "approximate" extent of groundwater contamination shown in the Proposed Plan indicates that the groundwater investigation is incomplete. The "approximate" extent of contamination extends to the boundary of a public elementary school under construction. The Navy and the State of California have learned nothing from their mistake in building Marina Village Family Housing, George Miller Elementary School, and the Woodstock Child Development Center on top of this contamination.	Existing analytical data, collected from monitoring wells present at the site does not indicate that the contamination extends to the boundary of the future Bayport School. The contamination is largely centered around the suspected hotspots located in OU-5/IR-02. Additional characterization to more accurately define the location of the plume centers and the area requiring treatment will be conducted prior to implementation of a remedy. Section 5.3 of the Record of Decision discusses the extent of benzene and naphthalene contamination at OU-5/IR-02. Section 2.5 of the Record of Decision discusses the additional actions that will be conducted to further refine the plume boundary.
Comment f	rom Cary Shao, Community Member, dated March 2006	
1	Plastic products are one of many chemically ridden items that	Thank you for this information. The DON appreciates your participation during this public

Number	Comment	Response
	have captured the interests of researchers. Evidence in studies has shown that a plastic additive in baby and sports bottles can adversely affect one's well being. The additive bisphenol-A can act as a birth control pill when it is found in low dosages in the body. University of Missouri researcher Vom Saal has concluded bisphenol-A affects the environment as well as fetuses. The purpose of the additive is to make plastic hard and durable, but at what cost to our health? Since the perfect destination for chemicals is the fat in our bodies, proper measures must be taken to avoid any accumulation of fat. America's new food pyramid is hoped to improve awareness of the necessity of a healthy diet when combined with exercise. What is at stake here is perhaps a shorter life span for this generation of obese Americans than its previous, with the obesity epidemic one of the primary causes. Obesity is a major issue, but an underlying problem includes the need to eliminate trace chemical substances in our body. The ultimate goal of the federal government and the EPA should be to adopt a policy similar to Europe's REACH, or Registration, Evaluation, and Authorization of Chemicals, for restricting the proliferation of chemicals in the consumer market. This can be achieved in a variety of ways. The EPA must first ensure that every chemical that reaches the market is thoroughly tested. The second component of the plan is to asses [sic] which chemicals require to be phased out of usage, which will greatly lower synthetic chemical dependency. The American nation cannot afford to dwell any longer on this issue, and needs to tackle and eliminate the problem as soon as possible.	comment period. The DON's Proposed Plan for OU-5/IR-02 Groundwater specifies cleaning up the chemicals benzene and naphthalene that are in the groundwater.

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Number	Comment	Response
Comments	from Dale Smith, RAB member, Sierra Club representative, Au	dubon Society representative, dated April 12, 2006
1	Has the perimeter of the plume been delineated or will it be fully delineated as part of the remediation?	Current data provides adequate plume definition to the north and south of the site. The extent of the plume to the west and east will be further delineated as part of the RD.
		Sections 2.5 and 5.3.3 of the Record of Decision discusses the additional actions that will be conducted to further refine the plume boundary.
2	Will perimeter monitoring be included in the remediation and for how long?	Monitoring, including perimeter monitoring, will be conducted as part of the selected remedy until remedial action goals are met. The results of groundwater monitoring will be used to evaluate the natural attenuation progress and contaminant reductions. The RI/FS estimated that the remedial action goals will be met in eight years (ERRG, 2004).
		Section 12.4 of the Record of Decision discusses how monitoring will be conducted until risk- based remedial goals have been met.
3	Is there a possibility that the remediation activities will pull the contamination away from the school, daycare center and residences? Is this the intention?	The two primary contaminants at the site (benzene and naphthalene) are readily biodegradable given oxygen sources and subsurface microbes and nutrients. The biosparging part of the remedy uses microorganisms already present in the soil and groundwater to biodegrade organic contaminants. Biosparging involves the controlled injection of a flow of air (or oxygen) and nutrients (if needed) into the saturated zone to enhance the biological activity of these microorganisms. This technology does not physically move, draw down or relocate the existing contamination. Biosparging is used to reduce concentrations of contaminants dissolved in groundwater, adsorbed to soil below the water table, and within the capillary fringe.
		Section 12.1 discusses biosparging systems and their operation.

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Number	Comment	Response
4	There appears to be an assumption that naphthalene concentrations will be reduced as benzene is remediated but there is no guarantee that this will occur. Why can this assumption be made?	This assumption is made based on the location of the benzene and naphthalene and their chemical properties. The affected area is approximately 42 acres, with an approximate aquifer thickness of 10 feet. Benzene concentrations appear to increase with depth (the highest detections were at approximately 20 feet bgs). Naphthalene is co-located with dissolved-phase benzene at the site, suggesting a common source.
		Benzene and naphthalene are biodegraded by biological oxidation to produce energy for microbial growth. To date, numerous laboratory and field studies have shown that microorganisms indigenous to the subsurface environment can degrade a variety of hydrocarbons by microbial metabolism, including components of gasoline, kerosene, diesel, and jet fuel (Wiedemeier, et al., 1995). An adequate supply of these microorganisms is typically present in the subsurface (Wiedemeier, et al., 1995; Atlas, 1981). Under ideal conditions, the biodegradation rates of low- to moderate-weight aliphatic, alicyclic, and aromatic compounds (e.g., benzene and naphthalene) can be very high. (Wiedemeier, et al., 1995).
		Remedial Alternative 4 will use biosparging as an in-situ remediation technology that uses indigenous microorganisms to biodegrade organic constituents in the saturated zone. Biosparging involves the controlled injection of a flow of air (or oxygen) and nutrients (if needed) into the saturated zone to enhance the biological activity of the indigenous microorganisms.
		Section 5.3.2 of the Record of Decision discusses how data indicates that the benzene and naphthalene plumes are co-located. Figures 5-1 through 5-4 indicate the plume boundaries. Sections 12.1 and 12.3 of the Record of Decision discuss biosparging and nutrient enhancement which will be used to address both benzene and naphthalene.

Number	Comment	Response
5	Why is only IR-02 considered when the contamination extends into IR 1 and 3?	Portions of IR-01 and IR-02 within the groundwater plume will be included in this remediation. Because the majority of IR-02 is within the estimated plume boundary and for brevity, the FISCA sites are not included in the Proposed Plan site title. The three Alameda Point Installation Restoration (IR) sites in OU-5 are Sites 25, 30, and 31. The three FISCA sites are IR-01, IR-02, and IR-03. These six sites are included in the Proposed Plan for OU-5/IR-02 Groundwater. Section 1.3 of the Record of Decision discusses each of the six individual sites located within Alameda Point and FISCA and are being addressed collectively as OU-5/IR-02.

Sources:

Bechtel, 2005 IT, 2001j CDM, 2006 Atlas, 1981 ERRG, 2004 Wiedemeier et al., 1995. IT, 2001c IT, 2001d Abbreviations and Acronyms: ARAR - Applicable or Relevant and Appropriate Requirement OU - Operable Unit CDM - Camp, Dresser, and McGee, Inc. RAB - Restoration Advisory Board CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act RAO – Remedial Action Objective DON - Department of the Navy DTSC - Department of Toxic Substances Control RD – Remedial Design EPA – U.S. Environmental Protection Agency RI – Remedial Investigation ERRG - Engineering/Remediation Resources Group, Inc. SVE - soil vapor extraction FISCA -Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex UST – underground storage tank FS – Feasibility Study HHRA – human health risk assessment IT – International Technology Corporation IR - Installation Restoration

MTBE - methyl tertiary butyl ether

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RCRA - Resource Conservation and Recovery Act Water Board - San Francisco Bay Water Board

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